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HEALTH AND FITNESS INSIGHTS:  
KNOWLEDGE, ATTITUDES AND PRACTICES ASSESSMENT  
OF UiTM CAWANGAN PULAU PINANG  
(BERTAM CAMPUS) STAFF

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**Abstract:**

Consistent exercise is essential for employees' physical and mental health, enhancing productivity, alleviating stress, and diminishing the chances of chronic diseases. Employees' knowledge, attitudes, and practices (KAP) concerning physical activity substantially affect their engagement in exercise programs. Obstacles such as excessive workload, inadequate facilities, and time limitations impede regular exercise, whereas favourable attitudes, supporting leadership, and accessible fitness programs promote participation. Comprehending employees' Knowledge, Attitudes, and Practices is essential for formulating effective workplace health strategies. This study sought to evaluate these parameters via a cross-sectional survey conducted at Universiti Teknologi MARA (UiTM) Cawangan Pulau Pinang, Bertam Campus. Seventy-four out of one hundred seventy-two employees participated. Although all

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respondents recognised the advantages of exercise, significant knowledge gaps were apparent—25.7% were uninformed about muscle-strengthening activities for chronic diseases, and 36.5% were unaware of the required 150 minutes of weekly physical activity. Misunderstandings of exercise dangers, including iron depletion (24.3%) and injuries from overexertion (28.4%), underscore the necessity for enhanced education on exercise safety and nutrition. The majority of participants regarded exercise favourably, mainly for health (95.9%), fitness (95.9%), and weight management (93.3%). Nevertheless, obstacles such as time limitations (35.1%) and stress (10.9%) remained, while social motivation fluctuated. Most participants (67.6%) engaged in activity 1-3 times per week, whereas 18.9% were sedentary. Brisk walking (83.8%) and jogging (51.4%) were prevalent but planned routines such as gym training (9.5%) and high-intensity interval training (17.6%) were less favoured due to constraints of time, expense, or lack of knowledge. Research indicates that merely enhancing knowledge may not maintain workout routines. Addressing lifestyle constraints and motivational factors is crucial for fostering continuous physical activity among employees.

#### Keywords:

Employees; Exercise; Fitness; Health; Lifestyle

## Introduction

In the age of escalating non-communicable diseases (NCDs), the workplace is increasingly acknowledged as a vital environment for health promotion. Employees frequently dedicate over one-third of their day to work, rendering occupational environments optimal for initiatives that enhance physical activity and general well-being. Nonetheless, despite international initiatives promoting healthy lifestyles, a substantial segment of the workforce persists in reporting insufficient participation in health and fitness activities. Multiple studies demonstrate that although employees typically have a fundamental comprehension of the advantages of exercise and adequate nutrition, this awareness does not consistently manifest in behaviour (Zabuddin et. al., 2023; Nui et. al., 2020; Abu Saad et. al., 2020; Ryu et. al., 2018).

Health and fitness are vital elements of a healthy lifestyle, with exercise serving a crucial function in sustaining general well-being. Consistent physical activity fortifies the heart (Adams & Linke, 2019), improves muscle tone, increases flexibility, and benefits mental well-being by alleviating stress and anxiety (Irum Naureen et. al., 2022). Incorporating cardiovascular workouts, weight training, or flexibility exercises into everyday routines can markedly enhance energy levels and foster longevity (Abou Sawan et. al., 2023; Mcleod et. al., 2024). Moreover, physical activity aids in weight regulation (Swift et. al., 2018; de Assis & Murawska-Ciałowicz, 2023), bolsters immunological function (Forte et. al., 2022) and improves sleep quality (Xie et. al., 2021), rendering it an essential practice for a healthier lifestyle. Maintaining an active lifestyle and a regular exercise routine enables individuals to attain both immediate and enduring advantages for their bodily and mental well-being.

The World Health Organisation (WHO) states that the requisite level of physical activity for good health varies by age and demographic groups. Teenagers should participate in moderate-to-vigorous cardiovascular activity for a minimum of 60 minutes daily on average. Adults should engage in a minimum of 150–300 minutes of moderate-intensity aerobic physical activity per week. Pregnant and postpartum women are advised to participate in various aerobic

and muscle-strengthening activities weekly to attain a minimum of 150 minutes of moderate-intensity aerobic exercise (WHO, 2020).

Additionally, the WHO (2020) indicates that over a quarter of the global adult population (1.4 billion adults) is inadequately active, with roughly 1 in 3 women and 1 in 4 men worldwide classified in this group. Unexpectedly, high-income nations have inactivity rates that are double those of low-income nations, and since 2001, there has been no enhancement in global physical activity levels. From 2001 to 2016, the proportion of inadequate physical activity in high-income countries increased by 5%, from 31.6% to 36.8%. A sedentary lifestyle can elevate the risk of numerous ailments, including cardiovascular disease, type 2 diabetes, cancer, and osteoporosis (I-Min Lee et. al., 2012). An increased risk of premature mortality from all causes, including the effects of obesity and overweight, can also be ascribed to it (I-Min Lee et.al., 2012).

Furthermore, the causes of physical inactivity stem from sedentary behaviour in both occupational and domestic settings, as well as inactivity during leisure periods. Likewise, an increase in the utilisation of "passive" modes of transportation contributes to the insufficient level of physical exercise.

### **Literature Review**

Health and exercise are fundamental components of personal well-being and public health. The Knowledge, Attitude, and Practice (KAP) framework is commonly utilized to assess awareness, perceptions, and behaviors related to health and fitness across diverse populations. This literature review synthesizes current research on health and fitness within the KAP paradigm, focusing on the acquisition of information, attitudinal influences, and practical engagement in fitness activities.

Prakash et al. (2021) explored the KAP regarding physical activity (PA) among medical academic personnel at Fiji National University (FNU). Using a mixed-methods approach, the study collected quantitative data through self-administered surveys and qualitative insights from focus group discussions. Findings revealed that while academic personnel possessed moderate knowledge of physical activity, their attitudes were overwhelmingly positive, and their levels of engagement in exercise were generally commendable. Identified barriers to physical activity included time constraints, excessive workload, lack of motivation, and insufficient institutional support. The study advocates for institutional strategies such as flexible schedules, improved facilities, incentives, and awareness campaigns to promote an active lifestyle among academic personnel.

Similarly, Mohd Rozi et al. (2023) examined the relationship between knowledge, attitudes, and exercise practices among staff at the International Islamic University Malaysia (IIUM) Kuantan Campus. The findings indicate that although the majority of staff had substantial knowledge and a favorable attitude toward exercise, their actual engagement in physical activity did not consistently align with their understanding. This highlights a persistent gap between knowledge and behavior, suggesting that targeted interventions may be necessary to encourage consistent exercise habits. Comparable observations were reported by Bako et al. (2021), who found that despite significant knowledge and positive attitudes among healthcare professionals, their physical activity behaviors remained inconsistent, underscoring the need for intervention strategies to encourage exercise within this demographic.

Murad et al. (2016) investigated the workout habits of individuals who regularly attended gymnasiums and recreational parks. The study identified preferences for exercise styles and motivational factors influencing participation in physical activity. Despite high awareness of the benefits of exercise, no strong association was found between knowledge or attitude and consistent exercise practices, emphasizing the role of motivation and the need to address barriers to sustained engagement in physical activity.

Suriani et al. (2018) examined KAP concerning healthy diets and physical activity among overweight and obese children in Malaysia. The study revealed a lack of knowledge regarding healthy diets and a negative attitude toward physical activity, highlighting the necessity for enhanced, validated, and sustained health programs in educational institutions. These findings align with the 2022 Malaysia National Health and Morbidity Survey on Adolescent Health, which reported that 80% of teenagers do not engage in physical exercise, and two-thirds of individuals lead a sedentary lifestyle (NHMS, 2022).

A study by Kok Leong Tan (2019) focused on physical inactivity among individuals in a suburban Malaysian district, identifying a prevalence rate of 36.3%. The study found significant associations between physical inactivity and factors such as age, gender, marital status, and working hours, suggesting that demographic variables play a critical role in exercise engagement.

Buchmann et al. (2023) examined health literacy and motivational readiness for leisure-time physical activity within a large German adult sample. The study investigated whether health literacy influences the adoption and maintenance of physical activity using data from a nationwide health survey. Findings demonstrated a positive correlation between health literacy and motivational preparedness, suggesting that strengthening health literacy could enhance physical activity promotion efforts.

Pronk (2021) explored strategies for promoting physical activity and reducing sedentary behaviour in the workplace. The study highlighted the substantial economic and health benefits of workplace physical activity initiatives for both employees and organizations. Reported benefits included improved cognitive function, productivity, quality of life, and reduced healthcare costs. Additionally, the study identified barriers to implementation and outlined practical intervention strategies within a socio-ecological model, ultimately advocating for a sustained and structured approach to addressing workplace inactivity.

Collectively, these studies underscore the complex interplay between knowledge, attitudes, and exercise practices. While knowledge and positive attitudes are prevalent, behavioural engagement often remains inconsistent, suggesting a need for targeted interventions.

**Table 1: Summary on Previous KAP Studies**

Study	Population & setting	Methodology	Key findings (KAP)	Barriers	Recommendations
Prakash et al. (2021)	Academic staff, Fiji National University	Mixed methods (survey + focus groups)	Moderate knowledge, positive attitudes, good practices	Time, workload, low motivation, lack of support	Flexible schedules, better facilities, incentives, awareness campaigns
Mohd Rozi et al. (2023)	Staff, IIUM Kuantan	Quantitative	High knowledge and attitude, but low practice	Not specified	Targeted behavioral interventions
Bako et al. (2021)	Healthcare professionals	Not specified	Positive knowledge and attitudes, inconsistent practice	Not specified	Promote regular exercise through strategic efforts
Murad et al. (2016)	Gym & park-goers, Malaysia	Quantitative	High awareness, no strong KAP-practice link	Motivation, engagement barriers	Address motivational factors, reduce obstacles
Suriani et al. (2018)	Overweight/obese children, Malaysia	Quantitative	Low knowledge, negative attitude toward PA	Implied lack of awareness and support	School-based, validated health programs
NHMS (2022)	Malaysian adolescents	National survey	80% inactive, high sedentary lifestyle	Lifestyle patterns	Increase youth-targeted PA initiatives
Kok Leong Tan (2019)	Suburban adults, Malaysia	Cross-sectional	36.3% inactive rate	Age, gender, marital status, long hours	Tailor programs to demographic factors
Buchmann et al. (2023)	German adults	National health survey	Health literacy linked to PA motivation	Not detailed	Improve health literacy to enhance motivation
Pronk (2021)	Workplace employees	Literature review	Benefits of PA at work (e.g., productivity)	Implementation challenges	Structured, long-term workplace PA plans

## Problem Statement

The knowledge, attitudes, and exercise habits of campus staff members remain insufficiently explored, despite the well-documented benefits of regular physical activity. This lack of understanding may contribute to suboptimal health and well-being among employees, potentially affecting not only their personal health but also their productivity and job satisfaction. To address this gap, this study aims to examine the current levels of knowledge, attitudes, and physical activity practices among campus staff. The findings will help identify key areas for improvement and inform the development of targeted interventions to promote a healthier lifestyle within the campus community.

## Methodology

### Study Design

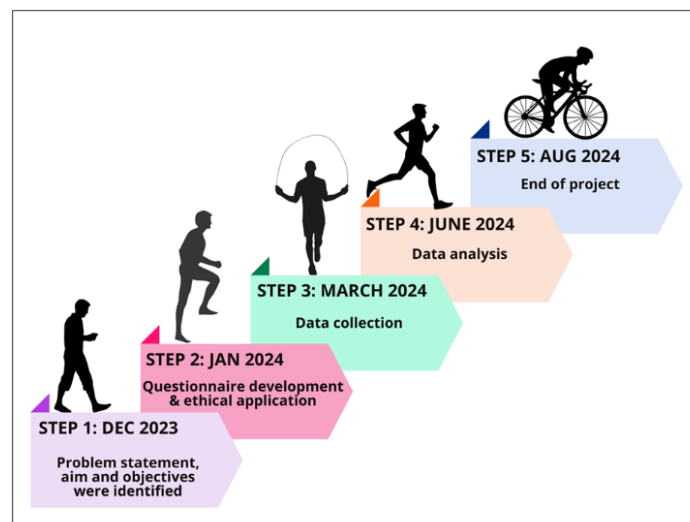


Figure 1: The General Framework of The Study.

### Ethical Approval

Prior to collecting the data reported in this study, the survey and methods were approved by Universiti Teknologi MARA's (UiTM) Research Ethics Committee (REC) reference number BERC/5/2024 (UG/MR/289).

### Subjects

The participants in this study comprised academic and non-academic personnel from the Faculty of Pharmacy, Faculty of Health Sciences, and administration of UiTM Cawangan Pulau Pinang, Bertam Campus. All participants were asked to complete the survey using a questionnaire distributed through WhatsApp, accompanied by request letters for their responses (Othman et al., 2022).

### Questionnaire

A questionnaire designed to evaluate knowledge, attitudes, and practices on health and fitness was developed from a study conducted by Mohd Rozi et al. (2023). The online survey questionnaire comprised four sections which include demographic information, knowledge about exercise, attitude regarding exercise and practices regarding exercise. The demographic



information consisted of gender, ethnic, age, education, chronic illness, gym membership and recreational group. The second section comprised of fourteen close-ended questions (True/False/Not sure response) to gain insight into respondents' knowledge on exercise. The third section of the survey contained sixteen close-ended questions presented in a 5-point Likert scale format (ranging from (1) 'strongly agree' to (5) 'strongly disagree') that assessed respondents' attitude regarding exercise. The last section of the survey included questions that provided data on the regularity of exercise and type of exercise, and also reasons for not exercising.

### Data Analysis

The collected data were analysed by the frequency of common responses from respondents and presented in percentages (%). The demographic information of the respondents, along with their knowledge, attitude, and practice regarding exercise, was organised in tables and figures displaying percentages (%). The correlation test was employed to assess the relationship between respondents' knowledge of exercise and their actual practices.

## Results

### Socio-demographic Data

A total of 74 staff members participated in this study (Figure 2). The demographic analysis indicates a predominantly female (68.9%) sample, with all respondents identifying as Malay. The majority (50%) fall within the 31-40 age group, suggesting a workforce primarily in their early to mid-career stages. Education levels are relatively high, with 33.8% holding a master's degree and 23% a diploma, reflecting an academically qualified group. Health and fitness engagement appear low, as only 9.5% reported having chronic illnesses, yet gym membership (5.4%) and recreational group participation (23%) were minimal. This suggests that despite a generally healthy demographic, structured physical activity is not a priority, possibly due to work-life balance challenges or cultural factors. Low participation in gym memberships and leisure organisations may arise from financial limitations, cultural inclinations towards unstructured activities, or insufficient access to facilities.

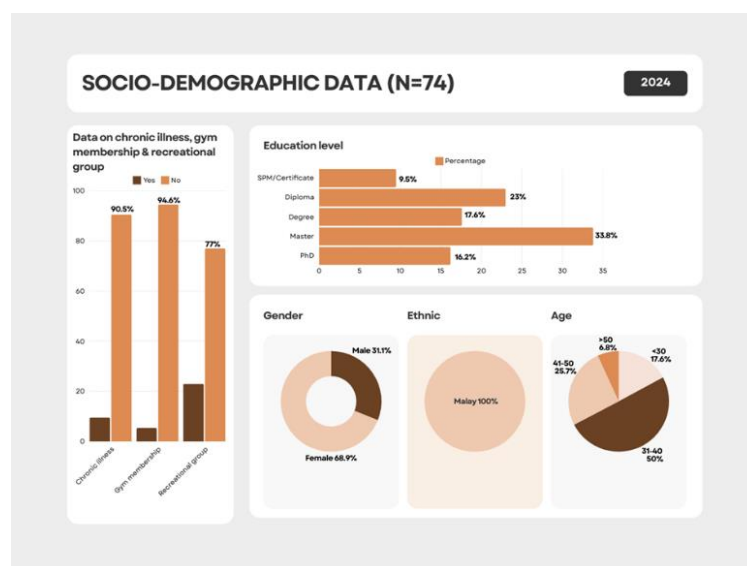


Figure 2: Socio-Demographic Data of The Respondents.

***Respondents' Knowledge About The Advantages Of Exercise***

Participants demonstrated a strong understanding of the positive impacts of exercise, with unanimous agreement (100%) on its benefits for disease prevention, mood enhancement, stress relief, and physical fitness (Table 2). However, gaps in knowledge persist regarding exercise guidelines, as 25.7% were unsure about muscle-strengthening exercises for individuals with chronic conditions, and 36.5% were uncertain about the recommended 150 minutes of moderate-intensity exercise per week. This indicates a need for clearer health education, particularly in targeted exercise recommendations, to improve adherence to globally recognized fitness guidelines.

**Table 2: Respondents' Knowledge About the Advantages of Exercise (n=74)**

Statements	n (%)		
	True	False	Not Sure
Exercise helps to combat many diseases	74 (100)	0 (0)	0 (0)
Exercise improves mood	74 (100)	0 (0)	0 (0)
Exercise can strengthen endurance and stamina	74 (100)	0 (0)	0 (0)
Doing some exercise makes life happier	70 (94.6)	0 (0)	4 (5.4)
Adults with chronic conditions should do muscle strengthening exercises	43 (58.1)	12 (16.2)	19 (25.7)
Exercise is able to relieve stress	74 (100)	0 (0)	0 (0)
Do some exercise can yield healthy body	74 (100)	0 (0)	0 (0)
Exercise can build a fit body	74 (100)	0 (0)	0 (0)
Adults should do at least 150 minutes a week of moderate intensity exercise	43 (58.1)	4 (5.4)	27 (36.5)

***Respondents' Knowledge About The Disadvantages Of Exercise***

While the majority of responders accurately recognised that exercise does not elevate stroke risks (68.9%), other misconceptions persist (Table 3). Significantly, 24.3% perceive that exercise induces iron loss, while 25.7% contend it leads to vitamin depletion, indicating a deficiency in understanding dietary management related to physical activity. Moreover, 28.4% regard exercising beyond 300 minutes weekly as detrimental, despite data endorsing its advantages for cardiovascular and metabolic health (WHO, 2020). Although 63.5% recognise the risk of substantial injuries, ambiguity in other domains indicates a necessity for education on exercise safety, intensity, and nutritional equilibrium.



**Table 3: Respondents' Knowledge About the Disadvantages of Exercise (n=74)**

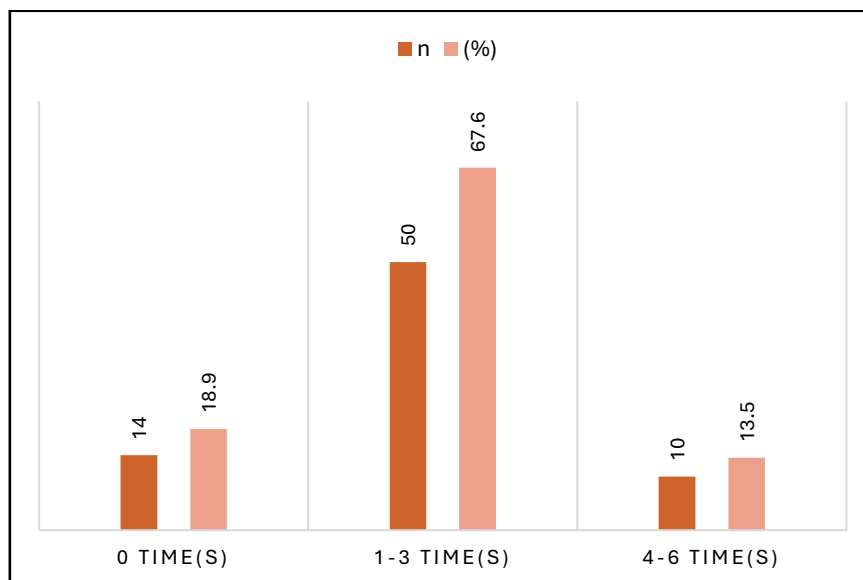
Statements	n (%)		
	True	False	Not Sure
Exercise increases the chance of stroke and other circulation problem	20 (27)	51 (68.9)	3 (4.1)
There is iron loss after exercise	18 (24.3)	26 (35.1)	30 (40.5)
There is vitamin loss after exercise	19 (25.7)	35 (47.3)	20 (27)
Significant injuries can occur from physical activity	47 (63.5)	25 (33.8)	2 (2.7)
Doing more than 300 minutes a week of moderate intensity exercise is more harmful than beneficial	21 (28.4)	23 (31.1)	30 (40.5)

***Respondents' Attitude Regarding Exercise***

Table 4 presents the respondents' perspective on exercise. The participants displayed positive attitudes, with most involved in exercise for health (95.9%), fitness (95.9%), and weight management (93.3%). A notable cultural impact was observed, with 79.7% agreeing that exercise is an integral part of being a good Muslim. However, barriers to physical activity persist, with 35.1% reporting insufficient time and 10.9% facing stress. The social motivation for exercise exhibited diversity, with 41.9% recognising it as a factor influencing their decision to engage in physical activity. The results suggest that while intrinsic motivations for exercise remain strong, time constraints persist as a major obstacle.

**Table 4: Respondents' Attitude Regarding Exercise (n=74)**

Statements	n (%)				
	Strongly Agree	Agree	Uncertain/ Neutral	Disagree	Strongly Disagree
1. Exercise is a stressful activity	5 (6.8)	3 (4.1)	12 (16.2)	24 (32.4)	29 (39.2)
2. Exercise causes people to be exhausted	11 (14.9)	7 (9.5)	16 (21.6)	26 (35.1)	11 (14.9)
3. Exercise is one of the ways for me to have fun	44 (59.5)	19 (25.7)	8 (10.8)	0 (0)	3 (4.1)
4. I exercise because I want to improve my health	59 (79.7)	12 (16.2)	0 (0)	3 (4.1)	0 (0)
5. I exercise because I want to increase my fitness level	57 (77)	14 (18.9)	0 (0)	3 (4.1)	0 (0)
6. I exercise because I want to look good	44 (59.5)	21 (28.4)	3 (4.1)	3 (4.1)	3 (4.1)
7. Socializing is the reason why I exercise	22 (29.7)	9 (12.2)	27 (36.5)	5 (6.8)	11 (14.9)
8. I exercise because I want to control my weight	54 (73)	15 (20.3)	2 (2.7)	3 (4.1)	0 (0)
9. I will exercise only if someone is accompanying me	3 (4.1)	0 (0)	28 (37.8)	20 (27)	22 (29.7)
10. Exercise is only for overweight people	6 (8.1)	0 (0)	0 (0)	15 (20.3)	49 (66.2)
11. I am afraid of getting injured when I exercise	6 (8.1)	7 (9.5)	13 (17.6)	28 (37.8)	18 (24.3)
12. I am too busy to exercise	12 (16.2)	14 (18.9)	24 (32.4)	4 (5.4)	18 (24.3)
13. People who don't exercise are lazy	12 (16.2)	10 (13.5)	35 (47.3)	2 (2.7)	15 (20.3)
14. Exercise is part of being a good Muslim	47 (63.5)	12 (16.2)	9 (12.2)	3 (4.1)	3 (4.1)
15. I am happy with my physical condition	9 (12.2)	23 (31.1)	24 (32.4)	12 (16.2)	6 (8.1)
16. I'm happy with my life	14 (18.9)	40 (54.1)	16 (21.6)	3 (4.1)	0 (0)

***Respondents' Frequency Of Exercising Per Week*****Figure 3: Respondents' Frequency of Exercising Per Week (n=74).**

As shown in Figure 3, the frequency of exercise varied, with the majority of participants (67.6%) participating in physical activity 1-3 times weekly, consistent with global patterns in moderate exercise compliance. Nonetheless, a troubling 18.9% indicated complete inactivity, suggesting potential hazards associated with a sedentary lifestyle. Although numerous individuals partake in varying degrees of physical activity, initiatives should focus on promoting more consistent and prolonged involvement.

### ***Exercise Categories Engaged In By The Respondents***

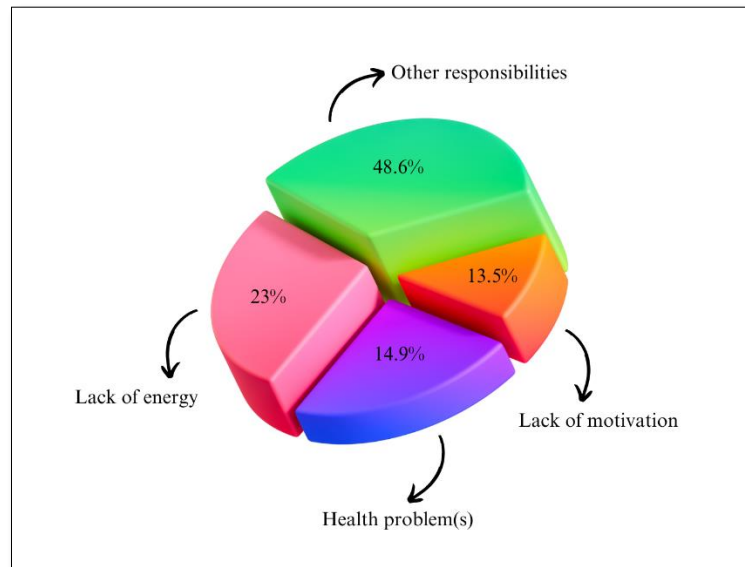
The most popular exercise choices were vigorous walking (83.8%) and jogging/running (51.4%), as demonstrated in Table 5. This is likely due to their low cost and accessibility. Nevertheless, the prevalence of more structured forms of exercise, such as high-intensity interval training (17.6%) and gym exercises (9.5%), was significantly lower. This trend indicates a preference for self-directed, lower-impact activities over structured fitness regimens, which may be due to time constraints, financial constraints, or a lack of familiarity with more intense training methods.

**Table 5: Exercise Categories Engaged in by The Respondents (n=74)**

Type of exercise	n (%)
Hiking	24 (32.4)
Brisk walking	62 (83.8)
Gym workout	7 (9.5)
Jogging/Running	38 (51.4)
Aerobic/Aerodance/Zumba	26 (35.1)
High Intensity Interval Training (HIIT)	13 (17.6)

### ***Factors That May Prevent Exercise***

The factors that may impede respondents from engaging in physical activity are illustrated in Figure 4. The primary obstacle to exercise was the presence of other responsibilities (48.6%), which underscored the significant challenge of time constraints. Other significant challenges included a lack of motivation (13.5%), health issues (14.9%), and a lack of vitality (23%). These results suggest that the level of exercise participation is substantially influenced by lifestyle demands, physical fatigue, and psychological factors. It is possible to improve exercise adherence by addressing these barriers through workplace wellness programs, motivational interventions, and time management strategies.



**Figure 4: Factors That May Prevent Exercise (n=74)**

### ***Correlation Between Knowledge Regarding Exercise And Its Practice***

Although it is widely believed that enhanced awareness of exercise benefits results in greater involvement, actual evidence does not consistently corroborate this notion. The negative correlation coefficient ( $r = -0.171$ ) indicates that as knowledge about exercise increases, the frequency of exercise somewhat declines. Although statistically significant ( $p = 0.000$ ), the link is weak, suggesting that knowledge alone is not a robust predictor of exercise behaviour. Socioeconomic status, profession, access to facilities, and pre-existing health conditions might mediate this relationship.

**Table 6: Correlation Between Knowledge Regarding Exercise and Its Practice (n=74)**

	Frequency of exercise	<i>p value</i>
<b>Knowledge regarding exercise</b>	$r = -0.171$	0.000

### **Discussions**

Consistent physical activity is a vital factor in general health and well-being, with many studies validating its importance in preventing chronic diseases and improving quality of life. Exercise significantly influences the modulation of inflammatory responses and oxidative stress (El Assar et. al., 2022; Wang et. al., 2023; Chen et. al., 2025) which are factors contributing to numerous degenerative illnesses. Notwithstanding these extensively recorded benefits, worldwide engagement in consistent physical exercise remains inadequate, affected by elements such as sedentary habits, work obligations, and cultural attitudes towards fitness. Mitigating these obstacles by governmental interventions, workplace wellness efforts, and community fitness programs can improve public health outcomes and promote a more active society. In addition to disease prevention, exercise is crucial for enhancing functional ability and longevity. Studies indicate that persons who sustain an active lifestyle demonstrate increased physical autonomy, less frailty, and improved mobility with advancing age (Woolford et.al., 2020; Talar et.al., 2021; Abou Sawan et. al., 2023; Mcleod et. al., 2024).

While 25.7% of respondents expressed uncertainty regarding muscle-strengthening exercises for individuals with chronic conditions, resistance training has been shown to mitigate sarcopenia (Talar et al., 2021; Cannataro et. al., 2022), the age-related decline in muscle mass and strength (Woolford et. al., 2020), thereby reducing the risk of falls and associated health issues in the elderly (WHO, 2020; Abou Sawan et. al., 2023; Mcleod et. al., 2024).

Concerning nutritional management associated with physical activity, around 35% and 47% staff members believed that participation in exercise results in the depletion of iron and vitamins in the body. This aligns with the findings of Mohd Rozi et al. (2023), where most respondents expressed agreement with the remarks. Iron is essential for critical activities such as oxygen transfer and energy synthesis during intense physical workout. Peeling et al. (2023) reported that iron deficiency affects both male and female athletes, making it one of the most prevalent nutritional diseases in athletic groups. To enhance awareness of this crucial issue, advocating for dietary supplementation of macro- and micronutrients prior to physical activity might be the most effective approach.

Table 3 indicates that over 40% of respondents are uncertain if engaging in moderate-intensity exercise for over 300 minutes weekly is harmful. The WHO (2020) reported that adults can enhance their health by engaging in over 300 minutes of moderate-intensity aerobic physical activity, more than 150 minutes of vigorous-intensity aerobic physical activity, or a corresponding combination of both types of activity weekly. In adults, increased levels of sedentary behaviour correlate with adverse health outcomes, including all-cause mortality, cardiovascular disease mortality, cancer mortality, and the incidence of cardiovascular disease, cancer, and type-2 diabetes. To mitigate the adverse effects of elevated sedentary behaviour on health, individuals are advised to exceed the recommended levels of moderate- to vigorous-intensity physical exercise (WHO, 2020).

Cultural perspectives also influence exercise participation. The data in Table 4 reveals that 79.7% consider exercise essential to religious practice, suggesting an opportunity for faith-based fitness programs. However, competing lifestyle demands, such as work-life balance, impose time constraints and fatigue, so limiting participation. Conversely, 41.9% acknowledge that socialising is the primary motivation for their workout, which closely aligns with the findings presented by Murad et. al. (2016). The social aspects of fitness, such as participation in group exercise programs or leisure sports, enhance motivation and provide psychological support. From a psychological perspective, the secretion of endorphins during physical exercise (Junior & Dewi, 2024) fosters a sense of accomplishment and motivation, thereby reinforcing adherence to good practices (Hossain et. al., 2024).

Figure 3 illustrates that 18.9% of respondents reported total inactivity. Despite the figures being seemingly trivial, the scenario indicates potential hazards linked to a sedentary lifestyle. Factors contributing to inactivity are summarised in Figure 4, and may include time limitations, insufficient support, inadequate space, bad self-perception regarding health, excessive screen time, and disinterest in physical activity (Martin et al., 2021; Landais et.al., 2022). In a workplace, significant potential threats stemming from employee sedentary behaviour include a greater likelihood of metabolic disorders, which indirectly lead to an increase in medical expenses and labour inefficiency. To address this issue, the employer or the organisation may incorporate physical activity participation as a key performance metric. In Sweden, initiatives for workplace health promotion are put into action to sustain employee well-being, enhance

productivity, and strengthen employee branding. A considerable number of financial resources, organisational backing, and office space are allocated to tackle the challenges faced by sedentary workers. This study emphasises the significance of employee engagement in enhancing workplace health promotion and tackling work-life balance challenges that impede a healthy lifestyle. Eliminating obstacles at the organisational level could enhance the implementation of workplace health initiatives focused on physical activity for office employees (Halling et.al., 2023).

Among the six categories of exercise shown in Table 5, brisk walking was favoured by the respondents. The findings of this study (83%) do not correspond with the results presented by Mohd Rozi et al. (2023), which indicated that just 20% enjoy walking. Brisk walking has been demonstrated to markedly improve employee well-being and productivity, rendering it a beneficial intervention in workplace health initiatives. Consistent brisk walking enhances cardiovascular health (Ghodeswar et al., 2023), decreases stress levels and elevates cognitive function (Olafsdottir et. al., 2018), resulting in improved concentration and work efficiency. Promoting brisk walking during breaks or as a component of workplace wellness programs can consequently result in a healthier, more engaged, and higher-performing staff. Moreover, brisk walking represents an economical form of exercise that necessitates no particular space and is accessible to all individuals.

On the flip side, the gym workout does not appear to be preferred by the staff in this study. This could be attributed to the complete participation of Malay staff in the study. The hesitation of certain Malays to participate in gym-based exercise can be linked to various cultural, social, and psychological influences. Cultural norms that prioritise modesty can deter individuals, especially women, from engaging in public fitness spaces because of worries related to clothing choices and the presence of mixed-gender settings. Moreover, conventional lifestyle practices that frequently emphasise outdoor pursuits or community-oriented sports might diminish the perceived need for gym sessions. Socioeconomic factors significantly influence accessibility, as the expense of gym memberships can limit availability for lower-income populations. Moreover, insufficient awareness about the significance of organised physical activity, along with the belief that routine tasks offer adequate exercise, leads to decreased attendance at gyms.

Meanwhile, the connection between awareness of exercise and actual participation is frequently taken for granted as being beneficial; nonetheless, empirical evidence does not consistently validate this belief. The observed negative correlation coefficient indicates that an increase in awareness of exercise benefits is associated with a slight decrease in the frequency of actual participation. This discrepancy underscores the intricate nature of exercise engagement and emphasises the necessity of accounting for additional influencing factors.

A potential explanation for this inverse relationship could be attributed to the influence of socioeconomic status (SES). People from elevated socioeconomic backgrounds frequently possess enhanced access to health information and demonstrate a greater awareness of the advantages of exercise. Nonetheless, they might encounter rigorous work schedules that restrict their time for engaging in physical activity. On the other hand, those belonging to lower socioeconomic status groups might participate in more physically intensive work, thereby attaining adequate exercise levels without a conscious recognition of its advantages. This indicates that lifestyle limitations, rather than just knowledge, have a greater impact on shaping exercise behaviours.



The availability of exercise facilities plays a crucial role in influencing the connection between awareness and participation. Simply being aware of the benefits of exercise does not ensure that individuals will stick to a routine, especially when they encounter structural obstacles like expensive gym memberships, insufficient public recreational areas, or gyms that are not conveniently located.

Existing health conditions add complexity to this relationship. People who possess a strong understanding of the advantages of exercise might also have existing health concerns that restrict their capacity to participate in physical activities. Individuals with cardiovascular conditions, joint pain, or chronic illnesses may recognise the significance of exercise yet face physical constraints that hinder their ability to engage consistently. This inverse relationship indicates that knowledge may not always lead to action, especially in the presence of health constraints. Although increased awareness of the benefits of exercise is significant, it alone does not serve as a sufficient predictor of exercise participation. Factors related to socioeconomic status, job requirements, access challenges, and health conditions play crucial roles as mediating variables. Future interventions designed to enhance physical activity should take a comprehensive approach, tackling both awareness and the structural and personal obstacles that hinder exercise adherence.

### Conclusions

The study focused on campus staff members' knowledge, attitudes, and exercise habits, all of which have received little attention. To close this gap, this study will look at the present levels of knowledge, attitudes, and physical activity practices among campus staff.

Despite the well-documented benefits of exercise, participation rates remain low due to a variety of factors, including sedentary work settings, cultural attitudes, and lifestyle constraints. The findings show that, while many people recognise the value of exercise, there is a gap between awareness and actual engagement, implying that information alone is insufficient to motivate behavioural change.

The study has several significant implications. First, the implementation of structured exercise programs at the workplace, combined with policy-level interventions, has the potential to increase participation and reduce the negative impacts of sedentary behaviour. Furthermore, cultural and social aspects should be considered while promoting exercise, as faith-based fitness programs and community-driven efforts have the potential to encourage active lifestyles. The findings also underscore the need for improved public education on nutrition and exercise, as misconceptions about nutritional depletion and exercise threats continue.

However, certain restrictions must be recognised. The study's sample composition, which consisted primarily of Malay workers, may limit the findings' applicability to more varied communities. Furthermore, self-reported data on exercise habits and impediments may be susceptible to response bias. Future study should include a larger and more representative sample, as well as longitudinal studies to track behavioural changes over time. Investigating the influence of socioeconomic circumstances, access to exercise facilities, and individualised health conditions in affecting physical activity participation might help to improve our understanding of exercise engagement.

Moving forward, comprehensive intervention strategies addressing both structural and psychological barriers to exercise are required. Policies that support inexpensive and accessible fitness programs, combined with focused awareness initiatives, can help close the knowledge-to-action gap. By addressing these issues, societies can cultivate a culture of health and wellness, resulting in better public health outcomes and a more active populace. This study adds to the growing body of evidence supporting holistic methods to fitness promotion and emphasises the need of cross-sectoral collaboration in boosting lifetime physical activity participation.

In summary, the objectives of this investigation have been satisfactorily accomplished.

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