

The Relationship Between Recreational Exercise Frequency And Physical Fitness Level

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ABSTRACT

This study aims to examine the relationship between the frequency of recreational exercise and physical fitness levels through a literature study of various scientific sources. Modern passive lifestyles have led to a decline in physical activity among the public, which contributes to declining fitness levels and increases the risk of non-communicable diseases. Recreational sport, as a voluntary and enjoyable physical activity, has been shown to improve various components of physical fitness if practised regularly. Analysing 10 scientific articles, the results of this study show that the frequency of recreational exercise is positively associated with improvements in physical fitness, including heart-lung endurance, muscle strength and flexibility. Recommendations from the WHO and various studies support the importance of doing at least 150 minutes of physical activity per week. Therefore, recreational exercise done consistently can be an effective solution to improve physical fitness. These findings emphasise the importance of building an exercise habit into daily life.

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- A. Conception and design of the study;
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INTRODUCTION

In this modern era, the rapid development of technology and urbanisation has had a huge impact on people's lifestyles. Especially in big cities, many people spend most of their time working with minimal physical movement, such as working in an office or using motorised vehicles as the main means of transport. This has led to a change in lifestyle to a more passive one, which in the long run has the potential to cause a decrease in physical fitness levels and increase the risk of various non-communicable diseases (NCDs) such as obesity, hypertension, diabetes and cardiovascular disease (Frohlich, 2016). This limited physical activity is also associated with an increasing incidence of chronic diseases among urban dwellers.

As part of the effort to address these health issues, recreational exercise is

emerging as one of the solutions that is easily accessible and has various benefits. Recreational sport is a form of physical activity that is undertaken to maintain or improve health, but with a more relaxed and enjoyable approach. Unlike competitive sports that demand technical skills and often require high levels of intensity, recreational sports focus more on physical activities that can be done by anyone regardless of age, gender or level of physical ability. These sports can be simple activities such as walking, cycling, gymnastics or jogging, done regularly.

According to research conducted by Rhodes and Naylor (2016), recreational sports have many benefits for physical fitness, especially in terms of improving heart-lung endurance, muscle strength, flexibility, and balance. In addition, these activities also benefit the mental and social health of individuals. Regular physical activity can reduce stress levels, improve sleep quality, and provide a sense of happiness due to the process of releasing endorphins, known as happiness hormones (Smith, 2015). Therefore, building a habit of exercising regularly, even at a light intensity, can be an important step in improving overall quality of life.

One important component of recreational exercise is the frequency of exercise itself. Adequate frequency of exercise is directly related to improved physical fitness. The World Health Organisation (WHO) recommends that adults engage in moderate-intensity physical activity for at least 150 minutes per week, which is equivalent to about 30 minutes of moderate exercise 5 days a week (World Health Organization, 2020). Research conducted by Fox et al. (2010) showed that physical activity done regularly and in sufficient amounts can increase the body's aerobic capacity, improve blood circulation, and strengthen the immune system.

However, despite many studies proving the importance of exercise frequency to improve physical fitness, there is still a big challenge in encouraging people to adopt recreational exercise as a daily habit. This is often due to time constraints, lack of adequate facilities, or even ignorance of the benefits of exercise itself. Therefore, it is important to understand more about the relationship between recreational exercise frequency and physical fitness to develop effective strategies to encourage people to participate in regular physical activity.

This study aims to further analyse the relationship between the frequency of recreational exercise and physical fitness levels through literature studies from various scientific sources. Using a qualitative approach and literature study method, this research will examine the findings of previous studies that discuss the effect of recreational exercise on physical fitness. This research is expected to provide a deeper insight into the benefits of recreational exercise and the importance of building exercise habits to improve body health and quality of life in general.

METHODS

This research used a literature study approach to analyse the relationship between recreational exercise frequency and physical fitness levels. The research process began with the collection of various relevant literature sources, which included scientific journals, reference books, research reports, and guidelines published by relevant institutions, both

nationally and internationally. This literature study not only aimed to identify the results of previous research, but also to compile a summary that includes variables that are interrelated with the frequency of recreational exercise and its impact on physical fitness.

RESULTS AND DISCUSSION

Based on the analysis of the 10 articles reviewed in this study, it can be concluded that there is a positive and significant relationship between the frequency of recreational exercise and physical fitness levels. In general, the majority of the studies reviewed indicate that the higher the frequency of recreational exercise, the better the physical fitness. Regular exercise, at least three times a week, can improve various components of physical fitness, such as cardiovascular endurance, muscle strength, flexibility, and body balance.

Research findings also indicate that the intensity and duration of exercise play a significant role in improving physical fitness. Exercise sessions lasting approximately 30 to 60 minutes per session and occurring at least three times per week are more effective in enhancing aerobic capacity, muscle strength, and overall physical endurance. Additionally, significant improvements in body flexibility were observed, which helps prevent injuries and enhances comfort in performing daily activities. Recreational exercise, even though it is classified as light to moderate intensity, has been proven to have significant benefits, both for younger individuals and older age groups.

In older age groups, recreational exercises such as cycling or morning exercises, when performed regularly, have been proven effective in improving physical mobility, heart health, and overall quality of life. Regular physical activity can improve physical function and boost self-confidence, which in turn can enhance social and psychological well-being. Furthermore, housewives who engage in regular light exercise also show improvements in daily energy levels and body balance, supporting their daily activities.

Overall, the results of this study indicate that recreational exercise not only has positive effects on physical fitness but also provides benefits for mental and social health. Therefore, it is recommended that recreational exercise be incorporated into daily routines, with a minimum frequency of three times per week. Adopting this exercise habit can be an effective solution to prevent various non-communicable diseases associated with a sedentary lifestyle and improve overall quality of life.

Table 1.
Literature Review Results

| No | Author and Year | Research Design | Respondents | Result |
|----|-------------------|-------------------------------------|----------------------------|---|
| 1 | Fox et al. (2010) | Literature and experimental studies | Young adults (18–30 years) | Exercise frequency 3–5 times/week increases VO2 max and aerobic capacity. |
| 2 | WHO (2020) | Guide Global Health | Common (various ages) | 150–300 minutes of physical activity/week increases heart-lung endurance. |
| 3 | Suroso (2018) | Quantitative Correlation Surveys | Students (n=100) | The frequency of exercise >3x/week is directly proportional to the increase in fitness. |

| No | Author and Year | Research Design | Respondents | Result |
|----|------------------------------|----------------------|--------------------------------|--|
| 4 | Suharjana (2014) | Descriptive studies | Junior High School Students | Exercising 3x/week improves muscle strength and flexibility. |
| 5 | Ministry of Health RI (2021) | Policy report | General public | Regular physical activity lowers the risk of non-communicable diseases and improves fitness. |
| 6 | Nurhayati & Rudianto (2017) | Experimental studies | Primary school teachers (n=30) | Regular morning exercise 4x/week improves overall physical fitness. |
| 7 | São Paulo & Ramadan (2019) | Correlation surveys | Employee office (n=75) | A brisk 30-minute, 5x/week walk increases endurance and muscle mass. |
| 8 | Lestari et al. (2020) | Quantitative studies | Sports students (n=60) | Moderate intensity aerobic exercise 3-4x/week is effective in increasing VO2 max. |
| 9 | Stuttgart & Handayani (2016) | Longitudinal studies | Active elderly (n=40) | Regular recreational cycling improves flexibility and heart health. |
| 10 | Angela (2022) | Survey and interview | Housewives (n=50) | Light gymnastics 3x/week improves daily energy and body balance. |

Based on the data in the Literature Review Results Table, it can be concluded that the frequency of recreational exercise has a positive and significant relationship with improvements in physical fitness, both in terms of physiological aspects such as cardiorespiratory endurance, muscle strength, and body flexibility. The majority of the studies reviewed show that exercise performed regularly at least three times a week has a significant impact on improving physical fitness.

Studies by Fox et al. (2010) and the WHO (2020) provide theoretical and practical foundations that high-frequency physical activity can enhance aerobic capacity and cardiorespiratory function. This is supported by Suroso (2018), who empirically demonstrated that students who exercise more than three times per week have higher VO2 max, an important indicator of physical fitness.

Other studies, such as those by Suharjana (2014) and Nurhayati & Rudianto (2017), show that regular exercise and morning callisthenics have an impact on increasing muscle strength and body flexibility. These activities, although recreational and light in nature, can improve muscle efficiency and maintain joint range of motion.

Additionally, the findings of Prasetyo & Handayani (2016) highlight the importance of recreational exercise for the elderly. They found that regular recreational cycling can improve mobility and heart health, indicating that light exercise still offers significant benefits for the elderly. Social and psychological aspects also cannot be overlooked. A study by Yuliana (2022) found that housewives who regularly engage in light exercise feel more energetic and balanced in their daily activities, indicating that physical fitness also impacts overall well-being and quality of life.

However, the intensity and duration of exercise are also important factors alongside frequency. A study by Lestari et al. (2020) showed that moderate-intensity aerobic exercise with a frequency of 3-4 times per week is more effective in improving fitness than exercises that are too light or performed inconsistently. In general, the consistent pattern across all studies in the table indicates that a minimum frequency of

3 times per week with a duration of 30–60 minutes per session is an effective combination for improving various aspects of physical fitness. These findings are consistent with guidelines issued by the WHO and the Indonesian Ministry of Health, which recommend that the public incorporate physical activity into their daily routines.

Based on the results of the research and analysis of the 20 articles reviewed in this literature study, there is consistent evidence that the frequency of recreational exercise has a positive and significant relationship with improvements in physical fitness. Overall, these findings support the statement that regular exercise can provide significant benefits for physical health, particularly in improving aerobic capacity, cardiovascular endurance, muscle strength, body flexibility, and body balance. Therefore, the habit of engaging in regular recreational exercise has a broad impact on the quality of life and health of the community.

The majority of studies analysed show that recreational exercise performed at least three times per week has a significant impact on physical fitness. Exercise lasting 30 to 60 minutes per session has been proven to improve endurance, particularly cardiorespiratory endurance. This exercise not only increases VO₂ max capacity, an important indicator in measuring physical endurance, but also enhances muscle strength and improves body flexibility. This is particularly important for reducing the risk of injury, increasing joint range of motion, and maintaining body balance, especially for older individuals.

Additionally, the intensity and consistency of exercise are crucial in maximising the benefits of recreational exercise. These findings also confirm that moderate-intensity exercise performed consistently is more effective in improving physical fitness than sporadic or occasional exercise. For example, aerobic exercise performed 3 to 4 times per week yields better results than exercise performed at lower frequencies or with very low intensity. Therefore, it is important to educate the public about the importance of consistency in exercise to achieve optimal benefits.

This study also found that recreational exercise has significant benefits for the elderly. Light exercises such as morning callisthenics, walking, or recreational cycling, although not very intense, have a significant impact on heart health, body mobility, and quality of life. Regular physical activity helps reduce pain, improve mobility, and enhance the cardiovascular system, which is crucial for older adults who tend to experience a decline in physical function. These findings align with guidelines from various global health organisations recommending that older adults remain physically active to improve their physical and mental health.

Recreational exercise has also been proven to have a positive impact on mental health. Many studies show that regular light exercise, in addition to being beneficial for physical fitness, can also reduce stress, anxiety, and depression levels. Consistent physical activity results in the release of endorphins, which function as happiness hormones, improving mood and psychological well-being. Even for housewives who often experience physical and mental fatigue due to daily routines, light exercise such as aerobics or walking can increase their daily energy levels and provide a sense of balance in the body.

The importance of recreational exercise in preventing non-communicable diseases is also highlighted in various studies. For example, regular recreational exercise can

reduce the risk of obesity, hypertension, type 2 diabetes, and various heart diseases. This aligns with guidelines published by the WHO, which recommend at least 150 minutes of physical activity per week to maintain heart and blood vessel health and prevent the risk of developing metabolic diseases. Additionally, exercise performed with sufficient frequency can improve the immune system, accelerate recovery after injury, and enhance sleep quality, all of which play a role in maintaining overall physical health.

Overall, these findings underscore the importance of integrating recreational exercise into daily life as a preventive measure to improve physical and mental fitness. Given the numerous benefits of recreational exercise for young people, working adults, and the elderly, it can become an accessible part of a healthy lifestyle for nearly all segments of society. This also demonstrates that, despite not requiring special facilities, recreational sports have a significant impact on improving quality of life. Therefore, consistent and regular participation in recreational sports can be an effective solution for enhancing physical fitness, reducing the risk of non-communicable diseases, and promoting the development of a sustainable healthy lifestyle.

CONCLUSION

Based on the results of the literature review, it can be concluded that there is a strong and positive relationship between the frequency of recreational exercise and physical fitness levels. Recreational exercise performed regularly, at least three times a week with a duration of 30–60 minutes per session, has been proven effective in improving various components of physical fitness, such as cardiovascular endurance, muscle strength, flexibility, and body balance.

The analysed studies indicate that the higher the frequency of recreational physical activity, the better the physical fitness levels achieved. This applies across various age groups and backgrounds, including students, employees, housewives, and the elderly. Additionally, recreational exercise has a positive impact on psychological well-being and quality of life, especially when performed consistently and in accordance with individual capacity.

This conclusion aligns with international (WHO) and national (Ministry of Health of the Republic of Indonesia) guidelines, which recommend regular physical activity as the primary strategy for improving public health and preventing non-communicable diseases. Thus, adequate frequency of recreational exercise not only enhances physical fitness but also supports the development of a sustainable, healthy lifestyle.

Based on the findings of this study, it is recommended that communities, both in urban areas and other regions, begin adopting the habit of engaging in recreational exercise regularly, with a minimum frequency of three times per week. Recreational physical activities such as gymnastics, cycling, brisk walking, and other light physical activities can be easily and enjoyably performed without requiring special facilities. Educational campaigns involving the government, health institutions, and the education sector are also needed to raise public awareness of the importance of physical activity.

Additionally, to achieve optimal results, exercise duration should range between 30 and 60 minutes per session. For older adults, lighter but regular exercises, such as morning gymnastics and cycling, can be appropriate choices. It is also important to consider other factors that support physical fitness, such as a healthy diet and adequate sleep, to maximise the benefits of recreational exercise.

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