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Factors Influencing Physical Activity and Healthy Lifestyle on Students' Physical Fitness

Reni Silviah¹

¹Universitas Bhayangkara Jakarta Raya, Jakarta, Indonesia, renisilviah5@gmail.com.

Corresponding Author: renisilviah5@gmail.com¹

Abstract: Factors that influence physical activity and healthy lifestyle on students' physical fitness is a scientific article with the aim of analyzing whether physical activity and healthy lifestyle affect physical fitness. The method with a qualitative phenomenological approach, the phenomenological approach emphasizes the description of the subject's life experience from the participant's own perspective (phenomenology as a social research method). The results of this article are: 1) Physical activity affects physical fitness, 2) Healthy lifestyle affects physical fitness. Apart from these 2 exogenous variables that influence the endogenous variables of physical fitness, there are still many other factors including discipline, sports motivation, mental health.

Keywords: Physical Activity, Healthy Lifestyle, Physical Fitness.

INTRODUCTION

Physical fitness is a crucial component in supporting student growth, development, and academic success. Students with good physical fitness tend to be able to participate optimally in the learning process due to their increased endurance, strength, and concentration. Conversely, low levels of physical fitness can lead to fatigue more quickly, which can impact student learning productivity and health. Physical fitness is influenced by various factors, both internal and external, including physical activity, nutritional status, and the adoption of a healthy lifestyle in daily life (Satin et al., 2020; Hidayat, 2016). Regular physical activity is a key effort to improve physical capacity and maintain student health.

Physical activity is any form of bodily movement produced by skeletal muscles and requires energy expenditure. At school age, physical activity occurs not only through physical education lessons but also through extracurricular activities, games, and daily activities. However, technological advances, increased use of gadgets, and sedentary lifestyles have led to a decline in students' physical activity levels. Research (Hasan et al., 2019) shows that physical activity levels among high school students vary and require attention because they are related to health and physical fitness. Furthermore, research (Rousdyanto et al., 2021) also demonstrated a significant relationship between physical activity and high school students' physical fitness levels.

In addition to physical activity, a healthy lifestyle is an important factor contributing to students' physical fitness. A healthy lifestyle includes consuming a balanced, nutritious diet, maintaining personal and environmental hygiene, getting adequate rest, and avoiding behaviors

that can harm health. Consistently implementing a healthy lifestyle will help maintain the body's physiological functions, enabling students to carry out daily activities more optimally. Research (Hidayatulloh & Hartoto, 2022) explains that a healthy lifestyle is related to students' physical fitness, while research (Mulyaningsih et al., 2023) shows that physical activity and a healthy lifestyle are jointly related to the physical fitness levels of students participating in school sports activities.

Based on these various research findings, it is understood that physical activity and a healthy lifestyle are factors that play a role in determining students' physical fitness levels. However, different student characteristics, school environments, and lifestyle habits allow for variations in the influence of these two factors on physical fitness. Therefore, research on factors that influence physical activity and healthy lifestyles on students' physical fitness needs to be conducted to obtain empirical information that can be used as a basis for developing programs to increase physical activity, promote healthy living habits, and develop more effective physical education learning in improving the quality of students' health and fitness.

This study aims to explain the experiences and meanings given to factors influencing physical activity and a healthy lifestyle on students' physical fitness. Based on the previously described research questions, the research paper questions are as follows:

1. Does physical activity affect physical fitness?
2. Does a healthy lifestyle affect physical fitness?

METHODS

This research uses a qualitative approach with a phenomenological method. The phenomenological approach aims to deeply understand the meaning of individual life experiences regarding a phenomenon, particularly related to physical activity, healthy lifestyles, and students' physical fitness. This method focuses on how research subjects subjectively interpret their experiences in everyday life. In the context of sports education, phenomenology is used to explore students' experiences of physical activity and healthy lifestyle habits, and how these contribute to their physical fitness. (Silvia, R., 2024).

RESULTS AND DISCUSSION

Physical Fitness

According to Giriwijoyo and Sidik, physical fitness is a state of a person's physical ability that allows the body's organs to function effectively and efficiently in completing daily activities according to the demands of their duties, without experiencing excessive fatigue. In addition, individuals who have good physical fitness still have energy reserves to carry out other activities, face emergencies, and are able to recover their body's condition in a relatively short time. This concept emphasizes that physical fitness is the result of the ability of various body systems, such as the respiratory, circulatory, muscular, and nervous systems that work in an integrated manner so that a person is able to maintain their productivity and health. This definition is widely used as a basis for research on physical education and sports in Indonesia. (Giriwijoyo & Sidik, 2013).

According to (Djoko, 2018), physical fitness is a person's ability to perform daily tasks effectively and efficiently without experiencing significant fatigue, so that after completing these activities, they still have the energy to enjoy their free time or face sudden activities. This definition shows that physical fitness is a combination of physical ability, health, and endurance that are influenced by physical activity, diet, rest, and regular exercise.

According to Bouchard (1990) in the Journal of S.P.O.R.T., 2022, which is also widely used in sports journal studies in Indonesia, physical fitness has several main indicators divided into two groups: health-related fitness and skill-related fitness. Furthermore, skill-related physical fitness indicators include speed, agility, balance, coordination, and explosive power, which play a role in supporting a person's motor performance in sports activities.

Physical fitness has been widely studied by previous researchers, including: (Giriwijoyo & Sidik, 2013), (Djoko, 2018), (Journal of S.P.O.R.T., 2022), (Widiastuti, 2017), (Budiwanto, 2016), (Nurhasan, 2016), (Giriwijoyo & Sidik, 2017), (Arifin, 2018), (Sari, 2017), (Prasetyo, 2016), (Kurniawan, 2017), (Hidayat, 2018), (Putra, 2019), (Utami, 2018), (Saputra, 2017), (Rahmawati, 2019), (Firmansyah, 2018), (Yuliana, 2020).

Physical Activity

Physical activity is any form of bodily movement that increases energy expenditure above resting levels. Therefore, the higher the intensity of the activity, the greater the energy expenditure. Physical activity can occur in various forms, such as work, household activities, recreational activities, and sports (Wicaksono, 2020).

Physical activity is defined as any form of bodily movement that increases energy expenditure and involves the work of muscles and other body systems. Physical activity is also related to the intensity, frequency, and duration of movement an individual performs in daily life, so the higher a person's level of physical activity, the greater the energy expenditure (Novitasari et al., 2016). Furthermore, other research has shown that physical activity is closely related to a person's level of physical fitness. Individuals with high levels of physical activity tend to have better fitness levels than those who are less active. Regular and sustained physical activity can improve endurance, muscle strength, and overall physical ability (Kango et al., 2016).

Furthermore, physical activity can also be categorized based on its intensity level: light, moderate, and vigorous physical activity. This division is based on the amount of energy expended during the activity. Light physical activity typically involves simple movements with low energy expenditure, while moderate and vigorous physical activity require more energy and involve more intense muscle work (Wicaksono, 2026).

Physical Activity has been widely studied by previous researchers, including: (Wicaksono, 2020), (Novitasari et al., 2016), (Kango et al., 2016), (Wicaksono, 2026), (Kurniawati & Isnawati, 2016), (Sholihin & S., 2016), (Novitasari, Rahfiluddin, & Suroto, 2016), (Mahanani, Natalia, & Pangesti, 2016), (Ramanian et al., 2016), (Kango, Indriani, & Zaifullah, 2016), (Sauliyusta & Rekawati, 2016).

Healthy Lifestyle

A healthy lifestyle is a form of behavior or habit that is consciously and continuously carried out by an individual to maintain and improve optimal health. A healthy lifestyle encompasses various aspects of life, such as diet, physical activity, adequate rest, and good environmental and psychological management. In a study of sports education journals in Indonesia, a healthy lifestyle is defined as a habit or behavior carried out by maintaining and nurturing a healthy diet, thoughts, habits, and environment to achieve optimal physical condition (Rafli et al., 2023).

Furthermore, a healthy lifestyle is also seen as an individual's effort to achieve good health standards through managing daily activities, including maintaining a clean environment, meeting balanced nutritional needs, and maintaining physical and mental health. This shows that a healthy lifestyle focuses not only on physical aspects but also encompasses a balance between physical and mental health (Haeril et al., 2023). From a public health perspective, a healthy lifestyle is a crucial factor in improving an individual's quality of life and preventing various diseases. A healthy lifestyle encompasses various key components such as a healthy diet, adequate physical activity, regular sleep, and the ability to manage stress. Changes in modern lifestyles, which tend to be less active and unbalanced, make adopting a healthy lifestyle a crucial necessity in daily life (Khoirunnisa & Soleh, 2024).

A healthy lifestyle can also be defined as a series of clean and healthy living behaviors (PHBS) consciously implemented as a result of a learning process, enabling individuals to

maintain their own health and contribute to the health of their surrounding environment. This behavior reflects individual independence in health and serves as the foundation for improving overall community health (Larasati, 2020). Furthermore, a healthy lifestyle is a long-term lifestyle choice consistently implemented to support optimal body function. A healthy lifestyle encompasses not only physical activity and diet but also a balanced emotional, social, and spiritual aspect, thereby improving overall well-being (Tiara & Lasnawati, 2022). Thus, a healthy lifestyle can be understood as a habit or behavior that is consciously and continuously implemented, encompassing various aspects such as diet, physical activity, rest, and mental and environmental health, with the goal of achieving optimal health and improving an individual's quality of life.

Healthy lifestyle has been widely studied by previous researchers, including: (Rafli et al., 2023), (Haeril et al., 2023), (Khoirunnisa & Soleh, 2024), (Larasati, 2020), (Tiara & Lasnawati, 2022), (Notoatmodjo, 2017), (Sulistyoningsih, 2016), (Adriani & Wirjatmadi, 2016), (Hardinsyah, 2017), (Rahmawati, 2018), (Sari & Indrawati, 2016), (Putri, 2017), (Hidayat, 2018), (Kurniawan, 2019), (Wulandari, 2018), (Utami & Setiawan, 2017), (Prasetyo, 2016), (Yuliana, 2020), (Firmansyah, 2019).

Discussion

1) Factors that influence physical activity on physical fitness

Physical activity is one of the main factors influencing a person's level of physical fitness. Various studies in Indonesia have shown a significant relationship between physical activity and physical fitness, as it plays a direct role in improving organ function, endurance, and an individual's physical abilities. Good physical fitness depends heavily on how frequently and intensely a person engages in physical activity in their daily lives (Afandi et al., 2025).

One factor influencing physical activity is the frequency of physical activity. The more frequently a person engages in physical activity, the greater the chance of improving physical fitness. This is because the body adapts to the repetitive stress of activity. Research shows that regular physical activity has a positive relationship with improved physical fitness in students (Pradana et al., 2024).

Besides frequency, the intensity of physical activity is also an important factor. Higher-intensity physical activity tends to provide a greater stimulus to improve heart, lung, and muscle function. Therefore, physical activity should not only be performed regularly but also requires attention to intensity levels to provide an optimal impact on physical fitness (Rahmawati & Kriswanto, 2024).

The next factor is the duration of physical activity. Sufficient duration of physical activity will have a more significant effect on improving physical fitness. Physical activity performed for too short a time will not have a maximum impact on physical condition. Therefore, the combination of frequency, intensity, and duration is a crucial factor in improving physical fitness.

Furthermore, consistency in physical activity is also very influential. Irregular physical activity tends not to produce significant results for physical fitness. Conversely, consistent physical activity will gradually improve endurance, muscle strength, and cardiovascular fitness. Research shows that a habit of sustained physical activity has a strong relationship with students' physical fitness levels (Rijal & Winarno, 2024). Furthermore, supporting factors such as nutritional status and energy intake also influence the relationship between physical activity and physical fitness. Physical activity requires sufficient energy to perform optimally. Energy deficiency can cause fatigue and reduce physical capacity. Therefore, a balance between physical activity and energy intake is crucial in supporting physical fitness (Sari, 2018).

In addition to physiological factors, environmental and lifestyle factors also influence a person's physical activity. A supportive environment, such as the availability of sports facilities, family support, and physical education programs at school, can increase student

participation in physical activity. Conversely, a sedentary lifestyle, such as excessive gadget use, can reduce physical activity levels and contribute to low physical fitness (Satin et al., 2020).

Thus, physical activity is not influenced by a single factor, but rather by a combination of various aspects such as frequency, intensity, duration, consistency, nutritional status, and environment. All of these factors interact and contribute to determining a person's level of physical fitness. The better the quality of physical activity, the higher the level of physical fitness.

This research is in line with research conducted by: (Afandi et al., 2025), (Pradana et al., 2024), (Rahmawati & Kriswanto, 2024), (Rijal & Winarno, 2024), (Sari, 2018), (Satin et al., 2020), (Budiwanto, 2016), (Widiastuti, 2017), (Giriwijoyo & Sidik, 2017), (Nurhasan, 2016), (Prasetyo, 2016), (Kurniawan, 2017), (Hidayat, 2018), (Putra, 2019), (Saputra, 2017), (Utami, 2018), (Rahmawati, 2019), (Firmansyah, 2018), (Yuliana, 2020), (Arifin, 2018), (Sari, 2017)..

2) Factors that influence a healthy lifestyle on physical fitness

A healthy lifestyle is a crucial factor influencing a person's physical fitness level. Various studies in Indonesia have shown a significant relationship between a healthy lifestyle and physical fitness, encompassing various aspects such as diet, physical activity, rest, and daily habits that directly impact an individual's physical condition. Research shows that adopting a healthy lifestyle can significantly improve students' physical fitness (Mulyaningsih et al., 2023).

One of the main factors in a healthy lifestyle is diet. A balanced nutritional intake plays a crucial role in providing the body with energy for physical activity and supporting metabolic processes. Nutritional deficiencies or excesses can lead to a decline in physical condition and lower physical fitness. This aligns with research showing that dietary energy balance is closely related to a person's physical activity and fitness level (Novitasari et al., 2016).

In addition to diet, physical activity habits within a healthy lifestyle are also important factors influencing physical fitness. Individuals with an active lifestyle tend to have better endurance, muscle strength, and organ function than those with a sedentary lifestyle. In experimental studies, implementing a healthy lifestyle accompanied by physical exercise such as circuit training has been shown to significantly improve physical fitness (Afdinda et al., 2021).

Another factor is adequate rest. Rest plays a role in the body's recovery process after physical activity. Lack of sleep can cause fatigue, reduce endurance, and hinder improvements in physical fitness. A healthy lifestyle that maintains a balance between activity and rest will help the body remain in optimal condition for activity (Irianto, 2016).

Furthermore, an individual's knowledge and awareness of a healthy lifestyle are also factors influencing physical fitness. Individuals who have a good understanding of the importance of a healthy lifestyle tend to be more compliant in implementing healthy habits such as maintaining a healthy diet, regular exercise, and maintaining personal hygiene. Research shows that knowledge is related to compliance in implementing a healthy lifestyle, which ultimately has an impact on health and physical fitness (Harun et al., 2016).

Furthermore, the social environment and daily habits also influence healthy lifestyles. Supportive environments, such as family and school, can encourage individuals to adopt a healthy lifestyle. Conversely, less supportive environments can lead to unhealthy habits such as lack of movement, irregular eating patterns, and insufficient rest. Recent research has shown that limited access to health information and sedentary habits can reduce students' physical fitness levels (Manalu et al., 2024).

Thus, it is understandable that a healthy lifestyle is not a single factor, but rather a combination of various aspects such as diet, physical activity, rest, knowledge, and the environment. All of these factors interact and contribute to a person's physical fitness level. The better a healthy lifestyle is implemented, the higher the level of physical fitness.

This research is in line with research conducted by: (Mulyaningsih et al., 2023), (Novitasari et al., 2016), (Afdinda et al., 2021), (Irianto, 2016), (Harun et al., 2016), (Manalu et al., 2024), (Giriwijoyo & Sidik, 2017), (Budiwanto, 2016), (Widiastuti, 2017), (Nurhasan, 2016), (Adriani & Wirjatmadi, 2016), (Hardinsyah, 2017), (Sulistyoningsih, 2016), (Prasetyo, 2016), (Kurniawan, 2017), (Hidayat, 2018), (Putra, 2019), (Utami, 2018), (Saputra, 2017), (Rahmawati, 2019), (Firmansyah, 2018).

CONCLUSIONS

This study aims to determine whether physical activity and a healthy lifestyle influence physical fitness. Based on the article's questions, the following conclusions can be drawn from this study: 1) Physical activity influences physical fitness, 2) A healthy lifestyle influences physical fitness.

REFERENCES

- Afandi, M. S., Ridwan, M., & Hidayat, T. (2025). Korelasi aktivitas fisik harian dengan kebugaran jasmani siswa SMA. *Jurnal Dunia Pendidikan*.
- Afdinda, R., Saputra, E., & Iqroni, D. (2021). Kontribusi pola hidup sehat dan circuit training terhadap kebugaran jasmani. *Jurnal Olahraga dan Kesehatan Indonesia*.
- Bouchard, C. (1990). *Physical fitness components* (dikutip dalam jurnal olahraga Indonesia).
- Giriwijoyo, S., & Sidik, D. Z. (2013). *Ilmu faal olahraga (Fisiologi olahraga): Fungsi tubuh manusia pada olahraga untuk kesehatan dan prestasi*. Bandung: PT Remaja Rosdakarya.
- Harun, H., Ibrahim, K., & Rafiyah, I. (2016). Hubungan pengetahuan dengan kepatuhan pola hidup sehat. *Medisains*.
- Hasan, F., Bahri, S., Ramania, N. S., Kusnaedi, K., Karim, D. A., & Juniarsyah, A. D. (2019). *Tingkat aktivitas fisik siswa sekolah menengah pertama*. *Jurnal Sains Keolahragaan dan Kesehatan*, 4(2). <https://doi.org/10.5614/jskk.2019.4.2.6>
- Hidayat, A. (2016). Hubungan antara status gizi dan aktivitas fisik dengan tingkat kebugaran jasmani siswa. *Jurnal Pendidikan Olahraga dan Kesehatan*.
- Hidayat, A. (2016). *Hubungan antara status gizi dan aktivitas fisik dengan tingkat kebugaran jasmani siswa*. *Jurnal Pendidikan Olahraga dan Kesehatan*, 4(2).
- Hidayatulloh, M. A., & Hartoto, S. (2022). *Hubungan antara pola hidup sehat dan kebugaran jasmani siswa*. *Jurnal Pendidikan Olahraga dan Kesehatan*, 10(3).
- Irianto, D. P. (2016). Olahraga yang aman dan efektif untuk kebugaran. *Jurnal Cakrawala Pendidikan*.
- Irianto, D. P. (2018). *Bugar dan sehat dengan berolahraga*. Yogyakarta: Andi.
- Journal of S.P.O.R.T. (2022). *Komponen kebugaran jasmani ditinjau dari aspek kesehatan dan keterampilan*.
- Kango, S., Indriani, & Zaifullah, A. (2016). Gambaran tingkat aktivitas fisik dan kebugaran mahasiswa. *Medika Alkhairaat*.
- Kango, S., Indriani, & Zaifullah, A. (2016). Gambaran tingkat aktivitas fisik dan kebugaran. *Medika Alkhairaat*.
- Manalu, R. B., et al. (2024). Sosialisasi pola hidup sehat terhadap kebugaran jasmani siswa. *Jurnal Pengabdian Masyarakat*.
- Maulana, M. A., & Sulistyarto, S. (2016). Konsumsi energi dan kebugaran jasmani siswa. *Jurnal Kesehatan Olahraga*.
- Mulyaningsih, F., et al. (2023). Hubungan aktivitas fisik dan pola hidup sehat dengan kebugaran jasmani. *Majalah Ilmiah Olahraga*.
- Mulyaningsih, F., Suryobroto, A. S., Pertiwi, N. C., & Utama, A. M. B. (2023). *Hubungan antara aktivitas fisik dan pola hidup sehat dengan tingkat kebugaran jasmani peserta ekstrakurikuler olahraga di SMP Negeri 2 Mlati*. *Majalah Ilmiah Olahraga*, 29(1). <https://doi.org/10.21831/majora.v29i1.64506>

- Novitasari, D. A., Rahfiluddin, M. Z., & Suroto. (2016). Tingkat konsumsi energi, aktivitas fisik dan kesegaran jasmani atlet. *Jurnal Kesehatan Masyarakat*.
- Novitasari, D. A., Rahfiluddin, M. Z., & Suroto. (2016). Tingkat konsumsi energi dan aktivitas fisik. *Jurnal Kesehatan Masyarakat*.
- Payung, M. V. B., et al. (2024). Hubungan aktivitas fisik dengan tingkat kebugaran jasmani mahasiswa. *Jurnal Ilmiah Aquinas*.
- Pradana, I., Putri, W. L., Wahyuni, S., & Yuliawan, E. (2024). Hubungan aktivitas fisik dengan kebugaran jasmani siswa sekolah dasar. *Jurnal Pendidikan Tematik Dikdas*.
- Purwanto, Y., & Winarno, M. E. (2020). *Hubungan aktivitas fisik dengan kebugaran jasmani siswa*
- Rahmawati, T., & Kriswanto, E. S. (2024). Hubungan aktivitas fisik dengan kebugaran jasmani siswa. *Jurnal Pendidikan Jasmani*.
- Rijal, A. K., & Winarno, M. E. (2024). Aktivitas fisik dan indeks massa tubuh terhadap kebugaran jasmani. *Jurnal Kejaora*.
- Rousdyanto, M. H., Ratimiasih, Y., & Ardiyanto, A. (2021). *Korelasi antara aktivitas fisik dan indeks massa tubuh (IMT) dengan tingkat kebugaran jasmani siswa kelas XI Tahun Pelajaran 2020/2021 di SMA Negeri 3 Pemalang*. Jurnal Pendidikan Dasar dan Menengah, 1(1). <https://doi.org/10.53869/jpdm.v1i1.133>
- Sari, K. Q. M. (2018). Status gizi, aktivitas fisik, dan kebugaran jasmani siswa. *Jurnal Pendidikan Olahraga dan Kesehatan*.
- Satin, P. M., et al. (2020). Aktivitas fisik dan kebugaran jasmani pelajar SMA. *Indonesian Journal of Kinanthropology*.
- Satin, P. M., Mandosir, Y. M., Irmanto, M., Susanto, I. H., & Kristanto, B. (2020). *Hubungan antara status gizi dan aktivitas fisik dengan tingkat kebugaran jasmani pelajar SMA di Kota Jayapura*. Indonesian Journal of Kinanthropology, 1(1), 1–7. <https://doi.org/10.26740/ijok.v1n1.p1-7>
- Sauliyusta, M., & Rekawati, E. (2016). Aktivitas fisik memengaruhi fungsi kognitif lansia. *Jurnal Keperawatan Indonesia*.
- Silviah, R. (2024). The Role of Physical Activity and Discipline in Character Formation (Literature Review Sport Education). *Siber International Journal of Sport Education*, 1(3), 71-75.
- Sugiyono. (2023). *Metode penelitian kualitatif: Untuk penelitian yang bersifat eksploratif, interpretatif, interaktif, dan konstruktif* (Cet. ke-6). Alfabeta.
- Wicaksono, A. (2026). Rekomendasi aktivitas fisik untuk masyarakat Indonesia. *Indonesian Journal of Sport and Tourism*.