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The Influence of Students' Physical Activity on the Use of Information Technology

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Abstrak

Aktivitas fisik sangat penting bagi kesehatan manusia dalam menjalankan aktivitas sehari-hari. Aktivitas kurang gerak yang disebabkan karena terlalu sering bermain game online dan offline, internet, terlalu banyak menonton televisi akan menimbulkan risiko obesitas. Obesitas seseorang dianggap sebagai faktor risiko berbagai penyakit, seperti diabetes, jantung, hipertensi dan banyak lainnya. Salah satu upaya yang dianggap dapat menurunkan risiko obesitas adalah dengan meningkatkan aktivitas fisik. Aktivitas fisik tidak hanya terbatas pada aktivitas khusus olahraga saja, tetapi juga aktivitas lain yang memerlukan kerja fisik, seperti menyapu, mengepel, mencuci, berjalan, menari, melukis, mencangkul, berjalan dan sebagainya. Penelitian ini bertujuan untuk mengetahui apakah ada pengaruh dan seberapa besar pengaruh pengguna teknologi informasi terhadap aktivitas fisik siswa di SMK Negeri 5 Kota Bengkulu. Penelitian ini merupakan penelitian non eksperimen. Subjek dalam penelitian ini adalah siswa kelas X SMK Negeri 5 Kota Bengkulu dengan menggunakan cluster random sampling yang terdiri dari 16 kelas dengan jumlah siswa sebanyak 558 siswa yang dikategorikan sebagai 72 siswa laki-laki dan 486 siswa perempuan. Dan dari hasil cluster random sampling diperoleh 5 kelas dengan jumlah sampel 150 siswa. Dari hasil perhitungan statistik dapat disimpulkan bahwa tidak terdapat pengaruh yang signifikan antara penggunaan teknologi informasi terhadap aktivitas fisik siswa. Karena data uji yang dilakukan menunjukkan bahwa r hitung lebih kecil dari r tabel hitung ($-0,717 > r_{tabel} (0,197)$). Untuk itu perlu sekali dilakukan aktivitas fisik siswa dengan perbantuan teknologi.

Kata Kunci: Teknologi Informasi, Aktivitas Fisik Siswa

Abstract

Physical activity is very important for human health in carrying out daily activities. Activity lack of movement caused by too often playing online and offline games, internet, watching television too much will lead to the risk of obesity. A person's obesity is considered a risk factor for various diseases, such as diabetes, heart, hypertension, and many others. One of the efforts that are considered to reduce the risk of obesity is to increase physical activity. Physical activity is not only limited to sports-specific activities but also other activities that require physical labor, such as sweeping, mopping, washing, walking, dancing, painting, hoeing, walking, and so on. This research aims to find out if there is an influence and how much information technology users have on the physical activity of students in SMK Negeri 5 Kota Bengkulu. This study is non-experimental. The subjects in this study were students of class X SMK Negeri 5 Kota Bengkulu by using a random sampling cluster consisting of 16 classes with a total of 558 students who were categorized as 72 male students and 486 female students. From the results of the random sampling cluster obtained 5 classes with a total sample of 150 students. From the results of the calculation of statistics can conclude that there is no significant influence between the use of information technology on the physical activity of students. Because the data tests performed showed that the calculated r count was smaller than the r table r count ($-0.717 > r_{table} (0.197)$).

Keywords: Information Technology, Physical Activity of Students

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INTRODUCTION

The School as an educational institution must continuously strive so that every creative potential in students can achieve optimal development in accordance with the abilities of each individual (Arif Maulana Soleh & Waluyo, 2021). With the potential that exists in students, they should be allowed to explore and expand certain scientific fields in addition to those contained in the school curriculum (Manangkot et al., 2020). Every student must be guided to do activities that are their interest and attention to encourage him to be creative so that the results will be useful in addition to themselves and for the future community life (Siti Nurkhalizah, Siti Rochmani, 2021).

In today's school environment, students can use information technology such as gadgets, computers, and so on (Laksana, 2021). From there also the students who should use IT (Information Technology) for the development of science in one of the fields that they must pursue, making students abuse the use of IT (Information Technology), such as playing games, or opening an account that is not too important, so that it makes a habit regardless of physical activity every day (Street et al., 2007).

In the era of globalization and the development of increasingly sophisticated science and technology, the dissemination of information and access to telecommunications and transportation is getting faster and easier.

In the era of globalization and the development of increasingly sophisticated science and technology, the dissemination of information and access to telecommunications and transportation is getting faster and easier (Supandi & Senam, 2019). It cannot be denied that it either directly or indirectly has an impact on the community, whether it has a positive or negative impact. The impact is not limited to certain circles but has extended to all circles (Aka, 2004).

Positive impacts include helping to facilitate a person in carrying out daily activities. To interact with others, one only uses a mobile phone, to listen to the radio, one can connect earphones to the phone. To listen to music, someone just turns on the mp3 player (Pramesti, n.d.). To greet others who are far away and have not communicated for a long time, one only needs to connect netbooks and the like to the internet network (Putri et al., 2021). If someone is tired of daily activities, one can play online or offline games through a computer (Hosler & Boomer, 2020). While the impact that often occurs with the advancement of information technology, including someone often ignores his health, because he is too comfortable with things that smell of technology, a person is more comfortable in cyberspace than in the real world, for example, someone is more comfortable playing online games on a computer than playing ball on the field (Rahmadi, 2019).

The lifestyle of students is now much different from the lifestyle of previous students, a very prominent difference that is the inactivity of moving and tends to be passive, and resulting in a decrease in the level of physical fitness of school students (Prasetyo, 2015). For this reason, one of the challenges of teachers or educators today is how an active and healthy lifestyle can be realized or become a reality in all levels of society regardless of age and gender, how well children are prepared to get used to being active and able to maintain their health throughout their lives (Aprisal & Abadi, 2018). Teaching and instilling how to keep students fit is a component of physical education that is very important in the teaching of physical education so that thus physical education will be a solid foundation in building the nation in various fields (Mailinda & Putri, n.d.).

Physical activity is very important for human health in carrying out daily activities. Activity lack of movement caused by too often playing online and offline games, internet, watching television too much will cause the risk of obesity (Sriwahyuniati, 2020). Obesity is considered a risk factor for various diseases, such as diabetes, heart, hypertension, and many others (Sahabuddin et al., 2020). One of the efforts that are considered to reduce the risk of obesity is to increase physical activity. Physical activity is not only limited to sports-specific activities, but also other activities that require physical labor, such as sweeping, mopping, washing, walking, dancing, painting, hoeing, sightseeing, and so on (Sebagai & Satu, n.d.). Problems like this have been widespread among students, where the fact that there is a lifestyle is less active, tends to be lazy to do a

movement or physical activity both in the school environment and outside the school, and the reason that stands out is that with the advancement of information and communication technology is currently one of the contributing factors, examples of students often doing or using the internet such as playing online games and the like until late at night, and without looking at the downside when using it for too long or other words do not limit the time (Prasetyo, 2015) Based on the background above that is what drives this research to be done, so it is expected that this research can provide new input for physical education teachers to increase students' physical In teaching and learning activities, it is not uncommon for students to feel bored with the subject matter delivered monotonously (Faroh et al., 2014). With technology, educators are now able to create alternative ways of teaching that are more interactive. For example, lessons through more lively slides or with videos that invite students to focus more on learning (Novianti & Kartono, 2014).

By implementing learning innovations that are livelier than the presence of technology, it will be possible for learning in the classroom to be more enjoyable. Students will also be more enthusiastic to receive the subject matter (Mentessori, 2019).

METHOD

This research method is quantitative descriptive research. Based on consideration of this type of research is following the title because it presents directly the nature of the relationship between the research and the respondent. From the problems that have been described (Siti Nurkhalizah, Siti Rochmani, 2021). The population in this study was the students of class X SMK Negeri 5 Bengkulu, which amounted to 558 students from 16 classes that categorized 72 male students, 486 sons. Meanwhile, the sample in this study is 5 classes that were taken randomly by being drawn.

The sampling technique used in this study is a random sampling cluster because the objects to be studied are very broad. Cluster random sampling areas are used to determine the sample when the object to be studied or the data source is very broad, for example, the population of a country, province, or district (Arif Maulana Soleh & Waluyo, 2021).

RESULTS AND DISCUSSIONS

Table 1
The Description of Information Technology Questionnaire and Physical Activity Card of Students of Class X SMK Negeri 5 Bengkulu

Data Description	Information Technology	Physical Activity
Mean	17,73	6561,87
Standard Deviation (Sd)	5,08	3510,27
Lowest Score	7	1642
Highest Score	30	17551

Based on the results of the analysis of the table above, it can be known that the results of information technology questionnaires have an average value of 17.73, a standard deviation value of 5.08, with the lowest value of 7 and the highest value of 30. While the average physical activity card result was 6561.87, the standard deviation value was 3510.27, with the lowest value of 1642 and the highest value of 17551.

Table 2
Normality Test Description

Model	Kolmogorov- Smirnov Z	Asymp. Sig. (2- tailed)	Category
Information Technology	0,798	0,548	Normal
Physical Activity	1,591	0,013	Abnormal

From the table above it can be explained that the significant value of information technology obtained a significant value (Kolmogorov-Smirnov Z) greater than the value of alpha (5%) or 0.05 in other words $Sig > \alpha$ ($0.798 > 0.05$). So it was decided that H_0 was accepted which meant that the data met normal assumptions and

for physical activity obtained a significant value (Kolmogorov-Smirnov Z) smaller than the alpha value (5%) or 0.05 in other words $Sig > \alpha$ ($1,591 < 0.05$) so it was decided H_0 was rejected which meant that the data did not meet normal assumptions.

Table 3
Correlation Testing Results

Variable	N	Correlation Spearman's rho	Sig. (2- tailed)
TI – AF	150	-.717	.000

To test the correlation coefficient (r) obtained. It must be consulted with spearman r value table (see appendix 7). For n150 and using the nearest n 100 is 0.197 for a significance level of 5% and 0.257 for a significance level of 1% so the correlation coefficient obtained is significant. Both are at the level of 5% and 1% considering that the r count is smaller than the r table. Thus based on empirical data as a result of field testing, at least for the data above, shows there is an influence between the use of information technology on physical activity.

Table 4
Determination Coefficient

Variable	N	Determination Coefficient
TI – AF	150	51,41%

From the data, there is an influence, which indicates a decrease in physical activity due to information technology reached 51.41%, while the rest was influenced by other factors. To find out the meaning of the correlation coefficient value, the results of the study say that the coefficient of correlation obtained is significant. Both are at the level of 5% and 1% considering that the r count is smaller than the r table, which is as follows the rcount value ($-.717$) $>$ rtable (0.197). Or it can be seen from a value of .000 smaller than alpha 0.05. Thus based on empirical data as a result of field testing in accordance with the hypothesis in this study, it is because students use information technology, such as playing online or offline games, watching television, listening to radio or music, internet like opening Twitter and Facebook accounts that are so high in intensity, that it affects students' physical activity. Therefore, the results of this study show that there is an influence between the use of information technology on students' physical activity.

CONCLUSION

Based on the results of data analysis it can be concluded that there is a significant influence between the use of information technology on the physical activity of X-grade students in SmK Negeri 5 Bengkulu, So the higher the use of information technology, the lower the physical activity, and vice versa the lower the use of information technology, the higher the physical activity. There is an influence, which indicates a decrease in physical activity due to information technology reaching 51.41%. Based on the results of data analysis it can be concluded that: 1. there is a significant influence between the use of information technology on the physical activity of X-grade students in SmK Negeri 5 Bengkulu. 2. so the higher the use of information technology, the lower the physical activity, and vice versa the lower the use of information technology, the higher the physical activity.

RECEARNCES

- Aka, K. A. (2004). models as an alternative model of design-based research of interactive multimedia in elementary school. *Journal of Physics*. <https://doi.org/10.1088/1742-6596/1318/1/012022>
- Aprisal, A., & Abadi, A. M. (2018). Improving students' mathematical reasoning and self-efficacy through Missouri mathematics project and problem-solving. *Beta: Jurnal Tadris Matematika*, 11(2), 191–208. <https://doi.org/10.20414/BETAJTM.V11I2.206>
- Arif Maulana Soleh, & Waluyo. (2021). Sarana Dan Prasarana Olahraga Mata Pelajaran PJOK Sekolah

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DOI: <https://doi.org/10.31004/basicedu.v6i1.1889>
- Menengah Pertama Negeri Se- Kota Salatiga. *SPRINTER: Jurnal Ilmu Olahraga*, 2(2), 164–171.
<https://doi.org/10.46838/spr.v2i2.121>
- Faroh, N., -, S., & Junaedi, I. (2014). Model Missouri Mathematics Project Terpadu dengan TIK untuk Meningkatkan Pemecahan Masalah Dan Kemandirian Belajar. *Unnes Journal of Mathematics Education Research*, 3(2). <https://journal.unnes.ac.id/sju/index.php/ujmer/article/view/4625>
- Hosler, J., & Boomer, K. B. (2020). Are comic books an effectiveway to engage nonmajors in learning and appreciating science? *CBE Life Sciences Education*, 10(3), 309–317. <https://doi.org/10.1187/cbe.10-07-0090>
- Laksana, S. D. (2021). Jurnal Teknologi Pembelajaran (JTep) Pentingnya Pendidikan Karakter Dalam Menghadapi Education Technology The 21 st Century. *Jurnal Teknologi Pembelajaran (JTep)*, 1(1), 14–22.
- Mailinda, D., & Putri, E. (n.d.). *Analisis Tingkat Stres Orangtua dan Anak Kelas Satu SD Belajar dari Rumah Selama Pandemi Related papers*.
- Manangkot, M. V., Sukawana, I. W., & Witarsa, I. M. S. (2020). Pengaruh Senam Lansia Terhadap Keseimbangan Tubuh. *Community of Publishing in Nursing*, April, 24–27.
- Mentessori, M. (2019). *Educational Outcomes and Research from 1:1 Computing Settings | The Journal of Technology, Learning and Assessment*. Journal of Science Communication.
<https://ejournals.bc.edu/index.php/jtla/article/view/1606>
- Novianti, S., & Kartono, P. (2014). Penerapan Pembelajaran Missouri Mathematics Project pada Pencapaian Kemampuan Komunikasi Lisan Matematis Siswa Kelas VIII. *Kreano, Jurnal Matematika Kreatif-Inovatif*, 5(2), 211–218. <https://doi.org/10.15294/KREANO.V5I2.4552>
- Pramesti, E. (n.d.). *Inovasi Dan Dampak Teknologi Pembelajaran Yang Diterapkan Pada Era Pandemi Covid-19 Dalam Pendidikan Nonformal-Informal*.
- Prasetyo, Y. (2015). Kesadaran Masyarakat Berolahraga Untuk Peningkatan Kesehatan Dan Pembangunan Nasional. *Medikora*, 11(2), 219–228. <https://doi.org/10.21831/medikora.v11i2.2819>
- Putri, N. I., Herdiana, Y., Munawar, Z., & Komalasari, R. (2021). Teknologi pendidikan dan transformasi digital di masa pandemi covid-19. *Jurnal ICT : Information Communication & Technology*, 20(1), 53–57. <https://ejournal.ikmi.ac.id/index.php/jict-ikmi/article/view/306/pdf>
- Rahmadi, I. F. (2019). Technological Pedagogical Content Knowledge (TPACK): Kerangka Pengetahuan Guru Abad 21. *Jurnal Pendidikan Kewarganegaraan*, 6(1), 65–74.
<https://doi.org/10.32493/JPKN.V6I1.Y2019.P65-74>
- Sahabuddin, S., Hakim, H., & Syahrudin, S. (2020). Kontribusi motor educability terhadap kemampuan senam ritmik alat simpai pada siswa sekolah dasar. *Jurnal SPORTIF : Jurnal Penelitian Pembelajaran*, 6(2), 449–465. https://doi.org/10.29407/js_unpgri.v6i2.14564
- Sebagai, D., & Satu, S. (n.d.). *Literature Review Hubungan Asupan Karbohidrat dengan Kejadian Obesitas pada Anak Usia Sekolah*.
- Siti Nurkhalizah, Siti Rochmani, Z. M. S. (2021). Nusantara Hasana Journal. *Nusantara Hasana Journal*, 1(1), 95–101.
- Sriwahyuniati, C. F. (2020). Senam Ritmik Dalam Paradigma Era Globalisasi. *Jorpres (Jurnal Olahraga Prestasi)*, 15(2), 67–71. <https://doi.org/10.21831/jorpres.v15i2.29512>
- Street, G. R., James, R., & Cutt, H. (2007). The relationship between organised physical recreation and mental health. *Health Promotion Journal of Australia*, 18(3), 236–239.
<https://doi.org/10.1071/HE07236/FORMAT/PDF/OEBPS/PAGES/2.PAGE.XHTML>
- Supandi, M., & Senam, S. (2019). Mengembangkan keterampilan berpikir kritis dengan game ritual tumpe. *Jurnal Inovasi Pendidikan IPA*, 5(2), 139–146. <https://doi.org/10.21831/jipi.v5i2.25920>