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Original Research Article

The Effects of Coronavirus Disease-19 Pandemic on Physical Activities and Mental Health of Students

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Abstract

The purpose of this study was to determine the impact of the spread of coronavirus disease-19 on physical activity and mental health of students. Coronavirus-19 (Covid-19) is a new disease that can cause respiratory problems and pneumonia. The spread of an infectious disease called COVID-19 in Indonesia has changed the joints of social life. The population in this study was (n=43) and all were used as a whole research sample (total sampling), students at the Faculty of Sports Science, State University of Malang, research instrument data collection using Google forms and then disseminated through WhatsApp social. The types of data in this study are in the qualitative category analyzed by percentage with windows excel 2010. The results of the study, most respondents considered it very important to do physical activity, and at least 3 to 7 times per week, with a duration of time mostly under 60 minutes. Meanwhile, the intensity of physical activity is in the medium level category. The level of boredom reaches 90.5% of respondents. Respondents have activities to reduce boredom such as playing games and doing daily chores at home as many as 18 students (48%), while 6 respondents (16%) work on college assignments, and 5 respondents (13%) do sports activities. A total of 8 respondents (21%) helped the entrepreneurial parents. Various activities aimed at reducing boredom so as not to cause more serious mental health disorders such as feelings of stress and depression.

Keyword: Coronavirus Disease-19, Physical Activity, Mental Health.

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INTRODUCTION

The spread of infectious diseases called Coronavirus-19 disease COVID-19 in Indonesia and other countries have changed the joints of social life. The impact of changes has occurred in various sectors, both formal and informal, both in economic, cultural, religious and daily life aspects. COVID-19 has received very high attention from the Indonesian government so that various efforts continue to be made by the government so that this pandemic can soon be addressed properly with a relatively fast time. To date when this article was written, data on COVID-19 in Indonesia includes; 15,438 positive infected people, who were being treated by 45,891 were recovering 18,404 and 2,465 died as of June 21, 2020. From this data when viewed from the trending graph, it can be concluded that every day there are still more people infected, treated, declared cured, and patients who died (covid, 2020).

Malang State University, located in Malang, was also affected by the spread of coronavirus diseases-19. These impacts include, universities must conduct online learning and require students and lecturers to stay and learn from home. Likewise, the staff faculty of sports science, poor state universities must work from home, except if there is work that cannot be done from home and requires coming to the university. This is so that there is no transmission from human to human-related to the spread of this virus.

Coronavirus Disease (COVID-19)

Coronavirus is part of a group of viruses responsible for seasonal causes of acute respiratory syndrome which may be accompanied by mild symptoms for severe conditions with a significant mortality rate. According (covid, 2020) response, COVID-19 is a new disease that can cause respiratory and pneumonia problems. COVID-19 is a contagious disease caused by the newly discovered coronavirus

(coronavirus, 2020). The main spread of the disease is considered through respiratory drops and close contact with sufferers. Droplets are small particles of the patient's mouth that can contain viral diseases, which are produced when coughing, sneezing, or speaking. Droplets can pass to a certain distance (usually 1 meter).

Corona is a deadly virus and the drug or vaccine is not there until now. This Virus spreads very quickly and many people in the world are infected and even died (kompasiana, 2020). Coronavirus can have severe complications, such as pneumonia. Pneumonia occurs if the virus causes infection in one or both bronchus. Small air pockets in the bronchi can be filled with liquids or pus, making it harder to breathe. COVID-19 May cause the heart, kidneys, or some organ failure, which can result in death (coronavirus, 2020).

Since December 2019, when the COVID-19 appeared in the city of Wuhan and rapidly spread throughout China. During the first 2 months of the outbreak today, the COVID-19 spread rapidly throughout China and caused various levels of the disease. Patients often present without fever, and many do not have abnormal radiology findings (Zhong., *et al*., 2020). With travel restrictions (none exposed to imports to Beijing), the number of infected persons in seven days will be reduced by 91.14% in Beijing, compared with no travel ban scenario (Tang, B., Wang, X., Li, Q., Bragazzi, NL, Tang, S., Xiao, Y., & Wu, J, 2020). Pandemic COVID-19 continues to increase, the number of countries and territories that adopt strict measures based on physical distance, aims to prevent human-to-human transmission and thereby restrict the spread of viruses. Lockdowns National, including mass quarantine based on Homestay rules, has been proven effective in preventing COVID-19 outbreaks in some countries. Some of the consequences of the Homestay ductility like physical inactivity, weight loss, behavioral disorders of addiction, insufficient exposure to sunlight, and social isolation (Lippi, G., Henry, BM, Bovo, C., & Sanchis-Gomar, F., 2020).

In addressing the Covid-19 pandemic, the Indonesian Government implemented a policy to prevent Covid-19 pandemic including 1) large-scale social restrictions (PSBB) for certain provinces, 2) everyone is obliged to use a mask when out of the house, 3) Maintain a physical distance (social-moving distancing), 4) study and work at home, 5) Some economic activity that collects mass, 6) a clean living pattern by washing hands with soap , 7) do not physically touch, for example shaking hands, 8) sterilization of facilities and public means.

The Urgency of Physical Activity

Physical activity is defined as activities planned for physical health and fitness purposes. In essence, exercise is a subcategory of physical activity but not identical to it (Singh, R., Pattisapu, A., & Emery, MS, 2019). Physical activity affects the cardiovascular and neuromuscular systems by enhancing the function of breathing, heart, and blood circulation and improving hypertrophy and strength of muscle fibers (Maugeri, G., & D'Agata, V., 2020). A practical recommendation to stay active at home, with aerobic exercise using bicycles or pedaling an ergometer, weight training, dancing and active video game play, can help address the detrimental physical and mental side effects of lifestyle protection regulations due to COVID-19 (Hammami, A., Harrabi, B., Mohr, M., & Krustrup, P., 2020).

There is convincing evidence that physical activity is regularly effective in preventing cardiovascular disease, diabetes, cancer, hypertension, obesity, depression, osteoporosis, and premature death. The relationship between physical activity and health conditions is expressed in a linear way, as follows: the more often the physical activity, the greater the physical fitness, the greater the health increase, (Piotrowska, K., & Pabianek, Ł. 2019: Gallot, M., Rieth, N., & Ganea, A. 2020).

Adults should do at least 150 minutes to 300 minutes a week with moderate intensity, or 75 to 150 weeks of aerobic physical activity with strong intensity, or a combination of equal moderate intensity and strong aerobic activity. As for improving cardiorespiratory and muscular fitness, bone health and reducing the risk of Noncommunicable diseases (NCDs) and the following depression are recommended: 1) Adults aged 18-64 years should do at least 150 minutes of moderate aerobic physical activity throughout the week, or do at least 75 minutes of intense aerobic physical activity throughout the week, or the equivalent , adults should increase aerobic intensity of moderate physical activity up to 300 minutes per week, or engage in 150 minutes of intense intensity of physical aerobic activity per week, or a combination of activity equivalent to moderate and strong intensity, 4) muscle Strengthening activities should be conducted involving major muscle groups in 2 days or more weeks (who, 2010).

Regular physical activity can be an essential tool for maintaining health, which has a positive impact on wellbeing, cognitive processes, and levels of optimism, as well as on the functions of motion, blood circulation, breathing, digestion, immunity, and the nervous system (Puciato, D., Oleśniewicz, P., & Rozpara, M. Therefore, 2020), the result of low-level physical activity: moderate physical activity is not enough to determine a healthy lifestyle (Petri, C., Mascherini, G., Toncelli, L., Armentano, N., Calà, P., & Galanti, G.). Physical activity of moderate intensity is associated with better immune function. Regular physical activity can help reduce feelings of stress and anxiety (*EIM_Rx for Health)*.

Mental Health Mental

Health is an integral and essential component of health. The WHO Constitution states: "health is a complete physical, mental and social state and not just the absence of disease or weakness." An important consequence of this definition is that mental health is described more than the absence of mental disorders or disabilities (mental health, 2020) Mental health will affect the cognitive, physiological, motor and emotional levels of students (Escalera-Chávez, M. E., Santana, J. C., & García-Santillán, A., 2020), In Indonesia, many students are already feeling stressed due to the COVID-19 pandemic, this is due to the online learning system where it greatly reduces the physical activity of students. (Yunus, M., Setyosari, P., Utaya, S., & Kuswandi, D., 2021) During the COVID-19 pandemic, when so many of us were very limited in our movements, it was even more important for people of all ages and the ability to be as active as possible. Even a short break from sitting, by doing 3-5 minutes of physical movements, such as walking or stretching the body, will help relieve muscle tension, relieve mental tension, and increase blood circulation and muscle activity. Regular physical activity also improves mental health and can reduce the risk of depression, cognitive decline, and delay the onset of dementia and increase feelings of overall well-being. Reduce long sitting time with short 3-5-minute breaks every 20-30 minutes. Just stand up and stretch or even better, take a walk around the house, up and downstairs, or into the garden. By just moving and stretching, you can improve your health and well-being.

In the context of emerging and ever-changing COVID-19, the University must implement a number of steps to slow the spread of the virus. Students and staff must receive information regularly via email and the University intranet. The health and safety of students and staff must be a top priority. Appropriate counseling services must be available to support mental health and student welfare. The authorities must be responsible for ensuring food and accommodation for international students. Faculty members must embrace technology and pay close attention to student experiences to make learning rich and effective (sahu, 2020).

The purpose of this research is to learn and assess the impact of the spread of coronavirus-19 disease against physical Activity and mental health of Students Faculty of Sports Sciences, State University of Malang, Indonesia.

METHODS

This type of research in writing this article is a survey, the survey is a quantitative study that is used to examine the symptoms of a group or individual behavior. While the study sample was students at the Faculty of Sports Science, State University of Malang. While the sampling technique is *nonprobability sampling* with a saturated sample technique meaning that all populations are used as research samples. The population in this study was 43 and all were used as a whole research sample (*total sampling*). The types of data in this study are in the qualitative category analyzed by percentage with windows excel 2010. While the research instrument for data collection using Google forms is then disseminated through social media *WhatsApp*. From the results of the data collection process, 43 students filled out and sent back students.

RESULT

Opinion of the Importance of Physical Activity during the COVID-19 Pandemic

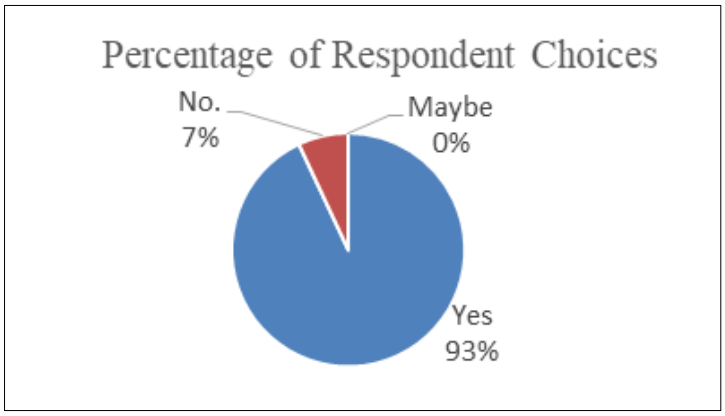

Figure 1: The Importance of Physical Activity

Based on the opinion of physical activity or not to maintain physical fitness, of the 43 sports students who gave answers, 93% or 40 students said that physical activity was important to do. Whereas 7% or 3 students give possible answers.

Important Physical Activity According to Linear Scale

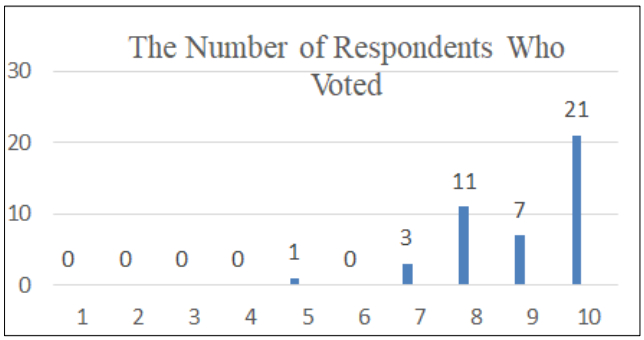

Figure 2: Importance of Physical Activity According to Linear Scale 1 - 10

From the answer to question number 2 about how important physical activity needs to be done, using a linear scale with levels 1-10, the following results are obtained. 1) 48.8% (21 students) answered the number 10 meaning that maintaining physical fitness was considered very important, 2) as many as 16.3% (7 students) answered the number 9 which also meant very important, 3) then as many as 25.6 % (11 students) which means in the important category, 4) then 7% (3 students) give answers to the number 7 which means it can be included in the important category, while 2.3% (1 student) answers the number 5 meaning quite important.

Types of Physical Activities undertaken by Students

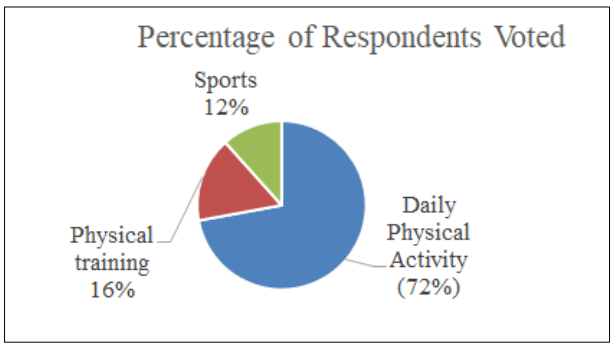

Figure 3: Types of Physical Activities

Types of physical activities undertaken by sports students obtained the following results. 1) 72.1% (31 students) gave answers to physical training such as walking, *jogging*, *push-ups*, stretching, aerobics, cycling, 2) then 16.3% (7 students) chose sports answers such as soccer, badminton, basketball, swimming, and 3) thereafter 11.6% (5 students) gave answers to physical activities such as washing clothes, mopping, walking, cleaning windows, gardening, ironing, playing with children.

Frequency of Physical Activity per Week

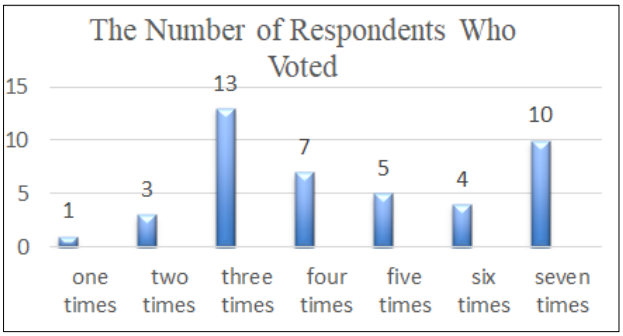

Figure 4: Frequency of Physical Activity per Week

From several 43 students who gave answers about the frequency of doing physical activity during the week, the following results were obtained. 1) 10 students (23.3%) do physical activities every day, 2) a total of 4 students (9.3%) do 6 times a week, 3) then 5 students (11.6%) give answers 5 times in a week, 4) there are 7 students (16.3%) doing physical activities 4 times a week, 5) there are 13 students (30.2%) carrying out

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physical activities 3 times a week, 6) then there are 3 students (7%) doing physical activity 2 times a week, and 7) there is 1 student (2.3%) doing physical activity only once a week.

Level of Physical Activity Intensity Undertaken by Students

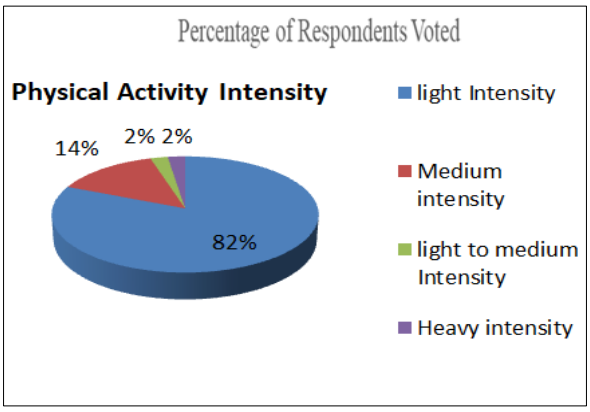

Figure 5: Intensity of Physical Activity

While the weight/lightness (intensity) of physical activity carried out by sports students obtained the following results. 1) 81.4% (35 students) undertook physical activity with moderate intensity, 2) then 14% (6 students) undertook physical activity with mild intensity, 3) subsequently 2.3% (1 student) gave moderate to moderate answers lightly, and 4) 2.3% (1 student) doing physical activity with heavy intensity.

Duration of Time in Conducting Physical Activity

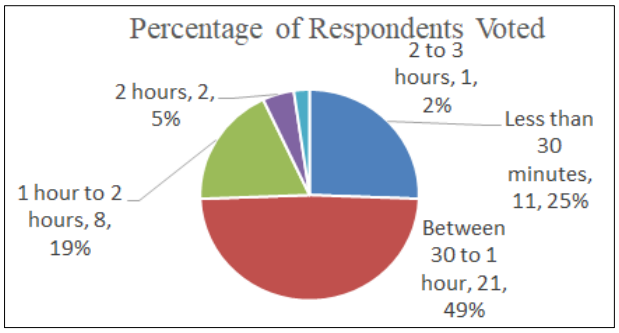

Figure 6: Duration of Physical Activity

Based on the duration of time, the length of physical activity carried out by students obtained the following results. 1) 48.8% (21 students) did physical activities for 30 minutes to 1 hour, 2) then 25.6% (11 students) did for less than 30 minutes, 3) then 18.6% (8 students) doing 1-2 hours, and 4) 4.7% (2 students) doing 2 hours, 5) while 2.3% (1 student) doing 2-3 hours.

Locations for Conducting Physical Activity

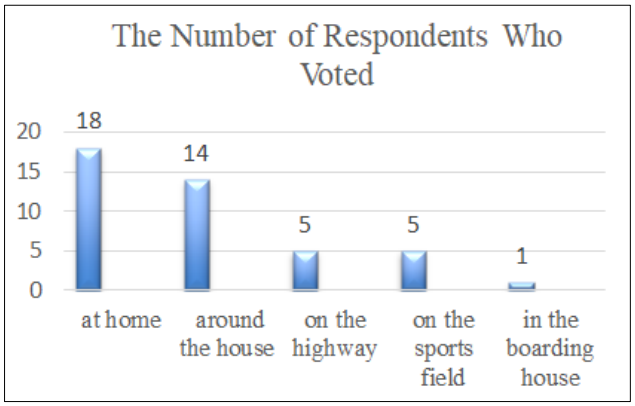

Figure 7: Location for Physical Activity

Based on the locations where students carry out physical activities, the following results are obtained. 1) 41.9% (18 students) performed physical activities in the neighborhood around the house, 2) then 32.6% (8 students) performed physical activities at home, and 3) 11.6% (5 students) conducted on the highway, 4) there were 11.6 (5 students) doing physical activities on the sports field, 5) while 2.3% (1 student) doing physical activities in the dorm room.

Time in Physical Activity

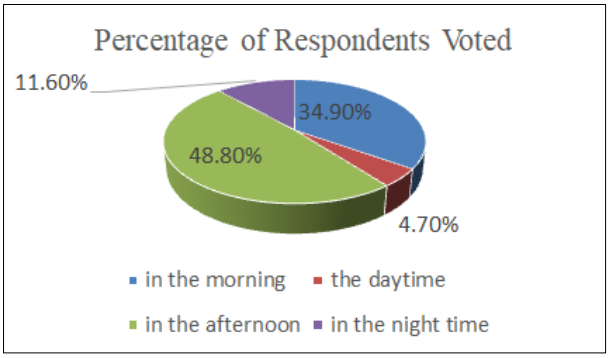

Figure 8: Time in Physical Activity

Based on the time in carrying out physical activity, the following results are obtained. 1) 48.8% (21 students) did the physical activity in the afternoon, 2) then 34.9% (15 students) did in the morning, 3) while 11.6% (5 students) did in the nighttime, 4) and only 4.7% (2 students) do it during the daytime.

Partners in Physical Activity

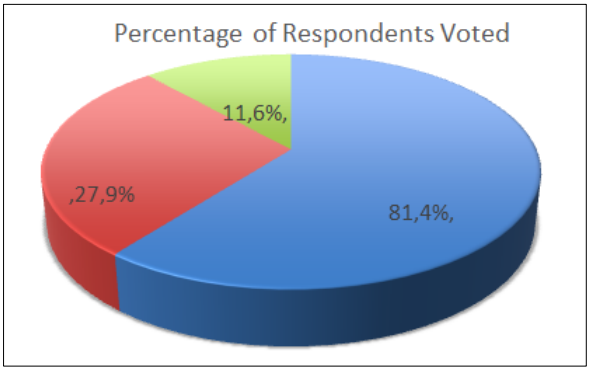

Figure 9: Partners in Physical Activity

Based on the results of the questionnaire on questions about partners when carrying out physical activities, the following results were obtained. 1) as much as 60.5% (26 students) do physical activities themselves, 2) then as much as 27.9% (12 students) do with friends, and 3) as much as 11.6% (5 students) do physical activities with family.

The Boredom Felt by Students When Staying at Home

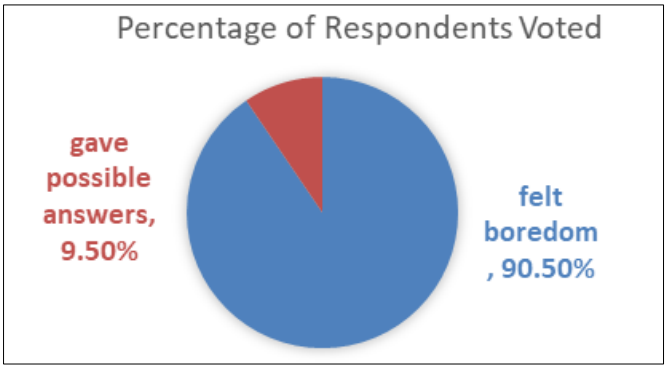

Figure 10: Feel Bored

Based on this question, which is related to the burnout felt by students because they have to live/study at home, the following results are obtained. 1) as much as 90.5% (38 students) felt boredom, and 2) as much as 9.5% (4 students) gave possible answers. It means feeling and sometimes not feeling bored.

Student Boredom Scores on Policies Stay at Home

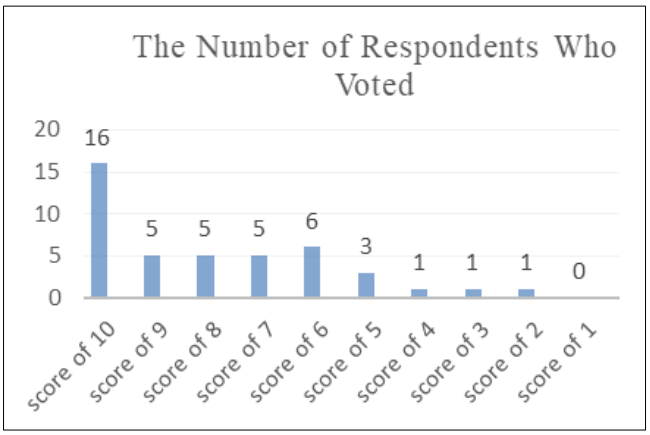

Figure 11: The Saturation Level Score

Based on the saturation level score using a linear scale from the level range 1-10, the following results are obtained. 1) 16 students (38.1%) gave a score of 10, 2) then 5 students (11.9%) gave a score of 9, 3) then as many as 5 students (11.9%) chose a score of 8, 4) also, as many as 5 students (11.9%) chose a score of 7, 5) as many as 6 students (14.3%) chose a score of 6, 6) as many as 3 students (7.1%) chose a score of 5, 7) as many as 1 students (2.4%) chose a score of 4, 8) and as many as 1 students (2.4%) chose a score of 3.

The Type of Activities Undertaken to Reduce Boredom

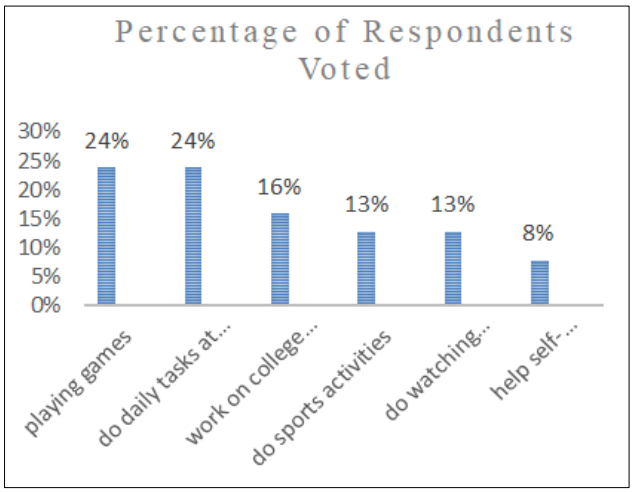

Figure 12: Types of Activities to Reduce Boredom

Based on answers about various types of activities to reduce the saturation obtained by 37 of 43 respondents. From all of the answers, it can be grouped into 6 activities in filling up the saturation, among others: 1) 9 students (24%) fill their boredom by playing *games*, 2) then 9 students (24%) do daily tasks at home, 3) while as many as 6 students (16%) work on college assignments, 4) as many as 5 students (13%) do sports activities, 5) subsequently as many as 5 students (13%) do watching activities, and 6) as many as 3 students (8 %) help self-employed parents.

DISCUSSION

The Importance of Physical Activity

Based on answers from respondents, it was found that a majority of 93% of respondents answered that physical activity was important. While the 7% of mentioned physical activity may be important. Then by using a linear scale, the score obtained the importance level of physical activity obtained data that as many as 42 students (97.67%) gave answers in important and very important. Another study was also conducted by (Rogowska, A. M., Pavlova, I., Kuśnierz, C., Kwaśnicka, A., Koszyk, S., & Hejno, M, 2021) that student physical activity is very important where the behavior will

increase motivation and can overcome the stress experienced by students, According to (Mattioli, A. V., Ballerini Puviani, M., Nasi, M., & Farinetti, A., 2020), WHO recently released a guide to "remain physically active during self-quarantine" in order to improve healthy behavior during quarantine. Meanwhile (Aubertin-Leheudre, M., & Rolland, Y., 2020), a COVID-19 restriction can reduce physical and mental health. A simple adapted and specific physical activity should be done and considered as the best solution for caring for a weak elderly during a COVID-19 pandemic. Of these three opinions, it is clearly stated that during the Co-19 pandemic It forces most people to stay home, but physical activity must be done to improve the body's fitness.

Types of Physical Activity

Several types of physical activities carried out by the students of the faculty of sports science, showed 72.1% gave answers to the types of physical exercise such as walking, *jogging*, *push-ups*, stretching, aerobics, cycling, 2) then 16.3% chose answers to sports types such as soccer, badminton, basketball, swimming, and 3) as many as 11.6% gave answers to types of physical activities such as washing clothes, mopping, walking, cleaning windows, gardening, ironing, playing with children.

Physical activity can be done through weight exercises such as squat holding the chair, sitting and waking from the chair or up and down one step, carrying something with mild and moderate weights (vegetables, rice, water, etc.), aerobic exercises such as walking indoors, dancing or balance exercises such as walking on a line on the floor, walking on the toes or heels, walking with heel for , and stepped above the obstacles (Jiménez-Pavón, D., Carbonell-Baeza, A., & Lavie,, 2020). Physical activity in adults, including recreational physical activities, transportation working at work, housework, playing, playing sports or exercise plans, in the context of daily activities, families, and society (who, 2010).

Partners in Physical Activity

Most students engage in physical activity that tends to be individualized. This can be seen from the category of activities that can be done alone by 60.50%, although it can be done with others of 27.90% and 11.60% with families. But there are still students who do this physical activity in team sports like football, basketball. From a health perspective of the COVID-19 pandemic, what is done in this type of exercise tends to be risky for COVID-19 transmissions. Given the transmission of this virus from human to human, let alone sports activities that are in direct physical contact.

According to (Fallon, K., 2020), the following home-based activities can be powerful enough to meet the criteria for individual moderate training: sweeping floors, dust, general carpenters, lawn mowing, leaf sweep, cleaning windows and pushing strollers. The same is said by (Carter, SJ, Baranauskas, MN, & Fly, AD, 2020), a lifestyle factor that can be modified such as diet and physical activity should not be degraded. Decades of empirical evidence support both as a key factor that promotes health and wellness. Furthermore, according to (Hammami, A., Harrabi, B., Mohr, M., & Krustrup, P., 2020) Many countries have now carried out lockdowns, forcing people to stay home and just go out in a pinch. These decisions will affect people's mental and physical health, especially those who are accustomed to physical activity outdoors. Staying at home can cause a lot of stress, anxiety, and mental stress.

From the opinion of three experts, it can be concluded that during the policy applied locking to prevent the transmission of covid-19, physical activity aimed at maintaining fitness and mental health should remain in mind. With good fitness and mental health, one's immune system will be well maintained as well.

Frequency of Physical Activity per Week

Of the number 43 students respond, the result is as follows. 1) 23.3% do physical activities every day (7 times) a week, 2) a total of 4 9.3% do 6 times a week, 3) then 11.6% do 5 times a week, 4) 16.3% do 4 times a week, 5) there is 30.2% do 3 times a week, 6) there is 7% do 2 times a week, and 7) 2.3% do physical activity only once a week.

Based on the results, the frequency of physical exercises performed by sports students in one week is mostly done 3 to 7 times. And only a small number of students do physical activity between 1-2 times a week. According to the opinion in (Jiménez-Pavón, D., Carbonell-Baeza, A., & Lavie, CJ, 2020), the frequency of training International guidelines for physical activity for parents recommend 5 days per week, which in certain quarantine situations can be increased to 5-7 days per week with adaptation in volume and intensity.

Meanwhile, according to (healthy athome, 2020) to develop and maintain musculoskeletal health, muscle-strengthening activities involving major muscle groups must be done 2 days or more a week. In addition, older adults with poor mobility must do physical activity to improve balance and prevent falls at 3 or more days per week.

The Intensity of Physical Activity

While the weight/lightness (intensity) of physical activity carried out by sports students is as follows. 1) as much as 81.4% do physical activity with moderate intensity, 2) 14% undertook physical activity with mild intensity, 3) 2.3% gave moderate to moderate answers lightly, and 4) 2.3% doing physical activity with heavy intensity.

For substantial health benefits, adults must do at least 150 minutes to 300 minutes a week with

moderate intensity, or 75 to 150 minutes a week of aerobic physical activity with strong intensity, or a combination of aerobic activity equivalent to moderate and strong intensity. Ideally, aerobic activity should be spread throughout the week (*Physical Activity Guidelines for Americans,)*. All adults must do at least 150 minutes of moderate-intensity physical activity throughout the week, or at least 75 minutes of high-intensity physical activity throughout the week. For additional health benefits, adults must increase moderate-intensity physical activity up to 300 minutes per week, or equivalent (healthyathome). Whereas according to (Dunton, G., Wang, S., Do, B., & Courtney, J., 2020), participants (82% female, 20% Hispanic, 41% overweight/obese) ranged in age from 18-79 years. Average, significant reduction in strong intensity (- 61.7 minutes/week, 37% decrease), moderate-intensity (-84.1 min/week, 47% decrease), and walking (-104.4 min/week, 33 % decrease) physical activity was observed during the beginning of the COVID-19 period compared to the pre-COVID-19 period. The reduction of strong physical activity intensity is greater for non-working adults. Reduction in physical activity is greater for adults who are Hispanic or live in low-income households.

Time Duration of Physical Activity

Based on the duration of time, the duration of physical activity carried out by students is as follows. 1) as much as 48.8% for 30 minutes to 1 hour, 2) 25.6% doing for less than 30 minutes, 3) 18.6% doing for 1 - 2 hours, 4) 4.7% (2 students) did for 2 hours, 5) 2.3% did for 2-3 hours. This means that most students do physical activity less than 60 minutes per exercise. Only a small proportion of students carry out more than 60 minutes of physical activity. According to (Aubertin-Leheudre, M., & Rolland, Y., 2020) under quarantine it can be suggested to increase to 200 - 400 min per week distributed between 5-7 days to compensate for the decrease in the level of daily physical activity. In addition, a minimum of 2-3 days per week of endurance training can be recommended.

Location for Physical Activity

The location of most students doing physical activities around the house, at home, and at boarding houses. While a small number of physical activities on the highway. This is understandable because one of the government's policies is to remain at home as a way to stop the transmission of COVID-19. Most students do physical activity in the afternoon and morning, while a small part during the day and night. When doing physical activities, most do it alone and a small portion with family.

Feel Boredom

Based on this question, which relates to the perceived burnout of having to stay at home, the following results are obtained. 1) as much as 90.5% felt boredom, and 2) 9.5% gave possible answers. This shows that the majority of students give that they feel bored with the policy of having to stay at home for a long time without any certainty when this policy will end soon. Based on the score using a linear scale with a range of 1-10, the saturation level is obtained as follows. 1) 38.1% stated a score of 10, 2) 11.9% obtained 9, 3) 11.9% chose 8, 4) 1.9% chose a score of 7. If we describe the conclusion of the level of saturation of students, then obtained a percentage of 73.8% stated saturated to very saturated. A large percentage of the number of students who experience burnout can have implications for their physical health and mental health.

As a result of the study (Yarımkaya, E., & Esentürk, O. K., 2020), low levels of physical activity during the outbreak of COVID-19 had side effects, especially on the mental health of children with ASD (autism spectrum disorders). Likewise, (Harper, CA, Satchell, LP, Fido, D., & Latzman, RD, 2020) consistently, the only predictor of positive behavior change (e.g., *social distance*, improving hand hygiene) is the fear of COVID-19, with no effect of relevant political variables. We discuss this data with regard to the potential functional nature of fear in the global health crisis.

There is conclusive evidence that physical fitness and the health status of children and adolescents are substantially improved by frequent physical activity. Compared with inactive young people, physically active children and young people have a level of cardiorespiratory fitness, muscular endurance and muscle strength, and well-documented health benefits including reduced body fat, more cardiovascular benefits and risk profile for metabolic diseases, improved bone health, and reduce symptoms of anxiety and depression (who, 2010). Likewise, reduced physical activity will increase oxidative stress, which is a condition where the number of free radicals in the body exceeds the body's capacity to neutralize it.

Various Types of Activities in Managing Saturation

Based on the responses that filled in, as many as 37 students and 6 students did not give a response. From all of these answers can be grouped into 6 activities in filling up saturation include: 1) group playing games as many as 24%, 2) 24% doing daily tasks at home, 3) 16% do college work, 4) 13% do sports activities, 5) 13% do watching activities, and 6) 8% help parents self-employed. From the opinions obtained, it shows that as many as 86% have activities to eliminate the sense of boredom experienced. Although the results obtained are only a few students who do lecture assignments that are equal to 16% and do sports activities by 13%. Noteworthy is the category of watching, playing *games*, and other entertainment. This can lead to less motion activity which can result in a decrease in body fitness and health. If this happens the chance of getting a disease risk is higher.

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According to (*Physical Activity Guidelines for Americans,)*, physical activity among US adults decreased dramatically over the first month of the former from the "place of residence" and "Stay at home" orders issued by the state during the COVID-19 pandemic. Although these restrictions are necessary to slow the spread of viruses and allow health facilities to build capacity, there may be unwanted consequences on other health-related behaviors such as physical activity. The distinct impact of the COVID-19 pandemic on the level of vulnerable sub-groups physical activity, including individuals who do not work, living in low-income households, or Hispanic descent, underscores the need for programs and policies of special physical activities of the population several months to many years such as sustainable pandemic.

CONCLUSION

Some sports students state that during the pandemic *coronavirus disease-19*: 1) physical activity is very important to maintain physical fitness, 2) while the type of physical activity that is mostly done is the type of activity that is individual, such as walking, *jogging, push up*, stretching, aerobics, cycling, 3) then the frequency of doing physical activity in a week, most students (90.69%) do range between 3-7 times a week, 4) then the level of physical activity undertaken by most students doing in the medium intensity category.

Talking about the duration of physical activity, the following results were obtained. 1) most of the physical activities require less than 1 hour (<1) as much as 74.4%, 2) furthermore, the place or location of doing physical activity most students (84.5%) at home and around the house, 3) then in that physical activity, some 60.5% students do it themselves, 4) in this co-19 pandemic situation, most students 90.5% feel boredom, 5) the degree of saturation that is felt using a linear scale with a range of 1 -10, the results obtained by the majority of students 73.8% expressed a range of scores from 7-10. This includes saturated and very saturated categories.

From the breakdown of survey results to the students of the Faculty of Sports Sciences, State University of Malang, this indicates that students are still doing physical activity in accordance with the recommendations of experts who are mostly between 3 to 7 times per week. Although the duration of time is mostly under 60 minutes. Likewise, the intensity of physical activity is carried out in the intermediate level category.

However, students as respondents still have activities to reduce the perceived boredom with various activities including playing *games* and doing daily assignments at home as many as 18 students (48%), then other activities are doing college assignments for 6 students (16 %), and 5 students (13%) also do sports activities. Including watching and helping parents with self-employed 8 students (21%). From this activity, at least able to reduce feelings of boredom or boredom which is expected not to cause more serious mental health disorders such as feelings of stress and depression.

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