

SPORTS WHILE SUNBATHING TO INCREASE IMMUNITY IN THE COVID-19 PANDEMIC

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Abstract: This Community Service Program activity aims to determine the general public's understanding of an appropriate sport, provide information about the right time to work out in the sun to the general public, give information about the right dose for exercising during the Covid-19 pandemic, and provide advantages and benefits of working out in the sun by following the educational video guidance from FIK UNY. The main target audience for this activity is the campus community, consisting of lecturers and staff and students totaling more than 1000 people, and the wider community because the online PPM model is not limited by space and region. This PPM implementation activity was carried out using an online method, by providing material in the form of an educational video of sports guidance which is then shared to one group to another group, person to person, and colleagues to colleagues. The implementation monitoring and information collection of users' satisfaction were carried out by means of google forms and direct/online interviews. The results indicated that around 98% of respondents liked educational videos and most of them did strength training more often. On average, the respondents did exercise 2-3 times a week, for 15-30 minutes a day, especially in the morning at 08.00-10.00 in front of their house. They felt the benefits of working out in the sun both physically, psychologically, and felt an increase in their immunity after doing the exercise.

Keywords: sports, sunbathing, Covid-19.

INTRODUCTION

The role of universities is to carry out the Tri Dharma which consists of 1) Education and Teaching, 2) Research and Publications, and 3) Community service. Based on these three pillars, Universitas Negeri Yogyakarta has the task to oversee the implementation of the Tri Dharma. Along with the current situation and conditions, since the end of 2019, there has been an outbreak of the coronavirus (SARS CoV 2) which causes the Corona Virus 19 (Covid-19) disease in all corners of the world. This has become an international issue and requires simultaneous handling from various elements of the government and society. The characteristics of Covid-19 include being transmitted through droplets from COVID-19 sufferers or being exposed to droplets attached to various media that can also transmit it (Ministry of Health of the Republic of Indonesia, 2020).

During this Covid-19 pandemic, several efforts have been recommended by WHO to prevent disease transmission, including by always maintaining personal hygiene and implementing Social/Physical Distancing and Stay at Home policies. These efforts have proven to be very effective in preventing transmission and controlling the spread of Covid-19 (Ministry of Health, 2020). Yet, according to PDSKO (2020), if we don't respond properly, it will lead to physical inactivity and excessive food intake. These two things, if done for a long time, will have a negative effect and can even lead to obesity and some cardiovascular and metabolic diseases, which in turn will increase the risk of viral infections.

We know that strengthening the immune system is one way to prevent the spread of the coronavirus (Ministry of Health, 2020). One of the efforts to increase the body's immunity is to keep us always in an active condition by doing sports activities and taking advantage of the abundant sunlight in Indonesia. Regular physical exercise/sports can help maintain health, fitness and increase stamina or our immune system (Health Promoting University, 2020). Meanwhile, according to Alsharani, et.al. (2013), Nimitphong and Holick (2013), and Medrano et.al. (2018), proper sunbathing besides being able to help fulfill our vitamin D needs, will also help boost our

immune system, and not give the SAR CoV-2 virus a chance to survive long in hot and humid environments.

Sports activities carried out must follow the FITT rules: done 3-5 times a week, moderate-intensity exercise, with a duration of 10-15 minutes, by doing physical activities that are easy and fun. In addition, the exercises performed should include aerobic, strengthening, balancing, and flexibility exercises. The physical activity carried out will have added value if it is carried out in the sun between 9 to 10 am or 3 to 4 pm (PDSKO, 2020).

The Faculty of Sports Science is one of the seven faculties at UNY that has a scientific specialty, namely sports. In response to the outbreak of Covid-19, the Faculty of Sports Science formed a team to develop guidelines for working out in the sun with several variations consisting of fitness exercises, weigh training, yoga, D'slonjor relaxation, which are equipped with theoretical information and the right dose of exercise.

Based on the observations, there are many people who do not have a sports background, and therefore it is assumed that they do not fully know about sports during the Covid-19 pandemic, such as how to exercise properly and correctly. Starting from this, the academic community of FIK UNY responded positively and formed a team to socialize the program of working out in the sun in an effort to increase the immunity of the community, especially in the D.I.Yogyakarta area.

The socialization model through the PPM program is carried out in accordance with the government's recommendation that they should not be close together (still maintaining a safe distance/physical distancing). In connection with this, the PPM is carried out online, where the working out in the sun model is a model that has been prepared as an educational video model, so that people can easily follow directions and examples according to the right guidelines. Given the importance of this, this Institutional PPM is carried out immediately, with the hope that it will further assist the community in exercising and increasing endurance and body fitness in the fight against the Covid-19 disease.

METHODS

The method of implementation activities used in the implementation of community service was carried out in a combination, including:

a) Beginning with FGD (Forum Group Discussion) of the preparation of educational video-based PPM materials for online; b) FGD Team to determine initial targets and agreed upon the campus community and its surroundings, then the material is shared to one group to another group, person to person, and colleague to colleague; c) Online method; d) Online program consultation method; e) Implementation monitoring and user satisfaction information collection with google forms and direct/online interviews.

FINDINGS AND DISCUSSION

Findings

PPM was done by forming a team, which was divided into several groups, movement material makers, video making, and a team in charge of uploading videos to YouTube. The target audience included lecturers, employees, students, and the general public who were able to be contacted through social media. The target audience was given a link that contains a guidance video and a link to provide an evaluation for their feedback purposes.

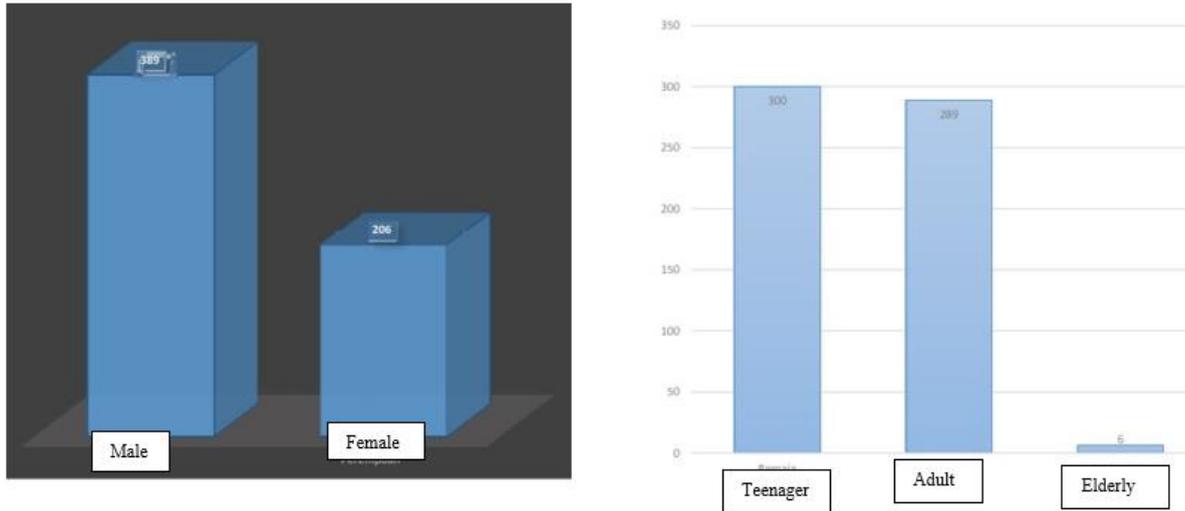


Figure 1. PPM Target Profile Overview

The distribution of videos and evaluations through social media was carried out from August 26 to September 18, 2020. The evaluation recap via google form was carried out until the end of September 2020. The results of the PPM show a profile as shown in Figure 1. For approximately one month, 595 target audiences who have provided feedback were collected, 389 men and 206 women. Of the 595 targets who have provided feedback, most of them were teenagers aged 11-19 years (300 people) and adults aged 20-60 years (289), while the elderly group aged more than 60 years were only 6 people.

Most (98%) of the respondents liked the exercise guide provided, and only 2% of the respondents stated that they did not like the exercise guide (see Figure 2).

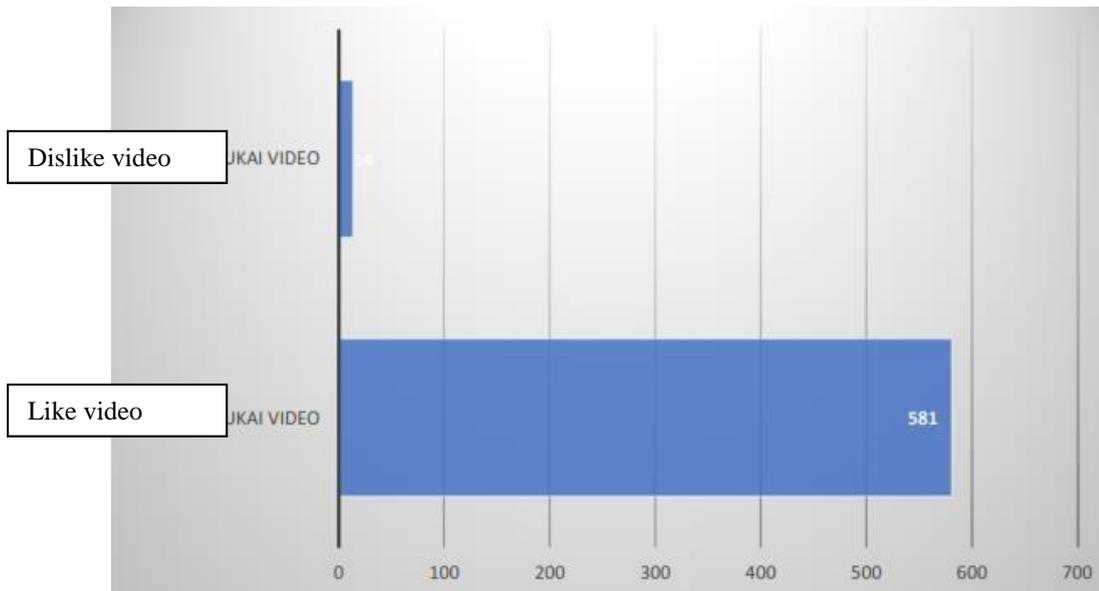


Figure 2. Respondents' description of the video educational material provided.

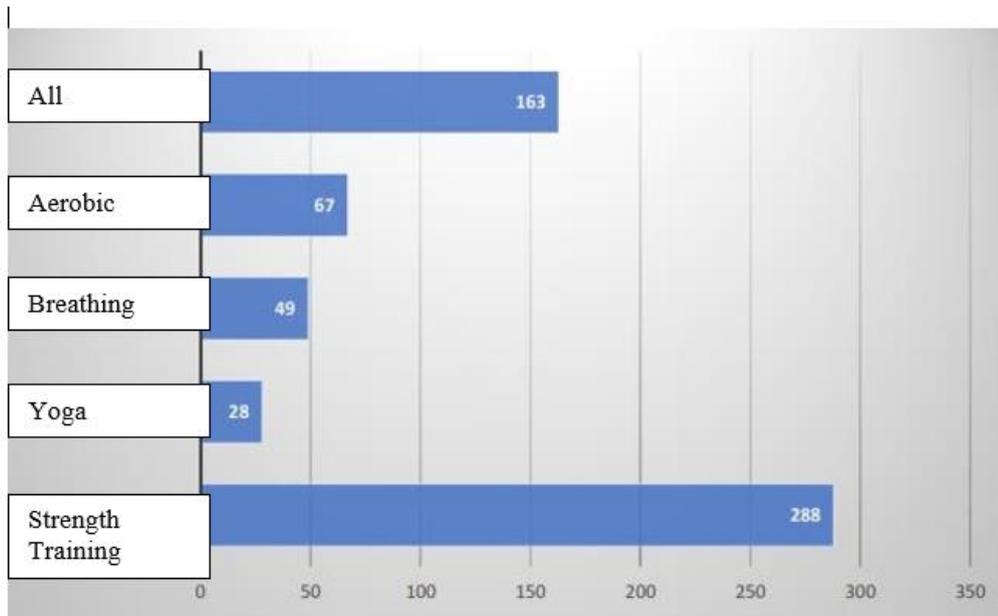


Figure 3. The description of the choice of working out in the sun model that has been given.

The exercise guide provided has several options, which can be done by all age groups of teenagers, adults, and the elderly. They can choose the sports model according to their wishes, namely aerobic exercise, strength training, yoga, and breathing exercises. The results showed that 288 respondents (49%) liked strength training, while 163 respondents (28%) did all the given models, aerobic exercise, strength training, breathing exercises, and yoga. This shows that the respondents liked the given exercise model (Figure 3).

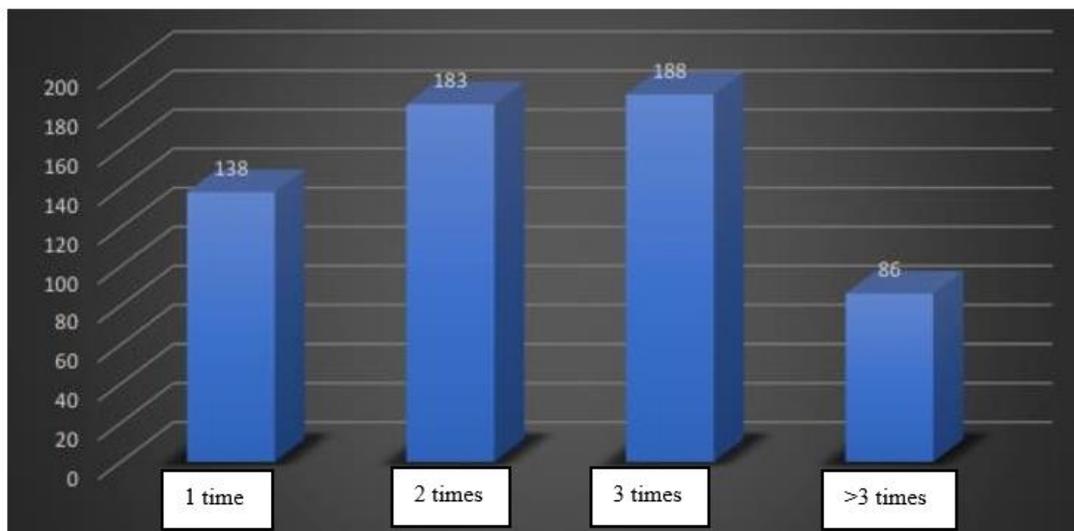


Figure 4. Frequency of exercise in one week.

Figure 4 showed that the average respondents did physical activity with a frequency of exercise 2 to 3 times a week, and there were only 138 (23%) respondents who did exercise only once a week.

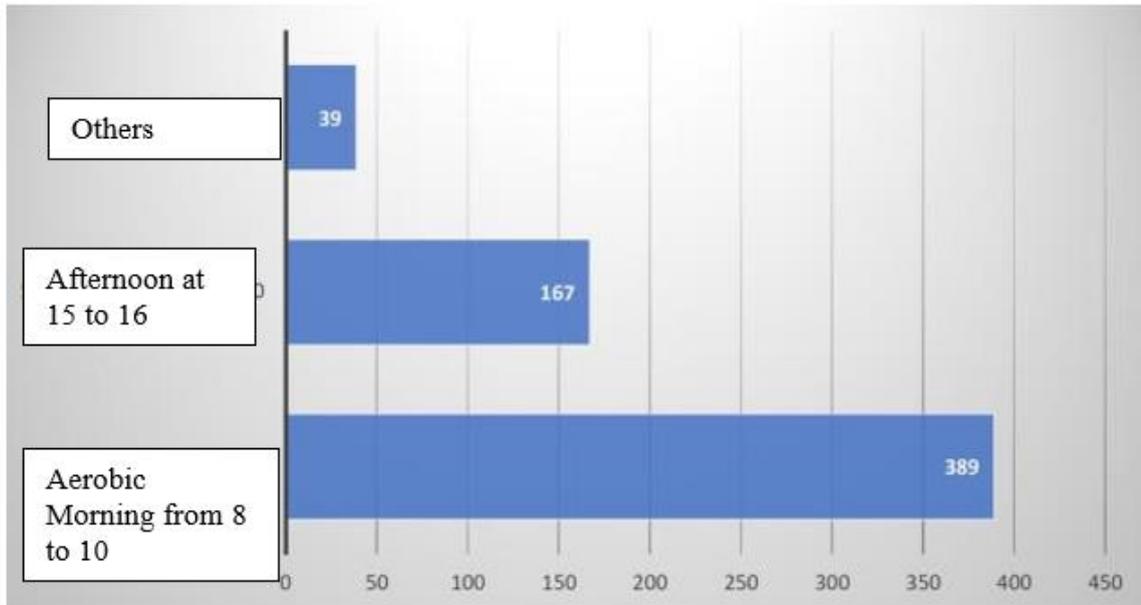


Figure 5. Time to work out in the sun.

Most of the respondents worked out in the sun in the morning and evening in accordance with the recommendations given, and only 39 (7%) of respondents worked out at times that were not recommended. In addition, the majority of respondents (86%) worked out for 15 minutes or more, and only 14% worked out for 10 minutes or less (see Figure 5).

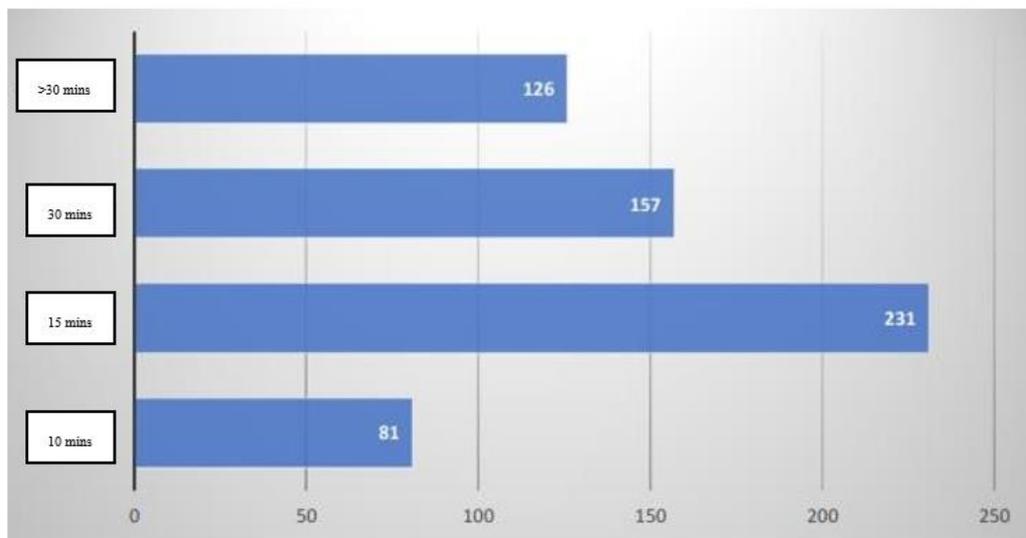


Figure 6. The description of the duration of working out in the sun.

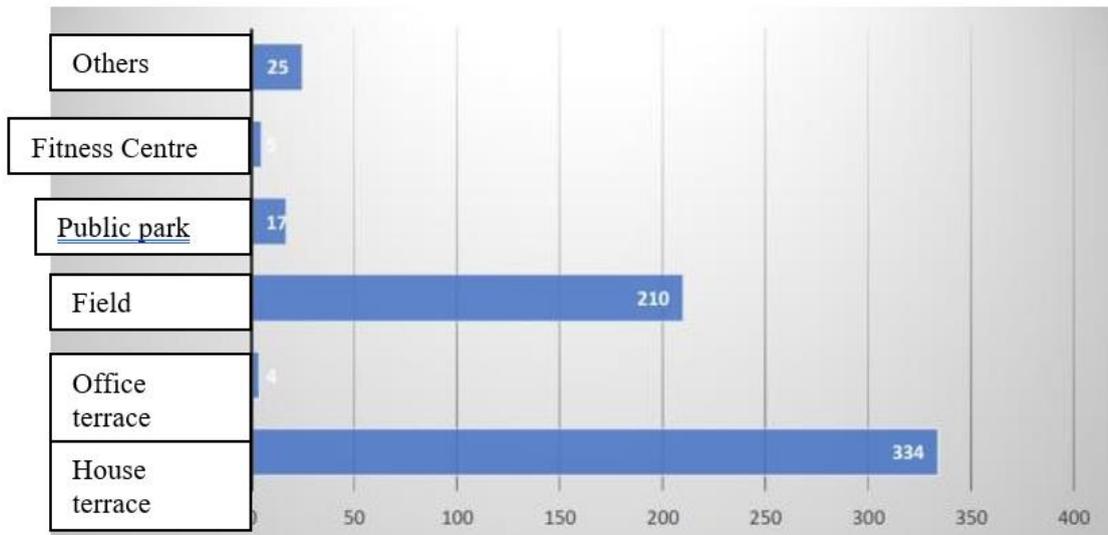


Figure 7. The place to work out in the sun.

Most of them (56%) worked out in the sun in front of their house, and some (35%) worked out in the field, and there were only a few who worked out in public parks, fitness centers, or other places (see Figure 7).

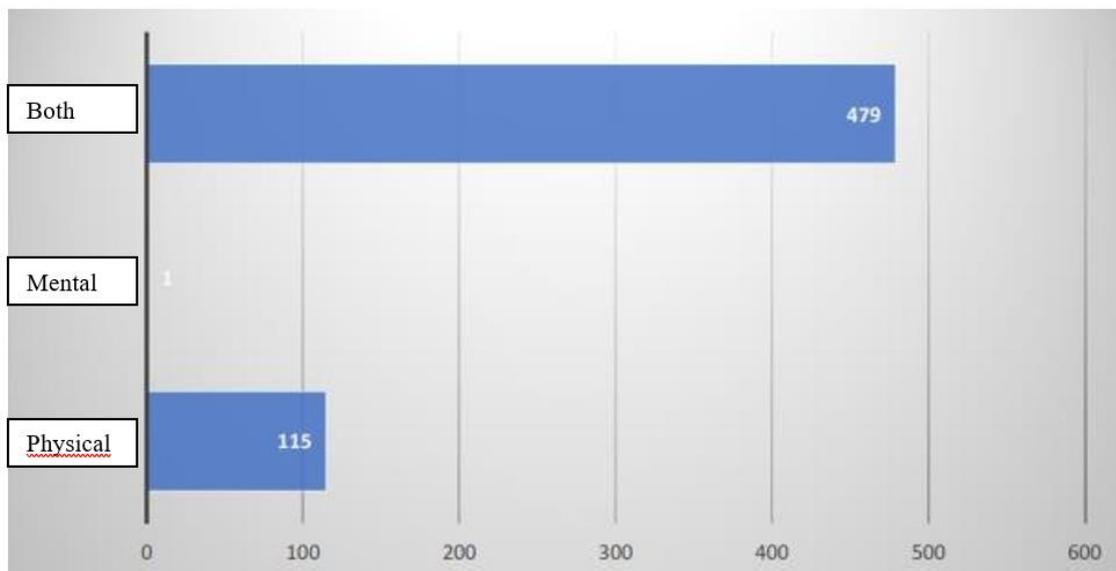


Figure 8. Benefits after working out in the sun.

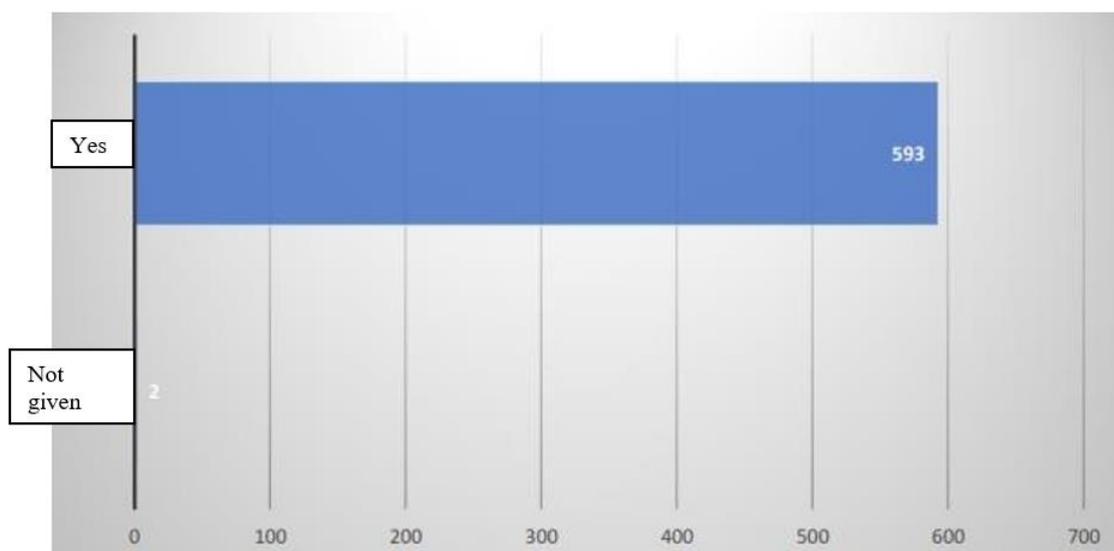


Figure 9. Benefits of increasing body immunity after working out in the sun.

Respondents obtained the benefits after working out in the sun both physically and psychologically, and an increase in the respondents' immunity (see Figures 8 and 9).

Discussion

A guide has been made in the form of education on the right way to exercise during a pandemic. Most of the respondents did sports with strength training. This may be because the respondents were dominated by teenagers and adults. In addition, there were more male respondents than female respondents. Regardless of the sport model chosen, they have been doing exercise with sufficient duration, which is 15 minutes or more. However, they mostly worked out in the sun with a frequency that is still lacking, that is 2 to 3 times a week.

They mostly worked out in the sun in the morning from 08.00 to 10.00. In accordance with the PDSKO (2020) recommendation, sports during the pandemic still have to follow the FITT rules, which are done 3-5 times a week, with a duration of 10-15 minutes. In addition, exercise has added value if it is done in the sun between 9 to 10 am or 3 to 4 pm. As stated by Alsharani, et.al. (2013), Nimitphong and Holick (2013), and Medrano et.al. (2018), proper sunbathing besides being able to help meet the needs of vitamin D, will also help boost our immune system, and not give the SAR CoV-2 virus a chance to survive long in hot and humid environments.

Most of the respondents do sports in front of their house. This shows that in working out in the sun, most of the respondents have maintained social/physical distancing, and stay-at-home as recommended by WHO (Ministry of Health of the Republic of Indonesia, 2020).

Respondents felt several benefits after doing exercise according to the guidelines provided, both physically, psychologically, and its effect in helping to improve their resistance to disease. We know that strengthening the immune system is one way to prevent the spread of the coronavirus (Ministry of Health, 2020).

CONCLUSIONS

Thus, based on the implementation of Community Service Program activities that have been carried out, the following conclusions can be drawn. UNY's guide of working out in the sun has been compiled in the form of an educational video. About 98% of respondents liked educational videos and the remaining 2% did not like them. Most of the respondents prefer/frequently did strength training. On average, respondents worked out 2-3 times a week. Most of the respondents worked out in the morning at 08.00-10.00. The duration of the exercise carried out by the respondent was 15-30 minutes a day. Most of the respondents worked out in

front of the house. The benefits felt by respondents from working out in the sun were physically and psychologically. Respondents also felt an increase in their immunity after doing the exercise. Exercise and the adequacy of vitamin D in the sun have been proven to increase the body's immunity, and therefore during this Covid-19 pandemic it is very necessary to work out in the sun. However, it is necessary to pay attention to the adequacy of exercise by paying attention to FITT. Moreover, the sports should be carried out at the right time to get the benefits of working out in the sun.

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