Description of community motivation in Palopo about excercising during COVID-19

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ABSTRACT
A person’s willingness to exercise is strongly influenced by motivation. The purpose of this research is to discover The description of the people’s motivation in doing physical activity during COVID-19 pandemic based on the social stratification and the motivation indicators (intrinsic & extrinsic). The research method uses descriptive analysis. The determination of the sample uses Quota Sampling which amounts to 1% of the total population, namely 1,389 people. The data collection technique uses a questionnaire which is divided into 18 questions with the help of the google form application. The research time is July–August 2021, where the research follows the provisions of WFH (work from home). Data analysis techniques using Microsoft Excel and SPSS 20 applications. The results, people’s motivation in doing physical activity during COVID-19 Pandemic is based on the social stratification, majority are on the very high category. We hope that the results of this research can be a scientific reference for policy makers, relevant agencies, sports practitioners, in drafting regulations related to community physical activity (exercise) during the COVID 19 Pandemic. Limitations of research and suggestions for further research; There is a possibility of bias when respondents answered the questionnaire, considering the very long period of the COVID-19 pandemic in Indonesia and various phases such as Lockdown/Large-Scale Restrictions (PSBB), Small/limited scale restrictions, and New Normal (Adaptation of new habits).In the future, Similar research should include the phase and or time (date/year) so that there is no bias when respondents answer the questionnaire and should collaborate with more credible government agencies if involving a wider sample.

Keywords: Physical activity; motivation; exercise; COVID-19

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INTRODUCTION
It is well known that in December 2019 in Wuhan (China) the first case of coronavirus disease 2019 (COVID-19) emerged (Huang et al., 2020). The virus then spread rapidly throughout the world, on March 11, 2020 WHO declared this virus a pandemic (López-Bueno et al., 2020). The COVID-19 pandemic has become a global health emergency, therefore all efforts and resources are mobilized for the prevention and treatment of this disease, and it is a top priority for the world of health (Tavakol et al., 2021). During the COVID-19 pandemic, physical activity (exercise) is the main strategy in order to overcome, prevent, and rehabilitate. There is a significant decrease in patients undergoing COVID-19 quarantine and then receiving treatment in
the form of exercise, it is also known that the positive benefits of exercise treatment are also influenced by neuromuscular disease, impaired walking, gender and BMI (Di Stefano et al., 2021).

Doing outdoor sports activities for hours in the sun certainly has a positive impact which boosts the immune system (Zaccagni et al., 2021). Regular and measurable physical activity and exercise are the main strategies to improve physical health during difficult times of COVID-19 (Callow et al., 2020; Woods et al., 2020). It is well known that no effective treatment has been found in reducing deaths due to COVID-19, so it is important to take control measures both in reducing the severity or damage as well as in prevention efforts. Generally, observational studies show that exercise can reduce the cause of a disease and the risk of death from the disease, (Salgado-Aranda et al., 2021). At the same time in many places, restrictions were imposed with various problems to reduce transmission. The effects of the COVID-19 pandemic have in most governments implementing policies such as strict quarantine and social distancing, but on the other hand this policy has increased post-traumatic stress, anxiety and depression symptoms (Wolf et al., 2021).

To reduce the negative mental health consequences of the pandemic, requires policy makers to provide adequate general supplies for basic needs in this case training and exercising, accurate information and, social support (Hsiang et al., 2020). The application of restrictions as a result of the COVID-19 pandemic has a negative effect on a person's psychological health (León-Zarceño et al., 2021). This means that physical activity (exercise) is the main strategy in efforts to overcome, prevent and rehabilitate during the COVID-19 pandemic throughout the world, but at the same time restrictions are applied in many places to reduce transmission which also has an effect on a person's willingness to do physical activity (exercise), while a person's willingness to exercise is strongly influenced by motivation.

The benefits of information related to motivation in exercising can help efforts to increase the level of physical activity in the community (van Lankveld et al., 2021). Motivation can be interpreted as the driving force of humans who have become active (Zulrafli et al., 2017). Motivation is considered as part of the drive within oneself to do everything as well as possible, and to satisfy and fulfill one's inner needs (Henjilito, 2017). Humans at work are greatly influenced by goal orientation, motivation is an important part in achieving these goals (Soraya, 2017). The existence of motivation shows that within a person there is a strong desire to carry out an activity (Fadli & Ansho, 2019). Through efforts to motivate someone to produce strong energy for that person, this can be achieved when motivation has penetrated a person (Alba et al., 2019).

Motivation can also be interpreted as a mental condition that affects doing an action and gives strength to someone in achieving needs, satisfaction, and minimizing imbalances (Prabowo, 2016). Apart from the subject who will exercise, it is very important that the existing trainers must be able to be a motivator in generating motivation from those who will be trained such as instilling confidence, enthusiasm, always building a cheerful and fun atmosphere (Rohman, 2018). A person's desire to carry out sports activities such as participating in physical education learning at school is largely determined by the high or low motivation because it is related to passion, pleasure, and enthusiasm (Mulyana, 2017). There is no doubt, and according to what has been proven by many studies there is a close relationship between exercise and psychological factors (self-esteem and motivation) (Alshammari, 2021).

The classification of motivation is divided into two parts, namely intrinsic motivation, which arises from within oneself, while extrinsic motivation, due to external influences (Supriyadi, 2019). Previous research related to community motivation in exercising during the COVID-19 Pandemic; Communities in Canada related to the decline in exercise activities during the COVID 19 Pandemic is closely related to work stress, while related to obstacles in carrying out sports activities related to access to facilities and infrastructure, time and motivation (Woodruff et al., 2021).

Digital platforms or applications can play an important role in helping support physical activity due to the COVID-19 Pandemic situation which requires restrictions on activities outside the home (Parker et al., 2021). The willingness to behave in a healthy manner to improve the quality of life is one of the aspects that motivates the people of Semarang City, Simpang Lima area, Tri Lomba Juang, respondents (Wakitayanti & Hartono, 2021). The tendency of students to be motivated in doing exercise from intrinsic aspects (needs and experiences) is bigger than from the outside aspects (Dewi et al., 2020). Limited access to the sports equipment makes a person less motivated (Marashi et al., 2021). A person's motivation for physical activity (exercise)
during the COVID-19 Lockdown in Spain, has a difference between male and female, the results of the study show that men are more motivated to do physical activity (exercise) (Leyton-Román et al., 2021).

The adult's motivation for physical activity (exercise) in Korea is strongly influenced by intrinsic motivation, especially social cognitive beliefs and intentions. Demographic influences such as gender, age, marriage, status, and past physical activity were not significantly influential (Jang et al., 2021). A person’s motivation for physical activity (exercise) during the COVID-19 lockdown in France and Sweden is largely influenced by culture, gender, and age. Country, socio-demographic aspects (place of residence), income, ethnicity, and character of physical activity (Maltagliati et al., 2021). The novelty of this research which makes it different from previous research, which describes the community’s motivation in physical activity (exercise) during the COVID 19 Pandemic in Palopo City, based on the social stratification of the community in a comprehensive manner (work, open unemployment, school age, taking care of the household, other or more “apart from the existing classification”).

Related to the explanations above the urgency of this research is to discover the motivation (including excercising indicator which are excercising is needs, excercising is easy and fun, excercising because of the equipments and facilities, and excercising in application support) of people in Palopo during COVID-19 pandemic, regarding the physical activity is the main strategy in overcoming, preventing, and rehabilitating during the COVID-19 pandemic. While at the same time restrictions are applied to reduce the transmission that have an effect on a person’s willingness to engage in physical activity (exercise), while a person's willingness to exercise is strongly influenced by motivation. The contribution of the results of this research is to become a scientific reference for policy makers, relevant agencies, sports practitioners, in preparing regulations related to community physical activity (exercise) activities during the COVID 19 Pandemic in Palopo City in particular, Indonesia and the world in general.

**METHOD**

The research approach used is descriptive analysis to determine the level of community motivation and motivation indicators in exercising during COVID-19 in Palopo City. The population is Palopo City residents aged over 15 years and over with social classification certain, among others; work, open unemployment, schooling, taking care of the household, others (other than the existing classification) totaling 138,862 people. As for determining the sample using Quota sampling, which is a sampling technique that divides the population into certain groups then samples will be taken from each group, while the quota used is 1% of the population, namely 1,389 people with an estimate; 762 people work, open unemployment 88 people, school age 155 people, take care of the household 317, others (other than the existing classification) 67 people.

![Figure 1. The Population of Palopo City People Over the Age of 15 Years](Central Bureau of Statistics of Palopo City, 2021)
The data collection technique used a questionnaire which was divided into 18 questions, related to: community motivation in exercising during COVID-19 by using google forms. The questionnaire grid was prepared beforehand to describe the indicators to be achieved in this research; 1) Intrinsic motivation includes physical activity or exercise indicators as part of needs (Needs) 5 questions, physical activity or exercise indicators are easy and fun to implement (easy and fun) 4 questions, 2) Extrinsic motivation includes exercise indicators because of the availability of facilities and infrastructure (Facilities and Infrastructure) 5 questions, physical activity or exercise with app support (Application) 3 questions. The questionnaire uses a Likert Scale with positive and negative question items with a score of 1-5. Questionnaire trials were also proposed to determine the level of validity and reliability of each item, the product moment validity test (SPSS) resulted in $R_{count} > R_{table}$ for all item questions.

The research time is July-August 2021 and the research location follows the WFH (work from home) regulations. After obtaining a research permit from the Community Service Research Institute (LPPM) Universitas Muhammadiyah Palopo (UM Palopo), the researchers then distributed a google form questionnaire involving students of the Physical Education Study Program, Faculty of Teacher Training and Education, UM Palopo, so that respondents who filled out this questionnaire were correct and in accordance with specified classification.

The data analysis technique used is descriptive analysis and overall using Microsoft Excel and SPSS 20 applications. To determine the level of motivation to exercise each time classification social classification uses a Likert scale and social classification of motivation indicators uses a formula.

$$P = \frac{F}{N} \times 100\%$$

Description: $P =$ Percentage, $F =$ Frequency, $N =$ Number of samples

- 90 - 100% = Strongly agree
- 80 - 89% = Agree
- 65 - 79% = Fairly agree
- 55 - 64% = Disagree
- 0 - 54% = Strongly disagree

RESULTS AND DISCUSSION

Graph 1 shows that, the motivation to physical activity or exercise for worker social classification shows, 65% in the very high category, 29% in the high category, 4% in the medium category, 2% in the low category, and 0% in the very low category.
Table 1 shows that, the motivational indicators that influence community in physical activity or exercise for the classification of Workers; Needs 85.93% (agree), Easy and Fun 76.34% (sufficiently agree), Facilities and Infrastructure 82.38% (agree), Applications 71% (sufficiently agree).

Table 1. The Motivational Indicators that Influence Community in Physical Activity or Exercise for the Classification of Workers

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>Indicator</th>
<th>Total Score Obtained</th>
<th>Total Score Ideal</th>
<th>Percentage</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Intrinsic Motivation</td>
<td>Needs</td>
<td>16386</td>
<td>19075</td>
<td>85.93%</td>
<td>Agree</td>
</tr>
<tr>
<td>2</td>
<td>Easy and Fun</td>
<td></td>
<td>11650</td>
<td>15260</td>
<td>76.34%</td>
<td>Just agree</td>
</tr>
<tr>
<td>1</td>
<td>Extrinsic Motivation</td>
<td>Facilities and Infrastructure</td>
<td>18858</td>
<td>22890</td>
<td>82.38%</td>
<td>Agree</td>
</tr>
<tr>
<td>2</td>
<td>Application</td>
<td></td>
<td>8133</td>
<td>11445</td>
<td>71%</td>
<td>Just agree</td>
</tr>
</tbody>
</table>

Graph 2 shows that, the motivation to physical activity or exercise for social classification open unemployment shows, 43% in the very high category, 52% in the high category, 2% in the medium category, 3% in the low category, and 0% in the very low category.

Table 2 shows that, the motivational indicators that influence community in sports for the classification of open Unemployment; Needs 76.31% (sufficiently agree), Easy and Fun 76.81% (sufficiently agree), Facilities and Infrastructure 79.50% (sufficiently agree), Applications 69.24% (sufficiently agree).

Table 2. The Motivational Indicators that Influence Community in Physical Activity or Exercise for The Classification of Open Unemployment

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>Indicator</th>
<th>Total score obtained</th>
<th>Total score ideal</th>
<th>Percentage</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Intrinsic motivation</td>
<td>Needs</td>
<td>1679</td>
<td>2200</td>
<td>76.31%</td>
<td>Just agree</td>
</tr>
<tr>
<td>2</td>
<td>Easy and Fun</td>
<td></td>
<td>1352</td>
<td>1760</td>
<td>76.81%</td>
<td>Just agree</td>
</tr>
<tr>
<td>1</td>
<td>Extrinsic motivation</td>
<td>Facilities and Infrastructure</td>
<td>2099</td>
<td>2640</td>
<td>79.50%</td>
<td>Just agree</td>
</tr>
<tr>
<td>2</td>
<td>Application</td>
<td></td>
<td>914</td>
<td>1320</td>
<td>69.24%</td>
<td>Just agree</td>
</tr>
</tbody>
</table>

Graph 3 shows that, the motivation to physical activity or exercise for student social classifications show; 43% in the very high category, 41% in the high category, 13% in the medium category, 3% in the low category, and 0% in the very low category.
Table 3 shows that, the motivational indicators that influence community in physical activity or exercise for Student classification; Needs 71.84% (sufficiently agree), Easy and Fun 78% (sufficiently agree), Facilities and Infrastructure 75.57% (sufficiently agree), Applications 69.41% (sufficiently agree).

Graph 3. The Motivation to Physical Activity or Exercise for Student Social Classification

Graph 4 shows that, the motivation to physical activity or exercise for social classification Housekeepershow; 45% in the very high category, 47% in the high category, 5% in the medium category, 3% in the low category, and 0% in the very low category.

Table 4 shows that, the motivational indicators that influence community in physical activity or exercise for the classification of housekeepers; Needs 74.87% (sufficiently agree), Easy and Fun 78.67% (sufficiently agree), Facilities and Infrastructure 76.80% (sufficiently agree), Applications 70.15% (sufficiently agree).

Table 4. The Motivational Indicators that Influence Community in Physical Activity or Exercise for the Classification of Housekeepers
Graph 5 shows that, the motivation to physical activity or exercise for social classification other (other than the existing classification) shows, 60% in the very high category, 37% in the high category, 1% in the medium category, 1% in the low category, and 0% for the very low category.

![Graph 5. The Motivation to Physical Activity or Exercise for Social Classification Other (other than the Existing Classification)](image)

Table 5 shows that, the motivational indicators that influence community in physical activity or exercise for other classifications (other than the existing classifications); Needs 80% (agree), Easy and Fun 84.70% (agree), Facilities and Infrastructure 84.82% (agree), Applications 71.94% (sufficiently agree).

![Table 5. The Motivational Indicators that Influence Community in Physical Activity or Exercise for Other Classifications (Other than the Existing Classifications)](image)

The purpose of this research is to discover the description of the people’s motivation in doing physical activity during COVID-19 pandemic based on the social stratification and the motivation indicators (intrinsic & extrinsic). During the COVID-19 pandemic, all information that is able to make a positive contribution is needed. The results of this research show that the people's motivation in doing physical activity (sport) during the COVID-19 pandemic is based on the social stratification, majority are on the very high and high category, some are on the mid and low category, and no very low category, (see diagram 1,2,3,4,5).

Based on the findings in Semarang city, People in Simpang five areas have been motivated in doing physical activity during New Normal (Wakitayanti & Hartono, 2021). In line with the findings in the Sembalun area of East Lombok, people are very motivated to take part in the fun race and trial run during the new normal period with a high category of 81% (Isnaini et al., 2021).

Based on the findings in Korea, that the influence of social stratification (Gender, age, marital status and past physical activities) are not significantly influencing the people's motivation in doing physical activity during the COVID-19 pandemic (Jang et al., 2021) and on the other hand the findings in France and Sweden, that people's motivation in doing physical activity (sport) during COVID-19 Lockdown is highly influenced by culture, gender and age (Maltagliati et al., 2021).

And also the findings in Canada (1-7 may 2020), that there was a decrease on the moderate to vigorous physical activity (MVPA) for workers during the COVID-19 pandemic (Rhodes et al., 2020). And the findings in Canada (March/april, 2020), that at the beginning of the COVID-19 pandemic, the workers can barely doing physical activity (sport) due to the stress (Woodruff et al., 2021).
People's motivation in doing physical activity during COVID-19 pandemic based on the social stratification is different between each country, related to this finding, we lean to the motivation theory which describes that the motives that push someone to behave; biogenetic (gene), sociogenetic (social interaction), theogenetic (believes), objective (needs) and emergency situation (Supriyanto, 2015).

The results of this study show that for all social stratifications that are motivated by physical activity (sports) during the COVID-19 pandemic due to intrinsic and extrinsic motivation indicators, the majority are agree and moderately agree categories, there are no categories of strongly agree, disagree and strongly disagree, (See table 1,2,3,4,5).

For sports indicators as part of needs, in line with findings in Semarang City, Simpang Lima area, the highest average score on the statement item on the healthy life awareness variable is statement item number 24 with a very high category classification of 3.64 (91%) which is between intervals 81.25%-100% (Wakitayanti & Hartono, 2021). Sport is a human need, someone who exercises expects health and body fitness so that he is able to support and increase his work activities (Firdaus, 2012).

For indicators of exercise because it is easy/fun, in line with the findings in Kotawaringin Barat Regency that the most influencing factor for the trend of cycling in this area is the intrinsic factor (easy/fun) (Rizal et al., 2020). In the concept of sports motivation, it is explained that someone wants to want to participate in physical activity (exercise) because of several factors; exercise is considered to improve performance, exercise is considered to provide fun, add friends, gain new experiences, increase one's potential for success, physical fitness (Firdaus, 2012).

For indicators of exercise, the existence of private and public sports facilities and infrastructure, in line with the findings in Canada that sports equipment, time, and self-motivation are the inhibiting factors for a person to be physically active (exercise) and sports equipment is the highest determining factor (Woodruff et al., 2021). Other studies also conclude that, the existence of personal facilities and infrastructure, exercise planning (program) is the main predictor of a person in maintaining moderate to vigorous physical activity (MVPA) (Rhodes et al., 2020).

For this reason, it is important to pay attention to the existence of private and public sports facilities and infrastructure. Improper management of facilities and infrastructure and their allocation will hinder efforts to increase achievement in sports and physical activity culture (sports) (Gunawan et al., 2021).

For indicators of application use, in line with findings in Australia, that 39.5% (469/1188) adults and 26.5% (255/963) were recorded as using digital platforms (digital platforms (YouTube, Instagram, and Facebook), online applications (such as Centr and MyFitnessPal), active electronic games such as Xbox Kinect, online training or racing (Zwift, FullGaz, and Rouvy), online classes (recorded/online) using Zoom, sports-only applications designed directly by sports organizations such as Team Builder for physical activity (exercise) (Parker et al., 2021).

This is in line with the findings of the Youth Organization (GMIM Elim Kolongan Region Tomohon Satu), that the desire for physical activity is due to Obtaining information from the internet and social media (Rau et al., 2021). The use of applications can be an effective medium for people's motivation to exercise during the Covid-19 Pandemic. Solutions in an effort to increase physical activity (exercise) during the pandemic should use home fitness applications, social media support, video streaming of physical activity (exercise) (Ammar et al., 2020).

People's motivation to exercise during the COVID-19 pandemic based on social stratification tends to vary and differ in each country. The majority of people agree that indicators of intrinsic motivation (feeling part of the need, and easy/fun) and extrinsic indicators (presence of private and public sports facilities and infrastructure, and the presence and use of applications), motivate them to do physical activity (sports), so that it is important for the government (decision makers) and the community to pay attention to these indicators so that everyone is willing to do physical activity (sports).

CONCLUSION

The results of this study show that people's motivation in physical activity (sports) during the COVID 19 Pandemic based on social stratification (work, open unemployment, school age, housekeepers, others "other
than the existing classification”) the majority are in the very high and high categories, a small portion for the medium and low categories, and no very low category was found. Our findings are in line with findings in several regions in Indonesia (Semarang, East Lombok and Grobogan) and findings in South Korea where social stratification is not the main predictor of the level of motivation to exercise, but in contrast to findings in France, Canada and Switzerland where these three countries Social stratification is the main predictor of the level of motivation to exercise. The results of our research further show that the majority of people agree that the indicators of intrinsic motivation (feeling part of the need, and easy/fun) and extrinsic indicators (the presence of private and public sports facilities and infrastructure, and the presence and use of applications), motivate them to carry out activities physical (sports).

The first limitation is that it is possible that there is a bias when the respondents answering the questions (for example; I need physical activity (sport) during COVID-19 pandemic, because ‘COVID-19 Pandemic’ is very long and divided into some parts such as Lockdown/Full Lock down, Semi Lockdown and New Normal. For the future researches to put the time (date and year) or the time of the COVID-19 Pandemic, Thus, the will be more accurate. The second is on this research the students of Physical education faculty University of MuhammadiyahPalopo have been involved but it cannot guarantee the accuracy of the data. In the future, the researches need to work together with government institution which more credible and suitable.

REFERENCES


