



Motivation to Practice in Free Time during the Covid-19 Pandemic: Differences between Male and Female Students

Dinar Dinangsit, Muhammad Nur Alif, Encep Sudirjo

Universitas Pendidikan Indonesia, Indonesia

Article Info

Received June 2021

Revised August 2021

Accepted September 2021

Available online October 2021

Keywords:

covid-19, physical activity, students

Abstract

The Covid-19 pandemic that suddenly appeared at the beginning of 2020 spread quickly throughout the world, including in Indonesia. Social restrictions to prevent the transmission of Covid-19 eliminate the essential characteristics of humans and individuals who need to move to maintain their existence as biological and social beings. The effect of inactivity includes the decrease in health quality and an increase in the illness rate. Therefore, this study aimed to examine physically active behaviour to fill spare time during restrictions in the Covid-19 pandemic. Related to physical activity behaviour from a psychological perspective, motivation to practice in leisure time is seen as a predictor for involvement in physical activity. The participants of this study were Elementary School students aged 10-12 year, seen as the critical transition stage of physical and psychological development to the adolescence stage. The male and female samples, each consisted of 50 people, were selected through a convenience sampling. They were voluntarily willing to be a respondent to answer a self-report process using the motivation to practice in free time scale (MBWL). The construct validity of the scale had met the requirements as well as the internal consistency of each item. The results of the study showed that male student motivation to practice in their free time was higher than female students.

INTRODUCTION

The Global Recommendations on Physical Activity for Health, suggested by the World Health Organization or WHO (2019), recommend that people aged 18–64 years or older should do at least 150 minutes of moderate physical activity per week or at least 75 minutes of high-intensity physical activity per week to harvest the health benefits. However, one-third of the population do not meet these recommended guidelines. The same thing happened in Indonesia, where the participation rate in sports of people aged 13-60 years was 23% (Mutohir et al., 2021). This trend is also happening in other countries, such as in South Korea (Ministry of Culture, Sports and Tourism of the Republic of Korea, 2019), where the restrictions imposed due to COVID-19 (such as isolation and quarantine) may exacerbate this situation (Kim, 2019).

The low participation rate in sports is exacerbated by policies related to social restrictions, which have implications for movement restrictions. Policies related to Covid-19 raise concerns about limited opportunities for carrying out physical activity necessary to maintain personal health and prevent disease (Matias et al., 2020). In fact, physical activity patterns have changed significantly (Tison et al., 2020), and nearly 4 billion people worldwide are reported to be experiencing social isolation (Sandford, 2020). It could take 1-2 years worldwide until the end of the pandemic (López and Rodó, 2020; Matias et al., 2020).

The significant effect of Covid-19 on education is that the process of physical activity in schools, including in Physical Education, Sports, and Health subject abbreviated as PJOK, has changed from face-to-face to distance learning through online system. The advantage of using communication technology is that it could reach far and wide the target audience, without being

limited by space constraints. However, the ideal goal of PJOK in the curriculum is barely achieved. The intended goal is conceptualized as providing students with self-management skills in an effort to develop and maintain physical fitness and a healthy lifestyle through various selected physical activities and sports (Kurukulum 2013).

The weakness of the implementation of the physical activity Physical Education learning process is the loss of essential elements in the teaching learning process. The process cannot be controlled and the social climate, as the hallmark of PJOK learning which provides opportunities in actual situations of intensive social interaction, is missing. Social interaction as a key factor in teaching and learning process was proposed by Hascher (cited by Niederkofler et al., 2015). The pattern of classroom interaction is formed by social interactions that must be realized and raised as it is a driving factor for students to be motivated. PJOK teachers is also supported to manage classes and achieve curricular goals, which is essential to increase motivation as stated by Roberts, Treasure, & Conroy (cited by Niederkofler et al., 2015).

On the other hand, Elementary School age is a critical stage of a child development requiring guidance, associated with the age of transition from childhood to adolescence. As described by Halal et al. (2006), childhood is a critical stage in the life journey so that it is necessary to intervene and promote an active lifestyle before long-term behavioral patterns become established. This may be important especially for children who experience decreased physical activity over the age gap. Hall et al (2006) also explain that time spent being physically active declines through childhood. Cross-country and gender data show differences in physical activity levels which are generally very low, below 50% for young people to meet the standard of 60 minutes MVPA per day. More specifically,

the level of physical activity was lower among girls.

METHOD

The research method used was descriptive quantitative method. There was no treatment for students. Therefore, the approach used was the cross-sectional approach, because the data were collected only once when the instrument was used. This approach is quite successful in uncovering problems and producing findings related to hypotheses.

Participants

The participants of this study were elementary school students in a city in West Java, Indonesia, aged 10-12 years who actively participated in PJOK lessons through online physical activity learning. With the permission of the principal, participants voluntarily participated in the study. They were in good physical and mental health and regarded as students without special needs.

Samples

Due to the difficulty of obtaining students to be the samples, due to the policy of closing schools, the research samples were not selected randomly from a limited population of students in limited schools. The method used was the convenience sample procedure because the researcher got permission to access the school to carry out the data collection process. The samples consisted of 100 people, 50 male students and 50 female students respectively, who participated in responding to the instrument. The sample size was considered adequate for processing quantitative data.

In the collecting data process, each respondent filled out a motivational scale for free time practice (MBWL). Students were arranged into several small groups to prevent COVID-19 infection. How to fill in the scale was previously explained by the coordinator, covering how to mark the answer of one of the five alternative answers. The

answers were according to the opinion of each respondent.

Instrument

The MBWL scale used in this study is an adaptation of the Free Time Motivation Scale (FTMS) which was compiled and tested for its validity and reliability by Baldwin and Caldwell (2003). This scale refers to the theory of self-determination (Deci & Ryan, 1985) and has been tested and adapted into Indonesian language for Dinar Dinangsit's dissertation (2017).

The MBWL scale consisted of 5 components, namely (1) amotivation, which included 4 items, (2) extrinsic motivation, which included 5 items, (3) introjected motivation, which included 5 items, (4) identified motivation, which included 4 items, and (5) intrinsic motivation, which included 4 items (originally 5 items but 1 was omitted due its low reliability). Each component was then translated into indicators and items, which included 23 items, such as physical activity.

The structure of the MBWL scale, according to the original version, was a Likert scale with a 5-response pattern, namely Strongly Agree, Agree, Doubtful, Disagree, and Strongly Disagree. The statement of physical activity was also in accordance with the original pattern, which was all positive, so that the score was ordered 5,3,4,2,1 respectively. The score obtained was a continuous score.

The internal consistency of the MBWL scale for each item was between 0.324 to 0.703 (Dinangsit, 2017). The reliability of the MBWL scale calculated by Cronbach alpha was 0.854, and the error variance was small, 0.271. The results when calculated per component were Amotivation, alpha 0.807 (error variance 0.329), Intrinsic, alpha 0.880 (error variance, 0.226); Extrinsic, alpha 0.701 (error variance 0.509); Introjection, alpha 0.842 (error variance 0.292); Identified, alpha 0.822 (error variance 0.325).

RESULT

MBWL data were statistically processed to test two aspects. The first was to test the significance of the difference in the MBWL mean score between male and female students. The second was to test the significance of the differences among the mean scores of the four motivational dimensions in the MBWL. The results of the statistical analysis recapitulation on the mean test related to the two types of analysis are presented in **Table 1**.

Table 1. Recapitulation of MBWL Comparative Test for Male and Female Students in Elementary School

Notes: AMT = amotivation; EXT = extrinsic; IJI = introjected; IDI

Variable	Group		P value	Conclusion
	Female (n=53)	Male (n=61)		
AMT	9.26±3.80	11.20±3.20	0.002	Significant
EXT	15.21±3.61	15.61±2.54	0.529	Not Significant
IJI	17.51±4.30	17.26±2.89	0.716	Not Significant
IDI	16.53±1.97	17.02±1.88	0.226	Not Significant
INT	20.20±2.94	20.80±2.47	0.041	Significant
MBWL	78.53±9.42	81.89±6.92	0.031	Significant

=identified; INT = intrinsic, MBWL = motivation for exercise in free time, complete scale.

The mean score of two data groups has a significant difference if it has a probability value (p-value) smaller than 0.05, and vice versa. The recapitulation results show that the overall MBWL score between male and female students has a significant difference because it has a p-value of 0.031, which is smaller than 0.05. The mean of MBWL score for male students is greater than that for female students. It concludes that the motivation to practice in free time is significantly different between male and female students. In other words, male students have a stronger motivation to practice in free time than female students.

The results of the calculations recapitu-

lation in Table 1 also shows the difference of the mean score of the five MBWL components. The results showed that the amotivation score (AMT) and intrinsic motivation score (INT) were significantly different between male and female students ($p < 0.05$). In both dimensions of motivation, male students were higher to female students. Furthermore, other motivational dimensions, including extrinsic (EXT), introjected (IJI), and identified (IDI) dimensions did not show a significant difference ($p > 0.05$) in male and female students.

DISCUSSION

The findings of this study tend to support the concept that motivation to practice in free time is influenced by socio-demographic factors, namely the motivation difference between male and female students. This finding shows that in elementary school students, males have stronger motivation to practice in their spare time than female students. Data about the level of activity of the students doing physical activity in their spare time were not recorded in this study. However, based on MBWL data, there were indications that physical activity of female students was low, which was also found in other physical activity results as described by Hallal et al. (2006), stating the lower levels of physical activity among female students.

There are indications that these findings signify the influence of subjective norms in society considering that sport is only suitable for boys. That male students are more motivated to practice in their free time than female students is likely to have a casual relationship with gender stereotypes in physical activity of PJOK lesson in schools, including students from the schools used as samples. This belief is often put forward by other researchers. An indication of the strong motivation of male students practicing in their free time may be the effect of gender stereotypes in the PJOK

learning process reflected in the teacher-student interaction pattern or in the teacher's pedagogic style differentiating treatment between males and females. This class climate is also described in the research of Nicaise et al. (cited by Niederkofler et al., 2015). It stated that girls reported less criticism and less response from their teachers than boys; girls also felt more supported. Another study revealed the effect of teacher feedback on competence perceptions and the stronger self-concept for girls than boys. Several authors also found differences in the verbal interaction level (Hannon & Ratliffe, 2007; cited by Niederkofler et al., 2015).

This finding is reinforced by the analysis results of motivation to practice in free time based on the mean score difference of the amotivation and intrinsic motivation components. In these two dimensions, male students were higher. It shows the superiority of male students over female students in terms of intrinsic motivation, which indicates that male students actively exercising in their free time are really due to personal encouragement, voluntary choices, and for the purpose of obtaining benefits from these activities. It means that the urge to fill the free time with physical activity is not influenced by external factors. However, whether the strength of the motivation is influenced by the achievement of the goal of PJOK lesson in the form of knowledge mastery forming a positive attitude towards physical activity or physical competence facilitating filling of free time was not revealed, because individual responses to MBWL were not explored more deeply by interviews.

The behavioral tendencies of male students that lead to autonomous decisions could be reviewed from the extrinsic, introjected, and identified motivation dimensions, which were not different from female students who were less strong in terms of intrinsic motivation. Therefore, the male

student behavior in spending their free time was not influenced by external factors, such as the desire to get awards or rewards. It was because, in the context of filling their free time, activities driven by expectations to get something from outside the activity were almost not found. The PJOK teachers, for example, were limited to driving motivation through advice or suggestions.

The motivation for introjected regulation was not different for male and female students. The urge to act related to this introjected motivation dimension may occur when physical activity occurs. Children aged students, namely elementary school students, do something because they are driven by their friend influence. Another factor could be the physical activity, so that they are seen by PJOK teachers as students who actively fill their time with constructive activities. The behavior can be cited as an example of introjected regulation motivation.

Another motivational dimension playing a role is identified regulation, although this dimension also does not show differences between male and female students. The urge to be active in free time may come from the influence of the PJOK teacher. The students want to get good PJOK scores in their report cards so they are practicing actively in their spare time.

The findings of this study imply the importance of increasing physical activity at all levels of education to emphasize the creation of a conducive social climate providing the widest possible opportunities for the social interaction process between students and students and between students and teachers concerned. This conducive social climate creates a physical activity climate that arouses motivation in students as an important psychological foundation for successful physical activity to create complete changes in students according to the curriculum mandate.

It is important to remove the stereotype

that sports are part of a masculine culture that must be preserved. Although male and female students are physically different, the PJOK teacher should pay more attention and give a larger portion to female students so that they are successful and competent in physical literacy. In this way, female students will develop a sense of competence that will strengthen their self-confidence to autonomous motivation to fill their free time.

Quantitative data collection, based on respondents' self-reports on the MBWL scale, has limitations. The quantitative data obtained are limited to the description of MBWL and do not reveal more in-depth reasons.

CONCLUSION

Individual responses to the MBWL scale reveal the fact that male students' motivation to practice in their leisure time was stronger than female students' motivation. The drive to be active in physical activity in the leisure time was more determined by intrinsic motivation. The finding indicates that coaching through PJOK learning for children is important to foster autonomous motivation.

REFERENCE

- Aktifitas fisikzen, I. (1991). The theory of planned behavior. *Organ. Behav. Hum. Decis. Process.* 50, 179–211. doi: 10.1016/0749-5978(91)90020-T
- Deci, E.L. dan Ryan, R.M. (1985). *Intrinsic Motivation and Self Determination in Human Behavior*, New York Plenum.
- Dinar, Dinangsit (2017). Pengaruh Self-Control Diet, Moivasi Berlatih Waktu Luang, Pengetahuan Kebugaran terkait Kesehatan terhadap Aktivitas Jasmani serta Hubungannya dengan Kebugaran Kardiovaskular dan Indeks Massa Tubuh Mahasiswi PGSD-UPI Sumedang. *Disertasi*. Bandung: SPS UPI.
- Hagger, M. S., and Chatzisarantis, N. L. (2016). The trans-contextual model of autonomous motivation in education: conceptual and empirical issues and meta-analysis. *Rev. Educ. Res.* 86, 360–407. doi: 10.3102/0034654315585005
- Hallal, Pedro C., Victoria, Cesar G., Azevedo, Mario R., dan Wells, Jonathan C.K. (2006). Adolescent Physical Activity and Health: A Systematic Review. *Sports Med* 2006; 36 (12).
- Jang D, Kim I and Kwon S (2021) Motivation and Intention Toward Physical Activity During the COVID-19 Pandemic: Perspectives From Integrated Model of Self-Determination and Planned Behavior Theories. *Front. Psychol.* 12:714865. doi: 10.3389/fpsyg.2021.714865
- López, L., and Rodó, X. (2020). The end of social confinement and COVID-19 re-emergence risk. *Nat. Human Behav.* 4, 746–755. doi: 10.1038/s41562-020-0908-8.
- Matias, T., Dominski, F. H., and Marks, D. F. (2020). Human needs in COVID-19 isolation. *J. Health Psychol.* 25, 871–882. doi: 10.1177/1359105320925149.
- Mutohir, Toho Cholik, Lutan, Rusli, Ma'sum, Ali dan Kriatianto, Agus (202). *Sport Development Index: Pra Survai*. Jakarta: Kemenpora.
- Pate, Russell R., Davis, Michael G., Robinson, Thomas N., Stone, Elaine J., McKenzie, Thomas L. dan Young, Judith C., (2006). A Leadership Role for Schools: A Scientific Statement from the American Heart Association Council on Nutrition, Physical Activity, and Metabolism (Physical Activity Committee) in Collaboration With the Councils on Cardiovascular Disease in the Young and Cardiovascular Nursing. *Promoting Physical Activity in Children and Youth*, 114(11).
- Sandford, A. (2020). *Coronavirus: Half of Humanity Now on Lockdown as 90*

Countries Call for Confinement. Euro News. Available online at: <https://www.euronews.com/2020/04/02/coronavirus-in-europe-spain-s-death-toll-hits-10-000-after-record-950-new-deaths-in-24-hou> (accessed April 3, 2020).

Tison, G. H., Avram, R., Kuhar, P., Abreau, S., Marcus, G. M., Pletcher, M. J., et al. (2020). Worldwide effect of COVID-19 on physical activity: a descriptive study. *Ann. Intern. Med.* 173, 767–770. doi: 10.7326/M20-2665.

WHO (2016). Fact Sheet Physical Activity in Adolescent. Retrieved from: https://www.euro.who.int/__data/assets/pdf_file/0018/303480/HBSC-No.7_factsheet_Physical.pdf

World Health Organization (2019). *Global Action Plan on Physical Activity 2018–2030: More Active People.*