




Assessment of the preparedness and acceptability for distance learning: A guide for an efficient distance learning

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ABSTRACT

A shift in the mode of learning has shifted from face-to-face to online and modular learning, wherein the former has been utilized more. The fundamental goal of the research is to explore the experiences of students along with their recommendations to further improve the delivery of physical education online class using what gadget is the best and much more efficient base on their experienced. This study assessed the preparedness and acceptability of University of Makati (UMak) students with a bachelor's degrees in physical wellness on distance learning. The study employed the quantitative method of research wherein the researcher used related research questions. The data were through the questionnaires. It served as a survey tool to draw facts about the preparedness and acceptability of University of Makati students with a bachelor's degrees in physical wellness on distance learning. The respondents of the study bachelor's degree in physical wellness students at the University of Makati. The researchers used the student's evaluation as an instrument to complement the research questions in assessing the competency of gadgets used. Based on the results of the study, majority of the respondents are prepared for any distance learning, however, the reliability of the gadget and availability of connectivity at home are issues that need solution. Majority of the students with a percentage rating ranging from 88% to 95% accept the possibility of having distance learning as the method to be used by UMak-CHK department on the 2nd semester of 2021-2022. The result of the assessment of the readiness and competency of faculty in the delivery of distance learning will be used as a tool in the implementation of courses of action in preparation for the coming semester of AY 2021-2022.

Keywords: Assessment; preparedness; acceptability; distance learning; physical education

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INTRODUCTION

Several studies have assessed online versus in-person learning at the school level in recent years (Brockman et al., 2020; Felson & Adamczyk, 2021; Vaillancourt et al., 2022). A key concern during this literature is that students typically self-select into online or in-person programs or courses, confounding estimates of student outcomes. That is, differences within the characteristics of scholars themselves may drive differences within the outcome measures we observe that are unrelated to the mode of instruction (Arias et al., 2018). Additionally, the content, instructor, assignments, and other course features might differ across online and in-person modes also, which makes apples-to-apples comparisons difficult (Spencer & Temple, 2021).

The most compelling studies of online education draw on a random assignment design (i.e., randomized control trial or RCT) to isolate the causal effect of online versus in-person learning (So et al., 2021). Several pathbreaking studies were ready to estimate

causal impacts of performance on final exams or course grades in recent years (Clark et al., 2021). Virtually all those studies found that online instruction resulted in lower student performance relative to in-person instruction; although in one case, students with hybrid instruction performed similarly to their in-person peers. Negative effects of online course-taking were particularly pronounced for males and less-academically prepared students.

The educational institution all over the world are in full constant effort to take the necessary adjustments during this pandemic affecting the students and faculty. Government schools were directed to a limited physical work reporting by faculty and employees and encouraging work from scheme (Elfirdoussi et al., 2020). University of Makati, a locally funded university, with the highly supportive mayor of the local government of Makati City are moving towards creating means to shift from the traditional conduct of classes to the distance learning method. It will be difficult but the assistance and cooperation of other sectors to realize the main objective of not disrupting the delivery of quality education to students will make the move possible and doable (OECD, 2020).

The assessment of the preparedness and acceptability of student to flexible blended or distance learning is very important (Reyes et al., 2021), it is one of the methods recommended by Commission on Higher Education given the situation that COVID-19 threat will continue to soar. The courses of action to be taken by University of Makati (UMak) need a considerable number of thoughts and wisdom because the future of the estimated twelve thousand (12,000) students will be at stake. The educational institution all over the world are in full constant effort to take the necessary adjustments during this pandemic affecting the students and faculty (Iglesias-Pradas et al., 2021). In the Philippines, The Commission on Higher Education (CHED) through its advisories directed all State Universities and Colleges (SUCs) and Local Universities and Colleges (LUCs) to move the start of classes in August for the first semester of FY 2020-2021 and exercise discretion in the use of blended and flexible methods of delivering quality education (CHED, 2020). This announcement is no longer new to some of the school, colleges, and universities and as we are commencing the classes from the University of Makati for the first semester every August.

The Civil Service Commission (CSC) released the Resolution No. 2000540 (Revised Interim Guidelines for Alternative Work Arrangements and Support Mechanisms for Workers in the Government During the Period of State of National Emergency Due to COVID-19 Pandemic) on May 7, 2020 which directed government offices to adopt a work from home (WFH) arrangement or man the office by skeletal force for agencies in areas placed under General Community Quarantine (GCQ) or where public transportation is limited and physical or social distancing in the workplace is required (CSC, 2020). The said resolution places the government schools in a limited physical work reporting by faculty and employees and encouraging work from scheme. In the IATF directives, the statement that no person below 21 years of age may go out of their houses for any purposes leaving the educational institution to formulate policies and implement the same in preparation for the coming semester. If the COVID curve will not flatten and continue to rise, the scenario of community quarantine will be prolonged affecting millions of students in relation to attendance to classes (Han et al., 2020).

On May 25, 2020, the President of the Philippines declared that no classes in all levels shall be conducted without vaccinating the students. This prompted the officials of the academic institutions to act on the matter considering that a vaccine before use will still have to undergo clinical trials for several months and the fact that no vaccine yet is

available from any laboratory (WHO, 2022). Since this is a major issue, the preparation in case of non-availability of this vaccine by August 2020 must be done. The assessment of the preparedness and acceptability of student to flexible blended or distance learning is very important it is one of the methods recommended by Commission on Higher Education given the situation that COVID-19 threat will continue to soar. The courses of action to be taken by UMak need a considerable number of thoughts and wisdom because the future of the estimated twelve thousand (12,000) students will be at stake. The fundamental goal of the research is to explore the experiences of students along with their recommendations to further improve the delivery of physical education online class using what gadget is the best and much more efficient base on their experienced. This study assessed the preparedness and acceptability of University of Makati students with a bachelor's degrees in physical wellness on distance learning.

METHOD

Quantitative approach is used in assessing the preparedness and acceptability of UMak-CHK BPW students on distance learning. Descriptive research design also utilized in preparing the questions and finding out the problem with main concentration of describing, explaining, and validating findings. The descriptive research design aimed to establish the relationship between independent variables and a dependent variables or outcome variable (Fraenkel et al., 2012).

The researchers prepared self-made survey questionnaire which the indicators were derived from related studies and literature. Survey questionnaires were distributed to one hundred sixty-seven (167) students via online using Google form due to the current situation of the country. Respondents are chosen randomly from different sections and year level from College of Human Kinetics, Bachelor in Physical Wellness major in Sports Management and Bachelor in Physical Wellness major in Education. The result of the study will be used on the implementation of necessary adjustments and preparations in the conduct of distance learning. Frequency and percentage were used on the interpretation of the demographic profile of the respondents; and weighted mean was used to scrutinize the interpretation of the assessment on the preparedness and acceptability on the distance learning.

RESULTS AND DISCUSSION

Considering the educational challenges everyone is facing during this COVID crisis, the preparedness and acceptability of CHK-BPW students was timely assessed. The result of the assessment of the readiness and competency of faculty in the delivery of distance learning will be used as a tool in the implementation of courses of action in preparation for the coming semester of AY 2021-2022.

Based from the result of the study, in terms of demographic profile, the majority of the respondents are from the age 19-21 years old; female and from first year level. In terms of the preparedness, majority of the respondents are using smart/mobile phone; moreover, most of them have a good internet connectivity though they are only using cellular/mobile data. Challenges were also included such as learning condition at home that shows majority of the respondents have learning area at home although they emphasize that it is not conducive learning area due to distraction and noise problems. However, despite of the said challenge, most of the students preferred to their studies via distance learning apply the combination of the synchronous and asynchronous.

To assess the acceptability, in include variables such as knowledge of the topic, teaching management, learning motivation, commitment, and skill competency. In

knowledge of the topic, the finding shows in distance learning where the variable of establish learning objectives on distance learning that are integrated into practical situations with the help of a professor. The result also reveals that on the learning management of the students where they want for a healthy and lively classroom environment topped the list of learning motivations from the professor. In assessing the teaching motivation of faculty that majority of the respondents are needed to be motivated to effectively achieve their learning objectives on distance learning.

In learning motivation, the result showed that majority of the respondents are mature enough to think independently and be accountable for their acts and opinions during distance learning classes and are willing to practice and perform tasks on distance learning. Furthermore, in commitment on the distance learning, majority of the respondents agree to commit themselves with distance learning classes and available in an online method. Lastly, the skill competency is divided in to several sub-variables like Knowledge of the basic operation of a computer, knowledge on basic computer software and computer literacy. Majority of the respondents have knowledge in basic operation of computer and in the basic computer software like MS Words, Excel and Power point because most of them are computer literate.

In the further discussion of the results in assessing the attitudes of the students on the knowledge of topic showed that majority of the respondents believe that they can establish learning objectives on distance learning by the help of faculty. The educators of the major or minor subjects they teach, need an extensive variety of diverse skills and approaches in helping students to attain their goals in life. The knowledge of the topic includes the subject matter familiarity and the considerate reception of educational developments as paired with the students' acceptance. If the teacher has no knowledge of the topic, the learning objectives will not be successful (Englund et al., 2017).

Also, majority of the respondents responded positively on the motivation by a professor conducting classes as facilitator, coaches and resource persons. To support the result, according to Klimoviené et al. (2016), the student gains experience through active communication and cooperation and develops, thus, his/her personal style of experience accumulation. Despite considering such approach globally, its successful implementation is not published yet although the effectiveness was already proven. In the same way, only few students successfully adapt to this kind of learning method maybe because the approach is not fully implemented to give students the freedom to perform on outcome-based learning styles. The effects of the variations on performances of students that examines the shift of traditional lecture-based learning method to a student-centered/field-based way. Also, the result showed that respondents are mature enough to think independently and be accountable for their acts and opinions during distance learning classes.

In addition, the motivation on the conduct of research to students is a good example of obtaining positive results from the conduct of classes by distance learning in preparation for the research subjects such as thesis, business plan, feasibility study, development and experimental studies and the like. According to Wilson (2018) students must learn how to best construct their independent learning schedule. Students must be encouraged to become self-disciplined learners. The responsibility of a teacher is to support them in making a pledge to themselves in organizing themselves and achieving goals (Zee & Koomen, 2016).

For the last variable, the skill competency which divided in to sub-variables, the result showed the respondents have knowledge of the basic operation of a computer. Knowledge on the basic computer is known as computer literacy and considered a very

vital proficiency to have (Wilson et al., 2015). Employers require employees to have basic computer skills for a more efficient work performance at the workplace (Peng, 2017). If computer literacy is very important in other workplaces, the more it significant in the academic institutions that employ technology in the delivery of instruction. The study also revealed that majority of the respondents have knowledge on Microsoft office (word, excel, PowerPoint). The knowledge on the basic software is very important as it will be used in the preparation of the instructional materials for the daily conduct of classes (Montrieux et al., 2015).

CONCLUSION

The assessment on the preparedness and acceptability of CHK BPW students on distance learning was conducted in expectation for the new developments and trends in the University of Makati particularly this coming semester of AY2020-2021 considering the rising rate of COVID threats. Based on the results of the study, majority of the respondents are prepared for any distance learning, however, the reliability of the gadget and availability of connectivity at home are issues that need solution. Majority of the students with a percentage rating ranging from 88% to 95% accept the possibility of having distance learning as the method to be used by UMak-CHK department on the 2nd semester of 2021-2022. The students, in addition accept the reality of the possible employment of any distance learning method. Considering the educational challenges everyone is facing during this COVID crisis, the preparedness and acceptability of CHK-BPW students was timely assessed. The result of the assessment of the readiness and competency of faculty in the delivery of distance learning will be used as a tool in the implementation of courses of action in preparation for the coming semester of AY 2021-2022.

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Knowledge of the basic operation of a computer, knowledge on basic computer software and computer literacy. Majority of the respondents have knowledge in basic operation of computer and in the basic computer software like MS Words, Excel and Power point because most of them are computer literate. After assessing the preparedness and acceptability of CHK BPW students on distance learning, the following recommendations are presented:

1. The lifting the community quarantine measure in Metro Manila is still uncertain due to the increase in the number of infected with COVID virus everyday as tabulated on the data of the IATF. As a result, the shift from traditional conduct of classes to distance learning through the employment of online and offline classes is recommended. This is so to ensure the safety of the students, faculty and employees considering the COVID situation in Metro Manila and Makati City in particular. This is also in consideration for the continued use of UMak building 1 as one of the COVID health facilities for frontliners working at Hospital ng Makati.
2. The delivery of quality education will still be realized as evidenced by the results on the measure of preparedness and acceptability on distance learning of students. For offline, lessons, quizzes, assignments, and major examinations. Questions and inquiries will be accommodated via mobile phone thru text messaging or telephone calls, emails, Facebook, Moodle/TBL hub.
3. As the results of the study revealed that the students are prepared mentally and emotionally for online and offline distance learning methods, several measures are to be considered before such action will be implemented such as provision of connectivity allowances and usable and reliable gadgets (tablets) for every student. The results generated were the issues on connectivity and gadget availability which when resolved will promote effective learning environment for the students.
4. In the conduct of distance learning faculty are advised to exercise compassion and discretionary and excellent discernment in assessing the performances of the students considering the current situations as this shift is very sudden and students need to adjust more than the faculty.
5. The students in general have disclosed on their responses that their preparedness will depend on the gadget. The commitment to learn either by blended or distance learning was expressed by majority of the students and the request for the necessary and appropriate assistance is based on the CHK faculty.
6. To deliver instruction online or offline, the students prefer to have copies of all the learning materials which they will need as references for their studies

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A sudden shift: Students' perception of distance and online education in physical education amidst COVID-19 Pandemic

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ABSTRACT

Students' perception is critical because it provides essential information about the current benefits and challenges, they are experiencing in the distance and online education setting. This study explores students' perception of physical education regarding the current educational environment in respect to gender, family accommodation, income, gadget, and source of internet connection. 262 1st year students taking minor PE are the participants in this study. Descriptive statistics such as frequency and percentage were utilized to describe the demographic characteristics of the respondents. At the same time, mean and standard deviation were used to describe students' attitudes towards distance and online education. Also, One-way ANOVA, Mann-Whitney U, and Kruskal Wallis H were utilized to determine the significant difference between groups regarding their perspective in the current educational setting. Based on the results, a statistically significant difference was found between groups concerning family accommodation. On the other hand, no difference was observed between groups of gender, income, gadget, and source of internet connection. In summary, most of the students positively perceived this current setting as beneficial to them. However, there are still challenges that pose threats to this current system. In this regard, the recommendation to address the challenges observed based on study findings and recommendations for future research is a result of this.

Keywords: Perception; distance education; online learning; physical education

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INTRODUCTION

Due to the emerging number of Filipino citizens affected by the COVID-19 virus pandemic; and to mitigate the growing number of cases infected by the said deadly virus, most Higher Education Institutions (HEIs) shifted from traditional face-to-face classes to distance classes or online classes (Foo et al., 2021; Gabriel & Rhonda, 2020). It has been almost two years since the Philippines started lockdown all over the country. In connection to this, the perception of students toward this new educational system is significant, especially for all the academicians who are still designing new strategic programs on how to address their needs and provide quality education in the distance online learning setting amidst the pandemic.

There have been a lot of previously conducted studies that focus on the perception of students towards distance and online education (Apriyanto & Saputra, 2021; D'Agostino et al., 2021; Muthuprasad et al., 2021; Ridwan et al., 2022); its advantages and disadvantages, and as well the benefits and challenges that the students experienced.

However, only a little research was performed in the Philippines, especially in a local setting. Hence, further investigation can be executed.

Advantages and Disadvantages of Distance/Online Learning

The advantages of online learning are considerable while the whole country is experiencing a pandemic. It is much safer than going back to a face-to-face class, given the rampant spread of the virus. It is the most effective way so that students' schooling is not compromised and that everyone may be able to finish their studies on time. The following are some of the advantages of online learning, according to Miller (2019); (i) Flexibility and self-paced learning, (ii) Better time management, (iii) Demonstrated self-motivation, (iv) Improved virtual communication and collaboration, (v) Broader-global perspective, (vi) Refined critical thinking skills, (vii) New technical skills.

Study findings from student surveys revealed that e-learning excitingly provides scientific material, and it increases the possibility of contact between students or themselves and teachers (Al-Rawashdeh et al., 2021). Idris et al. (2021) also mentioned in their study findings that 72.8% of students became independent, and 67.4% adapted themselves to an online learning set-up. Delas-Peñas (2020) stated that "interaction in an online environment promotes student-centered learning, encourages wider student participation, and produces more in-depth and reasoned discussion than a traditional classroom." Also, remote learning, comfort, and accessibility are also the advantages of online learning (Mukhtar et al., 2020). Lastly, in terms of Physical Education, synchronous online physical education class positively affected muscle mass, ankle strength, hip strength, knee strength, and balance (Lee et al., 2021). Therefore, online learning in physical education is effective (Apriyanto & S, 2021).

Even though there are certain advantages of online learning, there are still challenges that students are currently facing. Research by Al-Rasheed (2021) revealed that the most apparent challenges that students identified were: (i) Technicality issues, (ii) Insufficient face-to-face interaction, (iii) Time management and distractions, (iv) Lack of systematic schedule, (v) Stress and psychological pressure, (vi) Missing the traditional college life, (vii) Scarcity of digital devices, (viii) Lack of external learning resources (Tegero, 2021).

It also results in passive participation instead of active, lack of practical demonstration, inefficient feedback, a weak influence on the development of imagination and creativity, and lack of empathy (Bădău & Bădău, 2020). The result of Jeong and So (2020) on their study on the difficulties of physical education classes for middle and high school is the monotony of the courses within their limited environmental conditions and educational content that did not adequately convey the value of physical education. Trial-and-error methods are applied nationwide, resulting from a lack of expertise in operating online physical education classes. Likewise, with the study by Chan et al. (2021), PE teachers reported that online classes on the said course are ineffective in improving motor skill acquisition and physical activity levels. Chan et al. (2021) also stated that the main reason behind these due to "lack of practical training," "students' lack of learning motivation/interest," and "difficult to retain students' learning motivation." It is also alarming that the study findings of Guo et al. (2021) revealed that during the COVID-19 pandemic, the closure of schools exerted adverse effects on school-aged children's health habits, including fewer activities physically, more prolonged screen exposure, and irregular sleeping pattern. In the study of Barrot et al. (2021) on online learning challenges of college students in the Philippines during the COVID-19 pandemic, students' most significant challenge is correlated to their learning environment at home. The drastic shift to online class set-up made it difficult for the students to cope with the

new normal in education (Monte & Buan, 2021).

In this present study, the research aimed to determine the level of perception of students in distance and online learning in physical education and differences in regards to gender, family's accommodation, income, gadget, and source of internet connection amid the COVID-19 pandemic. This study is timely especially the college is still in the middle of the implementation of distance and online learning modality. The findings of this study will help to identify the perception of college students which will then be provided by significant information about the positive effect, as well as the negative effect on distance and online learning in this current setting of the study. Moreover, this study also aims to provide feedback and recommendation based on the negative effects found on the results.

METHOD

This study is carried out by using survey method. Sample of the participants are students from City College of Angeles currently enrolled and taking minor physical education courses for the academic year 2021-2022.

Population and Sample

Target population for this study are the 1st year students taking minor Physical education course from the three institutes namely: Institute of Education, Arts and Sciences, Institute of Business Management, and Institute of Computing Studies, and Library Information Science. The target sample consisted of 263 participants.

Data Collection Tools

The Students' Attitudes Towards Distance Education questionnaire was adapted for this study. The said instrument is divided into two parts. The first part deals with the demographic characteristics of the participants, such as gender, family accommodation, family's monthly income, gadgets used in the online class, and internet connection sources. As for the second part, a 24-item question regarding the attitudes of students toward distance education is subdivided into six dimensions: (1) computer and distance education, (2) learning environment, (3) student roles, (4) teaching methods, (5) communication and distance education system, and (6) related ideas. The Cronbach's Alpha value of the tool is 0.8372, which means "good," and can be utilized for the conduct of this study. Moreover, 263 online survey questionnaires were distributed, all accepted to be valid and considered. Lastly, in order to interpret the level of students' attitude, a 5-point scale was utilized which is shown in Table 1:

Table 1. Interpretation of the overall weighted mean for the level of students' attitude towards distance education

Range of weighted mean	Description	Interpretation
4.20 – 5.00	Strongly Agree	Very High
3.40 – 4.19	Agree	High
2.60 – 3.39	No Comment	Moderate
1.80 – 2.59	Disagree	Low
1.00 – 1.79	Strongly Disagree	Very Low

Analysis of Data

In order to recognize the appropriate statistical test to be used in this present study, normality test was conducted (Lobo et al., 2022). Table 2 revealed the results of the Kolmogorov-Smirnov and Shapiro-Wilk analysis. It was shown that the *p*-value of

students' attitude towards distance education in respect to gender and gadgets used in online class are higher than .05 ($>.05$); as a result, the data are considered normally distributed, and a parametric test is appropriate for the following data. On the other hand, the p -value of family's accommodation, family's monthly income and internet connection are source are lower than .05 ($<.05$); in this, non-parametric test is suitable.

Table 2. Kolmogorov-Smirnov and Shapiro-Wilk Test of Normality

	df	Kolmogorov-Smirnov		Shapiro-Wilk	
		Statistics	p -value	Statistics	p -value
Gender					
Male	99	.082	.102	.979	.105
Female	164	.056	.200*	.990	.337
Family Accommodation					
City	222	.069	.012	.983	.011
Barrio	41	.108	.200*	.966	.264
Family's Monthly Income					
10,000 PHP and below	148	.091	.005	.981	.035
10,001 PHP – 20,000 PHP	82	.068	.200*	.993	.941
20,001 PHP – 40,000 PHP	22	.127	.200*	.958	.447
40,001 PHP – 60,000 PHP	8	.237	.200*	.858	.114
60,001 PHP and above	3	.373		.779	.065
Gadgets used in online class					
Cellphone / Tablet	216	.067	.021	.987	.042
Laptop	36	.081	.200*	.969	.390
Personal Computer	11	.215	.165	.875	.089
Internet Connection Source					
Data Subscription	87	.087	.135	.960	.009
Wi-Fi Connection	176	.051	.200*	.986	.071

Descriptive statistics was used to describe the demographic characteristics of the participants, and the level of perception of students toward distance and online learning. In this, frequency (f) and percentage (%) were used to describe the demographic characteristics of the respondents as shown in Table 3; while mean (M) and standard deviation were utilized in order to describe the students' attitude towards distance education.

Table 3. Demographic Characteristics of the Participants

Individual variables	n	%
Gender		
Male	99	37.6
Female	164	62.4
Family Accommodation		
City	222	84.4
Barrio	41	15.6
Family's Monthly Income		
10,000 PHP and below	148	56.3
10,001 PHP – 20,000 PHP	82	31.2
20,001 PHP – 40,000 PHP	22	8.4
40,001 PHP – 60,000 PHP	8	3.0
60,001 PHP and above	3	1.1
Gadget used in online class		
Cellphone / Tablet	216	82.1
Laptop	36	13.7
Personal Computer	11	4.2

Individual variables	n	%
Internet Connection Source		
Data Subscription	87	33.1
Wi-Fi Connection	176	66.9

In order to describe the difference between gender and gadgets in respect to the six dimensions being measured for this study, Individual T-Test analysis and One-way ANOVA were used. Moreover, to test the difference between family's accommodation, monthly income and internet source connection in respect to six dimensions, Mann-Whitney U and Kruskal-Wallis H analyses were utilized.

RESULTS AND DISCUSSION

Table 4. Level of students' attitude towards distance education

	Statement	Mean ± SD	Interpretation
Computer and distance education	<i>I think distance education is a useful education system.</i>	3.52 ± 1.018	A
	<i>I know that in order to receive distance education, I must know computer software very well.</i>	3.88 ± .923	A
	<i>I know that in order to receive distance education, I must know computer hardware very well.</i>	3.76 ± 1.001	A
	<i>I know that in order to receive distance education, I must know the Internet very well.</i>	3.93 ± .869	A
Learning environment	<i>Learning independent from time and place makes my performance better.</i>	3.65 ± 1.015	A
	<i>It makes me ask questions comfortably which I hesitate to ask in traditional classrooms.</i>	3.41 ± 1.055	A
	<i>In distance education, there is no oppressiveness which I experience in traditional classes.</i>	3.56 ± .840	A
	<i>In the distance education process, studying at home causes motivational problems, conflicts in the family, and reduction of attention.</i>	3.86 ± .908	A
	<i>Courses taken through distance education are stable in the mind.</i>	3.44 ± .955	A
Student roles	<i>My ideas about the usage of internet in distance education is positive.</i>	3.57 ± .954	A
	<i>Distance education gives me more responsibility for learning.</i>	3.86 ± .808	A
	<i>Distance education makes me feel as if I achieve an important thing.</i>	3.60 ± .991	A
	<i>Discussion activities by e-mail, chat and electronic bulletins provides me new viewpoints.</i>	3.78 ± .972	A
Teaching methods	<i>By distance education, I can receive feedback on my effective skills.</i>	3.57 ± .942	A
	<i>I appreciate the application of distance education in all our lessons (including our practical lessons).</i>	3.99 ± .801	A
	<i>By distance education, I can receive enough feedback on my poor skills.</i>	3.48 ± .968	A
	<i>In distance education, modern teaching methods are used.</i>	4.01 ± .746	A

	Statement	Mean ± SD	Interpretation
Communication and distance education system	<i>I think it is more effective than (face-to-face) traditional classroom learning</i>	2.84 ± 1.403	NC
	<i>Questions towards discussion facilitate reinforcement.</i>	3.73 ± .742	A
	<i>Distance education reduces the expenses of communication and travel.</i>	4.06 ± .764	A
	<i>In distance education communication with teaching staff is difficult.</i>	3.92 ± .827	A
Related ideas	<i>Deficiencies of course materials in schools can be eliminated by distance education.</i>	3.61 ± .853	A
	<i>Through distance education, global education and equality of opportunity in education can be provided.</i>	3.57 ± 1.020	A

Values are expressed as means ± standard deviations. SA = strongly agree, A = agree, NC = no comment, DA = disagree and SDA = strongly disagree. VH = very high, H = high, M = moderate, L = low and VL = very low.

Comparison of averages

After the analysis, results yielded that students' attitude towards distance education is highly positive. Online and distance education provides many benefits and advantages to all institutes' students. Firstly, most of the respondents responded positively in terms of computer and distance education. Moreover, the most remarkable statement that garnered the highest compared to others is, "I know that to receive distance education, I must know the Internet very well." To adapt successfully to the new normal, students should possess knowledge and skills concerning internet use. The internet's service for education helps streamline the sharing of information and communication. It lets students access lectures online and refers to relevant study material in various multimedia formats. Furthermore, using the internet can improve learners' academic performance, self-confidence, and self-reliance (Alshahrani et al., 2017; Papanis et al., 2010).

Regarding the learning environment, the results yielded highly positive based on the respondents' responses. However, the most striking statement that garnered the highest mean among the views is "In the distance education process, studying at home causes motivational problems, conflicts in the family, and reduction of attention." Challenges are still evident even if the current setting provides various advantages that students may enjoy and benefit from (Elshareif & Mohamed, 2021; Sandybayev, 2020). These findings are relevant to the study of Meşe and Çiğdem (2021), which revealed that online education harms their motivation due to a lack of social interaction, a mismatch between expectations and content, organizational problems, and the organization of learning environments (Gustiani, 2020; Rachmat, 2020; Simamora, 2020).

The dimension of student roles yielded positive responses from the respondents. Most notably, the statement that garnered the highest mean among the ideas is "Distance education gives me more responsibility for learning." This is similar to the study of Turan et al. (2022), wherein distance education provides one of the learning opportunities that require students to act more autonomously and take more responsibility for regulating their learning process to achieve their personal learning goals. Similarly to the findings of Cárcamo and Pérez (2022), participation in online learning led to an increased level of autonomy employing increasing the frequency of behaviors related to taking charge of their learning process. Besides, distance and online learning offer flexible learning opportunities. Flexibility in time and grasp of the content positively affects the students' behavioral engagement and academic performance (Kokoç, 2019).

Regarding the teaching methods dimension, most of the responses yielded positively high. Moreover, the most striking statement that garnered the highest mean among all the accounts under this dimension is "In distance education, modern teaching methods are used." Using innovative, creative, and student-centered approaches in teaching may result in highly motivated and performing students. [Resdasari et al. \(2021\)](#) revealed that integrative e-learning significantly changes readiness and interest in learning. Similarly [Martin et al. \(2019\)](#) findings showed that the utilization of modern teaching methods positively impacts the student's education. On the other hand, the ways teachers should use in their respective classes should be carefully planned and selected to attain the goals of the course, specifically in a performance-output-based, Physical education.

It was also found that most respondents reacted positively regarding the dimension, communication, and distance education system. Remarkably, the statement "Distance education reduces the expenses of communication and travel" garnered the highest mean among the accounts. This is similar to the findings of [Abuhassna and Yahaya \(2018\)](#) that distance education has reduced travel costs and time. It is considerably cheaper compared to face-to-face settings ([Dhawan, 2020](#)). It is evident that distance and online learning education is easily accessible and can even reach rural and remote areas.

Lastly, based on the related ideas dimension, it was found that most of the respondents positively responded based on the results yielded. The most remarkable statement that garnered the highest mean among the comments is "Deficiencies of course materials in schools can be eliminated by distance education." This is similar to the advantages enumerated by the studies of [Jordan et al. \(2017\)](#), [Khan et al. \(2021\)](#), [Mpungose \(2020\)](#), and [Mukhtar et al. \(2020\)](#). Students may be able to access teachers and teaching materials conveniently. It also enables easy information access leading to positive attitude formation of students towards it. Students have the freedom to access this information, content, and documents anytime and anywhere – provided they have access to hardware and software resources. It benefited most students, allowed unprecedented flexibility and accessibility worldwide, and overcame geographical barriers.

Effects of different variable on the attitudes of students about online learning

Gender

Based on the results, there was no significant difference observed between gender and attitude of students toward distance education in terms of computer and distance $t(195.047) = .195, p = .845$, learning environment $t(187.775) = .342, p = .733$, student roles $t(261) = -.465, p = .642$, teaching methods $t(261) = -.473, p = .636$, communication and distance education system $t(173.333) = -.035, p = .972$, and related ideas $t(179.348) = .244, p = .808$ after performing Independent T-Test analysis. Overall, there was no significant difference observed between the two groups.

On the one hand, in regards to teaching methods, a significant difference was observed between groups in the statement "I appreciate the application of distance education in all our lessons (including our practical lessons)" ($p = .045$), where females are higher than males. This result refuted the study findings of ([Fidalgo et al., 2020](#)), where females are higher than males. This result refuted the study findings of ([Fidalgo et al., 2020](#)), where female students responded more positively in connection to the distance education systems' effectiveness. Additionally, in terms of the communication and distance education system, the statement "Distance education reduces the expenses of communication and travel" ($p = .034$), where females are higher than males. Based on this outcome, both groups positively agreed on the practical effect of the system as supported by the findings of [Adnan \(2020\)](#), [Almahasees et al. \(2021\)](#), [Lamanauskas and](#)

Makarskaitė-Petkevičienė (2021), Masalimova et al. (2022), and Todri et al. (2021) stating that students from the university expressed that there is a reduction in the cost of traveling to university and other related expenses.

No significant difference was observed between gender in terms of learning environment, student roles, teaching methods, and related ideas. Based on the learning environment, the following results contradicted the findings of Peytcheva-Forsyth et al. (2018), where females positively agreed to receive support in a conducive learning environment. Additionally, the study of Korlat et al. (2021) revealed that feminine adolescents are reported to have higher perceived teacher support compared to its counterpart.

Regarding student roles, the following results refuted the study findings of Yu (2021), which revealed that female learners are more perseverant and engaged than males. Also, males tend to hold a more stable positive attitude toward online learning. Moreover, females have a solid regulated attitude compared to males (Liu et al., 2021). However, findings revealed that gender differences in online learning tend to be inconsistent and even paradoxical. Justifications for these inconsistent findings may not be limited to the abovementioned results. Future research could do a more in-depth analysis of this field.

For the teaching methods used by instructors concerning students' perspectives based on gender, the result can be interpreted that both groups agreed on the statement under this dimension. However, the result was refuted by the study findings of Coman et al. (2020), where students affirmed that they have lesser time than they had before online learning because instructors give more assigned tasks than usual. On the other hand, students stated they have much more time than expected because instructors do not pay much attention to them.

Generally, the findings of Kulal and Nayak (2020) revealed that students are comfortable with the current online setting and receive enough support from teachers, but they do not believe that online classes will replace traditional classroom teaching. However, it was also revealed that teachers face difficulties conducting online classes due to a lack of proper training and development for online courses. Technical issues are the major problem for the effectiveness of online lessons.

Family Accommodation

After the Mann-Whitney U test analysis, a significant difference between groups in connection to student roles ($U = 3522.500$, $p = .020$) and teaching methods ($U = 3687.000$, $p = .050$). Moreover, in terms of student roles, the statement "My ideas about the usage of Internet in distance education are positive" ($p = .034$), "Distance education gives me more responsibility for learning" ($p = .047$), and "Distance education makes me feel as if I achieve an important thing" ($p = .043$) are higher for those who live in the city compared to the barrio. Additionally, in regards to teaching methods, the statement "I appreciate the application of distance education in all our lessons (including our practical lessons)" ($p = .049$) is higher for those who live in the city compared to the barrio.

No significant difference was observed between groups regarding the learning environment ($U = 3963.000$, $p = .186$) and communication and distance education system ($U = 3753.000$, $p = .072$). However, a significant difference between groups was observed in the learning environment, specifically in the statement "Learning independently from time and place makes my performance better" ($p = .001$), where people who live in the city are higher than those who are in the barrio. Similarly, regarding the communication and distance education system, a significant difference between groups was found in the statement "Questions towards discussion facilitate reinforcement" ($p = .011$), where

respondents who live in the city are higher than those in the barrio. Lastly, no significant difference between groups was observed in terms of computer and distance education ($U = 3993.500, p = .207$) and related ideas ($U = 4030.000, p = .229$). Overall, a statistically significant difference was found between groups in relation to this dimension ($U = 3660.500, p = .046$).

Generally, students who are living in urban areas are already privileged enough to experience quality online education, which is very evident in previously conducted studies (Cullinan et al., 2021; Das et al., 2021; Lembani et al., 2020), and highly apparent in the Philippines (Laguador, 2021). Both populations still face problems such as internet connection, electricity, learning privacy, and stress (Siddiqui et al., 2021). However, those who are living in the city face fewer disparities compared to those who are in the barrio. On a positive note, both populations positively perceive distance and online learning.

Family's Monthly Income

After the Kruskal-Wallis H test analysis, a significant difference was observed between groups concerning teaching methods $H(4) = 10.383, p = .034$. Based on the result, most respondents with 40,001.00-60,000.00 PHP income highly agree compared to the others. Moreover, most respondents with 40,001.00-60,000.00 PHP income positively agree with the statement "In distance education, modern teaching methods are used" ($p = .032$) compared to other groups. The result is highly supported by the findings of Abu-Talib et al. (2021) that distance and online education facilitates a modern and convenient mode of communication between students and instructors. Additionally, the implementation of distance and online learning, and the use of simulations and other methods for didactic purposes are useful and adequate.

On the other hand, no significant difference observed between groups in relation to computer and distance education $H(4) = 4.109, p = .392$, learning environment $H(4) = 7.084, p = .132$, student roles $H(4) = 5.329, p = .255$, communication and distance education system $H(4) = 5.845, p = .211$, and related ideas $H(4) = 7.925, p = .094$. Overall, there was no significant difference observed between the groups in relation to this dimension $H(4) = 8.163, p = .086$.

Based on Abu-Talib et al. (2021), distance or online learning systems may provide many advantages to students; however, many disadvantages may still arise and be experienced. As stated by Abu Talib et al., the following are the disadvantages: (i) Inequality and inaccessibility, (ii) Inadequacy, (iii) Communication Quality, (iv) Technical difficulties, (v) Stress, workload, and morale, (vi) Technological literacy, (vii) Engagement, participation, and motivation, (viii) Performance assessment, (ix) Work-life balance, (x) Privacy concerns. All mentioned disadvantages can be experienced by families with different incomes, which may significantly affect students. The institution may perform assessments and interventions to address these problems students are experiencing.

Gadgets used in online class

After a One-way ANOVA test analysis, a significant difference was observed between groups concerning computer and distance education ($F(2,260) = 3.390, p = .035$). A posthoc analysis was performed, and it was found that respondents who have personal computers are higher than those who use cellphones/tablets and laptops ($p = .035$) according to LSD. Moreover, laptop users are higher than others in the statement "I think distance education is a useful education system" ($p = .035$). In comparison, personal computer users are higher than the others in the statement "I know that to receive distance education, I must know computer software very well" ($p = .019$), "I know that to

receive distance education, I must know computer hardware very well" ($p = .031$), and "I know that to receive distance education, I must know the Internet very well" ($p = .050$). No significant difference was observed between groups in terms of learning environment ($F(2,260) = 1.817, p = .165$). On the other hand, a significant difference was found between groups, specifically in the statement, "In distance education process, studying at home causes motivational problems, conflicts in the family and reduction of attention" ($p = .031$), where laptop users are higher than others. In regards to student roles, no significant difference was observed in between groups ($F(2,260) = 1.278, p = .280$). On the other hand, laptop users are higher than others in the statement, "Distance education gives me more responsibility for learning" ($p = .034$). In respect to communication and distance education system, no significant difference was observed ($F(2,260) = .390, p = .677$). Moreover, a significant difference was observed between groups in the statement "In distance education communication with teaching staff is difficult" ($p = .002$), where laptop users are higher than other groups. Lastly, no significant difference observed between groups in respect to teaching methods ($F(2,260) = 2.622, p = .075$) and related ideas ($F(2,260) = 2.213, p = .111$). Overall, no statistically significant difference observed between groups in this specific dimension ($F(2,260) = 1.225, p = .295$).

Generally, no previous studies were found concerning students' perspectives who utilize cellphones/tablets, laptops, and personal computers. The results yielded regarding this variable are not yet conclusive. This further suggests conducting a similar study to support or refute the findings of this research.

Internet connection source

A significant difference was found between groups in respect to computer and distance education ($U = 6504.000, p = .044$), and communication and distance education system ($U = 6474.500, p = .040$). Moreover, specifically in computer and distance education, the statement "I know that to receive distance education, I must know computer software very well" ($p = .044$), most students who use Wi-Fi are higher than those who are using data subscription. Additionally, in regards to communication and distance education system, Wi-Fi users are higher than data subscription users, specifically, in the statements "Questions towards discussion facilitate reinforcement" ($p = .045$), "Distance education reduces the expenses of communication and travel" ($p = .009$), and "In distance education process, in-class interaction and discussion medium will be less" ($p = .016$). Lastly, no significant difference found between groups in relation to learning environment ($U = 7228.500, p = .459$), student roles ($U = 6679.500, p = .089$), teaching methodology ($U = 7027.00, p = .272$), and related ideas ($U = 7365.000, p = .605$). In totality, no statistically significant difference found in between groups in connection to this dimension ($U = 6819.000, p = .149$).

In summary, each population provides an opportunity to access information online. However, Wi-Fi users gain more advantages compared to data subscription users. The findings of [Moate et al. \(2017\)](#) revealed that most students benefit from Wi-Fi in their studies because it enables them to access the internet in various spots, allows them to submit their academic works on time, and enables efficient communication with classmates and lecturers. Students can access information and conduct learning processes through mobile phones, laptops, or even personal computers that can be accessed online ([Omar et al., 2018](#)). This is somehow different for those who only use mobile data, such as poor internet access and financial capacity to avail load just for online classes.

Lastly, no previously conducted studies were found in connection to these variables and each population's perspective towards distance and online classes. In connection with this, the study highly suggests conducting another study of the same and determining if the findings will support or refute the results of this present study.

CONCLUSION

Modern technology is being suggested as a remedy to the problems of traditional education's system limitations. It is much needed in this pandemic when students are studying at their respective homes. Distance education is now highly preferred by different educational institutions as the country is experiencing a pandemic due to the COVID-19 virus.

Based on the results, most students who answered the online survey appreciated the application of distance and online education amid the COVID-19 pandemic. In terms of the computer and distance education dimension, the benefit of distance and online learning education can be maximized by providing various computer literacy and internet usage seminars/webinars and training. In general, most students have a positive outlook on the application of distance and online learning education.

The learning environment of students is highly positive. It provides students autonomy in learning independently, which results in better academic performance. Moreover, the students are more comfortable asking their classmates and instructors questions concerning educational matters, which they are hesitant to ask in a traditional classroom setting. Additionally, the courses taken through distance and online education are perceived as stable in the mind of the students. However, distance and online learning education cause motivational problems, conflicts in the family, and a reduction of attention. To address these challenges, guidance counselors and advisers of each class should work together by providing various services to lessen the current cases of students in distance and online education.

Regarding the student roles, most of the respondents positively responded that distance and online education provides ideas on the positive use of the internet, responsible learning amidst the current setting, and challenges that test students to achieve more. Additionally, through various educational platforms, students received new viewpoints on their perspective towards this current setting.

The teaching methods of the instructors were also perceived positively by the respondents. Students receive feedback regarding their strengths and weaknesses in class. Also, the use of modern teaching in class positively impacts students' academic performance. Moreover, the students positively value the application of distance and online education to students' lectures and practical courses.

Also, based on the communication and distance education system dimension, the respondents positively responded across all accounts. Consistent communication between instructors and students was highly beneficial to students. Remarkably, instructors who ask questions during the discussion were perceived by students as helpful to them as this reinforces their learning. Also, one of the benefits of distance and online education perceived by the student is the reduction in the cost of communication and travel expense since most of the respondents are only staying inside their respective homes. On the contrary, students have difficulties communicating with their instructors. Instructors should provide platforms on how, when, and where to communicate with them to provide feedback and guidance to students. On the other hand, most students are neutral regarding the effectiveness of distance and online education compared to the traditional face-to-face setting.

Other related ideas, such as the opportunity to access various contents and information through the internet and equality of opportunity in education, are all perceived positively by the students. Aside from the local resources that can be accessed through the internet, the freedom and opportunity to seek helpful resources globally are also provided by this current setting.

One of the limitations of this study is its scope. This present study is only applicable to students who are currently part of the setting where this research has been conducted. This means the results of this study may not apply to other populations. Also, it does not generally represent the entire population of students from various Higher Education Institutions (HEIs) in the local, regional, or national setting. In this, future researchers may conduct a similar study widening its scope at a regional or national level. Hence, future researchers may find it interesting to work on in-depth studies by comparing the results among HEIs, and primary and secondary education institutions outside the local of this present study using a different approach and determine if the results may support or refute the findings of this research.

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Covid-19 pandemic: Psychosocial effect among physical and health education staff in Kogi State Nigeria

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ABSTRACT

Fear and anxiety have always been a negative affect in performance and job settings, especially when there are external pressures. The Corona virus-19, took the world by surprise just when everybody was enthusiastic about the long-expected year 2020. Movements were restricted, offices, businesses, and public places shut down with imposed curfews allowing only “essential workers” do their jobs. These, invariably affected the way work and associations would later become even after the lockdown. The study aimed to know whether the psychosocial effect of COVID-19 (fear and anxiety) affect physical and health education staff of Kogi State Nigeria. Descriptive survey method was adopted for the research. 200 respondents (male & female) that included physical and health education staff (350) from all higher institutions in Kogi state were part of the study. The average age of respondents was 48.5years. The Fear of COVID-19 Scale (FCV-19S) ($\alpha = .74$) and the Corona Virus Anxiety Scale ($\alpha = .82$) was used to collect data. Descriptive statistics of frequency counts, means and percentages were used to analyze data. It is concluded that physical and health education staff in Kogi State do not experience anxiety and fear due to COVID-19. A limitation encountered was most respondents feared been stigmatized with COVID as was the case at the time. It is significant in the sense that employees are greatly influenced by the views of their employer. Further research should be on the attitude of physical and health educators in Kogi State Nigeria to work during COVID-19 pandemic.

Keywords: Anxiety; covid-19; fear; pandemic; psychosocial effect

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INTRODUCTION

In addition to triggering economic collapse in several nations, including Nigeria, the epidemic of the contagious disease corona virus (COVID-19) has resulted in the loss of lives and property. The pandemic epidemic in Nigeria has caused widespread dread and worry, which has forced the closure of numerous industries there. Despite the governor of Kogi state's assertions that the state was free of the epidemic and that all reports were false (Onyeji, 2020; Premium Times, 2020) Schools and other industries were closed in 2020 in an effort to stop the spread. Due to their concerns about getting the corona virus sickness, staff, and students in Kogi State began to practice social withdrawal. The use of nose mask/face mask and sanitizer was enforced and made mandatory for all staff in Kogi State tertiary institutions.

The coronavirus disease of 2019 (COVID-19), according to [WHO \(2020\)](#), is a severe health, financial, and social emergency. Since then, the illness has spread over the globe, causing an ongoing pandemic. Previous pandemic epidemics like SARS and H1N1 influenza have also demonstrated similarities in terms of fear of transmission, isolation, dissatisfaction over insufficient palliative remedies, decreased social contact, and a change in routine ([Brooks et al., 2020](#); [Diciano et al., 2021](#); [Wheaton et al., 2012](#)). Additionally, it was discovered that adaptive physical education teachers had numerous challenges that lowered their motivation for learning ([Sari et al., 2021](#)). A new virus outbreak occurred in Wuhan, a major business district in China, before the end of the year. It claimed over 1800 lives and infected over 70000 people in just 50 days ([Shereen et al., 2020](#)). Tiredness, a dry cough, and a loss of taste and smell are some of the symptoms of COVID-19 ([Wang et al., 2020](#)). By March 2020, covid-19 has rapidly spread over the world, causing over 294,110 infections and roughly 13,000 fatalities in over 180 nations ([Cucinotta & Vanelli, 2020](#)). Corona virus 2019 (COVID-19) is the name of the ailment ([Cui et al., 2019](#)). In order to create preventive measures to reduce COVID-19 infection, it was crucial to research the origin and spread of the disease.

The closure of schools, markets, and workplaces in order to manage COVID-19 had a significant influence on people's personal and social lives, causing them to experience uncertainty, a sense of loss in terms of self-work, meaning, and drive ([Williams et al., 2020](#)). Lockdown, isolation, quarantine, social separation, work closure and partial reopening, among other measures, had a negative impact on people's health, particularly workers ([Brooks et al., 2020](#)). Workers' occupational health and mental health must always be taken into account. Workplace health is concerned with the health and safety of workers (employees), with the goal of reducing the impact of occupational stressors on workers' physical and mental health ([Schonfeld & Chang, 2016](#)). As a result of the COVID-19 epidemic, it was critical to assess its impact on staff occupational health, particularly at Kogi State tertiary institutions. Fear, worry, and diminished social interactions must have had an impact on staff's relationship with their academic life both before and after the pandemic.

Psychosocial characteristics involves the interpersonal psychological and environmental aspects. It is the psychological development in relation to a person's social and cultural environment ([Adegbesan et al., 2019](#)). The psychosocial theory deals with change in self-understanding, social relationships and ones relationship to the society throughout life ([Newman & Newman, 2020](#)). For the purpose of this research, fear and anxiety were the psychosocial variables studied.

Fear is an emotion that arises in response to perceived threat and results in physiological and behavioral changes ([Adolphs, 2013](#)). Fear is induced by an event or stimuli viewed as harmful. It's a reaction to perceived rage. Anxiety, which is the response to an unmanageable or unpredictable event, is closely related to fear. Fear, particularly during the COVID-19 epidemic, is persistent and unpredictable, potentially making it a burden. Fear has negative societal and individual consequences, including anxiety, phobia, and panic buying, among others ([Mertens et al., 2020](#)). Lack of adequate fear may also result in harm to both individuals and society ([Mertens et al., 2020](#)), due to disregard for policies put in place by the government to contain the COVID-19 outbreak, as is still the situation in the majority of Nigerian states. Additionally, it raises concerns about safety among society's citizens ([Engelhard et al., 2015](#)). Since COVID-19 was found in December of that year people were becoming more fearful and concerned about the infection ([McCarthy et al., 2020](#)).

The possibility of misinterpreting common bodily symptoms and believing that one is developing a major illness when there isn't one is known as health anxiety (Abramowitz et al., 2007). Research has suggested that fear of COVID-19 might boost health anxiety, just as it did for the "swine flu" pandemic of 2012 and the "Zika virus" of 2015 (Blakey & Abramowitz, 2017; Wheaton et al., 2012). Depending on how a person interprets and perceives stimuli, anxiety might affect performance (Judge et al., 2016). However, some bodily arousal and anxiety is beneficial and helps people get ready for competition (Hardy & Hutchinson, 2007).

Fear and worry have long been thought to have a negative impact on performance and job performance, particularly when there is uncertainty or external constraints. The Corona virus-19 caught everyone off guard just as everyone was getting excited for the long-awaited year 2020. Movement was restricted, offices, shops, and public places were closed, and curfews were set, enticing only "necessary workers" to accomplish their jobs. All of this had an impact on how work and associations would evolve following the shutdown. Curfews were lifted, and socializing became a risky endeavor, as everyone became a "suspect" (carrying the virus).

Previous pandemic outbreaks, most recently the H1N1 and SARS viruses in 2009 and 2014, were all marked by grief, anxiety, apprehension, and terror. One concerning mode of COVID-19 transmission was through intimate contact and groups, which is unique to Nigerians. Based on these findings, the researchers intended to investigate the psychosocial impact of COVID-19 on job performance among physical and health education staff in Kogi State Nigeria.

METHOD

The descriptive survey research approach was used for the study. The overall number of physical and health education personnel in the state was 350 (171 females and 179 males). The survey includes 200 respondents (both male and female) from all institutions in the state. The sample was selected in two steps. The fish-bowl method with replacement was employed in the first stage to select four institutions out of seven. In the second step, 200 respondents (50 per school) were purposefully chosen but assigned at random. To collect data for the study, two instruments were used. The first was the Fear of COVID-19 Scale (FCV-19S) (Ahorsu et al., 2020). The Fear of COVID-19 Scale (FCV-19S) is a 7-item standardized instrument with internal consistency ($\alpha = .82$) was used. FCV-19S was revalidated with a value of ($\alpha = .74$). The second instrument, the Corona Virus Anxiety Scale ($\alpha = .83$) (Lee, 2020). The Corona Virus Anxiety Scale which is a 5-item questionnaire, a self-report mental health screener of dysfunctional anxiety associated with corona virus crises. 5 trained research assistants were part of the study. Between November and December 2021, data was gathered. Data were analyzed using descriptive statistics, such as frequency counts, averages, and percentages. The study's goals and objectives were explained to the respondents, who were also assured of confidentiality and that the use of their responses was solely for research.

RESULTS AND DISCUSSION

Table 1. Demographic Distribution of Respondents

Item	Variable	N	%	Mean
Sex	Male	87	43.5%	
	Female	123	61.5%	
Age (Years)	21-30	8	4%	

Item	Variable	N	%	Mean
	31-40	26	13%	48.5 Years
	41-50	100	50%	
	51-60	30	15%	
	61-70	36	18%	
Religious Belief	Atheist	6	3%	
	Christianity	95	47.5%	
	Islam	73	36.5%	
	Traditionalist	26	13%	

Table 1 shows that there were more females (123) than males (87). Most of the respondents were over 40 years old. The average age of the respondents is 48.5 years old. Also, most respondents were either Christians (95) or Moslems (73).

Table 2. Physical and health education staff of Kogi state experience anxiety due to covid-19

Items	Not at all	Rare, less than a day or two	Several days	More than 7 days	Nearly every day over the last 2 week	Mean	St.D
I felt dizzy, lightheaded, or faint, when I read or listened to news about the coronavirus.	140 70%	58 29%	2 1%	0 0%	0 0%	1.31	.48
I had trouble falling or staying asleep because I was thinking about the coronavirus.	150 75%	38 19%	12 6%	0 0%	0 0%	1.31	.57
I felt paralyzed or frozen when I thought about or was exposed to information about the coronavirus	164 82%	30 15%	6 3%	0 0%	0 0%	1.21	.47
I lost interest in eating when I thought about or was exposed to information about the coronavirus	176 88%	16 8%	2 1%	6 3%	0 0%	1.19	.59
I felt nauseous or had stomach problems when I thought about or was exposed to information about the coronavirus.	162 81%	38 19%	0 0%	0 0%	0 0%	1.19	.39
Grand Mean						1.24	

A grand mean of 1.24 in table 2, shows that physical and health education staff in Kogi State do not experience coronavirus anxiety.

Table 3. Mean response of respondents on the fear of Covid-19

Items	SA	A	N	D	SD	Mean	St.D
I am most afraid of Coronavirus	0 0%	14 7%	98 49%	88 44%	0 0%	2.63	.61
It makes me uncomfortable to think about Coronavirus	0 0%	8 4%	26 13%	154 77%	12 6%	2.15	.57
My hands become clammy when I think about Coronavirus	0 0%	0 0%	20 10%	146 73%	34 17%	1.93	.51
I am afraid of losing my life because of Coronavirus	0 0%	26 13%	46 23%	80 40%	48 24%	2.25	.96
When I watch news and stories about Coronavirus on social media, I become nervous or anxious.	0 0%	44 22%	22 11%	62 31%	72 36%	2.19	1.14
I cannot sleep because I'm worrying about getting Coronavirus.	0 0%	6 3%	6 3%	134 67%	54 27%	1.82	.62
My heart races or palpitates when I think about getting Coronavirus.	0 0%	2 1%	40 20%	138 69%	20 10%	2.12	.57
Grand Mean						2.15	

A grand mean of 2.15 indicates that physical education staff in Kogi State do not experience fear due to coronavirus. However, when asked "I am most afraid of Coronavirus" 56% (112) of them answer in the affirmative or are indifferent. Findings from the study shows that physical and health education staff in Kogi State do not experience anxiety due to Covid-19. This contradicts the findings of [Li et al, \(2020\)](#) who indicated that the crisis of covid-19, caused teachers to suffer problems that are often related to pandemic situation, such as anxiety, depression, domestic violence and divorce. It also contradicts UNESCO's study which identified confusion and stress among teachers as being one of the adverse consequences of covid-19 ([UNESCO, 2020](#)). Lack of imposed lockdown and the state governor not giving Covid-19 a priority and no prolonged lockdown in the state might have given room to this discrepancy ([BBC, 2021](#); [Premium Times, 2020](#)).

The study revealed that the fear of covid-19 was not existent among the physical and health education staff in Kogi State Nigeria. This contradicts the findings of [Ahorsu et al, \(2020\)](#) who found that covid-19 is viewed as a new, unknown, and out-of-control hazard, causing widespread panic across the global population. The conclusion also contradicts previous research in which participants have reported dread of infection, death, loss of a family member, and interaction with potentially contaminated others ([Brooks et al., 2020](#)). The low number of recorded cases (5) and deaths (2) may have contributed to the absence of fear of Covid-19 ([Onyeji, 2020](#)).

CONCLUSION

The study concludes that physical and health education staff in Kogi State Nigeria do not experience neither anxiety due to covid-19, nor fear of covid-19. The lack of imposed curfews, closing of businesses, social gatherings as well as the low number of reported cases and deaths have greatly influenced the psyche of physical and health education staff in Kogi State Nigeria. Disparity of this research and other studies on COVID-19 was also caused by the lack of enthusiasm to get tested nor receive vaccinations by important actors in the state. Based on findings from the study, it is recommended that; although physical and health education staff in Kogi Nigeria do not experience the psychosocial effect of Covid-19, there should still be seminars on boosting their psychological make-up

against future pandemics. Also, there is still need for the school management to promote psychosocial resources by implementing interventions in reducing staff discomforts and strengthen their psyche, regardless of what others in the state feel concerning COVID-19. This work will be significant for further studies in that it showed the responses or access to respondents is greatly influenced by their employers or those in authority. It is also significant in that respondents know about the presence of COVID-19, practice preventive measures but are not afraid of the virus. Further research should be on the socio-economic effects of COVID-19 and attitude of physical and health educators in Kogi State Nigeria to work during COVID-19 pandemic since schools were not closed in the state as against a nationwide lockdown.

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The role of special program in sports in the athletic activities and performance of student-athletes in physical education

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ABSTRACT

The role of sports in education has been very evident across various educational institutions. Based on the previously conducted studies, it has been recognized as a builder of solid intellect for students. However, only a few investigations were found concerning the role of SPS in the development of student-athletes' athletic activities and performance in Physical education in a local setting here in the Philippines; hence, the conduct of the study regarding this matter is highly recommended. In connection to this, the present study aims to determine the role of the Special Program in Sports (SPS) in the athletic activities and performance of student-athletes in physical education. This study utilized a self-made questionnaire where inputs were taken from the related literature and studies reviewed and adapted to the Coaching Behavior Scale for Sport (CBS-S). Moreover, part of the questionnaire dealt with the coaching commitment and physical development of student-athletes involving the 4Cs (caring, character, competence, and connection). Descriptive and regression analyses were utilized to interpret data gathered from the respondents. The results have shown that the level of SPS was found to be very high in terms of instructor/coach, sports event, sports facilities, and training schedule. Also, the level of athletic activities was reported as high concerning training performance, regular sports participation, and health status, and very high in regards to theoretical knowledge, athletic potential, focus and discipline, resiliency and humility, and harmony and unity. SPS has been found to have no significant effect on the athletic activities and performance of student-athletes. Recommendations for the improvement of coaches and student-athletes, and future research to support the findings of this study are presented.

Keywords: Athletic activities; performance; special program in sports; student-athletes

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INTRODUCTION

The role of sport in society, particularly in schools, has been proven across research in the past few years (Malm et al., 2019; Westerbeek & Eime, 2021; Wretman, 2017). School sports have been recognized throughout education as a builder of solid intellect. The school institutions, especially the Department of Education, recognize sport's ability to improve the cognitive abilities, rational thinking, and reasoning of even the least promising children. Added by Agot (2019), SPS is implemented in qualified public secondary high schools in order to develop athletes' full potential and prepare them for higher learning and work. It also teaches the values of hard work, concentration, objectivity, and commitment. As such, sports can bring out latent abilities not reached by traditional education. Moreover, school sports can also provide social and emotional

benefits, including self-esteem and problem-solving skills (Shenoi et al., 2022; Taliaferro et al., 2010). Sports can also bring intangible benefits to the school and community (Bailey, 2006).

In the Philippines, the Special Program in Sports (SPS) is a particular program that shall lay the foundation for a career and support for learners with interest, skills, and aptitude in Sports. It aims to develop the talents of youths in sports, but also in the areas of leadership and good sportsmanship. Intensive athletic training balanced with a stringent academic excellence requirement also prepares students to conquer local and international sports competitions. Guidelines and policies to be used in the program are stipulated in the Department of Education Order No. 25, series of 2015. Additionally, the objective of SPS is the enrichment of student-athletes along with the academic performance of student-athletes within the context of the educational mission of schools. As such, school sports should be educational and contribute to the overall education of student-athletes (Guo & Meyerhoefer, 2016; Milambo & Pacho, 2021; Qurban et al., 2018). Other objectives of this particular sports program logically follow students' academic mission and welfare. The sports program offers different sporting events for training, including arnis, athletics, badminton, basketball, baseball, billiards, chess, dance sports, football, futsal, gymnastics, pencak silat, sepak takraw, softball, swimming, table tennis, taekwondo, volleyball, wrestling, and wushu. Numerous studies have been conducted in the Philippines and other countries assessing the implementation of such programs from various secondary public high schools over the past years (Abustan, 2021; Wijaya et al., 2018; Pestano & Ibarra, 2021; Wretman, 2017). Findings revealed that student-athletes perceived that the implementation of the program is highly sufficient in areas such as curriculum for sports, admission and retention policy, support for students, human resources, instructional resources, and moderately sufficient for sport equipment and facilities. However, no empirical studies were found in relation to the aforementioned studies, specifically here in the locality of Pampanga. Hence, conducting a study should be highly needed. In this, the study is focused on determining the role of SPS in the athletic activities and performance of students in Physical Education and comparing if the results will be consistent with other previously conducted studies. Moreover, this investigation is determined to provide new data in the body of knowledge and fill in the gap between research on the role of SPS.

Coach and Student-Athletes

Committed teachers are never satisfied with what they already have (Yildiz & Celik, 2017); instead, they constantly seek new ventures to explore new ideas and ways to contribute to the students significantly. The commitment intrinsically drives teachers to invest more time and energy in keeping up their involvement in school (Altun, 2017). Moreover, they sincerely have a passion and go for teaching and learning. Similarly, those teaching at educational institutions specializing in sports is no different because they handle student-athletes under supervision. As the leaders of various sports teams, coaches provide the necessary mentoring and other services in line with their program (Hinojosa & Maxwell, 2018). In this, student-athletes hardly rely on their coaches' mentoring ability to supervise impetus for them to perform well in various sports competitions. Therefore, teachers' commitment is paramount for students' physical development and academic success.

Sports, on the one hand, with designated coaches, have a priceless value in education. Instruction combines with sports to motivate student-athletes to the highest degree possible, allowing them to make significant progress in sports synonymous while making

life more manageable (Super et al., 2018). Students can benefit from sports and other physical activities in various ways. These are manifested from previously conducted studies (Orhan, 2020; Sierra-Díaz et al., 2019) concerning the benefits of sports, such as physical, mental, and social abilities through different organized sports (Oja & Piksööt, 2022; Wiium & Säfvenbom, 2019). Engaging in sports maintains a balance that suits students' maturity, talents, and interests. Harmoniously, sports also provide a welcome break from the humdrum of daily life for students. On the other hand, study findings found that coaches' commitment can affect student-athletes (Abós et al., 2021; Choi et al., 2020; O'Neil & Hodge, 2020). Student-athletes were also highly connected to their coach in every training session and competition. Sports coaches also serve as role models influencing student-athletes outside of the usual sport setting (Hebard et al., 2021). Through actions and feedback, coaches may influence how athlete acts in their daily survival.

Along with the responsibilities coaches are accountable for, one commits numerous hours and works behind the curtains to produce brilliant athletes and sporting teams, whether on a professional, paid basis or voluntary basis. Coaches are indispensable individuals in the sporting industry to train and produce exceptional athletes, yet what motivates them remains primarily unknown. Within sports, "commitment" is frequently defined as a necessary component underlying persistence, athlete satisfaction, motivation, and achieving goals in sports (Hundito, 2022). As mentioned by Collins et al. (2018), sports and actual work directly affect the physical, emotional, and mental health of student-athletes. It is critical to advance games and active work throughout one's life. On the part of the student-athletes, self-esteem and happiness gained from previous gaming experiences are crucial. Moreover, coaches can positively influence players' positive affective response to their athletic experiences, manifested by generalized feelings such as pleasure, liking, and sports enjoyment. Coaches who demonstrate adequate social support, situational awareness, and democratic behaviors toward athletes (Tucker & Black Jr., 2017), in addition to providing frequent instruction and positive feedback, may facilitate increased sport enjoyment (Kim et al., 2021). Furthermore, coaches who frequently commend players on their performance efforts and express gratitude for their contributions to the entire team can inspire athletes to enjoy sports.

In this ongoing study, coaches' commitment is one of the most influential factors in the overall development of student-athletes. Physical training and conditioning (Su et al., 2022), technical skills (Koopmann et al., 2020), mental preparation (Vodicar et al., 2012), competition strategies (Ives et al., 2020), personal/negative rapport (Davis et al., 2021), sports knowledge (Heppe et al., 2016), time management (Johnson et al., 2011), and teamwork are some of the factors that influence the development of student-athletes, and how the coaches are responsible for these (McEwan & Crawford, 2022).

Physical Training and Conditioning

The success of the student-athletes performance is usually attributed to a unique combination of criteria. Among these criteria, training and conditioning are considered the most critical quality in determining athletes' competitive abilities (Xiao et al., 2021). Strength and conditioning allow an athlete to strengthen supporting muscles, even out muscle imbalances, increase mobility, correct posture, stabilize joints, learn new movement patterns and enhance coordination and peripheral skills. In the study of Eisner et al. (2016) regarding the perception of student-athletes in the importance of strength and conditioning, and its contribution to their overall athletic performance, findings

revealed positive responses regarding athletes' general perceptions. They regarded that strength and conditioning are essential in their athletic development in their sport.

Technical Skills

High-level technical skills and tactical skills are key factors for optimal performance of athletes. Technical skills allow student-athletes to play the game or execute the gesticulations for their sport. It aims to execute a movement to the best of their abilities. Contrastingly, tactical skill development aims to make the athletes more successful in competitions. More often, the use of tactical skills is combined using technical skills. Relative to this, the study findings of [Sgrò et al. \(2018\)](#) revealed that the most used and innovative training method in improving technical and tactical skills is the small sided games (SSGs) which are seem to be worthy and valid methodology to train simultaneously various skills by reproducing several conditions of a real match.

Mental Preparation

Mentally prepared was defined as the ability of an athlete to cope with the demands brought by the various reasons such as practice and competitions, improved determination, focus, self-confidence, and keeping control under pressure ([Bulent et al., 2017](#)). In the result on the study of [de la Cerna and Diego \(2022\)](#), there are 4 themes and 8 categories that were mentioned in the aim of exploring mental toughness among student-athletes. The four themes are living the dream, malleability of time, path to elitism, and forward looking. Alongside these themes, the eight categories that were mentioned are family, hope for the future, time management, discipline, pressure, positive outlook, focus and value driven. These current findings suggest that, these themes and categories were discovered on the pursuit of defining mental toughness, how it develops over time, and how coaches may prepare for it.

Competition Strategies

Goal setting in sporting contexts is a regularly utilized method that can lead to enhanced performance ([Healy et al., 2018](#)). Researchers, practitioners, athletes, and coaches have all adopted goal-setting recommendations in sports and performance settings. However, it could be contended that these proposals are unduly simplistic and that a lack of critical commentary in the sporting literature fails to distinguish the intricacies of goal setting in training. Equally, the focus of research and practice in goal-setting has predominantly been on goal progress or attainment, thus overlooking the other benefits of effective goal pursuit on additional aspects such as well-being. Interactions between these factors have gained little attention in the academic literature or applied recommendations. This may result in reduced efficiency of goal setting for athletes and eventually lead to sub-optimal performance and well-being.

Additionally, goal setting is critical in various environments where physical education and sports leadership are employed. Students in physical education classes, athletes, sports teams, clients through injury rehabilitation, and adults participating in fitness programs can all benefit from goal-setting. Furthermore, it is significant as a motivational approach and tool for changing behavior or improving performance and utilized as a part of an intervention plan to fix problems or refocus efforts.

Personal/Negative Rapport

Previously conducted studies have shown that coach has the ability to significantly influence athletes through communicative actions and environments they create. Coach-

athlete relationship is the situation in which a coach and an athlete's cognition, feelings and behaviors are mutually and causally interrelated (Foulds et al., 2019). In this, a positive coach-athlete relationship promotes participation, satisfaction, self-esteem, and improved performance of student-athletes. In contrary, coaches who are disappointing, unhelpful and uninspiring will lead to a negative relationship between the two parties.

Sports Knowledge

Coaches have the responsibility of teaching all student-athletes, providing them the knowledge they need to form anything from their basic skills to competitive techniques. Moreover, coaches need to transfer their own knowledge into the athlete, and support their learning through the application of skills to sports. Athletes progress through several training stages as they get older and become more accomplished in their sport (Johnson et al., 2011). Each stage's curriculum should help athletes transition to the next stage through provision of what they need at present, as well as preparing student-athletes for the proceeding one.

Time Management

Time management is important for balancing academics and athletics. Time management has important implications on the development of athletes (Johnson et al., 2011). Coaches are responsible on how to help student-athletes understand time management and optimize their training without compromising academics. Excellent student-athletes are excellent at compartmentalizing various tasks in academic and sports. However, based from previously conducted studies, time management has been shown to be the challenge to students who are involved in sports (Nimphius et al., 2020). Studies have shown that time management was a challenge in balancing sport activities and academic responsibilities (Davis et al., 2019; Nimphius et al., 2020; Thompson et al., 2022).

Teamwork

Teamwork is defined as individuals working together to achieve a common goal; and in sports, is to aim for victory. Each team has the potential to rise or fall based on the group of people who share the same passion and goals, and are working together to achieve success (McEwan & Beauchamp, 2014). From the findings of Salcinovic et al. (2022), team function and performance are correlated to the leadership style of coaches, supportive team behavior, communication and performance feedback. Moreover, these findings may be enhanced through understanding the behavior of these four key variables relative to each other in a broader spectrum.

Competence, Confidence, Connection, and Character/Caring (4Cs)

This study included competence, confidence, connections, character, and caring in terms of physical development. The structure of the 4Cs (Competence, Confidence, Connection, and Character/Caring) is a helpful summary of the areas of improvement that all coaches should remember while instructing students (Vierimaa et al., 2012). Anyone who wants to work effectively and sustainably in a group should cultivate empathy, mindfulness, and affiliation with their teammates.

METHOD

Design

This study aimed to describe the level of a special program in Sports in terms of instructor/ coach and Sports event participation (sports facilities availability and training schedule). Also, it aimed to pronounce the level of athletic activities of student-athletes in terms of training performance, regular sports participation, theoretical knowledge of sports, athletic potential, focus and discipline, resiliency and humility, harmony and unity, and health status. Additionally, the level of performance in Physical education of student-athletes is aimed to be described in this study. Finally, this study is focused to determine the relationship and direct influence of SPS on athletic activities and performance in the Physical education of student-athletes.

Participants and Sampling Technique

To attain the goal of this study, researchers have only focused on the public schools in Pampanga, Philippines which offer SPS. In this, *Purposive Sampling Technique* was performed. This technique is also called as Judgment sampling, where the researcher deliberately chooses participants for the study due to the qualities they possess (Lobo et al., 2022). Also, it focused on the participants in the sports curriculum who are developmentally capable of participating in the study. Participants are junior high school students from Grade 7-10 and belong to the SPS section, which consists of 100 student-athletes actively engaged in sports events.

Instrumentation

A questionnaire was utilized for the conduct of this study which is divided into two parts. The said tool is a combination of a self-made questionnaire where inputs are taken from the review of related literature and studies, and an adapted tool. The first part of the questionnaire dealt with coaching commitment. It involved the competition strategies, goal setting, knowledge of sports, mental preparation, positive/negative rapport, physical training and condition, teamwork, technical skills, and time management by using the Coaching Behavior Scale for Sport (CBS-S) by Carlsson and Lundqvist (2016). It is a multidimensional self-report measure designed to assess sport coaches' controlling interpersonal style from the perspective of self-determination theory. The second part dealt with physical development of student-athletes. It involved the level of caring, character, competence, and connection (4C) of the students.

Statistical Analysis

Descriptive statistical analyses were used to describe the level of SPS, Athletic activities, and Level of Performance in PE. In this, Mean (M) and Standard Deviation (SD) were used. Lastly, Regression was performed to determine the relationship and direct influence of SPS on Athletic activities and Performance in PE of student-athletes. (Note: in the result section, values are expressed as means \pm standard deviations.)

RESULTS AND DISCUSSION

Firstly, in regards to the SPS level regarding instructor/coach and sports event participation (sports facilities availability and training schedules), statements all yielded a higher mean which corresponds to a great extent based on instructor/coach. Among all the reports, the "school provides coaches and sports instructors for different sports and activities" yielded the highest (4.45 ± 0.85). Secondly, all statements garnered a higher mean corresponding greatly regarding a sports event. Expressly, "school permits the

students to participate in sports competition outside the school” is the highest (4.44 ± 0.84). Thirdly, in terms of sports facilities, all statements resulted in a higher mean, which corresponded to a very great extent. Explicitly, “school has their gymnasium for sports activities” is the highest (4.52 ± 0.77). Lastly, as for the training schedule, all statements generated a high mean and were significantly interpreted. The “training schedule ensures that student-athlete is at their best condition to perform such physical activities” is the highest (4.39 ± 0.86). Generally, the level of SPS was found to be very high in terms of instructor/coach (4.36 ± 0.92), sports event (4.37 ± 0.84), sports facilities (4.38 ± 0.85), and training schedule (4.32 ± 0.92) respectively.

The next result describes the level of athletic activities of student-athletes according to training performance, regular sports participation, theoretical knowledge of sports, athletic potential, focus and discipline, resiliency and humility, harmony and unity, and health status. In terms of training performance, all of the statements corresponded to GE. Specifically, the report, “I develop work endurance and strength by performing different kinds of training,” garnered the highest (4.15 ± 1.07). Regarding regular sports participation, all statements corresponded to a GE. Remarkably, the information “I am willing to join in every sports competition in our school” garnered the highest (4.14 ± 1.07). In line with the theoretical knowledge of sports, most statements correspond to a VGE. Among the comments, “I can integrate sports content in sporting life” is the highest (4.27 ± 0.85). On the other hand, “I can develop specific means and methods used in preparing individual competition” (4.11 ± 0.97) is the lowest, which corresponds to GE. Most of the statements about athletic potential reached GE and VGE, respectively. The word “I can focus on my goals and achieve them one by one” is the highest (4.39 ± 0.90) interpreted as VGE, and “I am willing to learn other sports/games other than my current sports” is the lowest (4.10 ± 1.10) which indicates as GE. Also, statements under focus and discipline showed VGE and GE, respectively. In line with this, the idea “I try to find my motivation to stay focused on my training and sports competition” reported the highest (4.33 ± 0.96), which corresponds to a VGE. In comparison, “I prioritize my training and sports activities to improve my skills” is the lowest (4.12 ± 0.98), indicating GE. Relatively, in the case of resiliency and humility, all statements noticeably corresponded to VGE. The word “I can develop the confidence to recover and overcome my hardships in sports activities” is the highest (4.38 ± 0.79). Additionally, most statements under harmony and unity corresponded to a VGE. Precisely, “I can fully understand diversity through my social interaction with my co-athletes” garnered the highest (4.33 ± 0.91). On the other hand, “I can promote fairness and solidarity within my co-athletes” is the lowest among the statements (4.17 ± 0.95), which is interpreted as a GE. Lastly, comments which pertain to health status mostly garnered high means, which can be construed as a VGE. Moreover, the statement “I can maintain my well-being and healthy mental state” garnered the highest (4.23 ± 1.00), while “I can increase my physical strength and develop endurance and flexibility” is the lowest (4.09 ± 1.16), which both corresponds to VGE and GE respectively. Overall, the level of athletic activities was reported as high concerning training performance (4.08 ± 0.98), regular sports participation (4.05 ± 1.04), and health status (4.19 ± 1.04), and very high in regards to Theoretical knowledge of sports (4.22 ± 0.92), athletic potential (4.21 ± 1.02), focus and discipline (4.20 ± 0.98), resiliency and humility (4.29 ± 0.93), and harmony and unity (4.26 ± 0.94) correspondingly.

Regarding grades of student-athletes in Physical education, 75 (75%) rated a very satisfactory level with grades within the 85-89 range. Meanwhile, 13 respondents (13%) are in an outstanding rank, which falls under the 90-100 grade range. On the other hand, 12 respondents (12%) fall under satisfactory level with grades within the 80-84 range. In

totality, the level of performance of student-athletes concerning grades resulted (86.99 ± 2.00), which can be interpreted as very satisfactory.

Table 1. SPS, athletic activities, and performance

SPS	Athletic activities and performance	Beta Coefficient	F-value	p-value	Analysis
Instructor/coach	Training Performance	0.10	18.52	0.60	Not Significant
	Regular Sports Participation	-0.25	13.00	0.25	Not Significant
	Theoretical Knowledge of Sports	-0.37	21.37	0.04	Significant
	Athletic Potential	0.37	17.21	0.07	Not Significant
	Focus and Discipline	0.21	22.35	0.29	Not Significant
	Resiliency and Humility	0.21	23.03	0.22	Not Significant
	Harmony and Unity	-0.30	19.23	0.11	Not Significant
	Health Status	-0.21	12.99	0.35	Not Significant
		-0.09	0.50	0.52	Not Significant
Sports event participation	Training Performance	0.81	18.52	0.33	Not Significant
	Regular Sports Participation	0.41	13.00	0.05	Not Significant
	Theoretical Knowledge of Sports	0.78	21.37	<.05	Significant
	Athletic Potential	0.67	17.21	<.05	Significant
	Focus and Discipline	0.36	22.35	0.06	Not Significant
	Resiliency and Humility	0.29	23.03	0.08	Not Significant
	Harmony and Unity	0.27	19.23	0.13	Not Significant
	Health Status	0.42	12.99	0.06	Not Significant
		-0.04	0.503	0.760	Not Significant
Sport facilities availability	Training Performance	0.53	18.52	<.05	Significant
	Regular Sports Participation	0.53	13.00	<.05	Significant
	Theoretical Knowledge of Sports	0.35	21.37	<.05	Significant
	Athletic Potential	0.69	17.21	<.05	Significant
	Focus and Discipline	0.79	22.35	<.05	Significant
	Resiliency and Humility	0.62	23.03	<.05	Significant
	Harmony and Unity	0.60	19.23	<.05	Significant
	Health Status	0.53	12.99	<.05	Significant
		-0.07	0.50	0.63	Not Significant
Training Schedule	Training Performance	-0.00	18.52	0.96	Not Significant
	Regular Sports Participation	0.06	13.00	0.79	Not Significant
	Theoretical Knowledge of Sports	0.04	21.37	0.81	Not Significant
	Athletic Potential	-0.20	17.21	0.35	Not Significant
	Focus and Discipline	-0.06	22.35	0.74	Not Significant
	Resiliency and Humility	0.10	23.03	0.56	Not Significant
	Harmony and Unity	0.21	19.23	0.28	Not Significant
	Health Status	0.06	12.99	0.79	Not Significant
		0.13	0.50	0.40	Not Significant

Table 1 illustrates the analysis performed regarding the effect of SPS on athletic activities and performance. Firstly, the instructor/coach positively impacts the theoretical knowledge of sports of student-athletes. On the other hand, no significant effect was observed between instructor/coach to training performance, regular sports participation, athletic potential, focus and discipline, resiliency and humility, harmony and unity, and health status. A significant positive effect was found between sports event participation, theoretical knowledge of sports, and athletic potential. At the same time, no significant effect was observed on training performance, regular sports participation, focus and discipline, resiliency and humility, harmony and unity, and health status. A significant positive effect was observed between sports facilities' availability for training performance, regular sports participation, theoretical knowledge of sports, athletic potential, focus and discipline, resiliency and humility, harmony and unity, and health status. Lastly, no significant effect was observed between training schedule and training performance, regular sports participation, theoretical knowledge of sports, athletic potential, focus and discipline, resiliency and humility, harmony and unity, and health

status. Overall, no significant effect was observed between SPS (instructor/coach, sports event participation, sports facilities availability, and training schedule) and athletic activities and PE performance.

Previously conducted studies revealed that special programs in sports have a positive effect on the athletic activities and performance of student-athletes in Physical education (Li et al., 2022; Luo et al., 2022; Salino et al., 2022). This study aims to confirm if other previously worked studies' results are similar to the current research setting.

The investigation shows that the instructor/coach positively affects the student-athletes theoretical knowledge in sports, similar to previously conducted studies (Kaya, 2014; Lobo et al., 2022; Mason et al., 2020). This finding can be construed that instructors and coaches play a vital role in understanding student-athletes in advance of their tactical skills, integrating sports into their daily lives, areas of development, and various effective methodologies for effective performance. On the other hand, the instructor/coach has no significant effect on regular participation, athletic potential, focus and discipline, resiliency and humility, harmony and unity, and the health status of student-athletes. Results of the analysis opposed previously conducted studies on the positive effect of instructor/coach on the frequency of participation of student-athletes (Manzoor, 2018; Wekesser et al., 2021), the potential of athletes through feedbacks (Sumarna et al., 2017; Üzümlü, 2018), focus and discipline (Goffena & Horn, 2021), resiliency and humility (Balcombe & De Leo, 2021; Brandt, 2018; Lu et al., 2016), harmony and unity (Freire et al., 2022; Vahdani et al., 2012), and their health status (Bissett et al., 2020; Powers et al., 2020; Simons & Bird, 2022).

Moreover, a significant positive effect was observed between sports participation and theoretical knowledge of sports and athletic potential, parallel to the studies of Brooks et al. (2018) and Hernández-Andreo et al. (2020). It can be postulated that sports participation may improve their ability and potential, resulting in high-performing student-athletes in various competitions. Contrastingly, no significant effect was observed on the training performance, regular sports participation, focus and discipline, resiliency and humility, harmony and unity, and health status. The result of the analysis contradicted the positive findings of previously conducted studies (Caldarella et al., 2019; Gu & Xue, 2022; Moeijes et al., 2019; Tahira, 2022).

The availability of sports facilities was found to have a significant and positive effect on the training performance, regular sports participation, theoretical knowledge of sports, athletic potential, focus and discipline, resiliency and humility, harmony and unity, and health status of student-athletes. These can be interpreted that the availability of sporting equipment and facilities are vital to the overall development of student-athletes. Similar studies conducted in relation to these variables are supported by the findings of various scholars (Eime et al., 2017; Lu et al., 2016; Pestano & Ibarra, 2021; Sanger et al., 2016).

Furthermore, no direct and significant effect was found in between the training schedule to the training performance, regular sports participation, theoretical knowledge of sports, athletic potential, focus and discipline, resiliency and humility, harmony and unity, and health status. The result of the analysis contradicted the findings of previously conducted studies (Haugen et al., 2019; Kumyaito et al., 2018; Malagoni et al., 2015). Overall, no significant effect observed between SPS and athletic activities and performance of student-athletes. The findings aforementioned are above are considered inconclusive due to scarcity of studies that can support or refute the claims of this investigation. In this, it is warranted conducting a similar study.

CONCLUSION

Based on the initial findings, this study concluded that SPS has no significant effect on the athletic activities and performance in Physical Education of student-athletes from various public schools in Pampanga. In connection to the yielded results, instructors and coaches should continue providing theoretical knowledge in sports to student-athletes where they are currently engaged. In this, students may progress their tactical skills, develop effective methodologies which can be applied in sports competitions, and apply sports in their daily lives. Moreover, this study recommends that administrators may provide extensive training to instructors and coaches to improve their coaching and leadership skills, which can benefit them and student-athletes. In this, instructors and coaches could address some gaps in the frequency of participation, potential, focus and discipline, resiliency and humility, harmony and unity, and the overall health status of student-athletes.

Lastly, Future researchers may be interested in conducting a similar study on a broader set of populations using other instruments, statistical analyses, and research design, which will help support or refute this study's findings. Finally, this study has demonstrated its primary goal: to determine the role of SPS in the athletic activities and performance of students in Physical Education. Additionally, this adds new data to the body of knowledge and existing literature, supporting and filling the gap between research concerning the effectiveness of sports curricula in secondary public high schools.

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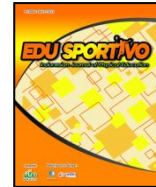
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Integrating game-based approach in students learning experiences in physical education: A phenomenological study

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ABSTRACT

In the transition to the delivery of instruction, game-based learning in physical education is the key to filling the instructional gap by giving each student the freedom to develop their skills in the 21st century. This study employed a qualitative research design using a phenomenological approach to acquire an in-depth understanding of students' learning experiences through game-based learning in Physical Education. Participants were chosen through purposive sampling which was participated by 7 students from the Grade 10 level in one of the secondary public schools in the Philippines. Codes and themes were transcribed in the study. Based on the research results, three themes emerged: innovative approach, the functionality of the application, and student engagement and authentic learning experience. Physical education teachers have become innovative and creative in how to deliver instruction, especially in the areas of cognitive and skills acquisition using a game-based approach. This is done to help all students to be creative and adapt to the modern learning environment. This application was practical, usable and accessible for every student both inside and outside of the classroom with offline and online features. This study will equip Physical Education teachers with clarity and a road map to the modern world. This will also provide the required support for students to shift away from traditional classroom learning and become more innovative by producing mobile apps that provide students with games and the freedom to absorb the lesson through a game-based approach.

Keywords: Game-based learning; physical education; blended learning

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INTRODUCTION

Moving to an advanced world by utilizing technology and developing students who are skilled in the digital world is the teacher's job to reach students in any way and form. The Department of Education is using online learning and modular learning methods to carry on the learning process throughout the COVID-19 outbreak (Abante, 2021). Blended learning takes place in the school's learning mode due to the division of the classes and scheduling and this is strengthened by the study (Hubackova & Semradova, 2016). Because of class division and scheduling, blended learning takes place in the school's learning mode. One of these continues to remain innovative, in particular the teacher-created mobile application for physical education that employs a games-based approach.

As the world entered a new genre of delivering instructions, game-based learning has had a tremendous effect on students' learning experiences. New skills often referred to as 21st-century skills are required by changes in social and technological conditions in

current society (Liu et al., 2020). As reiterated in the study of Qian and Clark (2016) a rising number of researchers are focused on creating educational games to improve students' learning of 21st-century skills in schools. Considering the numerous research findings that show the favorable impacts of games on learning. Similarly Jabbar and Felicia (2015) stated that game-based learning (GBL) contexts and game design features enhance engagement in learning. As stated by Wasserman and Banks (2017) through games, students will learn to laminate or attach deeper meaning to tangible items. This study is strengthened by Culajara (2022) that differentiated instruction is incorporated into the learning process to comprehend a dynamic system and can adapt to changes in students' learning. Furthermore, in the digital age, physical education is unique because, if the material is taught properly, it can enable the student to engage with mobility and the ability to complete the work (Diciano et al., 2020). According to the findings of Barany et al. (2020), teachers found it to be remarkably helpful in engaging students in learning.

Due to the change in the delivery of instruction and adaptation to 21st century skills and acquiring learnings, integrating game-based approach in Physical education is an effective way for every student to learn and as a means of reaching every students in the transition period of the learning. Physical education has a crucial role to play in this trying period and offers more opportunities than ever for all pupils to express their negative feelings (Schembri et al., 2021). Excellent instruction should be seen as the new norm in planning and execution, similar to the study of Tria (2020) to preserve and deliver in the educational setting amongst seclusion and community imprisonment which asserts that blended learning is increasingly gaining popularity across both academia and industry and it is one of the levels of the education trends which was a generation educated on interactive experiences that expects the same degree of interaction in every data and computer system (Fernandes et al., 2012). Using a game-based approach, the teacher provided students with the ability and support to understand the lesson and grasp the knowledge of the subject's content via the designed mobile application.

As Salvador-Ullauri et al. (2020) assert that complex games, also known as training games, are among the learning materials used in education today. These games were created for purposes and pure enjoyment with the prime aim of creatively reinforcing innovative thoughts (Salvador-Ullauri et al., 2020). Furthermore, Dunwell et al. (2013) reiterated that the incorporation of digital technology and multimedia has the potential to extend further than the limits of the classroom and provide a comprehensive insight into future careers and their effects in interactive and stimulating ways. Thus, Byun and Jung (2018) proved in the study that digital games (for example, video games or computer games) have been recognized as an effective instructional approach for increasing students' achievement and motivation. Game-based learning strategies have become popular in the mobile learning approach for actively engaging while also still having fun (Gean et al., 2015). With the study, the game-based application has supported and guided students in attaining learning goals and tasks. Moreover, the game encourages the adoption of pro-environmental attitudes and conduct (Ro et al., 2017). Teachers must connect with students in a wide range of ways as society moves toward a technologically advanced future and produce skilled learners for the digital world.

This study adheres to know the learning experiences of the students in utilizing game-based approach in their learning performance in Physical Education. The study sought to answer the following questions: (1) in what aspect of the learning experience does game-based learning help the students; (2) how game-based learning through devised mobile applications enhanced students' learning; and (3) what impact of the game-based learning to the students is learning experience. With these, this study will be key to the

addition of innovation and teaching practices of each Physical Education teacher in delivering quality instruction in cognitive and skills acquisition with the help of the modern world of using technology.

METHOD

The study used a qualitative research design employing a phenomenological approach through focus group discussion. As reiterated by Kalra et al. (2013), qualitative research uses an idealist or humanistic approach to answer the questions of the study and used to gain a sense of how people think, feel, act, and relate with one another which generates input that is not numerical. The participants in FGD were 7 students from Grade 10 level and purposive sampling was used to choose the participants. Learning experience design aims to address the gap by explaining the broader interaction when employing learning technologies (Tawfik et al., 2021). Integrating game-based approach in learning performances in Physical Education is used in the study which was a designed mobile application by the teacher.

Data collection was done through interviews and focus group discussions (FGD) which used to acquire an in-depth understanding of the learning experiences of the student. Coding and themes were transcribed and employed in the study. This was strengthened by the study of Alhojailan (2012) which assert that thematic analysis was used to examine qualitative data and develop a comprehensive understanding of the students' learning experiences. Using codes and themes, acquiring deep learning experiences and better understanding to the students learning experiences with the help of mobile application in their cognitive and skill acquisition. The study sought to answer the following questions: (1) what is the students' learning experiences using game-based approach?, (2) what is the impact of the game-based approach to students' learning experience, and (3) how game-based approach affects the students learning performances? The questionnaire's content was validated by Head Teacher and Master teacher to ensure that it addressed and fulfilled the study's objectives.

The study followed safety protocols since the focus group discussion was done in person or face-to-face. The study sent a letter of consent to the students included in the study as an assurance of their personal information and privacy. The study asked for permission from the School Head and the parents and gave assurance to the participants that any information given during the interview will be confidential and secretly kept.

RESULTS AND DISCUSSION

The study explored the learning experiences of the Grade 10 students in utilizing game-based learning in Physical Education. Three themes emerged in the study: (1) innovative approach, (2) functionality and (3) student engagement and authentic learning experiences.

Table 1. Results of the thematic analysis to the aspect affects the learning experiences of the students

Meaningful Unit Sample	Superordinate Theme
Participant 1: This mobile application through game-based approach helped me in understanding the lesson through online and offline mode.	Innovative Approach
Participant 2: I had more ability and efficiency in using technology because of this mobile application with a game-based approach and it	

Meaningful Unit Sample	Superordinate Theme
gets more attention in learning because I enjoy it.	
Participant 3: This method is fun and very accessible to me because of the setting that the school has (blended learning) I can understand the lesson even when I'm at home because I learn better, and I enjoy it because of the mobile application made by the teacher.	
Participant 4: My learning experience in using this application got my attention more because of the videos, games and pictures that are inside it. I appreciate the teacher's creativity and innovation more.	
Participant 5: With this learning strategy, I had more capability to enhance my technological skills, I can no longer use the cellphone as only for social medias, but I can use it for learning such as this mobile application which is purely games and gain more knowledge because of prepared videos, games and pictures made by the teacher.	
Participant 6: I had the skill to use technology and I was impressed with this mobile application that we can use the cellphone and the teacher can make this mobile application.	
Participant 7: With this innovation and creation of the mobile application, I had more ability to be techy and adapt to other students in the use of technology that despite being in a public school, this mobile application with game-based approach.	

Theme 1: Innovative Approach to Students Learning Experience

Teacher must be a support for each student as they adjust. Teachers became their support system as they gradually adjusted and adapted to the new normal of teaching and learning, and accepting changes aided their studies despite the two years they spent at home. The 21st century is all about innovation, particularly now that Covid-19 has arrived, employing technology in a unique way to provide our students with all their instruction. Additionally, it serves as a link for all instructors and students to reach the curriculum's stated objectives. The promotion of diversity is one of today's educational challenges is the students' proficiency in 21st-century skills (Tindowen et al., 2017), thus Ravelli and Leeuwen (2018) assert that there has to be a guiding force that changes brought about by the era of digital technology coexist with the advancement of improve the learning experience for students. Furthermore, teachers must have the skills and competencies to be productive in their work as technology used in education becomes more accessible (Koh et al., 2021). Furthermore, game-based instruction is a popular approach to learning that can improve the learning mechanisms of various types of learners (Bigueras, 2020). Because of the transition that occurred in the student's lives and the two years they were confined inside the home, utilizing game-based in their learning is a great help in adjusting their pace of learning because the incorporation of technology in their learning is better so they will understand the concept and lesson using game-based approach because this has been their support in the virtual world of learning and teaching amidst the pandemic. In employing the game-based approach, the students

were given the ability and support to understand the lesson and grasp the knowledge of the content of the subject through the designed mobile app by the teacher. With the participants' responses, game-based learning has a tremendous effect to their learning experiences particularly in becoming innovative. As participants contemplate:

P1: *This mobile application helped me in understanding the lesson through online and offline mode.*

P2: *I had more ability and efficiency in using technology because of this mobile application with a game-based approach and it gets more attention in learning because I enjoy it.*

For students to study and understand a lesson better and to provide them the flexibility to have a better grasp comprehension toward student successes, it is helpful to allow them the chance to realize their potential. Fundamentally improving user engagement and motivation (Fernandes et al., 2012), it is true that using a mobile application with a game-based learning strategy is an efficient way for students to study in a mixed manner with the classroom environment that was provided in the application and has the ability to complete tasks and an opportunity to comprehend the lesson even students are confined in their homes. Participants also shared that:

P4: *My learning experience in using this applicaion got my attention more because of the videos, games and pictures that are inside it. I appreciate the teacher's creativity and innovation more.*

P3: *This method is fun and very accessible to me because of the setting that the school has (blended learning) I can understand the lesson even when I'm at home because I learn better and I enjoy it because of the mobile application made by the teacher.*

The opportunity to develop experiences in video games that take a long time to emerge is very exceptional (Chye & Nakajima, 2012). The game-based approach has a tremendous effect on students learning experience. As participants reiterated on the positive impact on using the mobile application. With this opportunity to learn, students have a new way on learning which adapts on the 21st century trend. With the ability to learn independently and with the help of a game-based mobile application, students are given the freedom to do so. Students also have access to learning materials that can help them manage their time and attention.

P5: *With this learning strategy, I had more capability to enhance my technological skills, I can no longer use the cellphone as only for social medias but I can use it for learning such as this mobile application which is purely games and gain more knowledge because of prepared videos, games and pictures made by the teacher.*

P7: *With this innovation and creation of the mobile application, I had more ability to be techy and adapt to other students in the use of technology that despite being in a public school, this mobile application with game- based approach.*

P6: *I had the skill to use technology and I was impressed with this mobile application that we can use the cellphone and the teacher has the ability to make this mobile application.*

Because of the transition in the students' lives and the two years they were confined inside the home, incorporating game-based learning into their learning is a great help in adjusting their pace of learning because the incorporation of technology in their learning is better so they will understand the concept and lesson using game-based approach because this has been their support in the virtual world of learning and teaching amidst the pandemic. The instructional strategy aids students in overcoming learning challenges (Franco-Mariscal et al., 2016), thus innovation and creativity are essential to the achievement of good education (Culajara, 2022). It is the responsibility of teachers to find effective ways to deliver lessons, and it has been demonstrated that using mobile applications with a game-based approach significantly improves students' learning experiences. Given the feedback from the students, there is a chance to broaden this strategy in physical education. Despite the difficulty posed by the current world's rapid pace, we have a quick response to innovate and be creative as long as we students and continue our education.

Table 2. Results of thematic analysis using game-based learning in Physical Education

Meaningful Unit Sample	Superordinate Theme
Participant 1: Through the mobile application with games, my understanding was made easier because of the videos and content that are placed here. It is easier for me to understand the lessons indicated in the application.	
Participant 2: The game-based learning is enjoyable and you can really learn because you give yourself the ability to understand the lesson using your device anywhere and at any time because it is accessible.	
Participant 3: I used the application both online and offline. The lesson is easy to understand and I can build my own understanding of the lesson because of the games in the application.	
Participant 4: Anywhere and at any time I can use the application and I enjoy it and understand the lesson better because of the videos prepared by the teacher and games that are very interactive and engaging.	
Participant 5: This application is very accessible, it is available anytime because I own my time and learn to understand the lesson better to my own ability.	Functionality of Game-Based Learning
Participant 6: With the game-based approach in Physical Education, my time and my device have become more functional, I don't use my cell phone too much on social media sites because I enjoy using the application made by the teacher with games incorporated in our lesson.	
Participant 7: Through a mobile application with physical education games, my environment is safer because I can use it online and offline mode at the same time as having the ability to learn on my own. My environment is safe because I am only at home when using the application due to the blended learning modality that the school has.	

Theme 2: The functionality of the game-based approach to students learning experience

The use of the mobile application has been quite beneficial in their adaptation to the modern world of learning, particularly the inclusion of a game-based approach to training. One of the most essential components that need to be present in order to carry out teaching and learning process is instructional and learning materials (Harsono, 2015). Education through technological learning is made possible by the 4.0 industrial revolution (Astalini et al., 2019). When it comes to integrating technology into instruction, physical education presents a significant challenge. As a result, teachers' tasks are essential to achieving the desired goals and being possible to attain all students. Participants added to consider:

P1: *Through the mobile application with games, my understanding was made easier because of the videos and content that are placed here. It is easier for me to understand the lessons indicated in the application.*

P2: *The game-based learning is enjoyable and you can really learn because you give yourself the ability to understand the lesson using your device anywhere and at any time because it is accessible.*

P3: *I used the application both online and offline. The lesson is easy to understand and I can build my own understanding of the lesson because of the games in the application.*

The objective of the mobile application is to provide every student with the chance to learn 21st century skills, especially digitized learning, which uses technology to obtain knowledge and skills. Additionally, every student benefits greatly from game-based approach since it has the students convenient time and can access in all situations. Students can do this through an asynchronous and synchronous learning modality as a student who has to focus on other subjects.

P4: *Anywhere and at any time I can use the application and I enjoy it and understand the lesson better because of the videos prepared by the teacher and games that are very interactive and engaging.*

P5: *This application is very accessible, it is available anytime because I own my time and learn to understand the lesson better to my own ability.*

P6: *With the game-based approach in Physical Education, my time and my device have become more functional, I don't use my cell phone too much on social media sites because I enjoy using the application made by the teacher with games incorporated in our lesson.*

Every student is allowed to have the freedom and efficiency in using technology, particularly in the learning process, because students are able to adapt to the increasingly digital environment. Because the usage of games in the mobile application is enjoyable and worthwhile, kids pay more attention to the significance of their gadgets that are utilized in the learning and teaching process and are better able to discipline themselves to attend such classes or activities.

P7: Through a mobile application with physical education games, my environment is safer because I can use it online and offline mode at the same time as having the ability to learn on my own. My environment is safe because I am only at home when using the application due to the blended learning modality that the school has.

The Covid-19 virus, which is still a threat to our environment, can be avoided with this game-based learning strategy. Moreover, as cited by [Irfannuddin et al. \(2021\)](#), the school learning system has undergone adjustments as a result of the COVID-19 outbreak. In order to help all students be creative and adapt to the modern learning environment, physical education teachers have become innovative and creative on how to deliver instruction, especially in the areas of cognitive and skills acquisition through a mobile application that offers a game-based approach. With these, game-based approach was helpful in students adjustment in the transition of the new normal of education, this implies that using mobile application made them easy to understand and adapt to the lesson and able to learn the lesson even in the confinement of their home and can access offline and online mode.

Table 3. Results of Thematic Analysis of the Impact of Students' Learning Experience

Meaningful Unit Sample	Superordinate Theme
Participant 1: Through the game-based approach in PE class, I understand the lesson better and I enjoy learning because I am allowed to learn using my ability.	Students' engagement and authentic learning experiences
Participant 2: In a modern way, game-based learning has made me enjoy doing each activity more and the exciting part of each game because this technique is new and I learn more.	
Participant 3: The games are exciting and full of enjoyment because I can collaborate with classmates while doing the task.	
Participant 4: Through the games, I understand the lesson better because the application is simple and easy to use.	
Participant 5: I have become more engaged in learning because I use my device and I no longer need to write notes because the mobile application has what I need apart from the activities.	
Participant 6: I understand the lesson better when there are games or activities and the way of learning is innovative because it uses technology that can be used in offline and online modes.	
Participant 7: The application is easy to use, the games are fun and my time is more productive when I use the mobile app because I learn and understand the lesson better.	

Student engagement is generally recognized as having a significant influence on learning and performance ([Kahu, 2013](#)). Similarly, [Lukenchuk \(2016\)](#) cited student involvement concern for online learning where instructional and reinventing concepts, connectivity, and interaction are some challenges thus, teachers must have seen this new approach to teaching as a more pleasant and pragmatic way to learn in the digital era ([Estrellan et al., 2021](#)). However, In actuality, schools struggle to provide students with

meaningful learning, and achieving the learning standards in the new normal of education (Culajara et al., 2022).

P1: Through the game-based approach in PE class, I understand the lesson better and I enjoy learning because I am allowed to learn using my ability.

P2: In a modern way, game-based learning has made me enjoy doing each activity more and the exciting part of each game because this technique is new and I learn more.

P3: The games are exciting and full of enjoyment because I can collaborate with classmates while doing the task.

P4: Through the games, I understand the lesson better because the application is simple and easy to use and I can manage my time.

The students are progressively regaining access to conventional instruction that was lost during the two years of confinement at home probably to the modifications and improvements that have been made to the learning environment. Furthermore, Arrieta (2020) reiterated that students are able to learn through technology and has been a key tool and may lead in novel opportunities for learning and teaching. This is to strengthen by the study of Dimaculangan et al. (2022) that understanding of digital technology and introduced student-centered digital teaching strategies could lead to innovative and creativity of the students. Hence, using the mobile application with game-based approach as assert by Papa (2020) allows individual to manage time that has an essential effect on students' performance.

P5: I have become more engaged in learning because I use my device and I no longer need to write notes because the mobile application has what I need apart from the activities.

P6: I understand the lesson better when there are games or activities and the way of learning is innovative because it uses technology that can be used in offline and online modes.

P7: The application is easy to use, the games are fun and my time is more productive when I use the mobile app because I learn and understand the lesson better.

Students become innovative and enable themselves to unlock their capabilities through technology (Sayfullayeva et al. 2021). Through an innovative way of learning, game-based learning in Physical Education is the key to addressing gaps in instruction where each student is given the freedom to enhance themselves and better perform their own ability to adapt to the 21st century. As Septian and Sukarmin (2021) suggested that creating virtual spaces to the teaching and learning process could be a way in developing students' skills and knowledge and allowing them to unlock their full capability.

CONCLUSION

Based on the study's findings, being inventive and accepting changes is a major help and support for every teacher and school in delivering and reaching educational goals. On the other hand, every teacher is creative and innovative in teaching delivery. This research will provide clarity and a roadmap to the modern world for Physical Education teachers.

This will enable teachers and students to adapt to the 21st century skills which is digitalization and computerization. However, this study still has limitations that there are still schools who do not have access in internet and lack of devices. Nonetheless, this study will provide the necessary support to move away from traditional classroom learning and become more inventive by developing mobile applications that provide students with games and the freedom to absorb the lesson through a game-based approach. In the time we live in, having the ability to develop and improve a person's abilities and knowledge by giving them tasks that might help them achieve success and a deep sense of purpose is a bridge to learning performances that are more comprehended and take an active role in learning the lesson.

Moreover, the incorporation of technology, learning while having fun is made possible by using a less conversational and more demonstrative approach. Physical education teachers have become innovative and creative in how to deliver instruction, especially in the areas of cognitive and skills acquisition through a mobile application that offers a game-based approach. Students learning experiences are significantly influenced when physical education teachers use a game-based approach to assist them to grasp and apply the skills. The incorporation of technology into the classroom must allow students to study independently, and students must be able to complete work autonomously to avoid becoming jaded by traditional classroom information delivery methods. The study's findings offer a method for increasing student learning outcomes that offer in the teaching and learning process in Physical Education.

RECOMMENDATION

To reach every student, it is unique to offer this mobile application that features a game-based approach to physical education. This study paved way for the improvement and enhancing students learning experience through adapting and adjusting to the 21st century skills and capabilities. With these, game-based approach must incorporate into the new normal of education as the school had a transition to an in-person modality and students slowly adjusted and adapt to the new setting. Learning and teaching performances in Physical Education must integrate ICT as part of adapting to the digitalization era. Thus, school must provide a concrete innovative and strategic plan for enhancing the technological capabilities of the teachers and students where accessibility and availability of the devices should be addressed to adapt to the 4.0 education industry, particularly in developing a 21st skilled students and most importantly, as an agent of delivering instructions, capacitating teachers' technological capabilities through seminars/training/workshops to enhance their ability to integrate ICT in their delivery of instruction. Through this, game-based approach may utilize as a strategy in improving students' learning experiences.

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Physical activity barriers and team cohesiveness of Angeles City volleyball players during the pandemic

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ABSTRACT

Physical activity barriers, particularly for the volleyball players of Angeles City, are one of the elements that hinder team cohesiveness for all athletes during this pandemic. According to research, there are many areas where the pandemic influences physical activity and team cohesiveness. The purpose of this study is to ascertain whether physical activity barriers have a direct impact on volleyball players' ability to work together as a team. Based on related literature on how it affects physical activity barriers, an online Cross-Sectional, Descriptive-Survey research was conducted on the volleyball players around Angeles City. Respondents were chosen based on specific qualities and criteria and provided unbiased selection. In analyzing the data, the pandemic practices and communication are the areas that impact the volleyball players in the middle of the pandemic. The findings showed that physical activity barriers have no association with the team cohesiveness of the volleyball player. It is suggested to the trainers, coaches, school administrators, and players that they can apply the findings of this study to their training amidst this pandemic. For further validation, the same research is needed to identify the other areas or factors that affect physical activity barriers to team cohesiveness.

Keywords: Physical activity barriers; team cohesiveness; volleyball players; pandemic

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INTRODUCTION

Background of the Study

Cohesion can play a variety of functions on a sports team, allowing them to succeed or fail over the season (Fitzgerald, 2019). A sequence of dynamic processes of mutual attraction and collaboration among members of a sports team toward team goals or organization is called team cohesiveness. Team cohesion is a driving force for a team that actively encourages members to stay on the team and discourages them from leaving (Kao, 2019). The tendency for a group to stick and remain together in pursuit of its instrumental objectives and for the fulfillment of member affective needs, according to the definition of sport-team cohesion. While this definition emphasizes the meaning of the construct, it is also critical to comprehend the cues people use to shape their impressions of cohesiveness (McLaren & Spink, 2018).

Student-athletes (SAs) have unique challenges in maintaining their physical exercises, such as a loss of team support, a lack of motivation without specified goals, and changes in identity (Smith et al., 2020). Additional data reveals that due to technological advancements and environmental changes, sitting has become the default habit in the business, transportation, and household environments, and the amount of sedentary time is increasing (Hoare et al., 2017). Team cohesion may and should be understood in an athlete's overall life. Athletes need more control over their team and personal roles to reduce the risk of negative repercussions (Anderson & Dixon, 2019). According to (Guessogo et al., 2021), because of the increase in Physical Activity Barriers, roughly 70.3 percent of gamers have raised their body mass index (BMI).

However, from early 2020 onwards, governmental lockdowns (i.e., travel restrictions and closures of schools, businesses, and exercise/sports facilities as a safety measure) enforced severe changes in people's everyday life, with possible physical, social, and psychological effects (Ronkainen et al., 2021). During the semi-lockdown period, the volleyball players continued to practice to make a plan with the team members to improve the athletes' team cohesion during the pandemic (Guessogo et al., 2021). Furthermore, it would be appropriate to repeat behaviors such as collaboration, communication, cooperation, and sharing to motivate players who believe they are unsuccessful in the team, increase their cohesion level within the team, and include unsuccessful players in the game more (Filiz & Aydin, 2016).

Overall, athletes were unmotivated to engage in physical activity due to anxiety and a lack of social support. Respondents who were able to sustain their exercise levels noted a shift in what inspired them: physical health and appearance were less motivating, and mental health and well-being were more motivating. During the epidemic, stress relief, anxiety reduction, and sleep improvements were among the top motivators, and research backs up the use of physical activity for brain health, stress management, and sleep quality (Marashi et al., 2021).

Review of Related Literature

There have been previously conducted studies regarding the various factors that is associated with team cohesiveness such as personal and team (Tikon et al., 2019), relationship with the coach (Freire et al., 2022; Lobo, et. al., 2022), leadership style (Vahdani et al., 2012), and performance feedback (Salcinovic et al., 2022). However, after numerous attempts in searching for studies connected to physical activity barriers and team cohesiveness, only a few studies were found and further investigation may be conducted.

To further contextualize the issues in this study, the following paragraphs will present the state of art condition of Team Sports, specifically within the sphere of Physical Activity Barriers (PAB) and Team Cohesiveness (TC) among young Volleyball athletes. This literature review is divided into two sub-topics: (i) Influence of physical activity barriers in sports, (ii) Influence of team sports to physical activity barrier.

Influence of Physical Activity Barriers in Sports

An activity requiring physical exertion and skill in which an individual or team competes against another or others for amusement, according to the definition of sport (Somerset & Hoare, 2018). Sport's positive impacts are primarily accomplished through physical exercise (Malm et al., 2019). Physical exercise, a significant component of most sports, creates these favorable impacts (Malm et al., 2019). On the other hand, physical activity barriers limit participants' enjoyment and motivation to play (Patel et al., 2018).

According to research conducted by the National Basketball Association and USA Basketball, participation in sports should be a good experience (Patel et al., 2018). Sports cooperation may be hampered by physical activity limitations such as injuries (Patel et al., 2018). Physical activity is a personal choice, although the amount of physical activity a person engages in is impacted or determined by various circumstances. Sabharwal and Sabharwal (2018) findings revealed that the young adults saw a variety of personal, social, and environmental variables as limitations, including time constraints, exhaustion, stress, family control, safety concerns, and more. At this level, understanding and overcoming the obstacles will be beneficial.

Thus, researchers can use this information to design and implement interventions, strategies, and policies to promote participation in physical activity (Sabharwal & Sabharwal, 2018). Other obstacles to physical exercise were discomfort and injury. The results reveal that the teenagers faced challenges, recognized the benefits and drawbacks of physical activity, and considered variables that could encourage physical activity (Mikaelsson et al., 2020). Sport, on the other hand, is under investigation due to the pandemic, which is a significant factor in PAB (Evans et al., 2020). A complete halt to all competitive sports at all levels. As a result, students can no longer participate in school-based physical activities such as PE, recess, or walking to and from school (Dunton et al., 2020). Although school and park restrictions, as well as the termination of team sports and planned activity courses, were essential to slow the virus' spread and allow healthcare facilities to expand, they appear to have significantly influenced children's PA. Athletes with PAB are also less likely to do well in a team sports event.

Influence of Team Sports to Physical Activity Barrier

"Both team and individual sports entail competition, but cooperation is more prominent in team sports than in individual sports," according to the definition of team sports (Eybers & Hattingh, 2019). Team sports have health benefits for individuals, group cohesion and performance, and organizational benefits such as improved work performance (Brinkley et al., 2017).

Incompatibilities due to lack of time, participation in leisure activities, and demotivation due to routine and imposed tasks were all identified as hurdles by the teens. Participation in team sports and friends' sound effects were linked to motivation. The females were equally concerned about their appearance and diet (Fernández-Prieto et al., 2019).

Adolescents' immediate environment was highlighted as a source of barriers in three areas: family, friends, and school (Fernández-Prieto et al., 2019). Individual characteristics, time constraints, psychological concerns, lousy management, a lack of awareness and education, the social context, a lack of familial support, and active engagement were all impediments to the growth of sports tourism in Shiraz's park (Olfateh & Savadi, 2017).

Sports engagement has been linked to various physical and mental health advantages; however, participation reduces with age, and understanding of perceived barriers to participation in children is limited (Basterfield et al., 2016). Despite the advantages, there is evidence that children are becoming more sedentary and are at a higher risk of chronic disease than those who live an active lifestyle (Somerset & Hoare, 2018). The chance that parents identified impediments to accessing local sports and leisure facilities was estimated using multivariable logistic regression modeling. Parents are more likely to report barriers to access with lower household incomes (Harrington et al., 2017).

Statement of the Problem

This study seeks the connection of physical activity barriers in the team cohesiveness of volleyball players during the pandemic. Furthermore, the exact purpose of this research is to answer the following questions: (i) How may the volleyball players be described based on their demographic profile and playing history? (ii) What is the level of physical barrier of the respondents? (iii) What is the level of team cohesiveness of the athletes during the pandemic? (iv) What is the PAB's influence on the TC of the volleyball player? (v) What is the study's implication in team sports management and coaching?

METHOD

In this study, the researchers utilized the cross-sectional, descriptive - survey method. The descriptive research aimed to determine the relationship between physical activity barriers and team cohesiveness of volleyball players during the pandemic. This will be done using a self-administered online survey conducted by the researchers. The respondents of this study will be selected based on the following criteria: (i) Athletes who attend public and private school, (ii) Officials and non-official varsity players, (iii) Must have at least 1 year of volleyball experience, (iv) Must be 18 years old and above, (v) Who has enough experience training and playing with a team.

The Researchers used the Simple Random and Quota sampling technique to gather the data more effectively. *Quota sampling* is a non-random sampling approach in which participants are chosen based on specified qualities such that the overall sample has the same characteristic distribution as the general population (Taherdoost, 2016). While the *Simple random* procedure provides an unbiased random selection, drawing inferences from the outcomes of a study requires a representative sample. Keep in mind that one of the purposes of research is to draw inferences about the entire population based on the results of a sample. The representativeness of a sample acquired through simple random sampling makes generalizations from the sample's results to the population reasonable (Sharma, 2017).

The study used three (3) tools to obtain data from the respondents. Firstly, Part I deals with the demographic profile and volleyball playing history of the respondents from the public and private schools in Angeles City, Pampanga, Philippines. All items in the first part of the questionnaire were based on the review of the literature performed. The Group Environment Questionnaire (GEQ) was also adapted for this study with a Cronbach's Alpha value of 0.73-0.83. It is designed to assess the perceptions of the entire team. Responses from GEQ are then recorded from 1-9, indicating the level of agreement to each statement. Lastly, Exercise Benefits/Barriers Scale (EBBS) was also adapted with a Cronbach's Alpha value of .954. EBBS aims to determine individuals' perceptions of the benefits and barriers to participating in sports. All responses are recorded from 1 – strongly disagree and 4 – strongly agree.

This study has utilized a *subgroup sampling technique*. Based on the target population, the sample target for the study is 132 respondents. In order to recruit respondents for this study, the following protocol was strictly followed: (1) the researchers identified the address of the athlete coordinators or the coach of the volleyball team to seek approval for data gathering, and (2) wrote a formal letter of request indicating the objectives of the study and the expected contribution, risks, and benefits, (3) secured a list of names and contact information (if possible), (4) seek for both verbal and written consent, the preferred method for data gathering (online or face-to-face) while observing minimum health protocols and (5) conducted data gathering based on the agreed conditions.

This study used descriptive, independent t-test, and correlational analyses to investigate data gathered from the respondents. *Frequency* and *percentage* were used to describe the demographic profile, athletic history, level of physical barriers, and team cohesiveness. *Independent T-Test analysis* was used to describe the difference (Lobo et al., 2022), between physical activity barriers, demographic profile, and sports/athletic history and between team cohesiveness, demographic profile, and sports/athletic history. Lastly, *Pearson-r* was used to determine the relationship between team cohesiveness and physical activity barriers.

RESULTS AND DISCUSSION

Demographic Profile

In terms of age, there are (n=78, 59.1%) respondents with the age between 18-21, while (n=54, 40.9%) are respondents ages 22-24. Also, there are (n=64, 48.5%) males who answered the survey questionnaire compared to females (n=68, 51.5%). On the one hand, most respondents are from public schools (n=90, 68.2%) compared to private schools (n=42, 31.8%). Lastly, based on respondents' education level, mostly are college (n=93, 70.5%), while high school respondents are (n=39, 29.5%).

Sports/Athletic History

Based on the results, most of the respondents are varsity players (n=83, 62.9%), while non-varsities are (n=49, 37.1%). Also, most of the respondents have 1-3 years of experience (n=88, 66.7%), followed by 4-6 years (n=40, 30.3%) and 7-10 years (n=4, 3.0%). During pandemic, most of the respondents are not having their training weekly (n=53, 40.2%), while (n=50, 37.9%) are having their training per week between 5-6 hours (n=50, 37.9%) followed by 3-4 hours (n=22, 16.7%), 1-2 hours (n=4, 3.0%), and 7-8 hours (n=3, 2.3%). Additionally, most of the respondents does not participate to competitions in school (n=72, 54.5%), compare to those who are (n=60, 45.5%). It was also found that most respondents did not practice during the pandemic (n=106, 80.3%) compared to those who are (n=26, 19.7%). The mode of communication of the athletes is mostly via social media (n=91, 68.9), followed by SMS/Text Message (n=34, 25.8%), and lastly, face-to-face (n=7, 5.3%). Moreover, most of the teammates of the athletes are their friends (n=61, 46.2%), followed by a colleague (n=42, 31.8), family (n=26, 19.7%) and competitor (n=3, 2.3), respectively. Lastly, most of the respondents do not play volleyball anymore (n=91, 68.9) compared to those still playing the sport (n=41, 31.1%).

Overall Level of Physical Activity Barriers Experienced by Volleyball Players

The findings revealed that most of the athletes experience "middle" or average level of physical activity barriers (n=92, 69.7%), while others (n=36, 27.3%) experience a "high" and "low" level of physical activity barriers (n=4, 3.0%).

Lack of company, lack of social support from family and friends, unfavorable climate, and limited access to PA venues were the most commonly mentioned impediments to Physical Activity. Likewise, in the study of Rech et al. (2018), the most common stated difficulties were a lack of motivation and time. Moreover, these are results of previously conducted studies. In this regard, conducting a similar study focusing on these stated impediments in order to understand these factors and to provide recommendations in order to lessen the level of barriers in physical activities of students and athletes.

Overall Level of Team Cohesiveness of Volleyball Players

Concerning social group integration, it was found that most are in the “middle” level (n=119, 90.25%), while others are (n=10, 7.6%) in the “high” level and (n=3, 2.3%) “low.” Task group integration of the respondents are also found to be in the “middle” level (n=102, 77.3%), followed by “low” (n=16, 12.1%) and high (n=14, 10.6%), respectively. Lastly, the overall team cohesiveness of the volleyball players is found to be “middle” level (n=119, 90.2%), followed by “high” (n=9, 6.8%) and “low” (n=4, 3.0), respectively. Many social and sports psychologists believe that team cohesion and player satisfaction significantly impact team performance. This finding suggests that players are not drawn to their team because of its social environment (e.g., teammates are their best friends, they participate in team social events) or the way their team functions on a social level (e.g., they go out with their teammates, they maintain friendships after the sports season; [Brisimis et al. 2018](#)). However, these results are not yet conclusive. Conducting a similar study from a different set of population and comparing the results may lead to a better understanding of these.

Level of physical activity barriers vis-à-vis demographic profile and sports/athletic history of volleyball players

The results revealed that most of the volleyball players aged between 18-21 (n=53, total M=2.21) are currently experiencing “middle” level of physical activity barriers, compared to those players ages between 22-24 years old (n=39, total M=2.59) who all experience a “middle” level of physical activity barriers as well. Based on gender, the results revealed that most of the female players (n=50) are experiencing a “middle” level of physical activity barriers compared to male players (n=42) who are also experiencing a “middle” level of barriers. Players who come from public schools are mostly experiencing a “middle” level of barriers (n=60 total M=2.14), compared to those who are in private schools (n=32, total M=2.37), who are also experiencing a “middle” level of barriers. Most college players are mostly experiencing a “middle” level of barriers (n=63, total M=2.32), compared to those high school players (n=29, total M=1.95) who are also experiencing a “middle” level of barriers. Moreover, most varsity players are found to be experiencing a “middle” level of activity barriers (n=51, total M=2.16) compared to those who are not (n=41, total M=2.29) who are also experiencing a “middle” level of activity barriers. Those players whom their friends' influence are mostly experiencing a “middle” level of activity barriers (n=45, total M=2.09), compare to self (n=32, total M=2.27), social media (n=10, total M=2.77) and family (n=5, total M=1.80), respectively. Those who have 1-3 years experience in volleyball are mostly experiencing a “middle” level of activity barriers (n=68, total M=2.14), compared to 4-6 years (n=23, total M=2.35) who also experiencing a “middle” level, and lastly, 7-10 years are mostly experiencing a “high” level of activity barriers (n=2, total M=2.41). COVID-19 caused sporting events to be canceled, gyms and fitness facilities to close, and outdoor activities to be restricted. These factors prompted athletes to alter their training regimens and train at home, the majority of which is unsupervised by medical personnel or coaches (Lim et al., 2016).

Moreover, these results findings are not yet conclusive. They may be supported by studies focusing on the physical activity barriers experienced by different age groups, gender, type of school, educational level, (non-)varsity, students/athletes' influencers, and years of experience. Currently, no studies were found concerning physical activity barriers to the following variables aforementioned above. In this, a similar study may be conducted in other locality to compare the results and determine if the study's findings may support or refute the present research findings.

Level of physical activity barriers vis-à-vis sports/athletic history of volleyball players

The data revealed that players who participate (n=54, total M=2.46) and those who do not (n=65, total M=2.67) in competition in school both have "middle" level of physical activity barriers, but somehow different based on the number of respondents. Those volleyball players who participate in the community (n=70, total M=2.60) have a "middle" level of physical activity barriers, while those who do not have a "high" level of physical activity barriers (n=50, total M=2.53). Those volleyball players who are practicing during the pandemic (n=24, total M=2.51) and those who are not (n=95, total M=2.59) both have a "middle" level of physical activity barriers but are significantly different based on the number of respondents. In regards to the mode of communication, SMS/Text Message (n=32, total M=2.48), social media (n=80, total M=2.61), and Face-to-face (n=7, total M=2.61) modes all have "middle" level of physical activity barriers, but somehow different based on the number of respondents. Lastly, regarding the teammates of the players with their friends (n=40, total M=2.45), colleagues (n=30, total M=2.79), competitors (n=2, total M=1.70), and family (n=20, total M=2.60) all have "middle" level of physical activity barriers, but pointedly different based on the number of respondents who answered the survey.

The result of the findings is considered not conclusive as these outcomes cannot be supported as no studies were previously conducted in connection to the level of physical activity barriers experienced by those students and athletes who participate in school and in the community, practices during pandemic (or not), mode of communication and type of teammates. Furthermore, this study highly suggests that a parallel study may be conducted to back up or refute the claim of this investigation.

Table 1. Team Cohesiveness vis-à-vis Demographic Profile

Profile	Low	Middle	High	Mean
Age				
18-21	3	67	8	2.59
22-29	1	52	1	2.51
Gender				
Male	1	60	3	2.45
Female	3	59	6	2.69
Type of School				
Yes	3	81	6	2.51
No	1	38	3	2.71
Educational Level				
High School	0	32	2	1.95
College	4	83	6	2.63

Table 1 illustrates the demographic profile and sports athletic history based on the level of their team's cohesiveness. The findings show that most of the volleyball players ages 18-21 years old have a "middle" level of team cohesiveness (n=67, total M=2.59) compared to ages between 22-29 (n=52, total M=2.51), whom all have "middle" level of team cohesiveness as well. Both males (n=60, total M=2.45) and females (n=59, total M=2.69) have a "middle" level of team cohesiveness in their respecting team, while it differs based on the number of respondents. Public (n=81, total M=2.51) and private school (n=38, total M=2.71) volleyball players are also having a "middle" level of team cohesiveness but differ based on the number of respondents who answered the survey. Also, both high school (n=36, total M=2.43) and college volleyball players (n=73, total

M=2.63) have a “middle” level of team cohesiveness but differ based on the number of respondents.

No previous studies focused on the variables measured in this current study. Moreover, a similar study is highly suggested to determine the team cohesiveness of those teams in different age groups, gender, type of schools, and educational levels.

Table 2. Team Cohesiveness vis-à-vis Sports/Athletic History

Profile	Low	Middle	High	Mean
Participation in Competition in School				
Yes	2	54	4	2.46
No	2	65	5	2.67
Participation in Competition in the Community				
Yes	4	70	4	2.60
No	0	49	50	2.53
Practice during pandemic				
Yes	0	24	2	2.51
No	4	95	7	2.59
Mode of Communication				
SMS/Text Message	1	32	1	2.48
Social media	3	80	8	2.61
Face-to-face	0	7	0	2.61
Teammates				
Friend	1	40	20	2.45
Colleague	2	30	10	2.79
Competitor	0	2	1	1.70
Family	1	20	5	2.60

Table 2 illustrates the team cohesiveness vis-à-vis sports/athletic history. Players who participate (n=54, total M=2.46) and do not (n=65, total M=2.67) in competition in school both have a “middle” level of team cohesiveness but are somehow different based on the number of respondents. Those volleyball players who participate in the community (n=70, total M=2.60) have a “middle” level of team cohesiveness, while those have a “high” level of cohesiveness (n=50, total M=2.53). Those volleyball players who are practicing during the pandemic (n=24, total M=2.51) and those who are not (n=95, total M=2.59) both have a “middle” level of team cohesiveness but are significantly different based on the number of respondents. In regards to the mode of communication, SMS/Text Message (n=32, total M=2.48), social media (n=80, total M=2.61), and Face-to-face (n=7, total M=2.61) modes all have “middle” level of team cohesiveness, but somehow different based on the number of respondents. Lastly, regarding the teammates of the players with their friends (n=40, total M=2.45), colleagues (n=30, total M=2.79), competitors (n=2, total M=1.70), and family (n=20, total M=2.60) all have “middle” level of team cohesiveness, but pointedly different based on the number of respondents who answered the survey.

No studies were conducted concerning the level of team cohesiveness of students and athletes who participate in sports in school and community, practicing during the pandemic, mode of communication, and type of teammates. In order to support or refute these findings, a similar study is highly suggested.

Table 3. Independent T-test Analysis on the level of Physical Activity Barriers being independent of Gender, Type of School, Educational Level, Varsity Player, Participation (School), Participation (Community), Practice During Pandemic, and Do you still play Volleyball (?)

	Physical Activity Barriers	N	Mean	SD	df	t-test	Sig	Decision
Gender	Male	64	2.67	.458	130	-.926	.356	Not Significant
	Female	68	2.73	.395				
Type of School	Private School	90	2.72	.456	130	.999	.189	Not Significant
	Public School	42	2.64	.354				
Educational Level	High School	39	2.60	.414	130	-1.848	.067	Significant
	College	93	2.74	.426				
Varsity Player	Yes	83	2.75	.426	130	1.544	.125	Not Significant
	No	49	2.62	.421				
Participation (School)	Yes	60	2.72	.403	130	.573	.568	Not Significant
	No	72	2.68	.447				
Participation (Community)	Yes	78	2.64	.425	130	-1.785	.077	Significant
	No	54	2.78	.420				
Practice during Pandemic	Yes	26	2.42	.477	130	-3.947	<.05	Significant
	No	106	2.77	.385				
Do you still Play volleyball?	Yes	41	2.62	.502	130	-1.425	.157	Not Significant
	No	91	2.73	.386				

Table 3 illustrates the independent t-test analysis performed to determine the difference of physical activity barriers in respect to gender, type of school, educational level, varsity player, participation (community), practice during the pandemic, and whether you still play volleyball (?). It was found out that there is a significant difference observed between physical activity barriers and practice during pandemic $t(130) = -3.947, p = <.05$. In contrary, no significant difference observed to gender $t(130) = -.926, p = .356$, type of school $t(130) = .999$, varsity player $t(130) = 1.544, p = .125$, participation (school) $t(130) = .573, p = .568$, participation (community) $t(130) = -1.785, p = .077$, and do you still play volleyball $t(130) = -1.425, p = .157$.

Result findings revealed that varsity players experienced a higher level of physical activity barriers than those who were not. However, the current findings may not be supported since no studies were conducted concerning this variable. Regarding gender, the finding was refuted by the study of (Rosselli et al., 2020), where females are lower on their perceived physical activity barriers compared to males. On the other hand, no previously conducted studies were found in connection to the difference in physical activity barriers experienced by students participating in community sports and practicing during the pandemic. The results can be interpreted that most groups are equal regarding the level of physical activity barriers experienced. To summarize, the following findings may be supported by conducting a study of the same in a different locality.

Difference between the level of team cohesiveness in respect to gender, type of school, educational level, type of player, participation (school/community), practice during pandemic, and sport engagement

It was found out that there is a statistically significant difference between team cohesiveness to the participation in both school $t(130) = 2.642, p = .009$ and community $t(130) = -2.526, p = .013$, and do you still volleyball $t(130) = 2.189, p = .030$. On the other hand, there was no statistically significant difference between team cohesiveness to gender $t(130) = .641, p = .523$; type of school $t(130) = .336, p = .738$; educational level $t(130) = .199, p = .843$; varsity player $t(130) = .883, p = .379$; and, practice during

pandemic $t(130) = .882, p = .380$. The above findings are not yet conclusive since no studies were found in relation to these variables. In order to support the findings, this study highly suggests conducting a study of the same.

Association between physical activity barriers and team cohesiveness

The results revealed that there is no significant relationship between physical activity barriers to group integration – task ($r = .089, p = .310$), group integration – social ($r = .005, p = .951$), and overall team cohesiveness ($r = .026, p = .767$).

Limitations

Since the research was conducted during the pandemic, some restrictions were applied. These are the following: (i) Since mass gathering and face-to-face meetings were prohibited, the researchers had difficulty preparing and gathering the data due to restrictions and local government policies, (ii) In recruiting the respondents, the researchers did not acquire the maximum pax needed for the study due to the availability and school permissions, (iii) In disseminating the questionnaire, the researchers had a hard time collecting the data needed because some of the respondents were experiencing inconvenience in their internet connection.

Implications

Following the results, the researchers would like to focus on the following areas in physical activity barriers, and team cohesiveness of the volleyball players: (i) Extends volleyball athletes' face-to-face and online training on their home premises. Athletes can work on their training at home, improve their skills in playing volleyball, and maintain the team's cohesion, (ii) Coaches are the administrator of skills during training; possible occurrences that affect the athlete's cohesion may lead to unwanted performances. Coaches can create a training plan that can comprehend the individual abilities of athletes to improve at home and still play as a team with training that enhances their team cohesion, (iii) People with higher authority, such as the sports administrator, manage the teams in competitions such as school programs, local college competitions, and other possible competitions the group can join. They can monitor if the unit is capable of entering a match with their performances based on their training.

CONCLUSION

The main focus of this study is to determine the association between the level of physical activity barriers to the team cohesiveness of volleyball players in Angeles City, Philippines, during the pandemic. After performing the necessary analyses, it was found that there is no association between the two variables. In this, it can be concluded that the level of team cohesiveness of volleyball players may still be high regardless of the physical activity barriers they are experiencing. The study findings can be applied to team sports management and coaching; staff and people focus on athlete improvements, skill improvements, and team cohesion. This study supports that athletes' individual physical activity barriers do not affect the whole team cohesion of the entire team.

In this, the study highly suggests that other detailed data may be obtained, such as coaches/trainers, instructor engagements, and narratives, to determine further the relationship between physical activity barriers and team cohesiveness. Moreover, future researchers may conduct a similar study on a larger sample size and in other locations and use these present findings as a reference.

Lastly, curriculum designers and school administrators can incorporate this study into the school environment by incorporating pedagogical strategies that, in turn, can produce higher levels of team cohesion and can lower the level of physical activity barriers, which in turn can lead to better performance of the school athletes individually and as a team.

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Pembelajaran pendidikan jasmani di masa pandemi covid-19: Analisis respon siswa dan guru dalam menggunakan google classroom

Physical education learning during the covid-19 pandemic: Analysis of students and teachers' responses in using google classroom

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ABSTRAK

Pada masa pandemi covid-19 terjadi perubahan sistem belajar dari tatap muka beralih ke pembelajaran berbasis teknologi melalui media *online*. Penelitian ini bertujuan untuk mengetahui responsif siswa dan guru dalam penggunaan media *google classroom* di masa pandemi covid-19. Ini merupakan penelitian mixed method (kuantitatif dan kualitatif) dengan menggunakan angket dan wawancara sebagai instrumennya. Subjek penelitian ini adalah 89 siswa dan 1 orang guru pendidikan jasmani. Teknik analisa data yang digunakan adalah menghitung nilai persentase dari skor akhir angket. Berdasarkan hasil penelitian mengungkapkan jika penggunaan media *google classroom* pada pembelajaran pendidikan jasmani mencapai nilai persentase skor angket sebesar 93,69%. Sedangkan respon guru pendidikan jasmani menunjukkan bahwa penggunaan *google classroom* pada pembelajaran pendidikan jasmani di masa pandemi covid-19 sekarang ini sangat membantu dalam proses pembelajaran daring dan sudah dilaksanakan dengan baik. Meskipun hasil penelitian mengungkapkan respon yang baik dalam penggunaan *google classroom*, penelitian ini memiliki keterbatasan yaitu pada subjek penelitian dan hanya meneliti penggunaan satu media yaitu *google classroom* sehingga jangkauan penelitian terbatas. Hasil yang didapat diharapkan mampu menjadikan rujukan untuk penelitian lanjutan terutama dalam penggunaan media belajar di masa pandemi covid-19 pada pembelajaran pendidikan jasmani sehingga hasil pembelajaran lebih maksimal.

Kata Kunci: Pendidikan jasmani; covid-19; google classroom

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ABSTRACT

During the Covid-19 pandemic, there was a change in the learning system from face-to-face to technology-based learning through online media. This study aims to determine the responsiveness of students and teachers in using Google Classroom media during the Covid-19 pandemic. This is a mixed method research (quantitative and qualitative) using questionnaires and interviews as instruments. The subjects of this study were 89 students and 1 physical education teacher. The data analysis technique used is to calculate the percentage value of the final questionnaire score. Based on the results of the study, it was revealed that the use of Google Classroom media in physical education learning achieved a questionnaire score percentage of 93.69%. Meanwhile, the physical education teacher's response shows that the use of Google classroom in physical education learning during the current Covid-19 pandemic is very helpful in the online learning process and has been implemented properly. Even though the research results revealed a good response in using google classroom, this research has limitations, namely the research subject and only examines the use of one media, namely google classroom so that the research reach is limited. The results obtained are expected to be able to make a reference for further research, especially in the use of learning media during the Covid-19 pandemic in physical education learning so that learning outcomes are maximized.

Keywords: Physical education; covid-19; google classroom



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PENDAHULUAN

Pendidikan jasmani merupakan salah satu usaha sadar untuk menciptakan lingkungan yang mampu mempengaruhi potensi peserta didik agar berkembang ke arah tingkah laku yang positif melalui aktivitas jasmani (Utama, 2011). Hal ini berkaitan dengan peran dari pendidikan jasmani itu sendiri yakni pendidikan jasmani sebagai kontribusi yang sangat strategis dalam pembentukan manusia seutuhnya (Ayyi, 2016). Pendidikan jasmani tidak hanya berdampak positif pada pertumbuhan fisik anak, melainkan juga perkembangan mental, intelektual, emosional, dan sosialnya (Ayyi, 2016).

Pembelajaran pendidikan jasmani saat ini memiliki kendala yang sangat serius dengan adanya pandemi covid-19. Pandemi covid-19 telah membatasi kontak manusia-ke-manusia (Viana & De Lira, 2020), dan jarak sosial dianggap sebagai strategi pencegahan yang paling efektif karena tidak ada pengobatan spesifik (Rio & Malani, 2020), sehingga mempengaruhi lingkungan pendidikan (Yu & Jee, 2021). Pada 07 Agustus 2020, pemerintah Indonesia meningkatkan respons terhadap pandemi COVID-19 ke tingkat yang serius dan melarang melakukan pembelajaran tatap muka di satuan pendidikan dan melanjutkannya belajar di rumah (Kemdikbud, 2020). Menanggapi rencana ini, sebagian besar sekolah dan universitas mulai menyelenggarakan kelas online.

Pembelajaran yang dilakukan secara online ini ditemukan beberapa tantangan dan kendala, khususnya pada pembelajaran pendidikan jasmani. Subagio (2022) mengungkapkan target pembelajaran pendidikan jasmani yang dilakukan secara online tidak tercapai, seperti pada aspek psikomotor yang kurang tepat sasaran yang biasanya kegiatan belajar mengajar dilakukan di lapangan. Yu dan Jee (2021) juga mengungkapkan bahwa pembelajaran pendidikan jasmani secara online tidak memberikan manfaat kepada siswa karena guru dan siswa terpisah secara fisik dan spasial. Meskipun beberapa penelitian menyampaikan pembelajaran online berjalan dengan cukup baik (Herlina & Suherman, 2020; Maulana et al., 2022). Namun demikian, pembelajaran online tetap wajib dilaksanakan di masa pandemi covid-19 agar siswa dan guru terhindar dari virus.

Teknologi informasi sebagai pendukung terlaksananya pembelajaran online pada masa pandemi ini sangat banyak, seperti rumah belajar, Edmodo, EdLink, Moodle, Schoology, Google Meet, Zoom, Webex, dan Google Classroom (Astini, 2020). Namun, Google classroom merupakan media pembelajaran yang paling sering digunakan pada saat pembelajaran daring (Gunawan et al., 2019). Google classroom memungkinkan pendidik dan peserta didik melakukan interaksi berupa komunikasi, diskusi, berbagi file, hingga pemberian tugas melakukan penilaian (Sewang, 2017). Media ini sering digunakan karena terkesan mudah untuk dioperasikan oleh guru dan siswa (Lobo, 2022), google classroom juga dapat digunakan untuk menyediakan bahan ajar, tes yang terintegrasi dan penilaian siswa dalam pembelajaran (Ali & Zaini, 2020). Berdasarkan pembahasan tersebut, sangat penting rasanya untuk mengetahui sejauh mana respon siswa dan guru saat menggunakan media pembelajaran seperti google classroom, hal ini dapat menjawab sampai dimana keberhasilan guru dan siswa dalam menggunakan google classroom sebagai media dalam pembelajaran.

Peneliti sebelumnya sudah pernah membahas tentang pembelajaran pendidikan jasmani dengan menggunakan google classroom. Seperti analisis proses perkuliahan teori dan praktek pendidikan jasmani (Rozi et al., 2021), analisis tingkat kesulitan penggunaan google classroom sebagai media pembelajaran pendidikan jasmani (Hendriansyah et al., 2020), penggunaan google classroom pada minat belajar pendidikan jasmani (Febriansyah & Nugraha, 2020), kemandirian belajar mahasiswa pendidikan jasmani menggunakan media google classroom (Banat & Martiani, 2020). Namun, belum ada peneliti yang menganalisis respon siswa dan guru saat menggunakan google classroom

pada pembelajaran pendidikan jasmani, dan menggunakan metode penelitian campuran (*mix method*).

Oleh karena itu, penelitian ini menjadi salah satu celah yang dapat dikembangkan sekaligus menjadi alasan mengapa pentingnya studi ini dilakukan. Adapun tujuan dari penelitian ini yakni untuk melihat respon siswa dan guru saat menggunakan *google classroom* dalam pembelajaran pendidikan jasmani di sekolah. Hasil dari penelitian ini nantinya akan dijadikan tolak ukur untuk melihat keefektifan pembelajaran dengan menggunakan *google classroom*.

METODE

Metode yang digunakan dalam penelitian ini yakni penelitian deskriptif dengan menggunakan metode penelitian campuran (*mix method*). Subjek penelitian ini adalah 89 siswa dan 1 orang guru pendidikan jasmani di MTS Fadhilah Pekanbaru. Instrumen dalam penelitian ini adalah observasi, wawancara dan kuesioner yang disebarakan melalui *google form*. Berikut kisi-kisi yang digunakan dalam angket tersebut.

Tabel 1. Instrumen Penelitian (Kuesioner)

Variabel	Indikator	Nomor Pernyataan		Jumlah Pernyataan
		+	-	
Analisis Respon Siswa dan Guru dalam Menggunakan <i>Google Classroom</i>	Menggunakan <i>google classroom</i> memungkinkan dalam menyelesaikan tugas lebih cepat	1,2,5,6	3,4	6
	<i>google classroom</i> meningkatkan performa pembelajaran siswa	7,8,9,10	11,12	6
	<i>google classroom</i> dapat meningkatkan produktivitas dalam pembelajaran	13,14,18,19	15,16,17	7
	<i>google classroom</i> sangat berguna dalam proses pembelajaran	20,21,22,23	24	5
	Kemudahan dalam mengakses <i>google classroom</i>	25,26,27,28	29,30	6
	Kemudahan dalam penggunaan <i>google classroom</i> sesuai yang diinginkan	31,32,33,34,35	36,37	7
	<i>google classroom</i> menarik perhatian siswa dalam pembelajaran	38,39,40,41	42,43	6
	<i>google classroom</i> memungkinkan siswa mendapatkan umpan balik secara lebih cepat	44,45,46,47	48,49	6
	Siswa senang menggunakan <i>google classroom</i> dalam pembelajaran	50,51,52,53	54,55	6
	Tampilan <i>google classroom</i> sangat jelas dan mudah dipahami	56,57,58,59	60,61	6
	Dengan <i>google classroom</i> , memperoleh pengumuman, materi maupun pengumpulan tugas menjadi lebih fleksibel	62,63,64,65,66	67,68	7
	<i>Google classroom</i> memudahkan saya untuk menyimpan dokumen materi maupun tugas yang penting	69,70,71,72	73,74	6
	<i>Google classroom</i> memudahkan saya untuk menyimpan dokumen	75,76,77	78	4

Variabel	Indikator	Nomor Pernyataan		Jumlah Pernyataan
		+	-	
	materi maupun tugas yang penting (<i>real time</i>)			
	<i>Google classroom</i> dapat menghemat waktu dan biaya	79,80,81	82,83	5

(Arifin & Merdekawati, 2020)

Teknik analisis data yang digunakan pertama adalah teknik hitung analisis deskriptif, selanjutnya hasil wawancara akan dianalisis secara kualitatif dengan menggunakan model Miles dan Huberman, yaitu: (i) reduksi data, (ii) penyajian data, (iii) penarikan kesimpulan.

HASIL DAN PEMBAHASAN

Berdasarkan hasil penelitian yang telah dilakukan dengan cara menyebarkan angket kepada siswa dan wawancara kepada guru pendidikan jasmani tentang pembelajaran pendidikan jasmani di masa pandemi covid-19. Angket valid yang berjumlah 51 pernyataan yang diberikan kepada sebanyak 89 orang siswa tentang pembelajaran pendidikan jasmani di masa pandemi covid-19: menggunakan *google classroom*. Didapatkan respon dengan jumlah skor angket yang tersebar pada distribusi frekuensi sebanyak 7 kelas interval, dengan panjang kelas interval sebanyak 20, yaitu pada interval kelas pertama dengan rentang jumlah skor 61-80 terdapat frekuensi sebanyak 2 orang atau sebanyak 2.25%, pada interval kelas kedua dengan rentang jumlah skor 81-100 terdapat frekuensi sebanyak 7 orang atau sebanyak 7.87%, pada interval kelas ketiga dengan rentang jumlah skor 101-120 terdapat frekuensi sebanyak 10 orang atau sebanyak 11.24%, pada interval kelas keempat dengan rentang jumlah skor 121-140 terdapat frekuensi sebanyak 24 orang atau sebanyak 26.97%, pada interval kelas kelima dengan rentang jumlah skor 141-160 terdapat frekuensi sebanyak 26 orang atau sebanyak 29.21%, pada interval kelas keenam dengan rentang jumlah skor 161-180 terdapat frekuensi sebanyak 15 orang atau sebanyak 16.85%, pada interval kelas ketujuh dengan rentang jumlah skor 181-200 terdapat frekuensi sebanyak 5 orang atau sebanyak 5.62%. Untuk lebih jelasnya dapat dilihat pada Tabel 1.

Tabel 1. Distribusi Frekuensi Skor Angket Pembelajaran Pendidikan Jasmani di Masa Pandemi Covid-19

No	Interval Skor Nilai			Frekuensi	Frekuensi Relatif
1	61	-	80	2	2.25%
2	81	-	100	7	7.87%
3	101	-	120	10	11.24%
4	121	-	140	24	26.97%
5	141	-	160	26	29.21%
6	161	-	180	15	16.85%
7	181	-	200	5	5.62%
Jumlah Pernyataan				89	100%

Setelah data di atas didapat, maka data yang telah ditemukan selanjutnya akan direkapitulasi sesuai dengan kebutuhan yang ada. Rekapitulasi ini akan menjawab seberapa besar angka persentase dari respon siswa dan guru dalam menggunakan *google classroom* sebagai media pembelajaran saat pandemi covid-19. Hasil tersebut dijabarkan pada Tabel 2.

Tabel 2. Skor Angket Pembelajaran Pendidikan Jasmani di Masa Pandemi Covid-19

No	Jawaban	Bobot Nilai (S)	Jumlah Frekuensi (F)	Hasil Perkalian (S) x (F)
1	Sangat Setuju	4	1095	4 x 1095 = 5475
2	Setuju	3	1747	3 x 1747 = 6988
3	Kurang Setuju	2	1153	2 x 1153 = 3459
4	Tidak Setuju	1	544	1 x 544 = 1088
			Jumlah Skor	17010

Berdasarkan hasil dari respon siswa tersebut diketahui bahwa semua siswa menyetujui pembelajaran pendidikan jasmani yang dilakukan di masa pandemi covid-19 menggunakan *google classroom*. Karena dari angket yang telah diberikan hampir semua siswa memberikan respon yang positif terhadap penggunaan *google classroom* di masa pandemi covid-19 untuk kegiatan belajar. Tingginya angka persentase yang menandakan respon yang baik dari siswa disebabkan oleh mudahnya belajar dengan mengakses *google classroom* ini, dimana ada beberapa langkah yang harus dilakukan.

Peneliti melakukan penelitian terhadap proses implementasi *google classroom* pada materi pembelajaran pendidikan jasmani di masa pandemi covid-19. Dalam pembelajaran peneliti mengamati secara langsung proses kegiatan pembelajaran menggunakan *google classroom*. *Google classroom* adalah salah satu bentuk ICT produk dari google yang terhubung dengan *Gmail, Drive, Hangout, YouTube* serta kalender, dan lain-lain (Mu'minah & Gaffar, 2020). Banyaknya fasilitas yang disediakan *google classroom* akan memudahkan guru dalam melaksanakan kegiatan pembelajaran (Nurani et al., 2020).

Pembelajaran yang dimaksud bukan hanya di kelas saja, melainkan juga di luar kelas karena peserta didik dapat melakukan pembelajaran dimanapun dan kapanpun dengan mengakses *google classroom* secara dalam jaringan. *Google classroom* membuat kegiatan belajar mengajar menjadi lebih produktif dan bermakna dengan menyederhanakan tugas, meningkatkan kolaborasi dan membina komunikasi (Ali & Zaini, 2020). Pengajar dapat membuat teks memberikan tugas, mengirim masukan, dan melihat semuanya di satu tempat. *Google classroom* juga terintegrasi secara lancar dengan fitur *google* lainnya seperti *google docs* dan *google drive*.

Selanjutnya yaitu wawancara, peneliti melakukan wawancara terhadap informan yang telah ditentukan sebelumnya yaitu guru pendidikan jasmani yang dirasa dapat menjawab dan mendapatkan data yang diinginkan. Pada tahap dokumentasi peneliti merekam hasil wawancara dalam bentuk foto-foto dan data file yang berkaitan dengan penggunaan *google classroom* pada materi pendidikan jasmani dengan tujuan sebagai penguat data wawancara. Sesuai dengan hasil penelitian yang diperoleh peneliti dari informan berikut ini dikemukakan data temuan lapangan yang diperoleh dari wawancara. Berikut hasil wawancara dengan guru mata pelajaran pendidikan jasmani yang diperoleh peneliti:

Apakah bapak/ibu dalam kondisi pandemi saat ini tetap memberikan pembelajaran pendidikan jasmani? "*Selama covid, dari awal iya, itu saya tetap memberi materi kepada anak-anak*".

Metode apakah yang digunakan selama pelaksanaan pembelajaran pendidikan jasmani? "*Metode daring dengan materi yang biasa kami gunakan, karena tidak bisa ke lapangan, dan semua menggunakan materi tanpa praktek*".

Apakah pembelajaran pendidikan jasmani yang diberikan selama pandemi covid-19 sesuai dengan RPP? *“Kalau materinya kurang sesuai dan kurang efektif menurut RPP, karena RPP telah dibuat sebelum pandemi kemarin, jadi, kurang efektif kalau pendidikan jasmani seharusnya masuk ke lapangan, di RPP ada masuk ke lapangan sementara tidak bisa dilakukan di lapangan, saya sebagai gurunya saya usahakan sesuai dengan RPP”*.

Apa saja kesiapan Bapak/bu dalam menghadapi pembelajaran daring dengan menggunakan *google classroom*? *“Kalau untuk kesiapan itu karena kita daring juga, harus kami persiapkan semaksimal mungkin dengan daring menggunakan jaringan yang bagus sehingga pembelajaran dapat maksimal”*.

Apakah proses pelaksanaan pembelajaran *google classroom* masa pandemi Covid-19 sudah berjalan dengan baik Bapak/Ibu? *“Alhamdulillah selama pembelajaran Google classroom lancar dan baik”*.

Bagaimana strategi Bapak/Ibu untuk menyampaikan materi kepada siswa dalam pembelajaran *google classroom* masa pandemi Covid-19? *“Strateginya lebih memberikan video, setelah itu anak-anak disuruh melakukan gerakan yang telah saya berikan contoh melalui video, dan mereka mempraktekkan sendiri. Selanjutnya video akan kembali dikirimkan ke saya jadi saya nanti bisa memberikan nilainya”*.

Bagaimana tanggung jawab siswa dalam mengikuti pembelajaran *google classroom* masa pandemi Covid-19? *“Alhamdulillah kalau untuk tanggung jawab anak-anak itu semuanya bagus, karena pada saat saya suruh mengumpulkan tugas pada tanggal sekian nanti anak-anak itu tepat waktu dalam mengirimnya. Jadi tanggung jawab mereka dalam mengerjakan tugas itu sangat-sangat bagus”*.

Dari penggunaan *google classroom* pada pembelajaran daring, Apakah sudah ada hasil belajar siswa? *“sudah”*.

Apakah *google classroom* ini sudah efektif untuk digunakan pada pembelajaran daring masa pandemi Covid-19 ini? *“Efektif, sudah efektif”*

Apa faktor pendukung dan faktor penghambat dalam memaksimalkan pembelajaran daring dengan menggunakan *Google classroom* pada masa pandemi Covid-19? *“Kalau untuk faktor pendukungnya itu tidak ada, penghambatnya jaringan, selain jaringan penghambatnya sebagian siswa menggunakan hp orang tua, sebagian orang tua ada yang bekerja”*.

Bagaimana kelebihan dan kekurangan dari pembelajaran *Google classroom* pada masa pandemi covid-19 ini? *“Kalau belajar menggunakan google classroom ini mengakibatkan pembelajaran yang harus dilakukan secara praktek menjadi kurang efektif”*.

Kesulitan apa yang Bapak/Ibu alami selama menggunakan *Google classroom* dalam pembelajaran PJOK daring? *“Kesulitannya pada praktek saja”*.

Sejak terjadinya pandemi covid 19, pembelajaran pendidikan jasmani yang diadakan di MTs Fadhilah Pekanbaru dilakukan dengan cara memberikan materi pembelajaran menggunakan *google classroom*. Metode pembelajaran ini menggunakan pembelajaran daring dengan cara membentuk *group* dalam *google classroom* untuk memberikan tugas dan materi pelajaran walaupun kurang efektif jika berdasarkan RPP sebelum pandemi covid 19 karena harus praktek ke lapangan. Sebelum belajar guru berusaha semaksimal mungkin dalam mempersiapkan materi pembelajaran agar belajar siswa menjadi maksimal, sehingga pembelajaran pendidikan jasmani melalui *google classroom* dapat berjalan dengan baik dan lancar.

Saat belajar daring menggunakan *google classroom* ada beberapa faktor penghambat siswa dalam belajar yaitu masih ada siswa yang belum punya *handphone* sendiri, bergantung pada *handphone* orang tua, dan juga kuota internet menjadi kendalanya. Kekurangan dalam menggunakan *google classroom* ialah jika belajar menggunakan *google classroom* ini mengakibatkan pembelajaran yang harus dilakukan secara praktek menjadi kurang efektif sehingga dalam belajar *google classroom* kesulitannya hanya ada pada praktek saja karena sulit untuk mengarahkan siswa. Sarifudin et al. (2022) mengatakan jika *google classroom* dapat membantu memudahkan guru dan siswa dalam melaksanakan kegiatan belajar mengajar dengan lebih mendalam. Hal ini disebabkan karena baik siswa maupun guru dapat mengumpulkan tugas, mendistribusikan tugas, dan berdiskusi tentang pelajaran dimanapun tanpa terikat batas waktu atau jam pelajaran.

Penelitian yang relevan dengan penelitian yang dilakukan [Gunawan et al. \(2022\)](#) yang menemukan bahwa kepuasan siswa terhadap penggunaan *google classroom* sebagai media pembelajaran pendidikan jasmani pada masa pandemi covid-19 berada pada kategori “tidak memuaskan”. Hal yang sama juga disampaikan oleh [Anggorowati et al. \(2022\)](#) yang menyatakan jika aplikasi yang sering digunakan dalam pembelajaran pendidikan jasmani adalah *Google classroom*, *Zoom*, *WhatsApp*, *Duo*, *Google Meet*, dan *Siakad Cloud*. Namun, [Anggorowati et al. \(2022\)](#) menyampaikan tidak semua *handphone* mahasiswa memiliki aplikasi tersebut sehingga terkadang mengalami kendala dalam penggunaannya sehingga menimbulkan ketidakmaksimalan hasil belajar.

Adapun kelebihan *google classroom* ini memiliki fitur yang menarik dan menjadi satu tempat untuk memberikan materi pembelajaran, tugas latihan, dan sebagai wadah untuk mengumpulkan tugas tanpa perlu keluar rumah di masa pandemi covid sekarang ini. Tetapi masih ada kendala-kendala yang dihadapi dalam penggunaan media *google classroom* ini berupa keterbatasan kuota internet dan masih ada siswa yang belum memahami materi pembelajaran yang diberikan lewat *google classroom* dan belum begitu memahami penggunaan *google classroom*.

KESIMPULAN

Berdasarkan hasil penelitian, maka diperoleh kesimpulan dalam penelitian ini yaitu pembelajaran pendidikan jasmani di masa pandemi covid-19 dalam menggunakan *google classroom* mencapai nilai persentase skor angket sebesar 93,69%. Sedangkan respon Guru menunjukkan bahwa penggunaan *google classroom* pada pembelajaran pendidikan jasmani di masa pandemi covid-19 sekarang ini sangat membantu dalam proses pembelajaran daring dan sudah dilaksanakan dengan baik oleh guru pendidikan jasmani di MTs Fadhilah Pekanbaru. Meskipun hasil penelitian mengungkapkan respon yang baik dalam penggunaan *google classroom*, penelitian ini memiliki keterbatasan yaitu pada subjek penelitian dan hanya meneliti penggunaan satu media yaitu *google classroom* sehingga jangkauan penelitian terbatas. Hasil yang didapat diharapkan mampu

menjadikan rujukan untuk penelitian lanjutan terutama dalam penggunaan media belajar di masa pandemi covid-19 pada pembelajaran pendidikan jasmani sehingga hasil pembelajaran lebih maksimal.

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Penggunaan media audio-visual dalam meningkatkan hasil belajar gerakan senam *round off*

The use of audio-visual media in improving learning outcomes of round off gymnastics movements

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ABSTRAK

Gerakan *round off* merupakan gerakan yang cukup sulit diperagakan oleh mahasiswa, hal ini disebabkan oleh kurangnya pengembangan pembelajaran senam lantai khususnya penggunaan media pembelajaran. Penelitian ini bertujuan untuk mengetahui pengaruh penggunaan media audio-visual dalam meningkatkan hasil belajar gerakan senam *round off*. Penelitian ini melibatkan 42 mahasiswa sebagai sampel penelitian. Metode yang digunakan adalah eksperimen dimana dilakukan perlakuan dalam 12 kali pertemuan dengan teknik analisa data menggunakan pre-test dan post-test. Instrumen penelitian menggunakan *round off* test yang terdiri tiga tahap: fase awal, fase utama, dan fase akhir. Berdasarkan hasil penelitian bahwa terdapat pengaruh penggunaan media audio-visual terhadap hasil belajar gerakan senam *round off*, dan terjadi peningkatan sekitar 30%. Maka berdasarkan hasil penelitian, penggunaan media audio-visual efektif untuk meningkatkan hasil belajar gerakan senam *round off*. Hasil penelitian menunjukkan hal yang positif bagaimana penggunaan media audio-visual bisa menjadi solusi dan alternatif dalam belajar gerakan senam lantai, namun masih terdapat beberapa keterbatasan. Diharapkan bagi peneliti selanjutnya dapat mengembangkan dengan menambah jumlah kelompok sampel dan melibatkan kelompok pembanding sehingga mendapatkan temuan baru di lapangan.

Kata Kunci: Audio-visual, hasil belajar; senam; *round off*

ABSTRACT

The *round off* movement is a movement that is quite difficult to demonstrate by students, this is due to the lack of development of floor gymnastics learning, especially the use of learning media. This study aims to determine the effect of using audio-visual media in improving the learning outcomes of *round off* gymnastics movements. This study involved 42 students as research samples. The method used is an experiment where treatment is carried out in 12 meetings with data analysis techniques using pre tests and post tests. The research instrument used a *round off* test consisting of three stages: the initial phase, the main phase, and the final phase. Based on the results of the study that there is an effect of using audio-visual media on the learning outcomes of *round off* gymnastics movements, and there is an increase of about 30%. So based on the results of the study, the use of audio-visual media is effective for improving the learning outcomes of *round off* gymnastics movements. The results of the study show positive things how the use of audio-visual media can be a solution and alternative in learning floor gymnastics movements, but there are still some limitations. It is hoped that future researchers can develop by increasing the number of sample groups and involving comparison groups so as to get new findings in the field.

Keywords: Audio-visual, learning outcomes; gymnastics; *round off*

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PENDAHULUAN

Saat ini kita berada di era dimana teknologi sudah merambah ke semua bidang kehidupan manusia. Kita semua harus menyesuaikan diri dengan keadaan dan tantangan yang muncul di era globalisasi ini. Pada bidang pendidikan tentunya ada tuntutan untuk mengembangkan sumber daya dan potensi diri. Menurut [Taqwim et al. \(2020\)](#) pendidikan adalah hal yang dibutuhkan oleh manusia dalam menjalani kehidupan, dengan itu kita sebagai manusia bisa mengembangkan diri, menambah wawasan dan pengetahuan, belajar keterampilan dan menghasilkan kreativitas dalam diri sendiri. Salah satu cara yang bisa dilakukan untuk mendapatkan sumber daya mumpuni tentunya melalui proses pendidikan yang berkualitas, dalam konteks ini adalah melalui pendidikan jasmani ([Firmansyah, 2016](#)). Pendidikan jasmani merupakan komponen tidak terpisahkan dari kurikulum pendidikan secara umum yang tujuan utamanya bisa mengembangkan berbagai aspek, termasuk kesehatan baik secara fisik dan psikis, meningkatkan kebugaran jasmani, emosional, sosial, berfikir logis dan mengembangkan berbagai aspek keterampilan lainnya ([Melyza dan Aguss, 2021](#)). [Raibowo dan Nopiyanto \(2020\)](#) menjelaskan bahwa dengan menerapkan proses belajar tersebut diharapkan kita semua dapat menjalankan pola hidup sehat sepanjang hayat, contohnya adalah melalui aktivitas olahraga senam.

Olahraga senam berpotensi dalam membantu meningkatkan kemampuan gerak motorik, karena gerakannya melibatkan seluruh komponen anatomi tubuh ([Culjak et al., 2014](#); [Wang et al., 2013](#)). Senam merupakan aktivitas fisik yang dapat membantu mengoptimalkan perkembangan gerak terutama dalam membangun pengalaman gerak ([Forest et al., 2018](#)). Senam dapat meningkatkan ketahanan, kekuatan, kelenturan, kelincahan, koordinasi, dan pengendalian tubuh ([Werner, 2012](#)). Komponen fisik tersebut dibutuhkan untuk menampilkan gerakan senam yang terkoordinasi dengan baik, karena setiap aspek fisik mempunyai peranan masing-masing dalam setiap gerakan senam lantai. Contohnya dalam melakukan gerakan *round off*, dituntut untuk mempunyai kelenturan dan kekuatan otot lengan yang prima, agar bisa menampilkan setiap fase gerakannya dengan maksimal. Gerakan-gerakan pada senam lantai sangat berpengaruh pada aspek motorik khususnya dalam mengembangkan pengalaman gerak ([Permatasari et al., 2012](#)).

Cabor senam terdiri dari beberapa jenis, salah satunya adalah senam lantai yang latihannya dilakukan di atas matras ([Anwar, 2018](#)). Gerakan-gerakannya terdiri dari banyak variasi seperti sikap menumpu dengan tangan atau kaki, melompat, mengguling ke depan dan ke belakang, berputar di udara, meloncat dan lain sebagainya ([Parlina et al., 2021](#)). Pada intinya gerakan senam itu bagaimana bisa mempertahankan sikap seimbang saat melakukan gerakannya ([Mabrur et al., 2021](#)). [Daharis dan Rahmadani, \(2016\)](#) berpendapat gerakan yang diajarkan dalam senam lantai sangat beragam mulai dari gerakan yang mudah hingga gerakan yang sulit, sesuai dengan prinsip latihan. Pada pembelajaran senam lantai, pertama kali dikenalkan dengan gerakan yang mudah, seperti guling ke depan, guling ke belakang, meroda, lalu gerakan keseimbangan, sehingga setelah mampu melakukan gerakan tersebut dengan baik barulah dilatih dengan gerakan yang lebih sulit secara bertahap seperti gerakan *hand stand*, *kopstand*, *stut*, *round off*, *front and back handspring* hingga gerakan salto. [Prastyo \(2015\)](#) menyatakan dalam cabor senam terdapat gerakan-gerakan yang sulit dilakukan, untuk itu seseorang harus memiliki kondisi fisik yang prima seperti keseimbangan dan koordinasi gerakan yang baik.

Salah satu gerakan senam lantai yang diajarkan adalah *round off*. [Wahyuni \(2015\)](#) menerangkan gerakannya terdiri dari beberapa fase yaitu, fase awal, fase utama, dan

fase akhir. Materi *round off* diajarkan dengan menerapkan prinsip latihan dari gerakan yang mudah sampai pada gerakan yang sulit yang semakin lama intensitasnya semakin tinggi (Hadjarati & Haryanto, 2020). Gerakan *round off* membutuhkan koordinasi yang baik antar masing-masing fase gerakannya untuk mendapatkan gerakan yang dinamis dan terlihat indah (Daharis et al., 2021). Maka dibutuhkanlah program latihan yang berkesinambungan untuk melatih gerakan *round off* agar bisa dikuasai dengan sempurna. Hadjarati dan Haryanto (2020) menyatakan bahwa untuk dapat menampilkan gerakan *round off* tentunya terlebih dahulu harus dipelajari teori gerakannya, memahami fase-fase gerakannya, dan setelah itu baru melatih keterampilan gerakan. Materi gerakan *round off* harus dilatih dengan menggabungkan unsur teknik dan fisik supaya menghasilkan gerakan yang terkoordinasi dengan baik (Daharis & Rahmadani, 2018). Gerakan *round off* ini harus dilakukan dengan pengawasan, karena dipandang sebagai salah satu gerakan yang berbahaya dan sebagian besar mahasiswa takut untuk melakukannya ataupun mencobanya sehingga diperlukan penggunaan media pembelajaran yang secara langsung dapat diamati sebelum melakukan praktek secara langsung (Permatasari et al., (2012).

Pengembangan media pembelajaran dapat dilakukan salah satunya adalah menggunakan media audio-visual. Media pembelajaran audio-visual berbasis teknologi dan dapat digunakan sebagai sarana alternatif dalam mengoptimalkan proses pembelajaran, dikarenakan beberapa aspek antara lain: (i) mudah dikemas dalam proses pembelajaran, (ii) lebih menarik untuk pembelajaran, dan (iii) dapat di-edit (diperbaiki) setiap saat (Haryoko, 2012). Media pembelajaran berbasis audio-visual menyampaikan materinya melalui gambar-gambar dan suara (Wahyuni, 2015). Media pembelajaran audio-visual terbukti memiliki dampak dalam olahraga, seperti sepakbola (Andrianto, 2015; Taufik & Gaos, 2019), pencak silat (Budiman, 2021; Kurniawan, 2018), bola voli (Munhamir et al., 2016), bola basket (Arwanda et al., 2021; Ramadhan et al., 2020), atletik (Anggraini et al., 2022), dan futsal (Muarif et al., 2021).

Penelitian ini didasari pada pengembangan penelitian pada olahraga senam, seperti yang dilakukan oleh Prastyo (2015) yang membahas tentang efektivitas penerapan media audio-visual dalam mempelajari gerakan meroda. Arifin dan Febriyanti (2013) yang menjelaskan pengaruh media audio-visual dalam meningkatkan penguasaan gerakan roll ke depan, dan Wiguna (2017) yang menjelaskan penggunaan media audio-visual dalam meningkatkan hasil belajar guling belakang. Namun, peneliti belum menemukan suatu penelitian yang membahas bagaimana menerapkan media audio-visual dalam mempelajari gerakan senam *round off*. Oleh karena itu peneliti ingin mencoba menggunakan pembelajaran berbasis media audio-visual untuk melihat sejauh mana efektivitasnya dalam membantu mempelajari gerakan senam *round off*. Ini menjadi suatu kajian penting dimana peneliti akan mendapat suatu pemahaman baru dari hasil penelitian ini. Tujuan penelitian ini dilakukan untuk mengetahui seberapa besar pengaruh dari penggunaan media audio-visual dalam meningkatkan hasil belajar gerakan senam *round off*. Hasil temuan dari penelitian ini nantinya bisa diaplikasikan langsung dalam pembelajaran senam lantai khususnya pada gerakan *round off*.

METODE

Penelitian ini dilaksanakan di kampus Universitas Islam Riau pada Program Studi Pendidikan Jasmani dan dilakukan selama 3 bulan. Penelitian ini tergolong penelitian kuantitatif dengan menggunakan eksperimen dalam 12 kali pertemuan. Sesuai yang dikemukakan oleh Lahinda et al. (2020) bahwa dengan menerapkan 12-16 kali latihan sudah bisa meningkatkan penguasaan gerakan cabang olahraga. Variabel bebas pada

penelitian ini adalah media audio-visual sedangkan variabel terikatnya adalah gerakan *round off*.

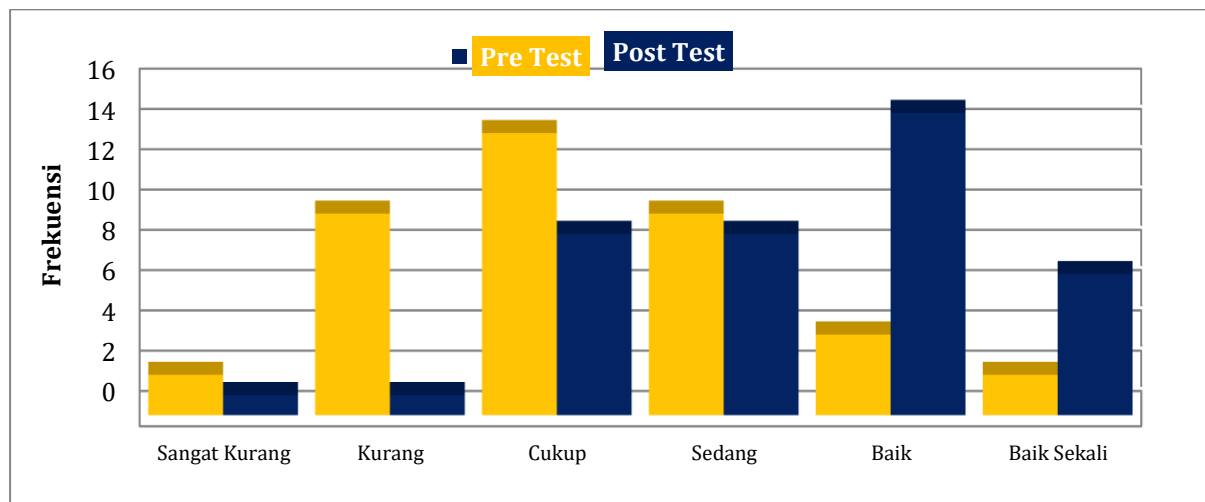
Teknik pengambilan sampel adalah dengan menggunakan *total sampling*. Artinya, seluruh populasi yang berjumlah 42 mahasiswa dijadikan sebagai sampel penelitian. Instrumen penelitian menggunakan *round off test*. Tes ini mempunyai beberapa indikator penilaian. Pengumpulan data dalam penelitian ini dilakukan dari hasil tes pengukuran. Tes keterampilan *round off* diamati secara morfologis yaitu dengan mengamati dari fase awal, utama dan akhir. Analisis secara kuantitatif dilakukan untuk menentukan apakah terdapat pengaruh penggunaan media audio-visual dalam meningkatkan hasil belajar gerakan senam *round off*. Untuk pengujian hipotesis diolah dengan analisis uji t menggunakan *pre test* dan *post test*.

HASIL DAN PEMBAHASAN

Sesuai dengan permasalahan yang terdapat pada bagian terdahulu yang telah diuraikan, maka dalam bagian ini akan dilakukan pemaparan dari hasil penelitian. Data-data diperoleh dari hasil tes dan pengukuran terhadap gerakan senam *round off*. Tes dilakukan untuk melihat perbedaan skor *round off* dari hasil *pre-test* dan *post-test*. Berikut adalah hasil tes *round off* dengan menggunakan media audiovisual, untuk lebih jelasnya dapat dilihat pada Tabel 1 dan Gambar 1

Tabel 1. Distribusi Frekuensi Hasil Tes *Round off*

<i>Pre-Test</i>	<i>Post-Test</i>	Golongan
2	1	Kurang Sekali
10	1	Kurang
14	9	Cukup
10	9	Sedang
4	15	Baik
2	7	Baik Sekali
$\Sigma f = 42$	$\Sigma f = 42$	



Gambar 1. Grafik Hasil Tes *Round off*

Berdasarkan Tabel 1 dan Gambar 1, ternyata terdapat perbedaan nilai rata-rata pada saat *pre test* dan *post test*. Semua data yang diperoleh dari hasil tes dan pengukuran dalam penelitian ini, terlebih dahulu dicek dan dianalisa secara kuantitatif. Selanjutnya data-data tersebut diuji dengan menggunakan t-test untuk sampel sejenis. Kemudian nilai t hitung yang diperoleh dari hasil uji t, dibandingkan dengan nilai t tabel dengan df (N-1). Apabila t hitung > t tabel, maka dapat disimpulkan terdapat peningkatan yang

signifikan terhadap hasil senam *round off* dengan menggunakan media audio-visual. Tapi, jika $t_{hitung} < t_{tabel}$, artinya tidak ada perbedaan yang signifikan dari kedua metode tersebut. Berikut data yang diperoleh dari analisis hasil uji t dapat dilihat pada Tabel 2.

Tabel 2. Hasil Analisis Data

Mean		t_{hitung}	df (N-1)	t_{tabel}	Kesimpulan
Pre-Test	Post-Test				
7.15	9.08	8.51	41	1.3	Terdapat Peningkatan

Dari hasil analisis data diperoleh nilai rata-rata *pre-test* adalah 7.15 dan *post-test* 9.08. Itu artinya terdapat peningkatan dari perbedaan kedua hasil tersebut. Terjadi peningkatan sekitar 30%. Nilai t hitung yang diperoleh adalah 8.51 lebih besar dari t tabel 1.3. Dengan demikian hipotesis dapat diterima, terbukti berdasarkan hasil penelitian penggunaan media audio-visual efektif untuk meningkatkan hasil belajar gerakan senam *round off*.

Berdasarkan penelitian-penelitian yang telah dilakukan sebelumnya penggunaan media audio-visual terbukti efektif untuk meningkatkan hasil belajar gerakan-gerakan senam lantai (Wahyuni, 2015). Hasil penelitian sebelumnya menerangkan bahwa media audio-visual efektif dalam meningkatkan hasil belajar gerakan guling ke depan (Anjarrio & Purnama, 2020; Amanuloh, 2015; Arifin & Febriyanti, 2013) dan guling belakang (*back roll*) (Wiguna, 2017). Kemudian Prastyo (2015), Anwar (2018), dan Racutisyah dan Sudarso (2016) menjelaskan penggunaan media audio-visual efektif untuk meningkatkan hasil belajar materi meroda.

Dalam praktek senam gerakan *round off* tentunya terlebih dahulu harus dipelajari teori gerakannya, memahami fase-fase gerakannya, dan setelah itu baru melatih keterampilan gerakan. Diperlukan latihan yang panjang secara *continue* agar bisa menguasai keterampilan gerakan tersebut, dan untuk menunjangnya, dibutuhkan kondisi fisik yang prima, di antaranya: kelentukan, kekuatan otot lengan, koordinasi gerak. Selain itu, gerakan senam *round off* bisa dipelajari dengan menggunakan media audio-visual. Media ini mempunyai unsur suara dan unsur gambar. Jenis media ini mempunyai kemampuan yang lebih baik, karena meliputi kedua jenis media auditif (mendengar) dan visual (melihat). Media audio-visual merupakan sebuah alat bantu audiovisual yang berarti bahan atau alat yang dipergunakan dalam situasi belajar untuk membantu tulisan dan kata yang diucapkan dalam menularkan pengetahuan, sikap, dan ide. Penelitian telah membuktikan bahwa penggunaan media audio-visual efektif dalam meningkatkan hasil belajar gerakan senam *round off* pada mahasiswa Program Studi Pendidikan Jasmani. Penggunaan media audio-visual dalam pembelajaran senam *round off* bisa membantu tenaga pengajar dalam penyampaian materi pembelajaran dengan cara yang lebih kreatif dan inovatif.

KESIMPULAN

Berdasarkan analisis data dan pembahasan, dapat disimpulkan hasil pengujian hipotesis menunjukkan bahwa terdapat peningkatan yang signifikan antara hasil *pre-test* dan *post-test* dari hasil tes *round off* dari kelompok sampel dengan menggunakan media audio-visual selama dalam proses *treatment*. Hasil analisa data juga menunjukkan terdapat peningkatan nilai rata-rata pada kedua tes tersebut. Nilai rata-rata *pre-test* adalah 7.15 dan *post-test* 9.08. Terjadi peningkatan sekitar 30%. Selanjutnya nilai t -hitung yang diperoleh adalah 8.51 lebih besar dari t -tabel 1.3.

Dengan demikian hipotesis dapat diterima, dan terbukti penggunaan media audio-visual efektif untuk meningkatkan hasil belajar gerakan senam *round off*. Hasil penelitian menunjukkan hal yang positif bagaimana penggunaan media audio-visual bisa menjadi solusi dan alternatif dalam belajar gerakan senam lantai, namun masih terdapat beberapa keterbatasan. Diharapkan bagi peneliti selanjutnya dapat mengembangkan dengan menambah jumlah kelompok sampel dan melibatkan kelompok pembanding sehingga mendapatkan temuan baru di lapangan.

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