

# Textbook still useful in the covid-19 era: Investigation perceptions of students at the university

Heriansyah<sup>1abde\*</sup>, Edi Setiawan<sup>2abcd</sup>, Hasanuddin Jumareng<sup>1abd</sup>,  
Abdul Saman<sup>1abe</sup>, Ruslan Abdul Gani<sup>3cd</sup>

Universitas Halu Oleo, Indonesia<sup>1</sup>  
Universitas Suryakencana, Indonesia<sup>2</sup>  
Universitas Singaperbangsa Karawang, Indonesia<sup>3</sup>

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## ABSTRACT

The Covid-19 era presents many obstacles for students to study and gain knowledge about physical education, so it is necessary to use textbooks thus enabling them to master the subject matter more optimally. The purpose of this study is to determine students' perceptions at the university level about physical education learning model textbooks during Covid-19. This research uses mixed methods. Twenty five subjects from sports students at Halu Oleo University are willing to contribute to this research. Quantitative data collection techniques are through questionnaires while qualitative data collection is through in-depth interviews. The results of the research quantitatively found that most of the subjects had a very agreeable perception of the use of textbooks in the Covid-19 era. While the results of qualitative research indicate that the majority of subjects give the perception that physical education learning model textbooks have quality material content, use of language, and good design. In addition, they consider that physical education learning model textbooks are pedagogical tools that have many benefits when used during the Covid-19 pandemic, one of which is to increase knowledge. Therefore, one of the efforts that can be made so that sports students have the willingness to learn during the Covid-19 pandemic is to provide quality textbooks.

**Keywords:** Textbooks; student perception; physical education; covid-19



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**Corresponding Author:** Heriansyah, Faculty of Teacher Training and Education, University of Halu Oleo, Kendari, Indonesia  
Email: heriansyah@uho.ac.id

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## INTRODUCTION

In the era of Covid-19, physical education learning cannot be done in theory or practice in the campus area (Kim, Dam, Hyuk, Cho & Park, 2020; Djalante et al., 2020; Mutton, 2020; Moorhouse, 2020; Jumareng, Setiawan, Patah, Aryani & Asmuddin, 2021). As letter number 4 of 2020 concerning policies for implementation of education in the emergency period of the spread of Covid-19 and circular letter of the Ministry of Education and Culture of Higher Education No. 1 of 2020 that is about face-to-face learning carried out in schools from the elementary level Junior High, High School (Nurulfa, Motto, Dis, Tangkudung,

Lubis & Junaidi, 2020; Hambali et al., 2020), to University transferred to learning from home using online media (Murphy, 2020). With the change in the learning system, from initially face-to-face to online-based, it causes students to find the difficult to study each material in the subject of physical education learning models specifically for relatively difficult material. With the emergence of these problems, to optimize the physical education learning model lecture material can be learned by students, a lecturer needs a teaching material (e.g., textbooks) to support maximum learning outcomes.

The textbook has long been a critical component of the education system at all levels (Grimald, Mallick, Waters & Baraniuk, 2019), and are often thought to guide the teacher's daily practice and to provide the main teaching material that students experience (Harwood, 2017). Textbooks must be arranged systematically, clearly, and in detail, so that the learning objectives will be achieved as expected. Textbooks contain meaning as textbooks in certain fields of study and are standard books compiled by experts, teachers, or lecturers in their respective fields for instructional, which are equipped with suitable teaching facilities and are easily understood by readers. Textbooks have often been used in education to integrate knowledge and most importantly to improve student learning outcomes (Eltahir, Al-Qatawneh, & Alsalhi, 2019). Hence, a textbook can be described as a mediator between the intended curriculum as official policy and the implemented curriculum by the teachers (Van den Ham & Heinze, 2018). Previous studies conducted in Australia reported that in higher education institutions almost all courses such as Science, Mathematics, Business and Education claim the use of textbooks as important for students. Textbooks are basically a guidance or reference for lecturers to carry out a learning activity, as well as a competency substance that should be taught to students (Sievert, Van Den Ham, Niedermeyer & Heinze, 2019). Textbooks can also be the learning media that are used by lecturers as intermediaries in conveying all information so that they can stimulate attention, enthusiasm, interest, and motivation from students. Thus, textbooks and the learning process have a close correlation because they complement one another, without textbooks the learning process will be less effective. Previous studies reported that electronic textbooks have a positive effect on physical fitness (Kubiyeva, Akhmetova, Islamova, Mambetov, Aralbayev & Sholpankulova 2020). In addition, the use of a textbook in learning activities can develop the cognitive and psychomotor domains owned by students, thus lecturers are obliged to provide textbooks for them (Gazali & Cendra, 2020).

Although there are many advantages provided by using textbooks when studying, several previous studies still found a gap, namely that textbooks are not widely read by students and survey results reported that 64% of students in Florida do not buy textbooks (Hilton, 2016). In the US, textbooks are still being analyzed about their effectiveness (Koedel, Li, Polikoff, Hardaway & Wrabel, 2017). According to Johansson (2016) textbooks can only be considered an important tool for teaching and learning, but also as a barrier if some students do not have textbooks. The next gap was reported by Milligan, Tikly, Williams, Vianney and Uworwabayeho (2017), that textbooks are a school system that is no longer effective to use. The latest study tries to test the effectiveness of some textbooks that are applied to grades four to six in elementary school as an effort to progress student learning. The results of the study found that the five textbooks did not affect children's learning progress in reading (Dockx, Bellens, & De Fraine, 2020). South and East African country highlight the lack of evidence on the impact of textbook access on student achievement at the primary school level (Milligan, Tikly, Williams, Vianney & Uworwabayeho, 2017), and the most important gap was the lack of textbook availability in the field of sports and physical education for students (Gazali & Cendra, 2020). Therefore the importance of clearly expressing the use of textbooks in the learning process.

Several previous studies on textbooks that have been researched (Lau, Lam, Kam, Nkhoma, Richardson & Thomas, 2018; Gazali & Cendra, 2020; Reichenberg, 2016), example effects of mathematics textbooks on the development of primary school children's adaptive expertise in arithmetic (Sievert, Van Den Ham, Niedermeyer & Heinze, 2019). Research by Kubiyeva, Akhmetova, Islamova, Mambetov, Aralbayev and Sholpankulova (2020), tried to test the effectiveness of textbooks involving 28 young people and the results of their study found that textbooks had a positive effect on improving physical fitness. Then Lee, Lee, and Jeong (2020) conducted research on the effects of digital textbooks on students' academic performance, academic interests, and learning skills. The results of his research showed that textbooks cause an increase in students' academic performance. In addition, Harwood (2017) conducted research on what we can learn from

mainstream education textbook research. However, no studies previously reported investigating students' perceptions at the university level about textbooks learning models of physical education during Covid-19 through mixed methods research. In addition, research on textbooks in previous studies only focused on general education and a little literature that related it to the context of physical education learning, so this research is important to do to add references and most importantly provide information for lecturers, teachers, students about the importance of using textbooks in learning. Therefore, the purpose of this study is to investigate students' perceptions at the university level about textbooks learning models of physical education during Covid-19.

## METHOD

Mixed-methods (quantitative and qualitative) were used as a methodological approach in this study (Khoshshima & Toroujeni, 2017). Mixed is a method that combines quantitative and qualitative research to solve a problem in research.

## Subject

The subjects in this study came from students of the physical education faculty at Halu Oleo of University. The subjects of the students used in this study came from several areas in Kendari, (Indonesia) who are currently studying at Halu Oleo University. To maintain the identity of the subjects, the researchers gave them a symbol of S. For the profile of the subject presented in Table 1.

Table 1. Profile of The Subject

Explanation	Frequency	%
Gender		
Men	15	60
Women	10	40
Age		
19 years	7	28
20 years	10	40
21 years	8	32
Semester		
1	3	40
3	10	28
5	7	20
7	5	12

## Research Procedure

This research was conducted in March 2021. This research has received permission from the Halu Oleo University committee with number E 05/03/2022 and gets approval from the parents of students. In addition, this study has followed the Ethics guidelines from the World Medical Association (Helsinki Declaration). Before the research is carried out, the subject is asked to make a written statement regarding the willingness to participate in all activities in this study.

## Data Collection Technique

The data obtained from this quantitative and qualitative research. Quantitative data were obtained from filling questionnaires, with indicators of questions related to book content: (Q1) The subject matter in this textbooks is very good quality, (Q2) This textbook makes my motivation to study high, (Q3) This textbook is effectively used in the era of Covid-19, (Q4) This textbook makes my physical education grades to be better. Then the indicator questions related to the language of the textbooks: (1) the language in this textbooks can be easily understood, (2) the language in this textbooks conforms to the standard "Kamus Besar Bahasa Indonesia", (3) the use of English in this textbooks has good grammar. Indicator questions related to textbook design: (1) the design of this textbook is very nice, (2) the design of this textbook makes my reading interest high. To fill out the questionnaire, can use a Likert scale from a value of 1 (Strongly Disagree), value of 2

(Disagree), value of 3 (Neutral), value of 4 (Agree) to a value of 5 (Strongly Agree). The distribution of questionnaires is done by sending files using via WhatsApp to the subjects, so that they can fill out the questionnaire at their own home, then after filling out the questionnaire they are obliged to send it back to the research team. While the qualitative data collection technique was carried out through in-depth interviews with the subject. Interviews were conducted via WhatsApp with a duration of 20-30 minutes per person, and interviews could be completed within two days. In addition, in-depth interviews with the subjects used Indonesian.

### Statistic Analysis

Quantitative data analysis using IBM SPSS 25.0 to find descriptive data (Mean±SD) and percentage (Jumareng, Setiawan, Patah, Aryani & Asmuddin, 2021). Meanwhile, statistical analysis for qualitative research data includes: (1) Interviews are transcribed word by word. (2) The transcribed interviews are read repeatedly by the author to get a broad understanding. (3) The texts are arranged based on a description of the experience and then each given label. (4) Data are sorted based on categorization, coding, and highlighting based on similarities. (5) A collection of similar phrases grouped and arranged into the initial theme. (6) Examining the meanings of the phenomenon being studied. (7) Arranging the data into themes with a description of each theme (Rasmitadila et al., 2020).

## RESULTS AND DISCUSSION

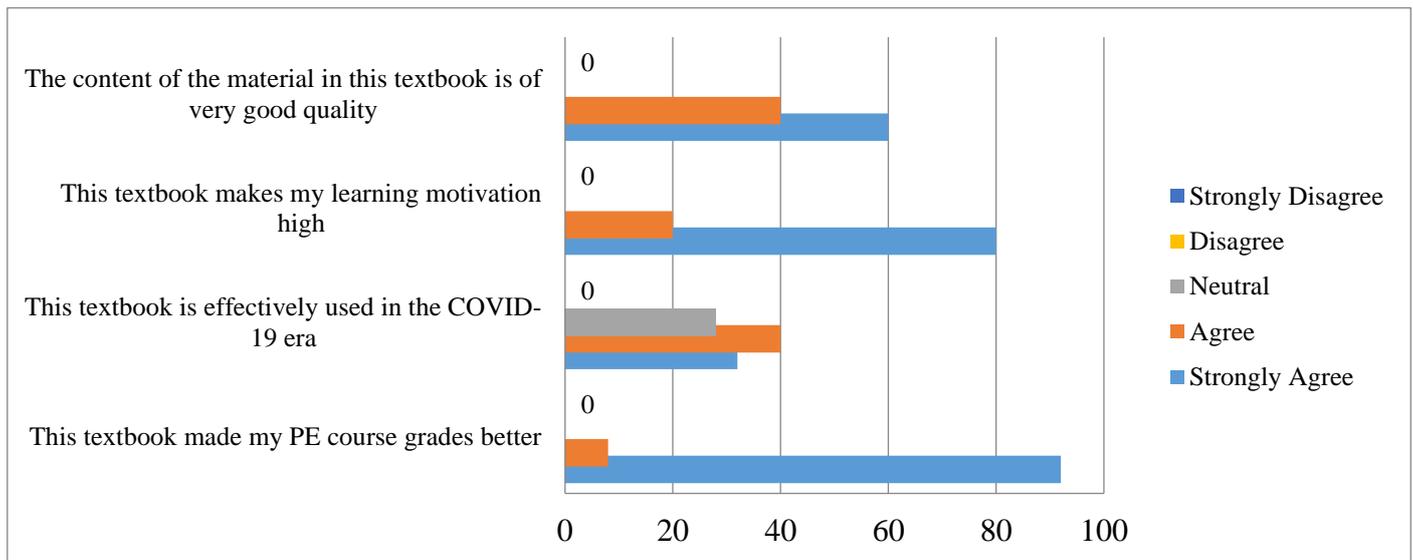
The results of this quantitative study found that students' perceptions of aspects of textbook content on the Q1 indicator showed high results ( $4.60 \pm 0.50$ ) with the percentage of strongly agree 60%, agree 40%, neutral 0%, disagree 0%, strongly disagree 0%. The Q2 indicator scores ( $4.80 \pm 0.41$ ) with the percentage of strongly agree 80%, agree 20%, neutral 0%, disagree 0%, strongly disagree 0%. Then for the Q3 indicator ( $4.04 \pm 0.79$ ) with the percentage of strongly agree 32%, agree 40%, neutral 28%, disagree 0%, strongly disagree 0%. While the Q4 indicator scored ( $4.92 \pm 0.28$ ) with a percentage of strongly agree 92%, agree 8%, neutral 0%, disagree 0%, strongly disagree 0% (Table 2). From these data, it can be interpreted that the majority of students give an assessment that strongly agrees with the content aspect of the physical education learning model textbook (Fig. 1).

Other results in this study found that students' perceptions of aspects of using Indonesian and English in textbooks showed high results on the Q1 indicator ( $4.36 \pm 0.64$ ) with the percentage of strongly agree 44%, agree 48%, neutral 8%, disagree 0%, strongly disagree 0%. The Q2 indicator scores ( $4.76 \pm 0.44$ ) with a percentage of strongly agree 76%, agree 24%, neutral 0%, disagree 0%, strongly disagree 0%. Then for the Q3 indicator ( $3.84 \pm 0.69$ ) with the percentage of strongly agree 16%, agree 52%, neutral 32%, disagree 0%, strongly disagree 0% (Table 3). The data proves that the majority of students agree on the language aspect used in the physical education learning model textbook (Fig. 2).

Subsequent findings in this study indicate that students' perceptions of the aspects of textbook design on the Q1 indicator ( $4.72 \pm 0.46$ ) with the percentage of strongly agree 72%, agree 28%, neutral 0%, disagree 0%, strongly disagree 0% and on the Q2 indicator get value ( $4.33 \pm 0.70$ ) with the percentage of strongly agree 48%, agree 40%, neutral 12%, disagree 0%, strongly disagree 0% (Table 4). These data indicate that the majority of students gave a perception of strongly agreeing on the design of the physical education learning model textbook (Fig. 3).

**Table 2. Students' Perceptions of Textbook Content (N=25)**

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	M(SD)
Q1: The content of the material in this textbook is of very good quality.	15 (60%)	10 (40%)	0 (0%)	0 (0%)	0 (0%)	4.60±(0.50)
Q2: This textbook makes my learning motivation high.	20 (80%)	5 (20%)	0 (0%)	0 (0%)	0 (0%)	4.80±(0.41)
Q3: This textbook is effectively used in the COVID-19 era.	8 (32%)	10 (40%)	7 (28%)	0 (0%)	0 (0%)	4.04±(0.79)
Q4: This textbook made my PE course grades better.	23 (92%)	2 (8%)	0 (0%)	0 (0%)	0 (0%)	4.92±(0.28)



**Figure 1. Results of Percentage of Students' Perceptions of Textbook Content**

**Table 3. Students' Perceptions of Textbook Language (N=25)**

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	M(SD)
Q1: The language in this textbook is easy to understand.	11 (44%)	12 (48%)	2 (8%)	0 (0%)	0 (0%)	4.36±(0.64)
Q2: The language in this textbook is in accordance with the standards of Kamus Besar Bahasa Indonesia (KBBI).	19 (76%)	6 (24%)	0 (0%)	0 (0%)	0 (0%)	4.76±(0.44)
Q3: The English in this textbook has good grammar.	4 (16%)	13 (52%)	8 (32%)	0 (0%)	0 (0%)	3.84±(0.69)

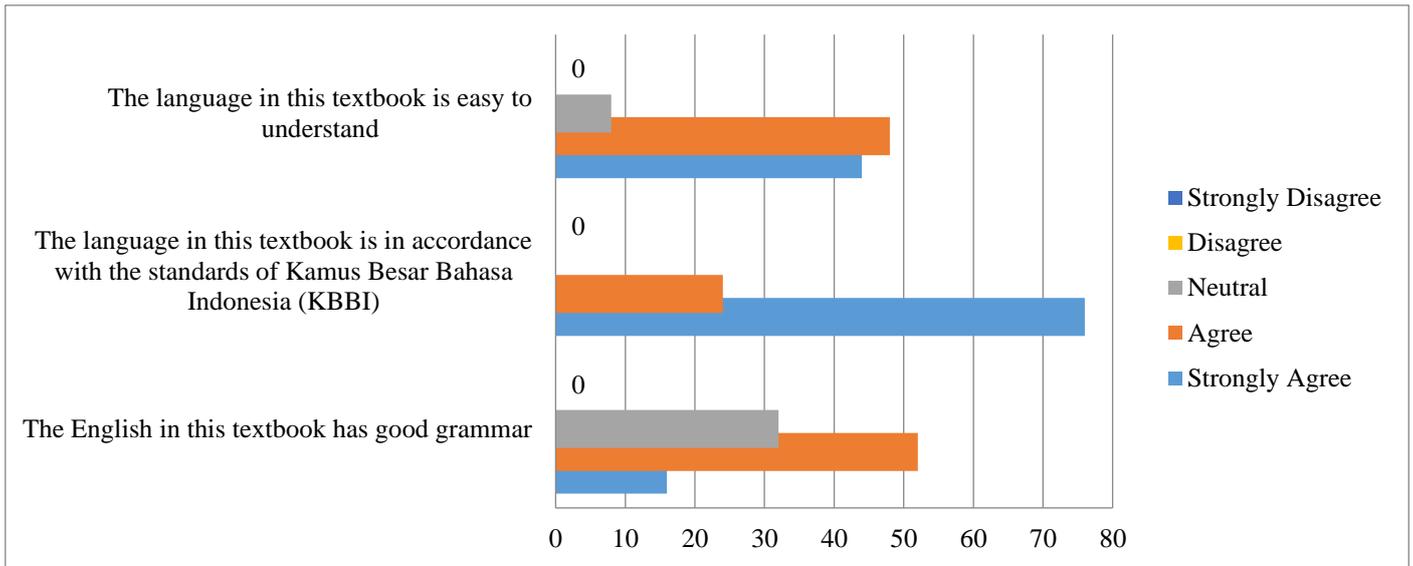


Figure 2. Percentage Results of Students' Perceptions of Textbook Language

Table 4. Students' Perceptions of Textbook Design (N=25)

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	M(SD)
Q1: The design of this textbook is very nice.	18 (72%)	7 (28%)	0 (0%)	0 (0%)	0 (0%)	4.72±(0.46)
Q2: The design of this textbook makes my reading interest high.	12 (48%)	10 (40%)	3 (12%)	0 (0%)	0 (0%)	4.36±(0.70)

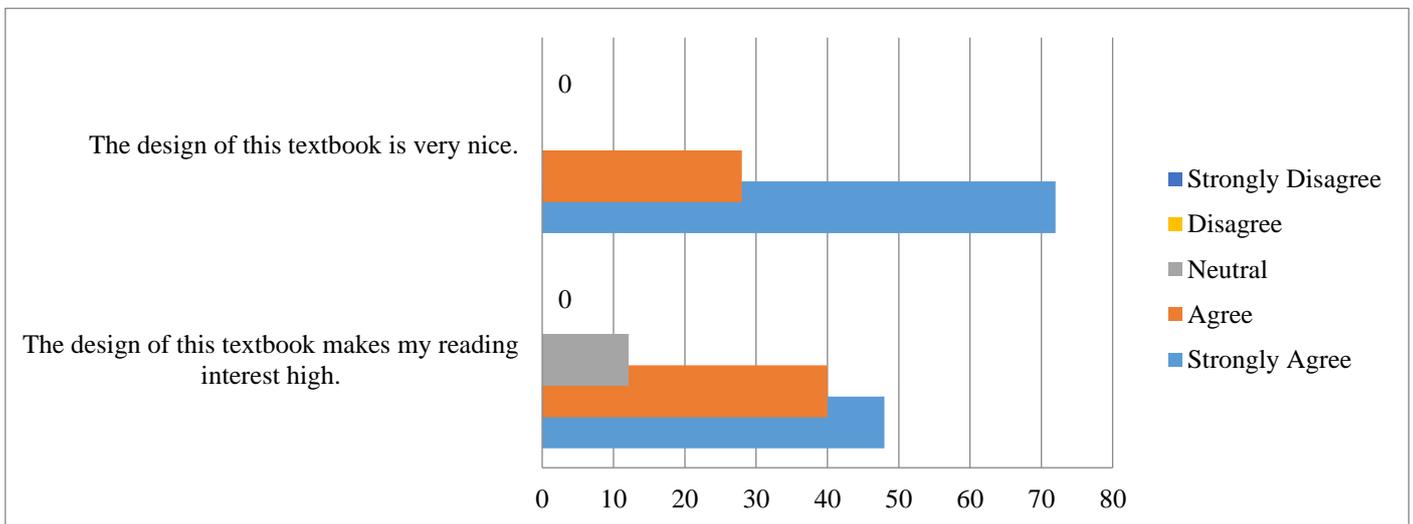


Figure 3. Results of Percentage of Students' Perceptions of Textbook Design

The results of qualitative research through in-depth interviews with respondents obtained the following findings:

**Theme: Textbook Content**

The content of the textbook material is the main factor that must be considered because the better the content of the material in a textbook, the more optimal the learning outcomes that will be obtained by students. In line with Hoshangabadwala (2015) explanation the content of textbooks is undoubtedly an important factor

because it contains ideas or concepts that will be taught to students. The subjects gave their perceptions about the contents of the textbooks as follows:

*“The content of the material in the textbook learning model in Physical Education is in accordance with the syllabus of Physical Education and Recreation Study Program, Teaching Faculty of Education at Suryakencana University.” (S1, S2, S5, S6, S7, S9, S10)*

*“The content of the material in the textbook learning model in Physical Education is good and uses a lot of references from journals related to the learning model. Even the journal reference used is the current Scopus indexed journal. However, it should be added with references regarding learning models that can be used in the Covid-19 era, such as blended learning, TPACK, or online learning. In addition, references from ebooks should be added so that this physical education learning model textbook will be rich in references from journals and ebooks.” (S3, S4, S8, S11, S12, S14, S15)*

*“This textbook makes our learning motivation higher even though we are currently facing the Covid-19 pandemic. The advantage of this textbook is that we can study independently at home at any time without any time limit. In addition, this textbook makes the learning outcomes of our physical education subjects better than before.” (S17, S18, S19, S20, S21, S24, S 25)*

*“This book can replace the role of lecturers in the Covid-19 pandemic era, which is the main source for gaining knowledge, and the presence of this textbook has caused us to gain a lot of knowledge about physical education learning models.”(S16, S22, S23)*

#### **Theme: Use of Language in Textbooks**

The use of Indonesian and English in textbooks is an important factor and needs to be considered. If the language used is not up to standard “Kamus Besar Bahasa Indonesia (KBBI)” or have poor grammar, then students will find it difficult to understand the meaning of the language. The subject is of the opinion that:

*“We think, then related to the use of language in textbook needs more attention and adjust it to undergraduate level students, thus they are easy to digest, understand the content in the material. In addition, the use of language should refer to Indonesia dictionary, and the use of English should be clearly explained so that students do not misinterpret the meaning of the writing.” (S4, S6, S7, S10, S11, S13, S15, S18, S19, S20, S25)*

*“The use of Indonesian in textbooks is good, easy to understand, and in accordance with the KBBI, so that we can study each subject matter optimally. However, we hope that the use of English in the textbooks is not too much.” (S1, S2, S3, S5, S8, S9, S12, S14, S16, S17, S21, S22, S23, S24)*

#### **Theme: Textbook Design**

According to [Hoshangabadwala \(2015\)](#) the design or appearance of textbooks is a factor that supports the quality of the textbooks. The poor appearance of textbooks will have an effect on the reading interest of students. The subjects argued:

*“We thought that the design on the cover of the textbook was good and that made us feel interested in reading the textbook.” (S1, S2, S3, S6, S8, S9, S11, S13, S14, S15, S18, S19, S20, S21, S22, S23, S24, S25)*

*“In our opinion, the design on the cover of this textbook is the best design of the other textbook designs.” (S4, S5, S7, S10, S12, S16, S17)*

This study aims to investigate students' perceptions at the university level about textbook learning models in physical education during the Covid-19 era. Research findings that are quantitative show that the majority of students' perceptions of textbooks have a high percentage ranging from 77%-98%. The data proves that students consider physical education learning model textbooks to provide many benefits for them during the Covid-19 pandemic. Previous studies related to the development of learning strategy textbooks reported findings where the response from students was 91.6%, this result was included in the very high criteria (Kurniawan & Hayudi, 2018). The study conducted by Hadar (2017) supports this research and explains that textbook have a positive effect on increasing higher achievement for students because they feel that all subject matter can be studied efficiently through textbooks. In addition, according to Gazali and Cendra, (2020) that textbooks are a very important educational tool for students because they contain sources of subject matter that students can learn anytime and anywhere without having to be supervised by a lecturer. In Estonia, Finland, and Norway from grade 7 to 9 almost all students use textbook, and 49–64% of teachers rely heavily on textbooks to plan and prepare their lessons in class. Furthermore, 79-92% of teachers use textbooks as the only source for practice in at least half of the lessons (Van den Ham & Heinze, 2018). Similar results were reported by previous studies that textbooks had a significant effect on student academic performance (Goeffin, Van Dooren, Avau, Thomassen, Ameal & Janssen, 2016; Bellens, Noortgate, & Damme, 2019). Several previous studies have found that textbook play an important role in learning activities in the classroom because they have the power to increase low student motivation to higher levels. This is because students find textbooks very interesting and there are many materials that can be studied independently without any instruction from the lecturer (Prasetya, 2018).

Meanwhile, qualitative research findings indicate that students feel happy because textbooks of learning models in physical education can be purchased at low prices, then this research summarizes some of the advantages of physical education learning model textbooks, including contains a lot of important information for students, can be used individually, has the potential to trigger interest and motivation from students, makes it easier for teachers to transfer knowledge to students, provides convenience for students to learn. However, the advantages and roles of textbooks really depend on the extent to which teachers can optimize the use of textbooks (Bellens et al., 2019). This textbook will make it easier for lecturers to deliver lecture material and make students to easily learn learning model courses independently and can be done anywhere and anytime (e.g., home, room, living room, courtyard home), without fear of Covid-19 transmission. Textbooks developed in a tertiary institution do have great benefits for lecturers and are also useful for students, because they can acquire and learn knowledge through practical and efficient way. The results of this study are in line with previous studies which reported that textbooks can be used to improve learning outcomes (Prasetya, 2018). Textbook resources are basically suitable for learning for University. Thus the research confirms that use of the textbook have positively impacting both teaching and learning lecturers and have the potential to support increased interactivity, even textbooks can be used to stimulate collaboration around content and to increase pedagogical knowledge and skills (Berry, Cook, Hill & Stevens, 2010; Grimaldi, Mallick, Water & Baraniuk, 2019).

## CONCLUSION

The use of a quality textbook for sports students during a pandemic can provide many benefits. For example, students have the willingness to study at home. Thus, this study confirms that most of the quantitative and qualitative student perceptions show positive perceptions (strongly agree). To physical education learning model textbooks. However, this research still has limitations, namely the sample size are relatively few and only from one university in Indonesia. Further research needs to be carried out by adding a broader sample size and covering several universities that have faculties of health and recreational physical education. It will lead to a greater extension of exploration and discovery. Furthermore, it would be worthwhile to examine if lecturer professional competencies possibly moderate textbook effects on the instructional quality and on students' achievement (Van den Ham & Heinze, 2018), discussing a survey of the quality of textbooks on student learning outcomes or discussing the effectiveness of digital textbooks in physical education learning.

Further, studies need to be carried out to help lecturers improve the quality of learning in the physical education sector.

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### CONFLICT OF INTEREST

All authors declare that there is no conflict of interest whatsoever in this study.

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