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Analysis of Physical Education Students' Learning Obstacles in basic Research Course

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Abstract

Obstacles in the learning process need to be an important concern for every lecturer in charge of the subject. Therefore, the purpose of this research is to reveal the learning barriers of physical education students in attending basic research lectures. The qualitative descriptive method is implemented to achieve research objectives. A total of 43 physical education students were involved in this study as subjects who provided the required information. Instruments consisting of observation, documentation, and semi-structured interviews are used to collect the required data. Analysis of the collected data using data triangulation. The results of the study stated that students experienced obstacles in attending basic research lectures, especially in the section on compiling research backgrounds and conducting research data analysis.

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INTRODUCTION

The learning process is a long stage that is passed by every student who is struggling to get a bachelor's degree (Lozano & Lozano, 2014). To be able to take a bachelor of education degree, each student is required to complete all the required courses (Boatman & Long, 2018). One of the compulsory subjects in question is basic research. Through this course, it is hoped that each student will have skills in conducting scientific research which will later be useful in conducting final research. The output of this course is a scientific research article. However, the fact is that not all students who take basic research courses have the skills to conduct research and produce scientific articles because in the learning process, they still experience learning barriers.

Obstacles in the learning process experienced by students can lead to serious problems if not addressed immediately (Fook & Sidhu, 2015; Solum et al., 2016). Various problems that occur due to learning barriers include decreased interest in learning, and low learning outcomes (Miller & Metz, 2014). Learning barriers are not felt by students who have low abilities but can also be experienced by students who have high learning abilities (Jackson, 2017). Various factors become learning barriers for students including health, ability or intelligence, interest, motivation, learning readiness, learning media, lecturer competence, and learning environment (Regmi & Jones, 2020; Bowles & Brindle, 2017; (Børte et al., 2023).

Based on the observations of 10 students, it was found that 70% of students had difficulty finding research problems, 80% of students had difficulty determining the research method to be used, and 60% of students had not been able to compile research instruments. To support the observations, the researchers conducted interviews with 10 students who attended basic research courses and selected them randomly. The results of the interviews concluded that most students had difficulty researching because they did not have previous research experience.

The problems faced by students became a motivation for researchers to examine more deeply and comprehensively through a study. Physical education students' learning barriers in participating in basic research lectures deserve to be studied in depth to provide alternative solutions for students. This research will provide a clear picture of the learning barriers of physical education students and make reflections for lecturers in charge of the subject so that in the future they can improve the quality of learning. The results of the research can be used as a reference for subject lecturers to develop syllabuses, and semester learning plans, develop assignment sheets and evaluate learning.

METHODS

This research is qualitative descriptive research, namely research that explores in-depth information about using various research instruments to obtain comprehensive data (Kim et al., 2017). A total of 43 physical education students of Bengkulu University were involved in this study as subjects who provided the required information. The selection of research subjects was carried out by purposive sampling, namely the subjects were selected based on certain criteria set by the researcher to achieve research objectives (Etikan, 2016). Conditions for research subjects include students who are active with a minimum attendance of 80%, participate in basic research lecture contracts, and are willing

to become subjects by providing honest information. When the research was carried out in June and July 2022. Instruments consisting of observation, documentation, and semi-structured interviews were used to collect the required data. Observation guidelines were prepared and developed by researchers by taking into account the indicators of the required data. While documentation is done by tracing the results of basic research lecture products in the form of scientific articles written by students. The instrument in the form of an interview guide was developed by the researcher with the steps including determining research objectives, compiling question items, validating with colleagues who are experts in the field of research education, and making revisions according to the validator's suggestions. Research data were analyzed using data triangulation, namely an analysis by checking the validity of data from various sources used to produce clear data (Heale & Forbes, 2013). The data collected was analyzed qualitatively by presenting it in easy-to-understand sentences (Hammarberg et al., 2016).

Table 1. Observation guide

Indicator	Description
Interest in learning	
Motivation to learn	
Readiness to learn	
Learning method	

Table 2. Documentation guide

Indicator	Description
Learning outcomes	
Scientific articles	

Table 3. Interview guide

Indicator	Description
Looking for references relevant	How many references for taking research courses?
Defining the problem	Do you have difficulty defining the research problem?
Developing the background	How do you prepare the background of research?
Determining research	Do you know the considerations for determining research methods?
Conduct data analysis	How do you perform data analysis?
Presenting the results and discussion of the research	Do you experience difficulties in presenting the results and discussion of the research?
Making conclusions	Do you have difficulty making conclusions?

RESULT

The results of this study are presented in the form of tables and diagrams to make it easier for readers to understand the results of the research.

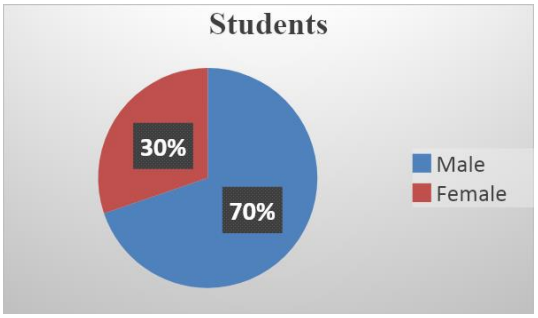

Fig 1. Gender of research subjects

This study consisted of 43 subjects with 30 male subjects and 13 female subjects. The subjects involved were observed and searched through documentation. The results of

observation and documentation are presented in tables 4 and 5.

Table 4. The observation results

Indicator	Description
Interest in learning	Students interested in attending lectures as evidenced by 95% of students always attending every lecture.
Motivation to learn	Students have good learning motivation marked by 85% of students doing all lecture assignments.
Readiness to learn	80% of students are not ready to learn marked by not having a reference book.
Methods learning	Lecturers apply methods learning project-based learning.

Based on table 4 it can be understood that in general physical education, students experience obstacles in basic research lectures.

Table 5. The document results

Indicator	Description
Learning outcomes	80% of student learning outcomes with an average score of B.
Scientific articles	85% of scientific articles produced by students through research that has been carried out are not yet fit for publication.

Table 5 shows the results of searching documents showing that the learning outcomes of Physical Education students participating in basic research lectures are not optimal, and the output in the form of scientific articles is not yet suitable for publication in national journals. This right seems to support the results of the observations that have been made.

Table 6. The interview results

Indicator	Description
Finding relevant references	46.51 students experienced obstacles.
Defining problems	58.14% of students experience obstacles.
Compiling background	83.72% of students experience obstacles.
Determining research methods	55% of students experience obstacles.
Doing data analysis	83.70% of students experience obstacles.
Presenting research results and discussion	51.16% of students experienced obstacles.
Making conclusions	53.49 students experience obstacles.

The results of the interviews conducted also showed the same results as the results of observation and documentation. Table 6 shows that most students experience obstacles from each of the indicators in question. Physical education student learning barriers can be illustrated through the histogram below.

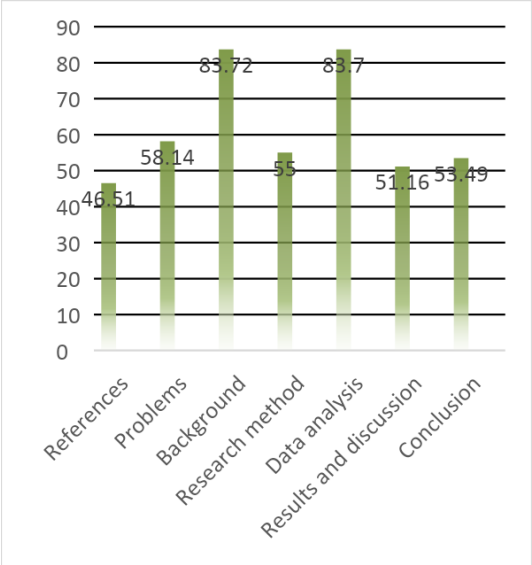

Fig 2. Graphic of obstacles

From Figure 2 it can be understood that the biggest obstacle for Physical Education students in attending basic research lectures is the obstacle to formulating a research background, and conducting research data analysis.

DISCUSSION

The purpose of this research is to get a clear picture of the obstacles experienced by physical education students who attend basic research courses. Based on table 5 it is stated that as many as 46.51 students experienced obstacles in finding relevant sources or references. The research results are supported by previous research which reveals that looking for relevant references and supporting research is an obstacle experienced by students (Purwanto et al., 2020; Tutpai & Er Unja, 2022; Junaedi et al., 2015).

The use of relevant references is very important for students to find research ideas, descriptions of research to be carried out, how to conduct research, and to conclude research results (Bavdekar, 2016). To get in-depth information about students' obstacles in finding references, the researcher conducted interviews with a subject with the initials "V" stating that "I am interested in taking basic research courses and am motivated to graduate with the best grades. Even so, I am still confused about the criteria for relevant references, whether the title of the research must be the same or whether the research problem is the same as ours. The subject with the initials "IR" also stated that "even though the lecturer has explained with various learning media, it is still difficult for me to find relevant references whose research problems are the same as mine". Previous research has revealed that finding relevant references to support the research to be carried out is one of the obstacles for novice researchers, especially students who have low reading interest (Khedri & Kritsis, 2020). Relevant references will be easier to find by students who are used to reading scientific research articles. (Winchester & Salji, 2016).

The second obstacle experienced by physical education students is finding research problems. Table 5 shows that as many as 58.14% of students experienced obstacles in finding problems that were worthy of being used as research. The statement from the subject "V" revealed that "I am still confused about what problems I will research, and how to find research problems". The same thing was also expressed by IR "even though the supervisor has explained, it seems difficult for me to find research problems". For novice researchers or students who are learning to do research, finding research problems is difficult because of the lack of research experience in scientific principles (Pacello, 2014; Baimyrzaeva, 2018).

After being able to get a research problem, students must then develop a research background. Based on this indicator, based on table 5, 83.72% of physical education students experience

obstacles. The research background is an important part because in this section students must explain the research problem under study, why they chose the problem to be studied, what are the benefits of researching this problem, and describe the objectives of the research being carried out (Ridwan et al., 2021). It's not only students who experience obstacles when compiling research backgrounds, but someone who already has research experience also often experiences difficulties (Fareed et al., 2016). From the results of interviews with subject V, it is known that "I find it difficult to develop words into the form of scientific writing". The same thing was also conveyed by the IR subject "the thing that I felt was the most difficult was writing the background because I had to explain in detail why I was doing the research." To be able to write a good background one needs to have and read references so have a lot of vocabulary to use.

Based on table 6, it is known that as many as 55% of physical education students have obstacles in determining research methods. The research method is an important part of research because it relates to how someone will conduct research from the beginning to make research conclusions (Snyder, 2019). Searching for information about student barriers in the interview session on subject V stated that "I am confused about whether to use qualitative or quantitative research methods, if I use quantitative I cannot be statistical, if I use qualitative I am not good at arranging words. The statement from subject IR also supports the previous subject "I read in various references that the research method used for my research is qualitative, but in other references it uses quantitative, so I am confused about which one to use". Although each research method has its advantages, students do not yet have good judgment in choosing a research method.

After the data collection process has been completed, students must analyze the research data. Table 6 it is shown that as many as 83.7% of students experienced obstacles in analyzing research data. At this stage, students have difficulty analyzing data using simple statistical formulas such as mean, median, mode, and standard deviation, and looking for a relationship between two variables (Jufri, 2018; (Daniel & Taneo, 2019). The results of interviews conducted with subject V stated that "I have difficulty describing research data into a sentence that is easily understood by readers". From the IR subject, information was obtained that "I am confused when my research data is not valid or normal so that the hypothesis is difficult to test". These obstacles usually occur to students or novice researchers so this needs to be a serious concern for lecturers supporting basic research courses.

Table 6 it is shown that as many as 51.16% of students experienced obstacles in presenting research results and discussion. In presenting research results, students do not use frequency tables, histograms, or images. Students display raw data in research results. This will certainly make it difficult for the reader to understand the results of the research. Most students only repeat the data in the table without giving a detailed explanation of the numbers that appear in the table (Budhyani & Angendari, 2021).

A total of 53.49 students experienced obstacles in compiling research conclusions. Most students find it difficult to draw conclusions that are easily understood by readers. The concluding sentences used do not summarize all the results of the study. The learning barriers experienced by physical education students in

participating in basic research lectures have an impact on learning outcomes and the quality of articles produced by students. From the search results through student documents, it is known that 80% of students get an average grade of B, and 85% of student scientific articles are not yet suitable for publication in national journals. The results of this study deserve to be of concern to lecturers in charge of the subject as a reference for overcoming student learning barriers by implementing various learning strategies that can reduce student learning barriers.

CONCLUSION

Based on data analysis, it can be concluded that physical education students have significant learning obstacles, especially in the part of compiling research background and analyzing research data. Student learning obstacles need to be an important concern for lecturers teaching basic research courses. Based on the results of the study, it is recommended for lecturers to be more creative and innovative in managing classes, using various learning technologies, and implementing collaborative learning to achieve learning objectives optimally. Follow-up is expected that lecturers and students must work together to produce quality scientific articles resulting from research conducted during lectures.

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REFERENCES

Baimyrzaeva, M. (2018). Beginners' Guide for Applied Research Process: What Is It, and Why and How to Do It? In University of Central Asia: Graduate School of Development. (Vol. 4).

Bavdekar, S. B. (2016). Enhance the value of a research paper: Choosing the right references and writing them accurately. Journal of Association of Physicians of India, 64(MARCH), 66–70.

Boatman, A., & Long, B. T. (2018). Does Remediation Work for All Students? How the Effects of Postsecondary Remedial and Developmental Courses Vary by Level of Academic Preparation. Educational Evaluation and Policy Analysis, 40(1), 29–58. https://doi.org/10.3102/0162373717715708

Børte, K., Nesje, K., & Lillejord, S. (2023). Barriers to student active learning in higher education. Teaching in Higher Education, 28(3), 597–615. https://doi.org/10.1080/13562517.2020.1839746

Bowles, T. V., & Brindle, K. A. (2017). Identifying facilitating factors and barriers to improving student retention rates in tertiary teaching courses: a systematic review. Higher Education Research and Development, 36(5), 903–919. https://doi.org/10.1080/07294360.2016.1264927

Budhyani, I. D. A. M., & Angendari, M. D. (2021). Kesulitan dalam Menulis Karya Ilmiah. Mimbar Ilmu, 26(3), 400. https://doi.org/10.23887/mi.v26i3.40678

Daniel, F., & Taneo, P. N. L. (2019). Analisis Kesulitan Mahasiswa Dalam Penyusunan Proposal

Penelitian Pendidikan Matematika. JPMI (Jurnal Pendidikan Matematika Indonesia), 4(2), 79. https://doi.org/10.26737/jpmi.v4i2.956

Etikan, I. (2016). Comparison of Convenience Sampling and Purposive Sampling. American Journal of Theoretical and Applied Statistics, 5(1), 1. https://doi.org/10.11648/j.ajtas.20160501.11

Fareed, M., Ashraf, A., & Bilal, M. (2016). ESL Learners' Writing Skills: Problems, Factors and Suggestions. Journal of Education & Social Sciences, 4(2), 83–94. https://doi.org/10.20547/jess0421604201

Fook, C. Y., & Sidhu, G. K. (2015). Investigating Learning Challenges Faced by Students in Higher Education. Procedia - Social and Behavioral Sciences, 186, 604–612. https://doi.org/10.1016/j.sbspro.2015.04.001

Hammarberg, K., Kirkman, M., & De Lacey, S. (2016). Qualitative research methods: When to use them and how to judge them. Human Reproduction, 31(3), 498–501. https://doi.org/10.1093/humrep/dev334

Heale, R., & Forbes, D. (2013). Understanding triangulation in research. Evidence-Based Nursing, 16(4), 98. https://doi.org/10.1136/eb-2013-101494

Jackson, D. (2017). Exploring the challenges experienced by international students during work-integrated learning in Australia. Asia Pacific Journal of Education, 37(3), 344–359. https://doi.org/10.1080/02188791.2017.1298515

Jufri, M. S. S. dan L. (2018). Deskripsi Kemampuan Mahasiswa Fakultas Tarbiyah Dan Ilmu Keguruan Iain Kendari Dalam Menganalisis Data Statistika. Jurnal Al-Ta'dib, 11(1), 109–126.

Junaedi, I., Asikin, M., & Masrukan, M. (2015). Penerapan Realistic Mathematics Education (RME) dengan Konteks Karakter dan Konservasi untuk Meningkatkan Kemampuan Mahasiswa dalam Menyusun Proposal Penelitian. Kreano, Jurnal Matematika Kreatif-Inovatif, 6(2), 177. https://doi.org/10.15294/kreano.v6i2.4988

Khedri, M., & Kritsis, K. (2020). How do we make ourselves heard in the writing of a research article? A study of authorial references in four disciplines. Australian Journal of Linguistics, 40(2), 194–217. https://doi.org/10.1080/07268602.2020.1753011

Kim, H., Sefcik, J. S., & Bradway, C. (2017). Characteristics of Qualitative Descriptive Studies: A Systematic Review. Research in Nursing and Health, 40(1), 23–42. https://doi.org/10.1002/nur.21768

Lozano, F. J., & Lozano, R. (2014). Developing the curriculum for a new Bachelor's degree in Engineering for Sustainable Development. Journal of Cleaner Production, 64, 136–146. https://doi.org/10.1016/j.jclepro.2013.08.022

Miller, C. J., & Metz, M. J. (2014). A comparison of professional-level faculty and student perceptions of active learning: Its current use, effectiveness, and barriers. Advances in Physiology Education, 38(3), 246–252. https://doi.org/10.1152/advan.00014.2014

Pacello, J. (2014). Integrating Metacognition into a Developmental Reading and Writing Course to

Promote Skill Transfer: An Examination of Student Perceptions and Experiences. Journal of College Reading and Learning, 44(2), 119–140. https://doi.org/10.1080/10790195.2014.906240

Purwanto, A., Pramono, R., Bernarto, I., Asbari, M., Santoso, P. B., Saifuddin, M. P., Hyun, C. C., Wijayanti, L. M., Ong, F., & Kusumaningsih, W. (2020). Minat dan Hambatan Publikasi Artikel pada Jurnal Internasional Bereputasi: Studi Eksploratori pada Mahasiswa Doktoral di Sebuah Perguruan Tinggi Swasta di Jakarta. Edumaspul: Jurnal Pendidikan, 4(1), 219–228. https://doi.org/10.33487/edumaspul.v4i1.348

Regmi, K., & Jones, L. (2020). A systematic review of the factors - Enablers and barriers - Affecting e-learning in health sciences education. BMC Medical Education, 20(1). https://doi.org/10.1186/s12909-020-02007-6

Ridwan, M., AM, S., Ulum, B., & Muhammad, F. (2021). Pentingnya Penerapan Literature Review pada Penelitian Ilmiah. Jurnal Masohi, 2(1), 42. https://doi.org/10.36339/jmas.v2i1.427

Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. Journal of Business Research, 104(March), 333–339. https://doi.org/10.1016/j.jbusres.2019.07.039

Solum, E. M., Maluwa, V. M., Tveit, B., & Severinsson, E. (2016). Enhancing students' moral competence in practice: Challenges experienced by Malawian nurse teachers. Nursing Ethics, 23(6), 685–697. https://doi.org/10.1177/0969733015580811

Tutpai, G., & Er Unja, E. (2022). Hambatan Dalam Penyusunan Proposal Penelitian Oleh Mahasiswa Keperawatan Stikes Suaka Insan Banjarmasin. Jurnal Keperawatan Suaka Insan (Jksi), 7(1), 18–23. https://doi.org/10.51143/jksi.v7i1.322

Winchester, C. L., & Salji, M. (2016). Writing a literature review. Journal of Clinical Urology, 9(5), 308–312. https://doi.org/10.1177/2051415816650133