



Evaluation of Mastery of Pedagogic Competence of Physical Education, Sports and Health (PJOK)

Andhika Yudisthira ^{*1}, Damrah ², Nurul Ihsan ³, Ronni Yenes ⁴, Jannatul Khairoh ⁵

^{1,2,3,4,5} Sports Education, Faculty of Sports Sciences, Universitas Negeri Padang, Padang, Indonesia

Article Info

Article History :

Received : August 2023

Revised : December 2023

Accepted : December 2023

Keywords:

Evaluation,
Pedagogical Competence,
PJOK,

Abstract

This study aims to analyze and evaluate the mastery of PJOK teacher pedagogical competencies in the city of Padang. The research method used is qualitative research using the CIPP method. The sampling technique in this study was to use a total sampling technique involving 15 PJOK teachers at State Middle Schools in East Padang District. Data analysis techniques use qualitative research techniques with a data triangulation approach. The results of this study indicate that sports and health physical education teachers in terms of context have approached students so that it makes it easier for teachers to understand the characteristics of students. Evaluation of pedagogic competence in terms of the input that the teacher develops cognitive aspects as well as developing psychomotor aspects and affective aspects. a teacher must have a way to change the behavior of students in a better direction through an approach, providing motivation. Evaluation of teacher competence in terms of process, namely the teacher uses learning strategies depending on the situation and conditions then adapts to the media and demonstrates implementation, this is an obstacle due to the lack of teacher creativity in developing learning media so that the teacher only asks to model students who have talent in the field certain. The teacher also conducts midterm and final semester assessments and makes improvements in oral and written forms. In terms of product, many students have participated in championships at the city, provincial and even national levels. Students who take part in the championship even though they will be given extracurricular activities, they practice more outside, in other words, under the guidance of a club. Overall, the pedagogic competence of sports and health physical education teachers in Padang Timur District, Padang City, needs to be improved and improved in terms of context, input, process, and product.



*Corresponding email : andhikayudisthira@gmail.com

INTRODUCTION

Education is aimed at everyone from young children to the elderly. Education not only comes from school but can also come from social interactions that occur in community life (Maksymchuk et al., 2018; Risan, 2022). In addition, education is not limited in terms of age, because education is intended for all people and all ages. This of course makes us realize how important education is for life. But in fact, until now it can be stated that the success of education in Indonesia has not achieved maximum results. Evidenced by discriminatory education policies in Indonesia, the many cases of cheating, for example among students and other cases of fraud that often occur in the world of education. (Gray et al., 2017; Morgan, 2019).

The world of education is a world full of learning processes. The learning process is the core activity that can be used to measure the success of an educational effort (Hastie et al., 2018; Morgan, 2017). In the learning process learning programs from each subject. Therefore, it can be stated that successful educational efforts are educational efforts that pay attention to the quality of the learning process in the form of implementing learning programs prepared by the teacher concerned. There are various factors that influence the success of education, including: teachers, students, infrastructure, educational environment, and curriculum. Of these various factors, the teacher in the learning process at school occupies a very important position without neglecting other supporting factors. The teacher as the subject of education determines the success of education itself (Bakhmat et al., 2019; Estevan et al., 2021). The teacher is the main executor in the educational

reform process to answer the need for quality human resources who can play a professional role in society (Donchenko et al., 2020; Jarvis et al., 2017). Therefore, the renewal of the educational process requires high teacher performance. Teacher competence in schools is realized through the ability to educate, teach, and train students in the learning process. The learning process will take place well, if it is supported by teachers who have high competence and performance, because teachers are the spearhead and forefront implementers of children's education in schools and as curriculum developers. Thus, the learning process that is managed by the performance of quality teachers will be able to produce quality human resources (Legrain et al., 2019; Valentini et al., 2017).

Teachers determine the success of a country's education. Various studies and research results that describe the strategic and decisive role of teachers in delivering the success of a country's education can be explained that the success of school reform is largely determined by the teacher, because the teacher is a learning leader, facilitator, and at the same time the center of learning initiatives (Peralta et al., 2016). In the learning process, the task that must be carried out by the teacher is to master, plan, implement learning and carry out learning evaluation. The planning made by the teacher must be in accordance with the concepts of education and learning contained in the curriculum (Mardapi & Herawan, 2018; Zulfahmi et al., 2020). This planning is a thought about what is carried out in learning so as to create a system that allows a learning process to occur and can bring students to achieve the expected goals. Furthermore, evaluation is carried out to measure the degree of achievement of goals and the effectiveness of the learning process implemented.

Evaluation is a feedback process that is the basis for improving the learning system. In order for evaluation activities to achieve maximum results, evaluation should be carried out on an ongoing basis (Masrun & Damrah, 2022; Rahmat, 2021).

The study aims to analyze and evaluate the mastery of pedagogical competence of Sports and Health Physical Education (PJOK) teachers in Padang City, especially in East Padang District. The research method used is qualitative with an approach using the CIPP method (Context, Input, Process, and Product). In this study, 15 PJOK teachers from public junior high schools in the region were the subjects of research through total sampling techniques. The results of this study revealed that PJOK teachers have taken a good approach to students, understand their characteristics, and develop cognitive, psychomotor, and affective aspects. However, there are obstacles in the use of less creative learning media. Even so, teachers conduct midterm and end-of-semester assessments and provide motivation to students who have participated in championships, even though many of them practice outside of school. Overall, this study shows the need to improve and improve the pedagogical competence of PJOK teachers in East Padang District, both in terms of context, input, process, and product.

The novelty and main contribution of this study is the sharp and strong emphasis on a comprehensive evaluation of the pedagogical competence of Sports and Health Physical Education (PJOK) teachers in Padang City, particularly in East Padang District. Although there have been several previous studies that have focused on teacher competence, our research takes a more holistic approach by considering context, input, process, and product factors in PJOK teacher assessment. Our main contribution is to provide a deeper understanding of how

PJOK teachers interact with learners and develop their cognitive, psychomotor, and affective aspects (Hakman et al., 2017; Kadarisma et al., 2019). Moreover, this study identifies real obstacles in the use of learning media that need to be corrected, and highlights the importance of motivation and support provided to students who excel in sports. With this sharp focus, this research is expected to provide valuable guidance to improve the quality of education in the field of PJOK in the region, which in turn will support the holistic development of learners and their achievements in sports and health.

METHODS

The research method used is qualitative research using the CIPP method. The sampling technique in this study was using a total sampling technique involving 15 PJOK Teachers of SMP Negeri Se East Padang District. The instruments in this study are as follows:

1. **Observasi (Participant observation)**
Observation is used in order to collect data in a study. In order to understand the condition of the object under study, researchers should conduct field observation activities so that researchers obtain informations related to what will be studied. In this observation, researchers directly observe and record the behavior of actors, such as the competence of sports and health physical education teachers, and what factors affect the competence of sports and health physical education teachers, as well as those related to the competence of these teachers.
2. **Interview**
To obtain accurate data/information, especially about concepts, ideas, thoughts related to the competence of

physical education, sports and health teachers, Junior High School in Padang Timur District in Padang City, researchers also use interview methods, interviews are used by researchers as the main method of research and as a complement to observation methods.

3. Documentation

Documentation is carried out to disclose administrative data such as organizational structure, the number of physical education, sports and health teachers in Junior High Schools in East Padang District in Padang City, these documents are only as supporting data and supporting data obtained from observation and interview methods.

Data Analysis Procedure.

1. Data Reduction
Field data is poured into detailed description reports so that after all is simplified, data that does not need to be sorted in order to make it easier for researchers to draw conclusions. Because this study is using a sequential explanatory approach model, the focus of data reduction is the results of proof during the quantitative stage.
2. Data Display
Data presentation is defined as a process of organizing data so that it is easy to analyze and conclude according to the type of data collected. At this stage, the data is presented in the form of tables making it easier for researchers to analyze the data.
3. Data Conclusion/Verification
The initial conclusions presented are tentative, and will change unless strong evidence is found to support

the next stage of data collection. However, if conclusions drawn at an early stage are supported by valid and consistent evidence when researchers return to the field to collect data, the conclusions presented are credible conclusions.

RESULT

1. Description of Public Junior High Schools in East Padang District in Padang City

The descriptions of the 5 schools that contributed to this research were Padang City 5 State Junior High School, Padang City 8 State Junior High School, Padang City 9 State Junior High School, Padang City 30 State Junior High School, and Padang City 31 Public Junior High School. .

2. Evaluation result of Public Junior High School 5, Padang City

a. Context

In context, the teacher gives positive encouragement to students before starting learning, stimulates their level of willingness to learn, and conveys the learning objectives and benefits of the material to be learned. This helps students understand the relevance of learning and the goals to be achieved. Teachers use learning methods that are in accordance with the characteristics of students, ensure the material is delivered in the most effective way, If a problem occurs, the teacher identifies the root of the problem, finds solutions, and tries to solve it. Teachers apply an approach that accepts positive criticism and is open to responses from learners. Teachers not only focus on cognitive aspects, but also pay attention to the development of students' attitudes and movement skills. This allows

teachers to provide holistic guidance, PE teachers at SMPN 5 Padang have a background as educators, which allows them to provide guidance.

b. Input

Input shows that the PE teacher at SMPN 5 Padang has a comprehensive approach in teaching. They not only focus on mastering the material, but also on developing the character and abilities of learners, as well as the use of effective and customized learning strategies. This illustrates the teacher's commitment to delivering meaningful learning and supporting the holistic growth of learners.

c. Proses

Variations of learning approaches used by sports teachers at SMPN 5 Padang, including the use of technology in learning. In addition, the evaluation of learning outcomes carried out by teachers through initial, ongoing, and final assessments shows an effort to ensure a good understanding of the material. Remedial action is also taken if learners' learning outcomes have not reached the expected standard. This shows attention to the development and improvement of the learning process in order to achieve optimal results.

d. Product

The success of sports teachers at SMPN 5 Padang in guiding students towards achievement in various sports. Active participation in various competitions and achievement demonstrates the quality of the training approach and support provided to learners. An individual approach based on interests also provides added value in the development of learners' sports skills.

State Junior High School 8 Kota Padang.

a. Context

An educational background relevant to the field of sports helps teachers provide quality learning to students. Sports teachers at SMPN 8 Padang use various methods to motivate students and improve learning competence. They explained the importance of the material, shared inspirational stories, and gave examples of achievements. Teachers also have an approach to dealing with problems and conflicts, by finding the root of the problem and finding solutions through discussion. The attitude of acceptance of responses and criticism from students as well as attention to the development of affective, social, and movement skills. The teacher's educational background has a positive impact on the quality of the learning provided. By having an educational background, sports teachers have a strong theoretical and methodological basis, which enables them to provide more meaningful and planned learning to students.

b. Input

Sports teachers at SMPN 8 Padang have shown quality in implementing learning. They follow the curriculum guidelines and develop lesson plans according to the syllabus. The teacher's professional attitude and mastery of educational competencies have a positive impact on the quality of learning. A diverse and adaptive learning approach also shows the teacher's efforts to ensure understanding and achievement of students' learning objectives.

c. Proses

Evaluation of the learning process for sports teachers at SMPN 8 Padang shows the use of technology as a

supporting tool in presenting material, especially in sports such as volleyball. The variation approach in the assessment of learning outcomes also allows teachers to understand more deeply the understanding and abilities of students. Remedial or corrective action as a response to learning outcomes that have not met the standard indicates an effort to ensure optimal understanding.

d. Product

This product evaluation shows that the efforts of the sports teacher at SMPN 8 Padang in guiding students towards achievement in various sports have been successful. Student achievements in various championships and participation in various competitive events, including at the national level, illustrate the quality of the training and guidance provided by sports teachers. Support from school facilities and extracurricular programs provide opportunities for students to further develop their sports abilities. Overall, this evaluation reflects the commitment of schools and sports teachers in developing the potential and achievements of students in the field of sports. HI standards indicate efforts to ensure optimal understanding.

Padang City 9 Public Junior High School

a. Context

This context evaluation illustrates that the sports teacher at SMPN 9 Padang has a relevant educational background and applies various approaches to learning. Approaches to motivation, collaborative problem solving, social support, and balanced assessment are some of the elements that are part of their approach in supporting student learning. A positive attitude and acceptance of student responses also helps create a positive and efficient learning environment.

b. Input

This evaluation illustrates that the sports teacher at SMPN 9 Padang has been able to understand and manage learning materials according to the established curriculum. The lesson plan adapted to the syllabus and participation in subject teacher deliberations reflects the teacher's commitment to providing structured and quality learning. Professional attitudes, mastery of educator competencies, and the use of adaptive learning strategies show the dedication of teachers in helping students achieve optimal understanding.

e. Proses

This evaluation indicates that in implementing the sports teacher teaching and learning program at SMPN 9 Padang, the use of technology and a structured assessment approach have been implemented. Technology integration helps improve the quality of learning, while the iterative assessment approach helps in monitoring student progress. The assigned assessment weight also reflects a balanced approach between skills and knowledge. Overall, this evaluation reflects the teacher's commitment to providing a good learning experience and supporting student progress in sports.

f. Product

This product evaluation shows that the efforts of the sports teacher at SMPN 9 Padang in bringing students to achieve achievements and participate in various sports championships have been successful. The achievements of students in various sports and their active participation reflect the quality of the training provided by the teacher. Support from school facilities and extracurricular programs helps students develop their sports abilities. Mapping the interests and talents of students also shows a personal and inclusive approach to the

development of sports skills. Overall, this evaluation reflects the commitment of teachers and schools in creating an environment that supports student achievement and development in sports.

Public Junior High School 30, Padang City

a. context

This evaluation illustrates that the sports teacher at SMPN 30 Padang has a relevant educational background and applies an inclusive and responsive approach to learning. The ability to motivate, solve problems, accept criticism, and pay attention to the development of attitudes and skills of students to create a positive learning environment. The use of a religious approach also reflects the teacher's efforts to form positive character in students. Overall, this evaluation reflects the teacher's commitment to providing quality and meaningful learning experiences for students.

a. Input

Evaluasi ini menunjukkan bahwa sebagian besar guru olahraga di SMPN 30 Padang memiliki kemampuan dalam memahami materi dan merencanakan pembelajaran yang sesuai. Meskipun ada kendala dalam menguasai semua kompetensi, mereka tetap mampu memberikan pembelajaran yang efektif dan inklusif. Pendekatan yang responsif, strategi pembelajaran yang adaptif, serta komitmen dalam menjalankan tanggung jawab sebagai pendidik menciptakan lingkungan pembelajaran yang positif dan bermakna bagi peserta didik.

b. Proses

Teachers have variations in the use of technology in the learning process by sports teachers at SMPN 30 Padang. Nonetheless, the evaluation of student

learning outcomes and remedial efforts demonstrates the teacher's commitment to creating a learning environment that supports the achievement of learning objectives. In facing the challenges of learning, sports teachers at SMPN 30 Padang are still trying to provide opportunities for students to understand and master the material well.

c. Product

Sports teachers at SMPN 30 Padang have succeeded in scoring student achievements in various sports championships. School support through extracurricular activities and providing opportunities for students to participate in sports clubs demonstrates efforts to develop students' talents and skills in the world of sports. This success reflects the hard work and commitment of teachers and students in achieving glorious achievements in the field of Sport.

Padang City 31 Public Junior High School

a. Contact

The majority of them have a bachelor's degree in Sports Education from Padang State University (UNP), and one of the teachers has a master's degree in Education. With this solid educational background, teachers are well equipped to provide quality learning. The PE teacher at SMPN 31 Padang has a variety of backgrounds. Some of them are former basketball and martial arts athletes, who can provide students with insight and practical experience in sports. Approach, expertise in sports, and providing quick information are ways to motivate learners. Teachers also have the ability to identify the root of problems and find appropriate solutions. The PE teacher at SMPN 31 Padang showed a positive attitude towards the students. They accept,

appreciate, and reward student participation and response. This creates an inclusive learning environment and.

b. Input

The PE teacher at SMPN 31 Padang shows commitment to improving the quality of sports learning. Despite challenges in understanding the material and applying teacher competencies, they still try to get close to the standards set. Collaboration, professional attitude, and the development of learning strategies that are appropriate to the classroom situation are important characteristics of the learning approach carried out by sports teachers at SMPN 31 Padang.

c. Proses

The PE teacher at SMPN 31 Padang has evaluated the learning process well. There is the use of technology in classroom learning, but the potential to use it more widely outside the classroom can still be increased. A holistic and responsive evaluation approach to student learning outcomes also shows the commitment of teachers in providing effective and quality learning. Remedial efforts for learners who require increased understanding are also a positive step in ensuring all learners succeed in sports learning.

d. Product

Sports teachers at smpn 31 padang have succeeded in guiding students to achieve brilliant achievements in various sports and championship levels. School support in the form of extracurricular activities and training by sports experts has had a positive impact on the ability and achievement of learners. This shows the hard work,

commitment, and dedication of teachers and learners in achieving success in the world of sports.

DISCUSSION

The results of this study provide a fairly comprehensive picture of the pedagogical competence of Sports and Health Physical Education (PJOK) teachers in Padang City, especially in East Padang District. An important point that can be drawn from the results of the study is that PJOK teachers have taken good steps in approaching students and developing diverse aspects, including cognitive, psychomotor, and affective (Gil-Arias et al., 2021). However, it should be noted that obstacles in the use of less creative learning media are one of the obstacles that need to be overcome. In addition, stronger attention and support towards learners who excel in sports needs to be increased (Gladilina et al., 2018; Ilahi et al., 2021). In conclusion, the results of this study provide a deeper understanding of the status quo of PJOK education in the region and provide a solid foundation for improvements that need to be made to improve the quality of education and create a more conducive environment for the development of learners in sports and health.

In-depth interpretation of the results of this study shows that Physical Education Sports and Health (PJOK) teachers in Padang City, especially in East Padang District, have made good efforts in fostering interaction with learners and developing various aspects of pedagogic competence (Kumbara et al., 2021; Rudisill, 2016). In the context of "context", it is important to note that they have successfully understood the characteristics of learners, which is an important first step in the educational process. This approach has helped teachers to more effectively communicate

with their learners, identify their needs, and design relevant learning experiences. This is a positive first step in improving the effectiveness of learning in PJOK classes. However, the results of the study also revealed challenges in the "inputs" or factors that influence the learning process. In Particular, constraints in the use of less creative learning media are a significant issue. This indicates the need for PJOK teachers to innovate more in creating interesting learning tools and supporting student development. More creative use of learning media can spark learners' interest, aid better understanding of concepts, and improve quality (Gil-Arias et al., 2020; Hutzler et al., 2019; Nasrulloh et al., 2022).

Furthermore, in the aspect of "process" or learning process, this study highlights that PJOK teachers have used various diverse learning strategies and have adjusted learning according to existing situations and conditions. However, there is a need to further increase creativity in the development of learning media and teaching methods (Nathan et al., 2023; Syahril et al., 2019). In the ever-evolving world of education, PJOK teachers need to be innovative in facing various challenges in learning, including the use of technology and digital resources that can improve the learning experience of students. Therefore, there needs to be ongoing support in the training and professional development of PJOK teachers so that they can deal with these changes and continuously improve the quality of their teaching. In comparing and comparing data from other studies against the results of this study, there are several aspects that can be focused. Below, we'll lay out those comparisons in five paragraphs:

1. Methodological Approach,

This study uses a qualitative approach with the CIPP (Context, Input, Process,

and Product) method to evaluate the pedagogical competence of PJOK teachers. In comparison with other studies, some studies may use quantitative methods with questionnaires or surveys as a data collection tool. This indicates that this study may be more in-depth in exploring certain aspects of the pedagogical competence of PJOK teachers, while quantitative research focuses more on quantitative measurements (Sudargini & Purwanto, 2020).

2. Evaluation Approach,

This study assesses the pedagogical competence of PJOK teachers in four dimensions, namely context, input, process, and product. In some previous research, assessments may have focused more on one or two specific aspects. This suggests that this study provides a more comprehensive picture of the competence of PJOK teachers at different stages of education (Hastie et al., 2016).

3. Learning Media Issues,

One of the main findings in this study is the constraints in the use of learning media that are less creative. In other studies, this issue may also arise, but it may be with variability in severity. Comparisons with other studies can reveal whether these issues are more evenly distributed or region-specific, and whether similar trends are occurring across different educational contexts (Gil-Arias et al., 2021).

4. Effects on Learners,

The study noted that many learners take part in sports championships and gain achievements, despite the need for extracurricular support. In other studies, outcomes related to learner achievement may also have been noted. A comparison with this study may reveal whether there

are differences in extracurricular support provided to learners in different regions.

5. Recommendations for Improvement,

The study concluded that there is a need for improvement in the pedagogical competence of PJOK teachers. In comparison with other studies, there may be similar or different recommendations regarding improvements needed. These comparisons can help in identifying common trends or challenges faced by PJOK teachers in different regions and support the development of more effective solutions. Overall, comparing and comparing data with previous research can help in understanding the context and relevance of these results, as well as identifying areas where the research provides deeper or different insights. This can be the foundation for the development of better education policies and improvements in PJOK teaching in various regions.

CONCLUSION

A very strong conclusion from this study is that the pedagogical competence of sports and health physical education (pjok) teachers in padang city, especially in east padang district, requires deep improvements in all aspects, namely context, input, process, and product. Although there have been positive efforts in approaching learners and developing cognitive, psychomotor, and affective aspects, this study highlights significant constraints in the use of less creative learning media. Support and motivation to students who excel in sports also need to be strengthened. Therefore, this comprehensive evaluation and sharp focus on the competence of pjok teachers is an important first step to ensure the improvement of the quality of education in the region. The implementation of continuous and evidence-based

improvement is becoming a must to ensure that pjok teachers can provide better education to learners.

REFERENCES

- Bakhmat, N., Maksymchuk, B., Voloshyna, O., Kuzmenko, V., Matviichuk, T., Kovalchuk, A., & Manzhos, E. (2019). Designing cloud-oriented university environment in teacher training of future physical education teachers. *Journal of Physical Education and Sport®(JPES)*.-2019.-Vol 19 (Supplement Issue 4), Art 192.-P. 1323-1332.-Publisher: University of Pitesti Country of Publisher: Romania.
- Donchenko¹, V. I., Zhamardiy¹, V. O., Shkola, O. M., Kabatska, O. V., & Fomenko, V. H. (2020). Health-saving competencies in physical education of students. *Wiad Lek*, 73(1), 145–150.
- Estevan, I., Bardid, F., Utesch, T., Menescardi, C., Barnett, L. M., & Castillo, I. (2021). Examining early adolescents' motivation for physical education: Associations with actual and perceived motor competence. *Physical Education and Sport Pedagogy*, 26(4), 359–374. <https://doi.org/10.1080/17408989.2020.1806995>
- Gil-Arias, A., Claver, F., Práxedes, A., Villar, F. Del, & Harvey, S. (2020). Autonomy support, motivational climate, enjoyment and perceived competence in physical education: Impact of a hybrid teaching games for understanding/sport education unit. *European Physical Education Review*, 26(1), 36–53.
- Gil-Arias, A., Harvey, S., García-Herreros, F., González-Víllora, S., Práxedes, A., & Moreno, A. (2021). Effect of a hybrid teaching games for

- understanding/sport education unit on elementary students' self-determined motivation in physical education. *European Physical Education Review*, 27(2), 366–383.
- Gladilina, I., Yumashev, A. V., Avdeeva, T. I., Fatkullina, A. A., & Gafiyatullina, E. A. (2018). Psychological and pedagogical aspects of increasing the educational process efficiency in a university for specialists in the field of physical education and sport. *Revista Espacios*, 39(21).
- Gray, S., Morgan, K., & Sproule, J. (2017). Pedagogy for motivation, learning and development in physical education. In *Transformative Learning and Teaching in Physical Education* (pp. 139–158). Routledge.
- Hakman, A., Nakonechniy, I., Moseychuk, Y., Liasota, T., Palichuk, Y., & Vaskan, I. (2017). Training methodology and didactic bases of technical movements of 9-11-year-old volleyball players. *Journal of Physical Education and Sport*, 17(4), 2638–2642.
- Hastie, P. A., Johnson, J. L., & Rudisill, M. E. (2018). An analysis of the attraction and holding power of motor skill stations used in a mastery motivational physical education climate for preschool children. *Physical Education and Sport Pedagogy*, 23(1), 37–53.
- Hutzler, Y., Meier, S., Reuker, S., & Zitomer, M. (2019). Attitudes and self-efficacy of physical education teachers toward inclusion of children with disabilities: a narrative review of international literature. *Physical Education and Sport Pedagogy*, 24(3), 249–266.
- Ilahi, B. R., Sasongko, R. N., Kristiawan, M., & Turnadi, T. (2021). Principal's perception of the performance of physical education teachers for sports and health mgmp smp in Bengkulu City. *Kinestetik: Jurnal Ilmiah Pendidikan Jasmani*, 5(2), 357–367.
- Jarvis, J. M., Pill, S. A., & Noble, A. G. (2017). Differentiated pedagogy to address learner diversity in secondary physical education. *Journal of Physical Education, Recreation & Dance*, 88(8), 46–54. <https://doi.org/10.1080/07303084.2017.1356771>
- Kadarisma, G., Senjayawati, E., & Amelia, R. (2019). Pedagogical content knowledge pre-service mathematics teacher. *Journal of Physics: Conference Series*, 1315(1), 12068.
- Kumbara, H., Iswana, B., & Fahritsani, H. (2021). Professionalism Physical Education Teacher Based On Pedagogic Performance. *Gladi: Jurnal Ilmu Keolahragaan*, 12(01), 9–16.
- Legrain, P., Escalié, G., Lafont, L., & Chaliès, S. (2019). Cooperative learning: a relevant instructional model for physical education pre-service teacher training? *Physical Education and Sport Pedagogy*, 24(1), 73–86. <https://doi.org/10.1080/17408989.2018.1561838>
- Maksymchuk, I., Sitovskyi, A., Savchuk, I., Maksymchuk, B., Frytsiuk, V., Matviichuk, T., Demchenko, I., Babii, I., Tsymbal-Slatvinska, S., & Nikitenko, A. (2018). Developing pedagogical mastery of future physical education teachers in higher education institutions. *Journal of Physical Education and Sport*, 18(2), 810–815. <https://doi.org/10.7752/jpes.2018.02119>
- Mardapi, D., & Herawan, T. (2018). Assessing Teacher Competence and Its Follow-Up to Support

- Professional Development Sustainability. *Journal of Teacher Education for Sustainability*, 20(1), 106–123.
- Masrun, M., & Damrah, D. (2022). The Influence of Pedagogic and Professional Competencies on the Performance of Physical Education Teachers of Elementary Schools in Padang. *Kinestetik: Jurnal Ilmiah Pendidikan Jasmani*, 6(2), 381–388.
- Morgan, K. (2017). Reconceptualizing motivational climate in physical education and sport coaching: An interdisciplinary perspective. *Quest*, 69(1), 95–112. <https://doi.org/10.1080/00336297.2016.1152984>
- Morgan, K. (2019). Applying the TARGET pedagogical principles in physical education to enhance students' physical literacy. *Journal of Physical Education, Recreation & Dance*, 90(1), 9–14. <https://doi.org/10.1080/07303084.2018.1535339>
- Nasrulloh, P., Suherman, A., & Susilawati, D. (2022). The Relationship of Teacher Competence to the Performance of Elementary School Physical Education Teachers. *JUARA: Jurnal Olahraga*, 7(3), 570–580.
- Nathan, M. A. N. H., Lengkana, A. S., & Mulyanto, R. (2023). Analysis of Teacher Competencies in Physical Education Learning Achievement. *JUARA: Jurnal Olahraga*, 8(1), 290–304.
- Peralta, L. R., O'Connor, D., Cotton, W. G., & Bennie, A. (2016). Pre-service physical education teachers' indigenous knowledge, cultural competency and pedagogy: A service learning intervention. *Teaching Education*, 27(3), 248–266.
- Rahmat, H. (2021). Evaluation Study On Teacher Competency Physical Education, Sports And Health (PJOK) In Pesawaran District. *Kinestetik*, 5(2), 310–317.
- Risan, R. (2022). Identifying the Characteristics of the Student: An Evaluation for English Teachers Pedagogical Competence. *Journal of English Language Teaching*, 11(2), 147–159. <https://doi.org/10.24036/jelt.v11i2.116598>
- Rudisill, M. E. (2016). Mastery motivational climates: Motivating children to move and learn in physical education contexts. *Kinesiology Review*, 5(3), 157–169.
- Sudargini, Y., & Purwanto, A. (2020). The effect of teachers' pedagogic competency on the learning outcomes of students. *Journal of Industrial Engineering & Management Research*, 1(4), 1–8.
- Syahrial, S., Asrial, A., Kurniawan, D. A., Chan, F., Hariandi, A., Pratama, R. A., Nugrogo, P., & Septiasari, R. (2019). The Impact of Constructivism in Social Affairs on Pedagogic Competencies. *International Journal of Evaluation and Research in Education*, 8(3), 409–416.
- Valentini, N. C., Pierosan, L., Rudisill, M. E., & Hastie, P. A. (2017). Mastery and exercise play interventions: motor skill development and verbal recall of children with and without disabilities. *Physical Education and Sport Pedagogy*, 22(4), 349–363.
- Zulfahmi, H. B., Trinova, Z., & Mahmud, M. (2020). Students' pedagogic and professional competencies in teaching practice program. *Al-Ta Lim Journal*, 27(2), 156–165.