

# Technium.

49/2023



The 7th International Conference on Social Sciences  
Organized by Faculty of Social Science  
and Law Manado State University

The Innovation Breakthrough  
in Digital and Disruptive Era



Powered by

**PLUS**  
COMMUNICATION



# **Determinants of Student Learning Achievement (Case Study on Department of Physical Education Health and Recreation Students at Musamus University)**

Ronald<sup>1,\*</sup> Hendra Jondry Hiskya<sup>2</sup>, Arifin Ika Nugroho<sup>3</sup>, Pricilya Margaretha  
Warwuru<sup>4</sup>, Febry Rahmadhani Suradji<sup>5</sup>, Nasiatul Aisyah Salim<sup>6</sup>

<sup>1,2,3,4,5</sup> *Department of Physical Education Health and Recreation, Universitas Musamus, Merauke, Indonesia*

<sup>6</sup> *Department of Medicine, Universitas Singaperbangsa Karawang*

\* *Corresponding author. Email: [ronald\\_fkip@unmus.ac.id](mailto:ronald_fkip@unmus.ac.id)*

## **ABSTRACT**

Education essentially aims to form fully qualified human resources. The quality of education is related to the learning process because the learning process is one of the most important aspects in the field of education. The purpose of this study was to determine the determinants of learning achievement in students of Physical Education, Health and Recreation at Musamus University. The population in this study were students of the Department of Physical Education, Health and Recreation, Musamus University, class of 2022. The sampling technique used was accidental random sampling. Data collection techniques were carried out using interviews. Data analysis techniques using descriptive statistical analysis and inferential statistical analysis. Based on the results of the analysis it was found that the learning achievement of Musamus University Physical Education Health & Recreation students was significantly influenced by all research variables (motivation, interest and talent).

**Keywords:** *Learning Achievement, Motivation, Interest, Talent*

## **1. INTRODUCTION**

Teaching and learning activities are very important activities carried out in the educational process, starting from elementary school, middle school, to tertiary institutions. Based on these activities there will be interaction between the teacher and the students, namely through the process of transferring knowledge and it is hoped that later educational goals will be achieved in the form of changes in student behavior[1]. The training and education activities consist of three elements. The first of these is students, with all their behaviour and characteristics that they continuously attempt to develop through learning activities. Second, it's teaching staff and teachers as well as lecturers who have to create a comfortable atmosphere in the educational process so that knowledge can be transferred. The third goal is what is expected to happen or appear after the completion of the learning process. The objectives of the learning process should be achieved in a satisfactory manner if these three components can work together.[2].

The implementation of higher education is carried out through a teaching and learning process in the classroom, the teaching and learning process sometimes does not run as expected, there are many factors that cause the teaching and learning process to not run as expected, for example teacher factors, student factors, available facilities, tools and media as well as other factors which unsupportive environment[3].

The achievement of students' learning outcomes can be seen as a real result of successful implementation of the teaching and learning process. The aim is to achieve the highest possible academic results for these students. The final results of a learning and teaching process, such as the grades given to students in each course they have taken, can therefore be seen.[4]. When the students have a good final score, it indicates that they are learning well and can be attributed to successful transfers of knowledge from teacher to student. So, it can be argued that the feedback from many different factors such as ability, fatigue, deficiencies and potential is indicative of a student's learning in terms of his or her ultimate grade at the course taken..[5]

The achievement of students in learning is essentially a reflection of their efforts in learning. The more effort you make in learning, the better your results will be. However, such a relationship cannot be separated from the factors which affect it, e.g. interest, motivation, parents' education levels, family incomes, and so on.[6].

Interest in learning which is also one of the internal factors in determining learning achievement, is a strong foundation in learning mathematics [7]. Because with an interest in learning, students will be motivated to learn and will be able to achieve maximum achievement [8].

Motivatedness is another factor that has an effect on learning outcomes. It's because of an interest that gives rise to motivation. Interest is a source of motivation that will lead you to what you're going to do if you have the freedom to choose. They'll be attracted to something that's meaningful to them if they see something that's meaningful to them, and that's what's going to make them happy.[9].

Motivation is an important factor that is non-intellectual in nature, which can encourage students to express their abilities to carry out learning activities so that changes in behavior occur to achieve a goal in the form of high learning achievement[10].

Besides interest and motivation, the talent factor is considered to be the most important factor in the achievement of a person's learning, because the higher a person's talent, the more positive his attitude towards something. As such, talent and a positive attitude towards education are linked.[11]. Moreover, talent has a bearing on motivation and is related to students' persistence. There'll be more incentive for students to pursue this field if they have talent. [12].

## 2. METHOD

The students of Department of Physical Education, Health and Recreation Universitas Musamus were included in the study. In order to obtain a sample of 29 students, it was necessary to determine the samples by Accidental Random Sampling. The research data are obtained by means of interviews and a questionnaire. Primary data is the use of which in this study. In this research, the primary data are obtained from respondents' answers to a number of questions raised by the researcher. A descriptive analysis and an inferential statistical analysis shall be used to analyse data obtained from the research results. Descriptive statistical analyses have been carried out by describing all data from each variable as part of the frequency distribution. An inferential analysis using the rank correlation test technique of Spearman. To determine whether the dependent variable is associated with an autonomous variable, this test technique shall be used. The

dependent variable is learning achievement and the independent variable is motivation, interest and talent.

## 3. RESULTS AND DISCUSSION

Table.1 Frequency Distribution of Respondents According to Student Learning Motivation and

Category	Frequency	Percentage
Good	28	96,6%
Deficient	1	3,4%
Total	29	100%

### Achievement

Based on the table above, it can be seen that the majority of respondents 28 people (96.6%) students have good motivation to learn and as many as 1 person (3.4%) students have less motivation to learn. In the correlation analysis, a significance value of  $<0.05$  ( $0.00 < 0.05$ ) was obtained which indicates that the learning motivation factor has a correlation with the learning achievement of students of Physical Education Health and Recreation at Universitas Musamus.

The motivation comes from within a person's mind to do something. Students are encouraged to improve their knowledge by learning with great motivation. High learning achievement is achieved by students who take an interest in their studies and are dedicated to it.[13]. The primary factor for the success of learning is motivation. The students' interest in what they learn will give rise to such learning motivation. Students, on the basis of their needs, consider what they're learning. Moreover, students feel that what they learn is useful, so that it will have an impact on their learning. A student with high levels of motivation to learn will be enthusiastic about learning and achieving good results. During education through the learning process, high motivation plays a positive role. [14].

Table.2 Frequency Distribution of Respondents According to Students' Learning Interests and Achievements

Category	Frequency	Percentage
Good	20	69%
Deficient	9	31%
Total	29	100%

Based on the table above, it can be seen that the majority of respondents 20 people (69%) students have a good interest in learning and as many as 9 people (31%) students have less interest in learning. In the correlation analysis, a significance value of  $<0.05$  ( $0.00 < 0.05$ ) was obtained which indicates that the interest in learning has a correlation with the learning achievement of students of Physical Education Health and Recreation at Universitas Musamus.

The interest's a tendency for the heart to move towards something. Someone has a great interest in learning, so the value of learning outcomes tends to change in a better direction. Interest in learning tends to be very high, while a decreased interest in learning is likely to lead to less educational attainment.[15]. A capital that means a great deal to achieve or acquire objects or objectives of interest is a great interest in something. A lot of things are driving interest in education, like a strong desire to get good work and be happy as well.[16].

An interest in learning has a very large impact on the results of education. This is because of research carried out by Mayura which found that interest and learning outcomes in a very strong category can be linked to one another, thereby leading to substantial positive relationships between the two.[15]. This means that the more a student's interest in learning increases, the better his results are. The involvement of a student with complete focus for the purpose of acquiring knowledge and understanding is an interest in education.[16].

**Table.3** Frequency Distribution of Respondents According to Talent and Learning Achievement of students

Category	Frequency	Percentage
Good	29	100%
Deficient	0	0%
Total	29	100%

Based on the table above, it can be seen that all 29 respondents (100%) students have a good interest in learning. In the correlation analysis obtained a significance value  $<0.05$  ( $0.000 < 0.05$ ) which indicates that the talent factor has a correlation with the learning achievement of students of Physical Health and Recreation Education at Universitas Musamus.

Talents are a number of talents which can be achieved in the same way as human activities or individual actions. The definition of talent itself is getting more and more sophisticated in the age of globalisation. [4]. Talent refers to an ability or something a person can accomplish in order to be successful in the future. That ability to perform a certain task without assistance from others with education and training efforts, is then considered along with the development of times.[5]. It is believed that talent is an ability or a potential that has not been influenced by experience or anything that still relates to the ability to master certain aspects of life.[12].

Learning success is usually the most important objective of a learning process. An expression of success in the area of education, according to Bloom, can be learned achievements or academic results. In order for the student to be able to demonstrate his or her educational attainment it is also understood as an achievement in education which can be established by

carrying out tests.[6]. Learning outcomes are a measure of students' efforts to learn, and it is for the teacher to decide if they succeed or fail. In determining whether or not a student is capable of doing something, whether or not a person is successful, and whether or not a student is intelligent, learning achievement is often a fundamental thing or a benchmark. Although, in fact, the intelligence of a person and their success are measured by various other factors that come into play. [9].

#### 4. CONCLUSION

The results show that the variables of motivation, interest and talent make an impact on student's ability to learn Physical Education, Health and Recreation at Musamus University based upon a statistical analysis carried out.

#### ACKNOWLEDGMENTS

WE'D LIKE TO THANK OUR FELLOW RESEARCHERS AND WRITERS FOR FACILITATING THE RESEARCH AND WRITING OF THIS ARTICLE, AS WELL AS THE PROFESSOR OF UNIVERSITAS MUSAMUS MERAUKE. ALSO, THIS ARTICLE WAS MADE POSSIBLE BY THE COMMITTEE OF INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES AND ICSS & ATLANTIS PRESS PUBLISHER.

#### REFERENCES

- [1] M. Agustin, N. A. Yensy, and R. Rusdi, "Efforts To Improve Student Learning Activities By Applying The Problem Posing Type Of Pre Solution Posing Learning Model In Smp Negeri 15 City Of Bengkulu," *J. Penelit. Pembelajaran Mat. Sekol.*, vol. 1, no. 1, pp. 66–72, Aug. 2017.
- [2] W. Andriani and I. Natsir, "Improving Students' Mathematics Learning Outcomes Through Cooperative Model Student Team Achievement Division (STAD) Type," *J. Math. Educ.*, vol. 2, no. 2, pp. 67–73, 2020.
- [3] I. Setyawan, "Higher Education Learning And Creativity Development," *J. Psikol.*, vol. 3, no. 2, pp. 116–122, 2010.
- [4] Y. Maulinda Dewi, K. Sarjana, J. Junaidi, and S. Azmi, "The Effect of Learning Interest and Motivation on Students' Mathematics Learning Outcomes," *Griya J. Math. Educ. Appl.*, vol. 1, no. 3, pp. 412–420, 2021.
- [5] A. Trisnowali, "The Effect of Achievement Motivation, Interest in Learning Mathematics,

- and Attitudes in Learning Mathematics on Students' Mathematics Learning Outcomes," *Mapan*, vol. 5, no. 2, pp. 259–278, 2017.
- [6] T. Simamora, E. Harapan, and N. Kesumawati, "Determining Factors That Affect Student Learning Achievement," *JMKSP (Jurnal Manajemen, Kepemimpinan, Dan Supervisi Pendidikan)*, 2020.
- [7] N. D. Tamardiyah, "Discipline Interest and Study Perseverance Against Achievement Motivation and Its Impact on Mathematics Learning Outcomes," *Manaj. Pendidik.*, vol. 12, no. 1, pp. 26–37, 2017.
- [8] E. Sulasmi, "Analysis of the Factors Influencing Learning Achievement From the Management Aspect of Interest in Learning," *Manaj. Pendidik. Dasar, Menengah Dan Tinggi*, 2020.
- [9] E. Meirista and M. Roya, "Increasing The Learning Achievement Of Class Vii Junior Highschool Students In Merauke Using The Auditory, Intellectually, And Repetition Type Cooperative Learning Model," *Musamus J. Math. Educ.*, vol. 1, no. 2, pp. 99–107, 2019.
- [10] N. Sufvinia, L. Fitriyah, and N. Indraswari, "The Effect of Reciprocal Teaching Learning Model on Mathematical Reasoning Ability and Mathematics Learning Outcomes of Grade VIII Students of MTs AN-Nur Lenteng," *Musamus J. Math. Educ.*, vol. 3, no. 2, pp. 68–78, 2021.
- [11] W. Irianti, E. Meirista, and M. Sianturi, "Comparison Of The Effectiveness Of Savi And Contextual Learning Approaches In View Of The Mathematics Learning Achievement Of Class Viii Students Of Smp Muhammadiyah Merauke," *usamus J. Math. Educ.*, vol. 1, no. 1, pp. 30–42, 2018.
- [12] A. Fadillah, "Analysis of Learning Interest and Talent on Students' Mathematics Learning Outcomes," *J. Mat. dan Pendidik. Mat.*, vol. 1, no. 2, pp. 113–122, 2016.
- [13] N. H. Wulansari and J. T. Manoy, "The Influence of Student Learning Motivation and Interest on Mathematics Learning Achievement During Study At Home. Journal of Mathematics and Science Education Research," *J. Penelit. Pendidik. Mat. Dan Sains*, vol. 4, no. 2, p. 72, 2021.
- [14] S. Silfitriah and W. H. Mailili, "The Effect of Interest in Learning and Learning Motivation on Students' Mathematics Learning Outcomes," *J. Pendidik. Dan Pembelajaran*, vol. 3, no. 1, pp. 53–60, 2020.
- [15] E. D. Sirait, "The Effect of Learning Interest on Mathematics Learning Achievement," *Form. J. Ilm. Pendidik. MIPA*, vol. 6, no. 1, pp. 35–43, 2016.
- [16] M. Palobo, N. Nurhayati, and N. Nurhayati, "Application of the Advance Organizer Model for Increasing Interest and Achievement in Learning Mathematics," *Musamus J. Math. Educ.*, vol. 2, no. 2, pp. 82–91, 2020.