ETDC Indonesian Journal of Research and Educational Review
Volume 3, No. 3, 2024, pp 118 - 127
e–ISSN 2809-3682
p–ISSN 2809-7505
https://doi.org/10.51574/ijrer.v3i3.1867

INTEREST, EMOTIONAL INTELLIGENCE, AND INTELLECTUAL INTELLIGENCE ON PJOK LEARNING ACHIEVEMENT IN MIDDLE SCHOOL STUDENTS

Arifuddin Usman[1], Juharti Anggreni[2], Muh. Adnan Hudain[3], Bustang[4], Suriah Hanafi[5]
[1, 2, 3, 4, 5] Pendidikan Jasmani dan Olahraga, Universitas Negeri Makassar, Indonesia

Article Info

Article history:

Received April 15, 2024
Revised June 05, 2024
Accepted June 21, 2024

Keywords:

Emotional Intelligence;
Intellectual Intelligence;
Interest;
Learning Achievement ;
PJOK.

ABSTRACT

This research objective is to determine the relationship between interest in learning, emotional intelligence, and intellectual intelligence and the PJOK learning achievement of class IX students at Public Middle School 1 Keera. The sample consisted of 54 students selected through random sampling. The research's dependent variable is the PJOK learning achievement. The independent variables include interest in learning, emotional intelligence, and intellectual intelligence. The study employed a descriptive research method. We analyzed the research data using correlational techniques, maintaining a significance level of 95%. The results of the research show that: 1) There is a relationship between interest in learning and PJOK learning achievement with a correlation value (r) of 0.838, which is in the quite strong category with a contribution of 72.2%. 2) There is a relationship between emotional intelligence and PJOK learning achievement with a correlation value (r) of 0.788, which is in the quite strong category with a contribution of 62.1%. 3) For class IX students at Public Middle School 1 Keera, there is a correlation between intellectual intelligence and PJOK learning achievement. The correlation value (r) is 0.800, which is pretty strong and works out to 64.0%. 4) The PJOK learning achievement of class IX students at Public Middle School 1 Keera reveals a significant relationship between interest in learning, emotional intelligence, and intellectual intelligence, with a correlation value (r) of 0.893, indicating a strong contribution of 79.7%.

Corresponding Author:

Juharti Anggreni,
Pendidikan Jasmani dan Olahraga, Universitas Negeri Makassar, Indonesia
Email: annaanaa26@gmail.com

1. INTRODUCTION

Students often interpret learning achievement as modifications in their knowledge, abilities, and attitudes following their participation in educational activities, resulting from an experience (Ilmiyah & Sumbawati, 2019). A high Orood learning outcome score indicates a student's level of study proficiency. Conversely, low student learning achievement indicates inadequate achievement in the learning process (Widiatma et al., 2022; Hakim & Awaluddin, 2024). Numerous factors impact student learning success, as learning is a multifaceted process susceptible to various influences. We can

categorize these factors into two groups: external, which originate from outside the student, and internal, which originate from within the student. The way students assimilate information also shapes their learning achievement, impacting both high-achieving and low-achieving students. Internal factors that determine learning success include interest in learning, emotional intelligence, and intellectual intelligence (Al-Fraihat et al., 2020; Zhoc et al., 2020; Rakhman et al., 2023).

Low student interest in learning is one of the determining factors (Harefa et al., 2023). The factors contributing to the low level of student learning are numerous. Learning with interest is considered an important internal factor. This is because if students will become more active in their learning activities if they have a genuine interest in learning. Interest refers to a genuine feeling of liking and interest in something or an activity, without any sense of coercion (Quinlan & Renninger, 2022). Because they are not interested in studying, students effectively learn optimally. Therefore, interest in learning greatly influences learning achievement. In addition, students may feel dissatisfied with the lesson and become too lazy to learn effectively. Teaching materials have the potential to spark students' interest, improve student learning achievement, and facilitate easier learning.

Providing students with information about the connections between the lessons they will study and the lessons they have already learned, as well as the content's potential future benefits, can help improve learning achievement. Connecting lesson material to viral news that most students already know can increase their interest in learning. As Aubret et al. (2023); and Reardon & Derner (2023) point out, it can be quite challenging to learn without maximizing success. According to research findings (Lestari, 2015), learning behavior from not caring to caring can change with the direct support of an interest in learning. Students who have a high interest in learning will abandon assignments that do not help them achieve their learning goals. earning goals.

Observations reveal a low level of student discipline during the teaching and learning process. This is evident in the attitude of students who are not prepared to participate in lessons at the start of the learning process, forcing teachers to reprimand students who are still playing. Another factor that contributes to achieving learning achievement is emotional intelligence. Emotional intelligence is defined as the ability to recognize and control emotions so that you can react to them and interact with other people. Emotional intelligence can influence students' learning attitudes during the teaching and learning process. Students demonstrate this attitude by interacting with teachers, participating in the teaching and learning process, and expressing their emotions through their responses to learning.

AL-Qadri & Zhao (2021) found a significant correlation between student learning success and emotional intelligence. The ability to regulate oneself during the learning process and provide a favorable learning environment is a sign of high emotional intelligence. This means there is a significant relationship between emotional intelligence and student learning achievement. Good emotional intelligence empowers students to exercise self-control during the teaching and learning process, thereby fostering a conducive learning environment. According to Kärchner et al. (2021),

controlling unstable thought patterns can influence student learning achievement. Applying character education during the learning process is one way to develop students' emotional intelligence. To instill character education in schools, teachers must be the pioneers through three methods, namely: understanding, habituation, and example.

Many people hold the belief that possessing high intellectual intelligence is necessary for cultivating a positive attitude and achieving success. This is because possessing high intellectual intelligence can potentially simplify the learning process and foster optimal learning attitudes (Kucharska & Bedford, 2020; Ahmad Baaqeel, 2020; Ghaznavi et al., 2021). In fact, during the teaching and learning process, many students still lack a learning attitude that matches their intellectual intelligence. There are students with high intellectual intelligence but low learning attitudes, and there are also students who have intellectual intelligence but have relatively high learning attitudes (Hong et al., 2021; Svenningsson et al., 2022). This suggests that intelligence is not the sole determinant of an individual's success. Intellectual intelligence is required to solve cognitive problems.

Therefore, this research aims to determine the relationship between interest in learning, emotional intelligence, and intellectual intelligence and PJOK learning achievement for class IX students of Public School 1 Keera.

2. METHOD

This research, specifically on Expost Facto, is correlational (Moleong, 2010; Merriam & Tisdell, 2016). Researchers investigate independent variables after an event to identify symptoms, reasons for behavioral changes, or resulting phenomena, without specifically focusing on the variables under study. We conducted this research in class IX of Public Middle School 1 Keera, using a sample of 54 students. This research focuses on two variables: the independent variable, which includes interest in learning (X1), emotional intelligence (X2), intellectual intelligence (X3), and PJOK learning achievement (Y). To understand the relationship design between these two variables, you can observe the following relationship patterns in simple terms.

This study employs stratified random sampling as a sampling method. This technique gives each member of the population the same opportunity to become a research sample. The stratified random sampling technique determines the number of samples by first calculating the total number of samples. Data collection consists of two methods: questionnaires to assess interest in learning and emotional intelligence, and written tests to gather information on intellectual intelligence. The supervisor, who teaches the PJOK subject, then extracts the learning outcome data from the report cards for a semester. This study employs both descriptive and inferential data analysis techniques.

Volume 3, No 3, 2024, pp 118 - 127 121

3. RESULTS AND DISCUSSION

Results

Descriptive Analysis of Student Learning Interests

We distribute the learning interest questionnaire to students, gather data related to learning interest, and then evaluate it descriptively to provide a general picture of learning interest intelligence. The research shows the following results: median 105.5, standard deviation 7, minimum score 92, and maximum score 118. The interval data in Table 1 pertains to the students' level of interest in learning.

Table 1. Frequency Distribution and Percentage of Student Learning Interest Scores

Intervals	Category	Frequency	Percentage (%)
$X < 94$	Very low	6	11
$94 < X \leq 102$	Low	13	24
$102 < X \leq 109$	Currently	19	35
$117 < X \leq 79$	Tall	12	22
$X > 79$	Very high	4	7
Total		54	100

Table 1 shows that there are 6 students, or 11%, in the very low category and 4 students, or 7%, in the very high category. Students with the highest frequency are in the medium category, with a percentage of 35%. Furthermore, the average learning interest of Class IX students was 105, so the learning interest of Class IX students at SMPN 1 was in the medium category.

Descriptive Analysis of Students' Emotional Intelligence

We obtained data related to emotional intelligence from a distributed emotional intelligence questionnaire, then conducted a descriptive analysis to gain a general picture of the students' emotional intelligence. Based on the results of the analysis, the minimum score was 100, the maximum score was 135, the mean was 122, the middle value was 123, and the standard deviation was 8. The results of students' emotional intelligence levels in Table 2 correspond to the following interval data.

Table 2. Frequency Distribution and Percentage of Students' Emotional Intelligence

Intervals	Category	Frequency	Percentage (%)
$X < 109$	Very low	4	7
$109 < X \leq 118$	Low	9	17
$118 < X \leq 126$	Currently	21	39
$126 < X \leq 134$	Tall	19	35
$X > 134$	Very high	1	2
Total		54	100

Table 2 shows that there are 4 students, or 7% of students, who have emotional intelligence in the very low category, and 1 student, or 2% of students, who have emotional intelligence in the very high category. Students with the highest frequency

are in the medium category, with a percentage of 39%. Furthermore, students' average emotional intelligence stood at 122, suggesting a medium level of learning interest.

Descriptive Analysis of Students' Intellectual Intelligence

We obtained data about intellectual intelligence from student-distributed intellectual intelligence tests, which we then subjected to descriptive analysis to gain a general picture of the students' intellectual intelligence. According to the analysis's results, the minimum score was 72, the maximum score was 96, the mean was 84, the middle value was 84, and the standard deviation was 7. The following table presents the interval data pertaining to the students' intellectual intelligence levels, as presented in Table 3.

Table 3. Frequency Distribution and Percentage of Students' Intellectual Intelligence

Intervals	Category	Frequency	Percentage (%)
0-63	Very low	0	0
64-73	Low	7	13
74-83	Currently	15	28
84-93	Tall	27	50
94-100	Very high	5	9
Total		54	100

Table 3 reveals that 7 students, or 13%, fall into the very low category, while 5 students, or 9%, belong to the very high category. The students with the highest frequency fall into the high category, accounting for 50% of the total. Additionally, we found that students' average intellectual intelligence was 84, placing them in the high category.

Descriptive Analysis of Student Learning achievement

We obtain data related to student learning achievement from the learning outcome scores, then conduct a descriptive analysis to gain a general picture of the student learning outcome scores. Based on the analysis findings, the minimum score was 75, the maximum score was 96, the mean was 83.7, the middle value was 84, and the standard deviation was 5.84. Table 4 below contains interval data related to student learning achievement.

Table 4. Frequency Distribution and Percentage of Student Learning Achievement

Intervals	Category	Frequency	Percentage (%)
0-63	Very low	0	0
64-73	Low	0	0
74-83	Currently	24	44
84-93	Tall	26	48
94-100	Very high	4	7
Total		54	100

Table 4 shows that there are 4 students, or 7% of students, who have learning achievement in the very high category; 26 students, or 48% of students, have learning

achievement in the high category; and 124 students, or 44% of students, have learning achievement in the medium category. Furthermore, the average student learning achievement stood at 83.7, placing them in the medium category.

Analysis Prerequisite Test

We use the normality test to determine the normality of each research variable's data. Table 5 demonstrates that all variables have an Asymp. Sig. (2-tailed) greater than 0.05, indicating a normal distribution of the data on learning interest, emotional intelligence, intellectual intelligence, and student learning achievement.

Table 5. Summary of Normality Test Results

		Interest to learn	Emotional Intelligence	Intellectual Intelligence	Learning Achievement
N		**54**	**54**	**54**	**54**
Normal Parameters[a,b]	Mean	105.30	121.67	83.57	83.70
	Std. Deviation	7.475	8.260	7.350	5.894
Most Extreme Differences	Absolute	.076	.101	.116	.090
	Positif	.076	.064	.108	.090
	Negatif	-.070	-.101	-.116	-.087
Test Statistic		.076	.101	.116	.090
Asymp. Sig. (2-tailed)		.200[c,d]	.200[c,d]	.069[c]	.200[c,d]

Data Linearity Test

Before performing regression and correlation analysis, one must first conduct a linearity test to verify the existence of a linear relationship between the independent and dependent variables. Statistical applications enable the use of the Test of Linearity at the sig level for linearity testing. 0.05. If the linearity deviation value (sig.) exceeds 0.05, we consider a variable to be linear in decision-making.

Table 6. Linearity Test Results of Learning Interest on Learning Achievement

			Sum of Squares	Df	Mean Square	F	Sig.
Learning Achievement * Interest to learn	Between Groups	(Combined)	1645.22 6	26	63.278	8.715	.000
		Linearity	1292.97 5	1	1292.97 5	178.084	.000
		Deviation from Linearity	352.251	25	14.090	1.941	.047
	Within Groups		196.033	27	7.260		
	Total		1841.25 9	53			

We conducted a linearity test between learning interest and learning achievement. According to Table 6, the significance value is 0047 > 0.05, indicating that the relationship between learning interest and learning achievement is linear.

Relationship Analysis

We conducted a regression analysis to determine the relationship between learning interest and learning achievement, specifically between learning passion and student learning achievement. Table 7 displays the analysis findings. The regression analysis seeks to ascertain the R value, a measure of the degree of relationship, and the Sig value. The model summary lists the F change to determine the correlation between learning interest and learning achievement

Table 7. Analysis of the relationship between learning interest and learning achievement

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.838[a]	.702	.696	3.247	.702	122.627	1	52	.000

Table 7's data analysis findings reveal a correlation value (r) of 0.838, indicating a strong relationship between learning interest and learning achievement. A significance value of 0.00 shows that there is a correlation between learning interest and student learning achievement. The R square value is 0.702, so the coefficient of determination (KP) is 0.702 x 100% = 70.2%. This demonstrates that learning interest contributes 70.2% to student learning achievement.

Discussion

The Relationship between Students' Learning Interests and Physical Education, Sports and Health Learning Achievement

The results of the correlation test show that there is a strong relationship between interest in learning and PJOK learning achievement for Class IX SMPN 1 Keera students. This can be noticed in the Sig value of 0.000 (0.000 < 0.05), and the correlation coefficient of learning interest on student learning achievement is 0.838. The coefficient of determination, at 0.702, indicates that interest in learning contributes 70.2% to PJOK learning achievement, with external factors influencing the remaining 29.8%. The findings of this research are in line with those of several previous researchers, namely Bahar et al. (2022) and Amirzan et al. (2023) who stated that there is a significant relationship between emotional intelligence and students' PJOK learning achievement.

The Relationship between Emotional Intelligence and Learning Achievement in Physical Education, Sports and Health

The results of correlation testing show that there is a strong correlation between emotional intelligence (EQ) and PJOK learning achievement for Class IX Public Middle

School 1 Keera students. The correlation coefficient between EQ and student learning achievement is 0.788, with a Sig value of 0.000 (0.000 < 0.05). With a coefficient of determination of 0.621, EQ has an influence of 62.1% on PJOK learning achievement, and the remaining 37.9% is due to variables that are outside the scope of this research. The findings of this research are consistent with previous research (Hasmara, 2022), which suggests that there is a significant relationship between students' PJOK learning achievement and their emotional intelligence.

The Relationship between Intellectual Intelligence and Learning Achievement in Physical Education, Sports and Health

The results of correlation testing demonstrate that there is a strong relationship between intellectual intelligence and PJOK learning achievement for Class IX Public Middle School 1 Keera students. The Sig value confirms this. 0.000 (0.000 < 0.05), and the correlation coefficient of intellectual intelligence on student learning achievement is 0.800. The coefficient of determination stands at 0.640, indicating a 64.40% influence of intellectual intelligence on PJOK learning achievement, with external factors accounting for the remaining 35.6%. The results of this research are relevant and supported by Sulistiya (2016) that there is a relationship between intellectual intelligence and learning achievement in physical education, sports and health.

Relationship, Interest in Learning, Emotional Intelligence and Intellectual Intelligence on Learning Achievement in Physical Education, Sports and Health

The PJOK learning achievement of students in Class IX at Keera Public Middle School shows a strong link between intellectual intelligence, emotional intelligence, and interest in learning. This was shown by the multiple linear regression analysis correlation test. This is demonstrated by the sig value of 0.000 (0.000 < 0.05) and the correlation coefficient of 0.893. The coefficient of determination stands at 0.797, indicating that learning, emotional intelligence, and intellectual intelligence all simultaneously contribute to PJOK learning achievement, accounting for 79.7%. However, factors outside the purview of this research impact the remaining 20.3%. The results of this research are relevant and support several previous research results from Sulistiya (2016), Ardian et al. (2019), Hasmara (2022), Bahar et al. (2022), and Amirzan et al. (2023) that there is a relationship between interest in learning, emotional intelligence, and intellectual intelligence on learning achievement student.

4. CONCLUSION

The research findings, based on data analysis, statistical calculations, and discussion, indicate a significant and strong relationship between student learning achievement and interest in learning. Emotional intelligence has a significant and strong relationship with student learning achievement. Intellectual intelligence establishes a significant and robust relationship with student learning achievement. Interest in learning, emotional intelligence, and intellectual intelligence all simultaneously provide a significant relationship with student

learning achievement, with a strong degree of correlation. The relationship between student learning achievement and emotional intelligence is robust.

As a suggestion, intelligence is not the only factor that determines a person's success. Intellectual intelligence is necessary to solve problems related to cognitive aspects. Aside from that, the results of this research can serve as a reference for future research on a larger scale.

REFERENCES

Ahmad Baaqeel, N. (2020). Improving student motivation and attitudes in learning English as a second language; literature as pleasurable reading: applying Garner's theory of multiple intelligences and Krashen's filter hypothesis. *AWEJ for Translation & Literary Studies*, *4*(1).

Amirzan, A., Jafaruddin, J., & Zikri, A. (2023). Pengaruh Minat Olahraga Terhadap Hasil Belajar Pjok Pada Siswa Kelas XI MAN 6 Pidie. *Education Enthusiast: Jurnal Pendidikan dan Keguruan*, *3*(4), 238-248.

Al-Fraihat, D., Joy, M., & Sinclair, J. (2020). Evaluating E-learning systems success: An empirical study. *Computers in human behavior*, *102*, 67-86.

Al-Qadri, A. H., & Zhao, W. (2021). Emotional intelligence and students' academic achievement. *Problems of Education in the 21st Century*, *79*(3), 360.

Ardian, A., Purwanto, S., & Alfarisi, D. S. (2019). Hubungan prestasi belajar siswa kelas khusus olahraga dengan kecerdasan emosional. *Jurnal Keolahragaan*, *7*(2), 126-134.

Aubret, A., Matignon, L., & Hassas, S. (2023). An information-theoretic perspective on intrinsic motivation in reinforcement learning: A survey. *Entropy*, *25*(2), 327.

Bahar, C., Pratama, E. Y., & Marselino, D. (2022). Hubungan Minat Olahraga Terhadap Hasil Belajar Siswa Kelas VII Di SMPN 23 Kerinci Pada Mata Pelajaran Penjaskes. *JPIn: Jurnal Pendidik Indonesia*, *5*(2), 445-468.

Ghaznavi, N., Haddad Narafshan, M., & Tajadini, M. (2021). The Implementation of a Multiple Intelligences Teaching Approach: Classroom engagement and physically disabled learners. *Cogent Psychology*, *8*(1), 1880258.

Hakim, H., & Awaluddin, A. (2024). Efforts To Increase Students' Learning Motivation Through Ice Breaking In Pjok Learning. *SHOOTING: Journal of Sport, Health, and Education*, *2*(1), 15-20.

Harefa, D., Sarumaha, M., Telaumbanua, K., Telaumbanua, T., Laia, B., & Hulu, F. (2023). Relationship student learning interest to the learning outcomes of natural sciences. *International Journal of Educational Research & Social Sciences*, *4*(2), 240-246.

Hasmara, P. S. (2022). Hubungan emotional quotient (eq) dengan hasil belajar PJOK siswa kelas atas SDN Bakalan Gondang Mojokerto. *Corner: Jurnal Pendidikan Jasmani dan Olahraga*, *2*(2), 34-43.

Hong, J. C., Hsiao, H. S., Chen, P. H., Lu, C. C., Tai, K. H., & Tsai, C. R. (2021). Critical attitude and ability associated with students' self-confidence and attitude toward "predict-observe-explain" online science inquiry learning. *Computers & Education*, *166*, 104172.

Ilmiyah, N. H., & Sumbawati, M. S. (2019). Pengaruh media Kahoot dan motivasi belajar terhadap hasil belajar siswa. *JIEET (Journal of Information Engineering and Educational Technology)*, *3*(1), 46-50.

Kärchner, H., Schöne, C., & Schwinger, M. (2021). Beyond level of self-esteem: exploring

the interplay of level, stability, and contingency of self-esteem, mediating factors, and academic achievement. *Social Psychology of Education*, *24*(2), 319-341.

Kucharska, W., & Bedford, D. A. (2020). Love your mistakes!—they help you adapt to change. How do knowledge, collaboration and learning cultures foster organizational intelligence?. *Journal of Organizational Change Management*, *33*(7), 1329-1354.

Lestari, I. (2015). Pengaruh waktu belajar dan minat belajar terhadap hasil belajar matematika. *Formatif: jurnal ilmiah pendidikan MIPA*, *3*(2).

Merriam, S. B., & Tisdell, E. J. (2016). Qualitative research: A guide to design and implementation (Fourth). *San Francisco, CA: ohn Wiley & Sons*.

Moleong, L. (2010). Metode Penelitian. *Jakarta: Rineka Cipta*, *25*.

Quinlan, K. M., & Renninger, K. A. (2022). Rethinking employability: how students build on interest in a subject to plan a career. *Higher Education*, *84*(4), 863-883.

Rakhman, F., Surur, M., Ramli, A., Noviyanti, A., & Sarumaha, Y. A. (2023). Education Management Based On Multiple Intelligence For Developing The Potential Of Students. *Mudir: Jurnal Manajemen Pendidikan*, *5*(1), 112-117.

Reardon, M., & Derner, S. (2023). *Strategies for great teaching: Maximize learning moments*. Routledge.

Sulistiya, F. (2016). Pengaruh Tingkat (IQ) Dan (EQ) Terhadap Prestasi Belajar Penjasorkes Siswa Di Smpn 15 Yogyakarta. *Pendidikan Jasmani Kesehatan dan Rekreasi*, *5*(7).

Svenningsson, J., Höst, G., Hultén, M., & Hallström, J. (2022). Students' attitudes toward technology: exploring the relationship among affective, cognitive and behavioral components of the attitude construct. *International Journal of Technology and Design Education*, *32*(3), 1531-1551.

Widiatma, A. A., Hasmyati., & Asran. (2022). Student Motivation in Learning PJOK: A Study on Lower Passing Volleyball. *ETDC: Indonesian Journal of Research and Educational Review*, *1*(4), 479-488.

Zhoc, K. C., King, R. B., Chung, T. S., & Chen, J. (2020). Emotionally intelligent students are more engaged and successful: examining the role of emotional intelligence in higher education. *European Journal of Psychology of Education*, *35*(4), 839-863.