

Correlational study: Sports Students' special test results and basic athletic training learning outcomes Estudio correlacional: Los resultados de las pruebas especiales de los estudiantes de deporte y los resultados del aprendizaje del entrenamiento atlético básico

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Abstract. Introduction: The special test is an instrument that is carried out to select prospective students who have motor skills to be able to take part in sports practice lectures at FIK UNP. However, the grades for athletic practice courses were relatively low, leading to the emergence of various assumptions that the special tests carried out in selecting prospective students had little role. This study aims to see the relationship between the results of special tests with the learning outcomes of basic athletic practice for students majoring in coaching FIK UNP. Materials and methods: This type of research is quantitative descriptive research with a correlation study. The instruments used to obtain specific test results are the wall pass test, Basket Ball Throw, Standing Broad Jump, and Obstacle Race. Furthermore, on the learning outcomes of athletic practice through learning outcome data. This study was conducted on sports education students at FIK UNP using a Total Sampling sampling technique, with a total of 39 students taking basic athletics courses sampled. In terms of data verification, only 33 students were used for analytical computations. The SPSS version 26 application was used to help with the analysis in this investigation. Results: Based on the results of the special test correlation test with the results of the 100-meter run, it is known that the significance value is $0.000 > 0.05$, which means there is a significant relationship. The results of the special test with discus throwing results are known, a significance value of $0.000 > 0.05$, so there is a significant relationship between the special test and discus throwing results. Furthermore, special tests with the results of basic athletic results are known to have a significant value of $0.000 > 0.05$, so there is a significant relationship between the special tests and the results of basic athletic results in students. Conclusion: The results of this study provide evidence that there is a significant relationship between the results of special tests and the learning outcomes of basic athletic practice in FIK UNP students. Where these results have provided a new reference related to the learning outcomes of basic athletic practice. Furthermore, you can find information related to factors that influence the learning outcomes of basic athletic practice in sports students.

Keywords: Special Tests, Practical Learning Results, Basic Athletics, Sports Students

Resumen. Introducción: La prueba especial es un instrumento que se lleva a cabo para seleccionar a los futuros estudiantes que cuenten con habilidades motrices para poder participar en las charlas de práctica deportiva en el FIK UNP. Sin embargo, las calificaciones de los cursos de práctica atlética fueron relativamente bajas, lo que llevó a varias suposiciones de que las pruebas especiales realizadas para seleccionar a los posibles estudiantes desempeñaron un papel menor. Este estudio tiene como objetivo ver la relación entre los resultados de las pruebas especiales con los resultados de aprendizaje de la práctica deportiva básica para los estudiantes de la carrera de entrenador en FIK UNP. Materiales y métodos: Este tipo de investigación es una investigación cuantitativa descriptiva con un estudio de correlación. Los instrumentos utilizados para obtener resultados de pruebas especiales son la prueba de pase de pared, lanzamiento de baloncesto, salto largo de pie y carrera de obstáculos. Además, sobre los resultados de aprendizaje de la práctica deportiva a través de datos de resultados de aprendizaje. El tema de esta investigación se llevó a cabo en estudiantes de entrenador deportivo del FIK UNP con una técnica de muestreo mediante Muestreo Total por lo que se muestreó un total de 39 estudiantes que cursaban cursos básicos de atletismo. En cuanto a los resultados de la verificación de datos, solo 33 estudiantes fueron utilizados para los cálculos analíticos. El análisis en este estudio fue asistido por el uso de la aplicación SPSS versión 26. Resultados: Según los resultados de la prueba especial de correlación con los resultados de la carrera de 100 metros, se sabe que el valor significativo es $0,000 > 0,05$, lo que significa que existe una relación significativa. Se sabe que los resultados de la prueba especial con lanzamiento de disco tienen un valor significativo de $0,000 > 0,05$, por lo que existe una relación significativa entre la prueba especial y los resultados de lanzamiento de disco. Además, se sabe que las pruebas especiales con los resultados de atletismo básico tienen un valor de significación de $0,000 > 0,05$, por lo que existe una relación significativa entre las pruebas especiales y los resultados de atletismo básico en los estudiantes. Conclusión: Los resultados de este estudio evidencian que existe una relación significativa entre los resultados de las pruebas especiales y los resultados de aprendizaje de la práctica deportiva básica en los estudiantes de FIK UNP. Donde estos resultados han proporcionado una nueva referencia relacionada con los resultados de aprendizaje de la práctica deportiva básica. Además, puede encontrar información relacionada con los factores que influyen en los resultados de aprendizaje de la práctica deportiva básica en estudiantes de deportes.

Palabras clave: Pruebas Especiales, Resultados de Aprendizajes Prácticos, Atletismo Básico, Estudiantes Deportivos

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Introduction

Sport is a form of effort to improve a person's quality so that it leads to better things, both individually, in groups, or socially (Aziz, 2022). Where sports are physical activities that are easy to do, even at an elderly age (Suryadi, Gustian, & Fauziah, 2022). In addition, sports activities seek to improve a person's health and physical fitness (Baek et al., 2020; Martins, Honório, & Cardoso, 2023; Mérida, Palma-Leon, Arias-Arias, & Calvo-Lluch, 2023; Rubiyatno et al., 2023; Saputra et al., 2023; Suryadi, 2022; Suryadi & Rubiyatno, 2022; Suryadi, Samodra, & Purnomo, 2021; Suryadi, Suganda, et al.,

2023), and even vo2max endurance (Chávez Valenzuela et al., 2021; Enriquez-Del Castillo, Cervantes Hernández, Candia Luján, & Flores Olivares, 2021; Pulido, Ortiz-Pulido, Gómez-Figueroa, & Ortiz-Pulido, 2022; Supriatna, Suryadi, Haetam, & Yosika, 2023; Vargas & Gallardo, 2023). A statement by (Hughes et al., 2020) says that sport makes an important contribution to physical, psychological, and emotional well-being. Similar to the research conducted by Moreno-Quispe et al., the contributions made also to physical and social strength (Moreno-Quispe et al., 2021). In addition, the great benefits offered by exercise can reduce the risk of disease and can maintain a healthy body (Alarcón, Riquelme, Sáez,

Hernández, & Fuentes-Vilagrón, 2023; Marco et al., 2023; Meo et al., 2021). Therefore, sports are very important to do so that the body is always in good shape (Suryadi, 2022).

According to (Aziz, 2022) says that through sports activities, it will have a favorable impact on Indonesia's ability to establish a quality society. Various efforts have been made to increase development in Indonesia in all fields, one of which is education. Where education is an important factor in achieving achievement in sports (Galiano, Ramírez, & Ramos, 2023; Rubiyatno & Suryadi, 2022; Suryadi, Samodra, et al., 2023). So what is done will also vary depending on how the goal is (Fekry, Zafarany, & Shamseldin, 2014). Efforts to foster and develop sports are efforts to improve the quality of the Indonesian nation. In this case, it is clear that what is meant is education, which should be higher education, especially in the field of sports, is obliged to produce educational staff both in quality and quantity. One of the things that can be done is to implement coaching that also runs through the available curriculum with sports branches as subjects (Nursalam & Aziz, 2020).

To earn *out goodput*, a series of special tests on prospective students need to be carried out, where measurement tests are very important in the world of sports (Sepdanius, Rifki, Sazeli, Komaini, & Anton, 2019). That way, it will be seen that students have the expected motor skills in accordance with their respective innate abilities because movement in every sport is very important for the development of innate abilities possessed, and is useful for developing other branches (Aziz & Donie, 2017). In addition, by taking measurements it will make it easier to foster achievements in sports (Samodra et al., 2023; Suryadi, Rubiyatno, & Fauziah, 2022). Furthermore, the measurement tests carried out are useful for testing the extent to which a person's motor level has been carried out and developed innate abilities in learning motor skills. With these results, it can be used as a first step in preparation for improving the quality of the next generation, because it can also determine the ability of teachers involved in education.

The problem in this research is that student scores from athletics courses are relatively low, and some opinions say that the reason is that the special tests carried out in selecting prospective students don't play a role even though the practical courses to be run are quite tough. This result is reinforced by Pratama et al., the physical fitness of the male Arts Activity Unit in the less category and the female in the very less category (Pratama et al., 2023). Furthermore, the average arm muscle strength is in the less category for sports students (Hardiansyah, 2018). Therefore, this problem makes the special test course less functional, causing students to find it difficult to take practical courses. Where the special test is an instrument that is carried out to select prospective students who have motor skills to be able to take part in sports practice lectures at FIK UNP.

In addition, this course is included in the curriculum as a compulsory subject because it is considered important for developing the abilities of other sports branches. One of the subjects referred to is basic athletics in which there are complex movements, namely movements that require strength, speed, endurance, flexibility, and coordination, and other elemental abilities. Where, muscle strength is the ability that identifies a person can do the activity (Konishi et al., 2022). Although previously research had been carried out by (Hasan, 1982) which discussed the relationship between the results of special tests and learning outcomes. However, this research has been relatively old and there has been no update until now and this research is focused on the field of counseling guidance so that it has not been found in the field of sports. Therefore, This research is one of the gaps that can be developed as well as the reason why this study is important. The research objective is to obtain data and information that are close to reality to reveal the factors causing the low learning outcomes of basic athletic practice for students majoring in sports coaching at FIK UNP.

Materials and Methods

This type of research is a quantitative descriptive study with a correlation study, namely to see the relationship between special tests and learning outcomes of basic athletic practices.

Participant

This study was conducted on sports education students at Padang State University's Faculty of Sports Science. whole Sampling is utilized in the sampling technique, which means that the sample used is the whole number of students currently enrolled in basic athletic courses. As a result, there are 39 students. There are four students who do not attend basic athletic lectures and two students who do not locate special test data; therefore, the sample size is 33 students, 20 male students, and 13 female students.

Procedure

The instruments used to obtain special test results are the wall pass test, Basket Ball Throw, Standing Broad Jump, and Obstacle Race. The Wall Pass test aims to see the ability of the upper arm muscles to catch and push a basketball. The implementation is carried out in a room with a minimum size of 2.66m and 3m wide and the room there are flat and straight walls for throwing. As previously discussed, carrying out this test does not only work for athletics but can also be used for other sports such as football, this test can affect the accuracy of passing (Suantama, Swadesi, & Sudarmada, 2018).

Furthermore, in basketball throws, this test has the same goal as the wall pass but adds an element of maximal strength to throw the basketball as far as possible. The implementation may use the prefix or not, and when throwing use one hand. Of course, this test is often found in basketball because it is one of the important things to

support achievement (Tan, Burns, Pan, & Kong, 2020). Standing a broad jump is done to see the ability of the body to push with two legs without using a prefix. An obstacle race was carried out to measure the ability to coordinate movements, and speed in carrying out activities.

Statistical Analysis

Data analysis in this study used the Pearson correlation test, which aims to determine the relationship between special tests and learning outcomes of basic athletic practice. Furthermore, to find out the relationship through the stages of the normality test, linearity test, and using a correlation test assisted by the SPSS version 26 application.

Results

The results of this study draw several conclusions about the relationship between the results of special tests and the learning outcomes of basic athletic practice for students majoring in coaching at FIK UNP. Where these results show the results of special tests and practical learning outcomes in athletic courses as follows.

Table 1.
General Description of Special Test Results

No	Score	Frequency	Percentage	Information
1	>50	24	72.7%	A
2	39 . 8 - 49	6	15.2%	B
3	29 . 6-39 . 7	4	12.1%	C
Amount			100 %	

In Table 1 the results show the dominant value in the best group (A), with a percentage of 72.7%, where this result is fairly good. Then in the best group (B) with a

Table 4.
Linearity Test

ANOVA Table					
			Sum of Squares	df	MeanSquare
Results Run 100 meters * Special Test	Between Groups	Deviation from Linearity	609,397	19	32,074
Discus Throw Results * Special Test	Between Groups	Deviation from Linearity	1230.138	19	64,744
Basic Athletic Results * Special Tests	Between Groups	Deviation from Linearity	935,461	19	49,235

The results of the data linearity test results of the 100-meter run * The test shows a significance value of $0.982 > 0.05$. Discus Throwing Results Data * Special Test shows a significance value of $0.751 > 0.05$ and then Basic Athletic Results * Special Test shows a significance value of $0.242 > 0.05$ so based on these results it can be concluded that the data is linear. The results can be seen in Table 4.

Based on the results of the special test correlation test with the results of the 100-meter run, it is known that the significance value is $0.000 > 0.05$, so it can be concluded that there is a significant relationship between the special test and the results of the 100-meter run in students. The results can be seen in Table 5.

Based on the results of the correlation test of the special test with the discus-throwing results, it is known that the significance value is $0.000 > 0.05$, so it can be concluded that there is a significant relationship between the special test and the discus-throwing results in students. The

percentage of 15.2% and the moderate group (C) with 12.1%.

The results the Table 2 shows that the learning value of the 100-meter running practice of students tends to get a low score, namely a moderate score (C) of 39.39 % and sufficient value (D) of as much as 39.39 %. Furthermore, the results in discus throwing tended to be in the very good category with 39.39 %. While Basic Athletics tends to be low, namely a moderate value (C) with 5 .58 %, so this result is the target of research on whether this has a close relationship with special tests on student acceptance. The results can be seen in Table 2.

Table 2.
Learning Results for the Practice of Athletics Courses

No	Score	100m	Discus Throw	Basic Athletics	Information
1	90 – 100	0%	39.39 %	6.06 %	A
2	80 – 89	6 .06 %	21.21 %	24.24 %	B
3	69 – 79	39.39 %	27.28 %	57.58 %	C
4	55 – 68	39.39 %	6.06 %	9.09 %	D
5	55	15.16 %	6.06 %	3.03 %	E
Amount		100	100	100	

Based on the results of the normality test, the value shows a significance of $0.200 > 0.05$, so it can be said that the data is normally distributed. So that it is feasible to carry out further tests, the results can be seen in Table 3.

Table 3.
Kolmogorov-Smirnov One-Sample Normality Test

		Unstandardized Residuals	
N	33	Normal Parameters ^{a,b}	Means
asym. Sig. (2-tailed)		0.0000000	.200 ^c

results can be seen in Table 6.

Table 5.
Specific Test Correlation Test with 100-meter Run Results

		Special Test	100-meter running results
Special Test	Pearson Correlation	1	.762 **
	Sig. (2-tailed)		0.000
	N	33	33

100-meter running results	Pearson Correlation	.762 **	1
	Sig. (2-tailed)	0.000	
	N	33	33

Table 6.

Correlation Test of Specific Tests with Discus Throwing Results

		Special Test	Discus Throw Results
Special Test	Pearson Correlation	1	.766 **
	Sig. (2-tailed)		0.000
	N	33	33

Discus Throw Results	Pearson Correlation	.766 **	1
	Sig. (2-tailed)	0.000	
	N	33	33

Based on the results of the special test correlation test with the results of basic athletic results it is known that the significance value is $0.000 > 0.05$, it can be concluded that there is a significant relationship between the special test and the results of basic athletic results in students. The results can be seen in Table 7.

Table 7.
Correlation Test of Specific Tests with Basic Athletic Results

		Special Test	Basic Athletic Results
Special Test	Pearson Correlation	1	.671 **
	Sig. (2-tailed)		0.000
	N	33	33
Basic Athletic Results	Pearson Correlation	.671 **	1
	Sig. (2-tailed)	0.000	
	N	33	33

Discussion

This study aims to look at the relationship between the results of special tests with the learning outcomes of basic athletic practice for students majoring in coaching FIK UNP. Where the results of the study showed that there was a significant relationship between special tests and the results of basic athletic results in students. This result is also seen in the results of the r_{count} which is greater than the r_{table} . Therefore, the hypothesis proposed is accepted as true, and it is necessary to look again at the influencing variables in this study. Therefore the data is taken from sources trusted, namely from the organizing committee for the UNP FIK special test and from the athletics lecturer. In previous studies proving interested in learning and intelligence, there is a significant relationship to the learning outcomes of athletic coordination exercises (Erizal, Oktarifaldi, & Nur, 2020). Based on observations the results obtained by students were still relatively low, and this may be due to the lack of students mastering the dominant elements in basic athletics such as; strength, speed, endurance, flexibility, coordination, and more.

Where strength functions to achieve maximum results so that it makes it easier to learn techniques. So that this can be one of the determinants of achievement. Strength also does not merely increase because age and practice can also determine (Bayindir & Kolayış, 2015). In addition, speed can be obtained if you already have elements of strength, speed, and preparation for special physical conditions built based on preparation for general physical conditions that you already have (Hakim & Umar, 2019). Furthermore, in athletics running 100 meters and discuss throwing, what is needed is local muscle endurance which functions to maintain, accelerate and prevent injuries in sports. Endurance is an important component that influences athletes (Jarkasih Imam & Fardi, 2020). According to Olajos et al., (2020), coordination plays a role in assembling several elements of the movement into a harmonious movement, where coordination becomes a necessary element in all sports (Olajos et al., 2020). In this lecture process, it turns out that flexibility is also a determinant of graduation. In addition, flexibility is also

often more at risk than other components if not studied properly (Mas Martinez et al., 2020).

A study by Rankin et al., (2016) proved that students' perceptions of the positive aspects of climate can influence the success of athletics in students. It turns out that giving reinforcement has an influence on the learning outcomes of the flop-style high jump students (Setyo Guntoro, 2017). Furthermore, giving treatment to traditional games has a significant effect on the learning outcomes of short-distance running (Aryati, 2019). The statement Dodge & Mazerolle, (2015) that teaching and learning activities are identified as having positive attributes related to being a mentor, where the results of this study prove that athletic training develops joy can be influenced by mentors in a lesson. Based on these results, it can be concluded that the role of a mentor or teacher is needed to determine success in a lesson, this is also evidenced by (Rubiyatno & Suryadi, 2022; Suryadi, Saputra, & Wahyudi, 2022), which says educators have an important role in achieving learning.

Conclusions

Based on data analysis and hypothesis testing put forward in this study has a strong foundation related to athletic learning outcomes, these results have been listed in the discussion results. The results showed that learning basic athletic practices for students majoring in coaching only met the graduation requirements, although there were still some students who got good grades (B). The results of the study also showed that there was a significant relationship between the results of the special test and the learning outcomes of the athletic practice of coaching students which showed significant results. The results show that there is a significant relationship between the results of the special test and the learning outcomes of the 100-meter running practice for students majoring in coaching. Furthermore, there is a significant relationship between the results of the special test and the learning outcomes of discus throwing practice for students majoring in coaching. These results have provided a new reference regarding the relationship between special tests and basic athletic learning outcomes for students so that these results can be considered by sports practitioners in paying attention to factors related to basic athletic practice learning. Recommendations for further research can seek information regarding factors that influence the learning outcomes of basic athletic practice in sports students with a wider sample and population.

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Non declare

Conflicts of Interest

The authors declare no potential conflicts of interest concerning the research, authorship, and publication of

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