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The Interest in Gateball Sports Between FIK UNM and UKM UMI College Students

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Authors' contribution:
A. *Conception and design of the study;* ***B.*** *Acquisition of data;* ***C.*** *Analysis and interpretation of data;* ***D.*** *Manuscript preparation;* ***E.*** *Obtaining funding*

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ABSTRACT

This study aims to test whether there are differences in the interest of FIK UNM and UMI UKM college students towards the Gateball game. This study was conducted in September 2018. The population in this study was all FIK UNM college students and UMI UKM college students. The sample consisted of 15 FIK UNM college students and 15 UMI UKM college students, the sample in this study was determined using random sampling. Data collection in the study was carried out using questionnaires. The method used for hypothesis testing is the Independent Sample T-test. The results showed that: (1) The results of hypothesis testing obtained a sig value (2-tailed) which is 0.080 greater than 0.05. Thus, it can be concluded that there is no significant difference in interest between FIK UNM college students and UMI UKM towards the Gateball game.

Keywords: Interest; Sport; Gateball

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INTRODUCTION

Sport is one of the physical and psychological activities of a person that is useful for maintaining and improving the quality of health. Sport is a form of individual and community education that prioritizes physical movements that are carried out consciously and systematically towards a higher quality (Sahabuddin, 2019). Many people do sports so that their health and physical freshness remain good as a basis for a useful life (Judge et al., 2022). Sports can form humans who have a disciplined character and in the end quality humans will be formed. According to Law No. 3 of 2005, sports is a systematic activity to encourage, foster, and develop physical, spiritual and social potential. Sport is any physical activity that contains the nature of the game and contains struggles with oneself as well as with others, or confrontation with the elements of nature (Hammado, Sahabuddin, et al., 2020). Sport is a systematic process in the form of all activities or efforts that can encourage,

develop, awaken, and foster one's physical and spiritual potential as individual or community groups in the form of games, competitions, competitions, and physical activities (Hammado, Razak, et al., 2020) which is intensive to obtain recreation, victory, and peak potential in the context of forming a quality whole Indonesian person based on Pancasila. Exercise is also a series of regular and planned physical movements to maintain motion (improve quality of life) (Anggreni et al., 2022).

Sports have shown very rapid progress, especially at this time. In Indonesia, the development of sports is getting more advanced and growing day by day (Hanafi et al., 2022). This is evidenced by the many sports activities held in several regions. Sport is a condition that can be seen as a person's needs, either individually or in groups (Sahabuddin, Hakim, et al., 2022). Sports not only play a role in improving physical and spiritual freshness but sports can make the athlete proud and raise the name of the athlete himself and the region he brings (Ishak et al., 2022).

Various sports are popular in Indonesia, one of which is gateball. This can be seen by the rapid development of basketball, especially in South Sulawesi, both in schools, universities and among the community. The rapid development of gateball is evidenced by the many emerging clubs and frequent tournaments, sparring between college student clubs and college students from regional to national levels. The development of gateball, especially in South Sulawesi, also does not want to be outdone by other developed provinces. The development and progress of gateball branches in South Sulawesi are supported by many campus teams and other clubs to produce talented players In South Sulawesi every year gateball must be completed and held in various regions such as universities, and the public. Competitions like this are usually carried out to find talented athletes, from there the athlete seeds begin to grow and develop.

Apart from that, important sports activities are also recreational sports because recreational sports can also be used as an educational vehicle that can provide experience for children and can shape personality to build confidence and improve the ability to know themselves and others. Recreational sports are sports that lead to movement activities that aim for fun and fun. Many can find recreational sports in tourist attractions, the types are also increasingly varied from those who start an adventure to challenging, one example of recreational sports is Gateball Sports.

Gateball is an interesting game because, in addition to sports activities, gateball also provides physical fitness (Hidayat & Indardi, 2015), improving the skill of hitting the ball as well as a place for self-control by tolerating fellow friends, and using the mind to apply the right tactics and strategies to win the game (Sudiana, 2015). The game of Gateball involves two opposing teams with each team numbering players, each team essentially consisting of five people (Word, 2022) and each player holds one ball so that there are ten balls in play (Ijyayama et al., 2018). The match is started by the first player carrying the red ball (number 1), continued by the player carrying the white ball (number 2) and so on according to the sequence number until number 10, returning to number 1 and so on until the match is declared complete with 30 minutes of game time (Simorangkir, 2021). The player's target is to put the ball into the goal which is 22 cm wide and hits a 2 cm pin in the middle of the field to get points (Rani, 2019a). In the game there is an element of hindering the opponent and helping comrades (Wulandari et al., 2023), so every team needs thinking to use strategy in winning games (knowledge, teamwork is needed to organize attack or defense behavior supported by ball hitting skills) (Irfan & Hasibuan, 2019).

The basic technique of Gateball sport is how to include hitting the ball and sparking it. The basic technique of hitting the ball in a gateball game is to open your feet shoulder-width apart, left foot in front position, right foot behind, (Supardi et al., 2020) and there is

also the location of the feet parallel to the position of the two feet slightly bent, the left hand holds the top of the stick (Sri Wahyu Ningrum et al., 2022) Then followed by the right hand underneath, the gaze and position of the body leads towards the target which is then followed by the swing of the stick (Rani, 2019b). The basic sparking technique in the Gateball game is to take the touch ball and step on the ball itself and the touch ball is attached to the ball itself that is stepped on, hit the ball itself so that the touch ball moves/rolls in the specified direction (Indrajaya et al., 2019).

Physical condition means something that is needed as an effort to improve the performance of athletes and can be interpreted as a fundamental need that is very very important (Sahabuddin, Syahruddin, et al., 2022). These abilities include strength, speed, endurance, agility, and flexibility. Gateball is part of a sport that requires strong energy, especially since this sport is related to concentration and focus which is the main thing (Safitri et al., 2023), then athletes are more encouraged to have a healthy physical state level, to achieve maximum performance (Harizona, 2022). Gateball players who have a healthy physical condition can affect their game on the field so that the game becomes good to get maximum performance (Sri Wahyu Ningrum et al., 2022).

Makassar State University and especially the Faculty of Sports Science is one of the best sports faculties in Indonesia and must be focused on sports science. Makassar Muslim University is also one of the private universities in Makassar that does not have a sports faculty but has established UKM Gateball (Gateball College Student Activity Unit).

METHODS

This type of research is descriptive research. The research design used by researchers is quantitative experimental research with the type of survey research and the research design is comparative. In this study there are two variables involved, namely the independent variable and the dependent variable, the free variable is the influencing variable, while the dependent variable is the influenced variable, in this study there are two independent variables and one bound variable, namely: free variable (X): comparison of FIK UNM college students and UMI UKM while the bound variable (Y): interest in the Gatebal. The quantitative approach relies on collecting data in the form of numbers measured against the comparison of interest of FIK UNM and UMI UKM college students towards the Gateball game. Because the data collected must be processed systematically so that it can be interpreted properly. With quantitative data with its presentation in the form of cursory numbers, it is easier to know how FIK UNM and UKM UMI college students compare to the Gateball game. Based on the quantitative research process described above, it appears that the quantitative research process is non-experimental, where the steps are clear, starting from problem formulation, hypothesizing, collecting data, analyzing data, and making conclusions and suggestions.

So, the population in this study is the college students of the Faculty of Sports Science, Makassar State University who are engaged in the Gateball Game and are still active status and registered at the University, and all members of the Gateball College Student Activity Unit of the Indonesian Muslim University. The sample is part of individuals who represent the population, thus the sample in this study is part of individuals who represent FIK UNM college students and who represent members of UMI UKM. The sample selection was carried out using the Random Sampling technique so that the number of samples obtained FIK UNM = 15 college students and UKM UMI = 15 college students so that a total of 30 samples.

Research instrument trials are carried out to determine the level of validity of the research. This instrument trial is intended to determine the validity and reliability of research

instruments so that it can be known whether or not the instrument is suitable for use in taking research data. According to Sujoko Efferin (2008) in Herman Syahruddin (2017), validation is the "truth" of data, namely the extent to which data accurately describes the social phenomenon referenced. Data validation is a measure that shows the level of reliability or validity of measuring instruments. Valid means that the instrument can be used to measure what should be measured, To test the validity of instrument items, then tested using the SPSS 21.0 program. The questionnaire item in the validity test is said to be valid if the r-calculate value > r-tabel at a significant value of 5%, conversely, the item is said to be invalid if the r-calculate value is < r-tabel at a significant value of 5% and there are 25 question items to be tested for validation.

Reliability refers to an understanding that an instrument is reliable enough to be used as a data collection tool because the instrument is good (Suharsimi, 2006). So reliability is used to determine the extent to which measurement results remain consistent if two or more measurements are made of the same symptoms using the same measuring device. In this study to measure the reliability of interest instruments, researchers used the Alpha Cronbach technique. Reliability tests in a study can be carried out using the Alpa method (Riduwan, 2008) in Rahman (2017). This technique or formula can be used to determine whether the instrument of interest in the study is reliable or not. The criteria of a research instrument are said to be reliable using this technique if the reliability coefficient > 0.5. Stages of reliability test calculation using the Cronbach Alpha technique.

After all the researchers' data is collected, namely the weighting of the value of the target results from the answers of all samples, to test the hypothesis proposed, the data analysis technique in this study uses the Independent Sample T-test analysis test using the SPSS 21.0 program. Then the basis for decision making from the Independent Sample T-Test Hypothesis Test is if sig. (2-tailed) > 0.05 then Ho is accepted and if sig. (2-tailed) < 0.05 Ha accepted. Thus the decision can be made.

RESULTS AND DISCUSSION

Descriptive Statistics

The description in this study is the data obtained during the implementation of the research including data on the interest of FIK UNM college students and UKM UMI college students. Data on the interest of FIK UNM and UMI UKM college students. Data on college student interest includes mean, median, variance, standard deviation, minimum value, the maximum value can be seen in **Table 1** below.

Table 1.
College Student Interest Data

Variable	Mean	Median	Variance	Std. Devation	Minimum	Maximum
FIK UNM	70,80	72,00	53,600	7,321	60	80
UKM UMI	72,20	73,00	23,314	4,828	63	83

Instrument Validity Test

Testing the validity of the instrument of interest in the game Gateball using the SPSS 21.0 program. with a total of 25 statement items. The selection of statement items is carried out by correlating total items by looking at the Total Item Statistics table in the Corrected Item Total Correlation column, it can be seen whether or not the statements made by researchers are valid.

Based on the results of the selection of instrument validity testing conducted twice, researchers obtained 12 valid statements and 13 void statements, so invalid statements

cannot be a benchmark and must be discarded. While valid statements are considered capable of being a research measurement tool.

The validity test was carried out with the bivariate person correlation formula with the SPSS 21.0 program tool. The questionnaire item in the validity test is said to be valid if Rcalculate > Rtabel at a significant value of 5% Conversely, the item is said to be invalid if Rcalculate < Rtabel at a significant value of 5% As for the summary of the validity test results as the data in the following **Table 2** and **Table 3**:

Table 2.
Results of the Validity Test of the FIK UNM College Student Questionnaire

Item no	R-calculate	r-table 5% (15)	Information
1	0,777	0,514	Valid
2	0,666	0,514	Valid
3	0,622	0,514	Valid
4	0,885	0,514	Valid
5	0,804	0,514	Valid
6	0,696	0,514	Valid
7	0,914	0,514	Valid
8	0,714	0,514	Valid
9	0,597	0,514	Valid
10	0,575	0,514	Valid
11	0,537	0,514	Valid
12	0,737	0,514	Valid

Table 3.
Results of the Validity Test of the UMI UKM College Student Questionnaire

Item no	r-calculate	r-table 5% (15)	Information
1	0,530	0,514	Valid
2	0,617	0,514	Valid
3	0,584	0,514	Valid
4	0,746	0,514	Valid
5	0,606	0,514	Valid
6	0,838	0,514	Valid
7	0,769	0,514	Valid
8	0,523	0,514	Valid
9	0.524	0,514	Valid
10	0,590	0,514	Valid
11	0,593	0,514	Valid
12	0,534	0,514	Valid

The calculation results of the Validity Test as the tables above, show that the calculation > r-table at a significant value of 5%, therefore, it can be concluded that all items in this research questionnaire are valid so that they can be used as research instruments.

Instrument Reliability

Testing the reliability of college student interest instruments using *Cronbach's Alpha* on the SPSS 21.0 program. Reliability tests are carried out twice using the formula *Alpha*. Significant tests performed on an instrument can be said to be reliable if the value *Alpha* is greater than the r-table (0.514).

Table 4.
Reliability Test

Variable	r-calculate	r-table 5% (15)	Information
X1	0,879	0,514	Reliable
X2	0,728	0,514	Reliable

The results of the reliability test obtained the value of the X1 questionnaire coefficient of 0.879 and the X2 questionnaire of 0.728. Based on the value of the reliability coefficient, it can be concluded that all questionnaires in this study are reliable or consistent, so they can be used as research instruments.

Data Normality Test

From the data collected by researchers, both the interest of FIK UNM and UMI UKMs towards the Gateball game. Then a data normality test was carried out using the Kolmogorov-Smirnov test operated using the SPSS 21.0 program. then the results of the normality test of interest of FIK UNM and UMI UKMs are as follows.

Table 5.

Data from Data Normality Test with *Kolmogorov-Smirnov Test*

Data	Significant Value	Data	Information
FIK UNM Interests	0,956	0.956>0.05	Normal Distributed
UMI UKM Interest	0,966	0.966>0.05	Normal Distributed

From the table above it can be seen that the data prerequisite is called normal if the significant value > 0.05 on the data normality test using *Kolmogorov-Smirnov*. Based on the results of the normality test data above, it can be concluded that the data from the normality test results of interest data for FIK UNM and UMI UKM college students are normally distributed because the value is significantly greater than 0.05. Then one of the prerequisites in hypothesis testing using the Independent Sample T-test has been met.

Variant homogeneity test

The Variant Homigenity Test in this study used the SPSS 21.0 program. which aims to find out whether the sample is from the same variant or not. The following are the results of the Homogeneity Test of interest of FIK and UMI UKMs conducted by researchers.

Table 6.

Variance homogeneity test data

Data	Significant Value	Data	Information
Interest of FIK UNM and UKM UMI	0,07	0.07>0.05	Homogency Variance

From the table above, it can be seen that the data prerequisite is called homogeneous if the significant value > 0.05 on the data homogeneity test using the SPSS 21.0 program. Based on the results of the homogeneity test of the data above, it can be concluded that the homogeneity test data of FIK UNM and UMI UKMs have homogeneous variances.

Test the hypothesis

Based on the results of the analysis prerequisite test research believes that the data normality test and homogeneity test have been carried out and have been fulfilled, the hypothesis test can be carried out with the SPSS 21.0 program. using the Independent Sample T-test. The following table of results from the output of the Independent Sample T-test.

Table 7.

Test Data Results Independent Sample T-test

Equal Variances Assumed	Sig (2-tailed)
College student Interest in FIK UNM and UKM UMI	0,80

From the table above, researchers can answer the hypothesis test using the Independent Sample T-test. The following is an Independent Sample T-test on the hypothesis that has been formulated by the researcher.

The difference in the interest of FIK UNM and UKM UMI college students towards the Gateball game

From the research data that has been collected regarding the interests of FIK UNM college students and UMI UKM. At the time of the distribution of the questionnaire of interest in the Gateball game, the average score (mean) in FIK UNM college students was 70.80 while in UMI UKM college students it was 72.20. From the results of the interest questionnaire score on the Gateball game, the average score obtained by UMI UKM college students is higher than the score of FIK UNM college students.

Table 8.

Data on the average score of the Interest Questionnaire on the Gateball Game.

Interest in the game of gateball	Mean
FIK UNM College students	70,80
UMI UKM College students	72,20

Table 9.

Results of Independent Sample T-test Data on Gateball Game

Equal Variances Assumed	Sig (2-tailed)
College student Interest in FIK UNM and UKM UMI	0,80

So the table above can answer the hypothesis in this study, with the formulation of the researcher's hypothesis as follows:

1. Working hypothesis or Alternative hypothesis (Ha) = There is a significant difference in interest between FIK UNM College students and UMI UKM towards the Gateball game.
2. Hypothetical nihil (Ho) = there is no significant difference in interest between FIK UNM college students and UMI UKM towards the game of Gateball.

Because of the significant values located in the sig (2-tailed) column 0.080 and 0.080 > 0.05, Ho is accepted and Ha is rejected. based on the results of the Independent Sample T-test, it can be concluded that the second hypothesis which reads "there is no significant difference in interest between FIK UNM college students and UMI UKM towards the Gateball game is tested.

Discussion

In the study entitled Comparison of FIK UNM and UKM UMI College Student Interest in the Gateball Game, the aim is to find out how much the interest of FIK UNM and UMI UKM college students compares to the Gateball game.

The population used in this study was all FIK UNM college students and all members of UMI UKM then taken as research samples. The sample in this study was all college students of FIK UNM and UKM UMI using the sampling method, namely Simple Random Sampling or random taking, this is because the population is considered homogeneous. After getting the sample to be studied, the researcher then distributed a questionnaire of interest in the Gateball game which was used to measure the comparison of FIK UNM and UMI UKM college students to the Gateball game. Before the results of the data in the Normality Test, Homogeneity Test and Independent Sample T-test, the study conducted a Validity Test and Reliability Test, this was done to determine whether it was valid or not, as well as reliable or not a questionnaire would be used as a measuring tool to measure the Comparison of Interest of FIK UNM College students and UMI UKM towards the Gateball Game.

The next stage after giving the Interest questionnaire to the Gateball game is to conduct a data Normality Test and a Data Homogeneity Test. The data normality test is used to find out whether the sample is normally distributed or not. The homogeneity test is

used to find out whether the sample is homogeneous or not. The results of the data normality test conducted on the interest questionnaire for the Gateball game using the SPSS 21.0 program using the Kolmogorov-Smirnov test and the results of the data are normally distributed, this can be seen from the significant value in FIK UNM college students of 0.956 and UMI UKM college students of 0.966 so that it is said to be normally distributed if the significant value > 0.05. The results of the homogeneity test variance for the variable of interest in the game Gateball amounted to 0.07. The results of the analysis of interest data on the Gateball game were carried out using the independent sample T-test technique, known to have a significant value of 0.80. The provision to accept or reject a hypothesis if the value of sig. (2-tailed) < 0.05 then Ho is rejected while Ha is accepted. If the value of sig. (2-tailed) > 0.05 then $H_{o\ is}$ accepted while Ha is rejected. The results of the analysis showed a significant value of 0.80 > 0.05 then Ho was accepted. Based on the results of the test above, it can be concluded that the second hypothesis reads: Ho = There is no significant difference in interest between FIK UNM college students and UMI UKM towards the Gateball game. Proved to be true.

CONCLUSION

Based on data analysis on research and discussion of research results, the following can be concluded: There is no significant difference in interest between FIK UNM college students and UMI UKM towards the Gateball game.

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