Correlation between the level of self-confidence and anxiety with the performance of karate athletes kata class

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ABSTRACT

Purpose: The aim of this research was to see correlation between levels of self-confidence and anxiety and the performance of karate athletes. **Method:** This research was carried out at the Dojo of SMPN 1 Campaka Cianjur with a sample of 40 people, the technique of taking samples with a total sample was that the entire population was used as a sample. The research method used is quantitative descriptive with correlational analysis. The instrument used is the CSAI-2 questionnaire to measure cognitive anxiety, somatic anxiety and self-confidence. Data is collected online using Google Form. This research was calculated using IBM SPSS Statistics 26 which measures the Normality test and the Pearson product moment hypothesis test. **Result:** The results of this study state that there is a correlation between the level of self-confidence and the performance of karate athletes in the kata class with a significance value of 0.001, there is a correlation between the level of anxiety and the performance of karate athletes in the kata class with a significance value of 0.000, there is a correlation between the level of self-confidence and anxiety and performance kata class karate athlete with a significance value of 0.000.

Keywords: confidence, anxiety, performance, karate and kata class.

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Introduction

Sport is a physical activity that is usually carried out by everyone, both men and women, from children, teenagers to adults, both indoors and outdoors with the aim of maintaining good physical and mental health. Apart from that, sport is also a supporting way for someone to achieve an achievement. In line with (Mirhan & Kurnia Jusuf, 2016) stated that "Sport is an important thing in life because sport is not just an activity that is oriented towards physical factors but sport can also train a person's attitude and mentality".

Karate is a branch of martial arts originating from Japan which has long been known in Indonesia and is quite popular among the public with its attack techniques and tactics using bare hands to defeat the enemy through one deadly movement, this is proven by the existence of athletes who have excelled at this level. city to international and there are championship events or competitions, especially in the sport of karate. Currently, karate can be divided into traditional and sports (performance) styles.

The existence of individual karate competitions creates feelings of anxiety and lack of self-confidence experienced by athletes. So anxiety will arise naturally (Putri & Handayani, 2020). Karate athletes need thorough preparation starting from technical, tactical, physical and mental as well as spiritual so that they can perform well and be able to perform to achieve the best performance. Performance is a person's performance ability to carry out all assigned tasks and the results are satisfactory established criteria. With many competitive events being held, athletes have to compete with each other. According to (Ilsya & Komarudin, 2019) an athlete's goal is to excel and this must be their absolute desire, that's why they train hard and compete with each other. Hakim in (Indraharsani & Budisetyani, 2017) stated that an athlete's performance is influenced by external factors: technique, opponents in the game, game atmosphere, and spectators watching the game. There are internal factors that influence an athlete's performance, such as motivation.

Having anxiety about the competition and when competing is not beneficial for the athlete. And according to Rejeki's research, he also believes that there is a positive correlation between self-confidence and performance, while anxiety has a negative correlation with performance. When athletes experience high anxiety, their performance will decrease (Muthiarani, 2020). An athlete also has physiological signs caused by mental changes such as: stiffness, fear of failure, haste, reduced focus, pessimism and can also affect performance by changing the rhythm of the athlete's technical and tactical movements in one qualifying competition (Warjito & Pudjijuniarto, 2022).

Feeling insecure and anxious is normal for every athlete, both when facing a match and while competing, but if it is excessive, it can really affect the athlete and his or her performance. This is caused by a lack of guidance or mental training carried out by coaches and athletes themselves. There are still many coaches who believe that physical, technical and tactical factors can support athletes' performance and achievements, without realizing it and ignoring that mental factors play a bigger role than physical, technical and tactical factors when competing.

The aim of this research is to determine the correlation between the level of self-confidence and the performance of karate athletes in the kata class, to determine correlation between the level of anxiety and the performance of karate athletes in the kata class, to determine correlation between the level of self-confidence and anxiety and the performance of karate athletes in the kata class.

Based on the explanation above, it can be concluded that the psychological aspects of self-confidence and anxiety can influence the performance of karate athletes, but there is no significant scientific evidence that these two aspects are interconnected and influence the performance of karate athletes.

As far as the researchers know, there are many studies that examine psychology, especially self-confidence and anxiety, but there are still few that examine specifically the performance of karate athletes. In this regard, researchers are interested in conducting research on "Correlation Between Levels of Self-Confidence and Anxiety on the Performance of Karate Athletes Kata Class".

Method

According to the definition put forward by (Fraenkel, Wallen, & Hyun, 2012) correlational research is research to determine the correlation between two or more variables without any attempt to influence them. This research method is the simplest form of research. This correlation research method is used and aims to determine the possible correlation between two or more variables. According to (Creswell, 2008), the method used in this research is quantitative descriptive research methods with correlational analysis. The author uses a correlational research method with a dual paradigm research design with two independent variables. The initial step in data collection is for the author to determine the sample size using saturated sampling, which is a sample determination technique when all members of the population are used as samples

In quantitative research, data analysis activities include processing and presenting data, carrying out calculations to describe data and carrying out hypothesis testing using statistical tests. Presentation of data and data analysis through data collected from the field can be presented in the form of tables, graphs or diagrams. The ultimate goal to be achieved in conducting research using a quantitative approach is to test theories, establish facts, shows correlation and influences as well as comparisons between variables, provides statistical descriptions, estimates and predicts results.

Result

The following is the output of descriptive data using IBM SPSS Statistics 26.

Table 1. Descriptive Data Results

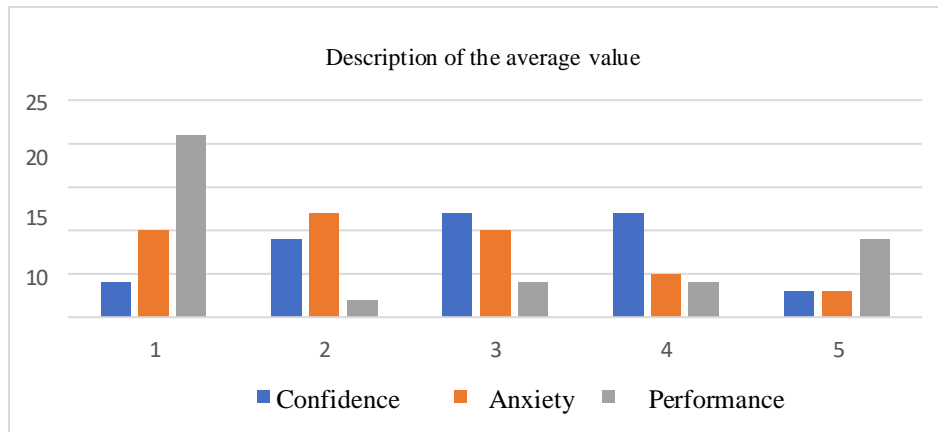|	N	Minimum	Maximum	Mean	Std. Deviation
Anxiety	40	19	51	38.43	8.286
Confidence	40	27	36	31.55	2.309
Performance	40	23	25	24.45	.552
Valid N (listwise)	40				

Figure 1. Average Confidence, Anxiety, and Performance Scores

Based on table 1 above it is known that N is the number of respondents who answered the statement, namely 40 people, then the minimum value for anxiety is 19 while self-confidence is 27 and performance for karate athletes is 23. The maximum value for anxiety is 51 while self-confidence is 36 and performance for karate athletes is 25. Mean value from anxiety was 38.43 while for self-confidence 31.55 and performance for karate athletes 24.45. And the standard deviation (SD) value for anxiety is 8.286 while for self-confidence it is 2.309 and for the performance of karate athletes 0.552.

The purpose of the normality test is to test whether the dependent and independent variables in a regression model have a normal distribution. A good regression model has a normal or close to normal data distribution. The data normality test can be used to determine whether the data distribution follows or approaches a normal distribution.

A good data distribution is data that has a pattern like a normal distribution, that is, the data distribution does not have a squint to the left or right and a sharpness to the left or right. There are several ways to test whether the data is normally or abnormally distributed. However, in this approach, the researcher uses a data normality test carried out using graphs and looks at the magnitude of the Shapiro-Wilk significance number with the test criteria:

If the significance figure (SIG) is > 0.05, then the data is normally distributed

If the significance figure (SIG) is <0.05, then the data is not normally distributed.

The following is the output of the normality test results using Shapiro-Wilk which can be seen in the table below.

Table 2. Normality Test Results

	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
X1	,132	40	,078	,949	40	,072
X2	,151	40	,022	,944	40	,048
Y	,115	40	,200*	,970	40	,369

From Table 2. The results of the normality test on the Shapiro Wilk value of the population need to be stated according to the normality test decision rule. If the Sig value is > 0.05 then the data can be declared significant, and if the Sig value is < 0.05 then the data can be declared not significant. Because the results on the anxiety test have a normality value of 0.072, meaning the anxiety test data is normally distributed, the results on the self-confidence test have a normality value of 0.048, meaning the self-confidence test data is normally distributed, and the results on the karate athlete performance test have a normality value of 0.369, meaning the test data performance of karate athletes is normally distributed.

Correlation Test is a statistical method used to measure the extent of the correlation between two or more variables. To determine whether or not there is a correlation between variables, the correlation test in this study uses product moment correlation with the IBM SPSS Statistics 26 program. The basis for decision making in this test is that if the significance value is <0.05 then there is a correlation between two or more variables. But if the significance value is > 0.05 then there is no correlation between two or more variables. The following is the output of the product moment correlation test results for performance

anxiety, performance confidence, anxiety and confidence and athlete performance, which can be seen from the following table:

Table 3. Correlation Test Results for Levels of Anxiety Performance and Level of Confidence in Performance Correlations

		Kecemasan	Percaya_Diri	Performa
Anxiety	Pearson Correlation	1	,034	-,786**
	Sig. (2-tailed)		,837	,000
	N	40	40	40
Confidence	Pearson Correlation	,034	1	-,511**
	Sig. (2-tailed)	,837		,001
	N	40	40	40
Performance	Pearson Correlation	-,786**	-,511**	1
	Sig. (2-tailed)	,000	,001	
	N	40	40	40

Based on table 3. above, it is known that the value of the anxiety level is significant < 0.05 or the significance value of the anxiety level is 0.000 < 0.05, meaning that there is a correlation between the level of anxiety and the performance of kata class karate athletes. It is known that the value of the level of self-confidence is significant < 0.05 or the significance value of the level of self-confidence is 0.001 < 0.05, meaning that there is a correlation between the level of self-confidence and the performance of kata class karate athletes.

Table 4 Self-confidence correlation test results and anxiety about athlete performance

Correlations		Xn	Performance
Xn	Pearson Correlation	1	1.000**
	Sig. (2-tailed)		.000
	N	40	40
Performance	Pearson Correlation	1.000**	1
	Sig. (2-tailed)	.000	
	N	40	40

Based on table 4 above, it is known that the significance value is <0.05 or the significance value of the level of self-confidence and anxiety regarding the performance of athletes is <0.05, meaning that there is a correlation between the level of self-confidence and anxiety regarding the performance of kata class karate athletes.

Discussion

1. Correlation between self-confidence and the performance of kata class karate athletes.

This research was conducted to find out correlation between the level of self-confidence and the performance of 40 karate athletes with a percentage of 10% very good, 22.5% good, 30% moderate, 30% poor, and 7.5% very poor. level of confidence in the performance of karate athletes. The results of data analysis which was carried out using the correlation test, obtained a correlation coefficient value of -0.511 with a significance value of 0.001 <0.05. The results of the correlation test show that there is a correlation between the level of self-confidence and the performance of karate athletes.

The findings above are in accordance with the Yerkes-Dodson Law (Weiberg, p. 1988), which was quoted by Harsono (1988), namely that performance will increase if arousal or activation increases to a certain optimal point. Correlation between arousal and self-confidence is in accordance with the Intervered-U hypothesis which states that if self-confidence is low then performance will not be optimal because the athlete has a low desire to win, if self-confidence is too high then the performance will not be optimal because the athlete takes the word moves too lightly. . The best thing is optimal self-confidence because if the optimal level of self-confidence is not too low and not too high then the performance of kata class karate athletes will also be maximum.

According to Saranson (1993) in Komarudin (2022, p. 67) says that self-confidence is a feeling that contains the strength, ability and skills to do and produce something based on the belief of success. Everything that contains beliefs related to strength, one's ability to do and achieve success, as well as being responsible for what one has set.

This is also in accordance with research which has stated that there is a correlation between anxiety and athlete performance in basketball. This is also confirmed by research from (Warjito & Pudjijuniarto, 2022) which states that there is a strong correlation between the level of self-confidence and anxiety regarding archery performance and the performance of high school archery athletes in the city of Surabaya. So, the findings that researchers conducted in the field compared with the Yarkes-Dodson and Intervered-U Law theories as well as previous research provide confirmation that there is a correlation between the level of self-confidence and the performance of kata class karate athletes. There is a correlation between anxiety levels and the performance of kata class karate athletes.

2. Correlation between anxiety levels and the performance of kata class karate athletes

This research was conducted to find out correlation between anxiety levels and the performance of 40 karate athletes with a percentage of 25% very good, 30% good, 25% moderate, 12.5% poor, and 7.5% very poor. anxiety about the performance of karate athletes. The results of data analysis which was carried out using the correlation test, obtained a correlation coefficient value of -0.786 with a significance value of 0.000 <0.05. The results of the correlation test show that there is a correlation between anxiety levels and the performance of karate athletes.

The findings above are in accordance with the theory of Setyobroto (1989) from Cratty (1973) which states that if anxiety is high and ambition is low then achievement will level off, if anxiety is low and ambition is high then achievement will increase, if anxiety is high and ambition is high then achievement will decrease , and if anxiety is low and ambition is low then achievement will level off. Anxiety is a situational reaction to various stressful stimuli (Horn & Smith, 2018). If an athlete's tension is excessive and exceeds the normal limit or stress threshold, the athlete will experience anxiety (Yusuf Hidayat, 2023). Feelings of anxiety in conditional anxiety come when you suddenly face a problem, for example a match.

This is also in accordance with research which has stated that there is a correlation between anxiety and athlete performance in the sport of basketball. This is also confirmed by research from (Warjito & Pudjijuniarto, 2022) which states that there is a strong correlation between the level of self-confidence and anxiety regarding archery performance and the performance of high school archery athletes in the city of Surabaya.

So, the findings that researchers conducted in the field compared with the theory of Setyobroto (1989) from Cratty (1973) and previous research provide confirmation that there is a correlation between anxiety levels and the performance of karate athletes in the kata class. There is a correlation between the level of self-confidence and anxiety and the performance of karate athletes.

3. Correlation between levels of self-confidence and anxiety and the performance of karate athletes

This research was conducted to find out the correlation between the level of self-confidence and the performance of 40 karate athletes with a percentage of 52.5% very good, 5% good, 10% moderate, 10% poor, and 22.5% very poor. Between the level of self-confidence and anxiety and the performance of karate athletes. The results of data analysis which was carried out using the correlation test, obtained a correlation coefficient value of 1,000 with a significance value of 0,000 <0.05. The results of the correlation test show that there is a correlation between the level of self-confidence and anxiety and the performance of karate athletes.

This anxiety appears in the athletes themselves." Nichols & Jones (2017) provide examples of sources of anxiety within athletes, including athletes relying too much on their own abilities, athletes feeling they are playing very well or vice versa, there are negative thoughts because they are ridiculed or scolded, there are thoughts of complacency. As for external sources, this means that the source of anxiety comes from outside the athlete. Some examples of anxiety that come from outside include confusing stimuli, the influence of the masses or spectators, rivals who are not their match and the presence or absence of a coach. Apart from these two sources of tension, other sources of anxiety that can arise in athletes come from environmental factors, such as the condition of the competition field, place of competition, weather, ventilation, field surface, and so on.

This is also in accordance with research which has stated that there is a correlation between anxiety and athlete performance in the sport of basketball. This is also confirmed by research from (Warjito & Pudjijuniarto, 2022) which states that there is a strong correlation between the level of self-confidence and anxiety regarding archery performance and the performance of high school archery athletes in the city of Surabaya.

So, from the findings that researchers conducted in the field compared with the Yarkes-Dodson and Intervered-U Law theories, Setyobroto (1989) from Cratty (1973) as well as previous research, it strengthens that there is a correlation between the level of self-confidence and anxiety and the performance of karate athletes in the kata class.

Conclusion

Quantitative research on correlation between the level of self-confidence and anxiety and the performance of karate athletes in the kata class can be concluded that the results of correlation between the level of self-confidence and anxiety are that there is a correlation between the level of self-confidence and the performance of karate athletes in the kata class, the level of anxiety and the performance of karate athletes in the kata class , also the level of self-confidence and anxiety regarding the performance of kata class karate. athletes can be proven using the Normality Test and Hypothesis Test using IBM SPSS Statistics 26. The results of the self-confidence test research state that out of 40 karate dojo athletes at SMPN 1 Campaka Cianjur have a high level of self-confidence. From the data analysis that was carried out using the correlation test, a correlation coefficient value of -0.511 was obtained with a significance value of 0.001 <0.05. The results of the correlation test show that there is a correlation between the level of self-confidence and the performance of karate athletes in the kata class.

The results of the self-confidence test research stated that out of 40 karate dojo athletes at SMPN 1 Campaka Cianjur had a level of self-confidence from data analysis that had been carried out using a correlation test, a correlation coefficient value of -0.511 was obtained with a significance value of 0.001 <0.05. The results of the correlation test show that there is a correlation between the level of self-confidence and the performance of karate athletes in the kata class.

The results of the anxiety test research on the performance of karate athletes stated that for 40 karate dojo athletes at SMPN 1 Campaka there was a correlation between the level of anxiety and the performance of karate athletes in the kata class. From data analysis that had been carried out using a correlation test, a correlation coefficient value of -0.786 was obtained. significance of 0.000 <0.05. The results of the correlation test show that there is a correlation between the level of anxiety and the performance of karate athletes in the kata class.

The final results of this research stated that of the 40 karate dojo athletes at SMPN 1 Campaka, there was a correlation between the level of self-confidence and anxiety and the performance of karate athletes in the kata class. With the results of data analysis that had been carried out using a correlation test, a correlation coefficient value of 1,000 was obtained. The significance value is 0.000 <0.05. The correlation test shows that there is a correlation between the level of self-confidence and anxiety and the performance of karate athletes in the kata class.

References

Mirhan, & Kurnia Jusuf, J. B. (2016). Hubungan Antara Percaya Diri Dan Kerja Keras Dalam Olahraga. *Jurnal Olahraga Prestasi*, Volume 12, Nomor 1, Hal 86-96.

Putri, S. A., & Handayani, A. (2020). Hubungan Antara Kepercayaan Diri Dan Regulasi Emosi Terhadap Kecemasan. *Jurnal Psikologi Proyeksi*, Vol. 15 (1), 88-97.

Ilsya, M. N., & Komarudin. (2019). Hubungan Antara Kecemasan Dengan Performa Atlet Pada. *Jurnal Sains Keolahragaan & Kesehatan*, Vol. Iv, No. 1, Hal 26-32.

Indraharsani, I. S., & Budisetyani, I. W. (2017). Efektivitas Self-Talk Positif Untuk Meningkatkan Performa. *Jurnal Psikologi Udayana*, Vol.4, No.2, 367-378.

Muthiarani , A. (2020). *Tesis Hubungan Kepercayaan Diri, Motivasi, Dan Kecemasan.* Yogyakarta: Universitas Negeri Yogyakarta.

Warjito, N., & Pudjijuniarto. (2022). Hubungan Tingkat Kepercayaan Diri Dan Kecemasan Terhadap Prestasi. *Jurnal Kesehatan*

Fraenkel , J., Wallen, N., & Hyun, H. (2012). *How To Design And Evaluate Research In Education* . New York: Mcgraw.

Creswell, J. (2008). *Thrid Edition Research Design Qualitative, Quantitative, And Mixed Methods Approaches.* London United Kingdom: Sage.

Komarudin. (2022). Psikologi Olahraga, Latihan Keterampilan Mental Dalam Olahraga Kompetitif. *Rosda*

Yusuf Hidayat. (2023). Psikologi Olahraga, Konsep, Keterampilan Dan Metode. *Rosda*Saranson. (1993). *Personality, An Objective Approach,* New York: John Wiley & Son.

Aryani,M.(2015). Pengaruh Metode Latihan Psikologi Imagery Dan Relaksasi Terhadap Kecemasan Kognitif, Kecemasan Somatis, Kepercayaan Diri Dan Perfoma Atlet Panjat Tebing . Universitas Pendidikan Indonesia.

Muchtar, R. (2018). Tahun Baru Dengan Peraturan Karate Baru. Osh Info. Https://Doi.Org/10.1017/S0033291717003336.Socio-Economic Septri, S., Haryanto, J., & Sari, D.

Happy Anggia. (2022). Pengaruh Metode Latihan Medicine Ball Dan Push-Up Terhadap

Daya Ledak Otot Lengan Atlet Karate. Sporta Saintika, 7(1), 46–59. Https://Doi.Org/10.24036/Sporta.V7i1.221 Thauwrisan, J. S., Putrawan, B. K., Tinggi, S., Moriah,

T., & Penulis, K. (2023). Pengaruh Perubahan Cara Latihan Terhadap Mental Dan Stamina Dalam Menjaga Kekuatan Fisik Dan Tehnik Para Olahragawan Di Masa Pandemi Covid-19. Sport Science, 23(1), 30–40.

Https://Doi.Org/10.24036/Jsopj.23012023.04 Xu, L., Zimmermann, M., Forkey, H., Griffin, J., Wilds, C., Morgan, W. S., … Mcneal, C. J. (2022). How To Mitigate Risk Of Premature Cardiovascular Disease Among Children And Adolescents With Mental Health Conditions. Current Atherosclerosis Reports, 24(4), 253–264. Https://Doi.Org/10.1007/S11883-022-00998-9

Creswell, J. (2008). *Thrid Edition Research Design Qualitative, Quantitative, And Mixed Methods Approaches.* London United Kingdom: Sage.

Hawindri, B. S. (2016). Pemanfaatan Panduan Latihan Teknik Dasar Futsal. *Penjas Dan Interdisipliner Ilmu Keolahragaan*, 284-292.

Hindiari , Y., & Wismanadi, H. (2022). Tingkat Kecemasan Atlet Karate Menjelang Pertandingan Pada. *Jurnal Kesehatan Olahraga*, Vol. 10. No. 01, Pp 179 - 186.

Insani, C. N. (2020). Analisis Turnover Tim Bola Basket Putri Dalam Kompetisi Development Basketball.*Repository.Upi.Edu*.

Jang, S., Eom, H.-J., Lee, K.-D., Choi, W.-M., Choi, Y.-L., Kang, H.-W., Et Al. (2018). Jurnal Validation Of A Questionnaire That Surveys Confidence In Sports Among Korean Competitive Athletes. *Jomh (Journal Of Men's Health)*, Vol 14(2):E30-E41.

Kurniawan, A. W., Wijayanto, A., Amiq, F., & Hafiz N.H, M. (2021). *Psikologi Olahraga.* Tulungagung: Akademia Pustaka.

Lestari, R. (2020). Skripsi Hubungan Mental Toughness Dan Competitive Anxiety Dengan Performa Wasit Karate. 29-31.

Merdekawati, T. A., & Sagitarius. (2020). Metode Hipnoterapi Menurunkan Tingkat Kecemasan Atlet. *Jurnal Kepelatihan Olahraga, Universitas Pendidikan Indonesia*, Volume, 12. No, 2, P 113-120.

Muriawijaya, N. C. (2016). Hubungan Antara Motivasi Berprestasi Dengan. *Universitas Muhammadiyah Surakarta*, 2-4.