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# Analysis of Anxiety and Self-Efficacy on Athlete Performance in Pencak Silat Competitions

Angger Widorotama<sup>1⊠</sup>, Tandiyo Rahayu <sup>2</sup>, Ipang Setiawan <sup>3</sup>, Yudhi Teguh Pambudi <sup>4</sup>

<sup>1,2,3</sup> Semarang State University <sup>4</sup>Jenderal Soedirman University

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#### Abstract

Several factors affect peak performance for athletes and include match anxiety and self-efficacy. The purpose of this study was to determine the analysis of competition anxiety and self-efficacy on athletes' peak performance in pencak silat matches. This study uses a mixed methods design to provide analyses related to competition anxiety, self-efficacy and peak performance in athletes in pencak silat competitions. The research subjects were taken using puposive sampling technique involving 42 teenage pencak silat athletes at regional student sports week District Level who came from Public Vocasional School 3 Purwokerto, Public Islamic Senior High School Purbalingga, Vocational School Muhamadiyah Bobotsari, Public Senior High School 2 Purbalingga and Islamic Integrated Senior High School Nurul Ihsan. Data were obtained through questionnaires on competition anxiety, self-efficacy and peak performance. Qualitative data analysis involves collecting, presenting, and drawing conclusions while quantitative data analysis uses Rank Spearman data analysis techniques. The results showed that the relationship or correlation of anxiety competing with peak performance got a correlation coefficient of 0.701, while the relationship or correlation of self-efficacy with peak performance got a greater correlation coefficient of 0.830. So the hypothesis that states there is a relationship between competition anxiety and self-efficacy with peak performance of martial arts athletes is accepted.

Conclusion: (1) Based on the results of the correlation coefficient value obtained, it can be interpreted that the two variables have very strong relationship results. (2) The correlation coefficient value of self-efficacy is greater than the anxiety of competing, meaning that the self-efficacy variable is more influential on the peak performance of athletes in pencak silat matches compared to the variable anxiety of competing.

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<sup>™</sup> Address correspondence:

E-mail: widorotama95@students.unnes.ac.id

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#### INTRODUCTION

Pencak Silat, Indonesia's original martial arts sport, has made an impressive journey to international recognition. With the increasing number of competitions at the international level, such as single events and multi-events, this sport has attracted the attention of many parties. In pencak silat competitions, there are several categories, including sparring, singles, doubles and team, where the sparring category is one of the most popular (Mulyana & Lutan, 2021). To achieve the best performance in a match, athletes need support in various aspects, including physical, technical, tactical and psychological (Forsman et al., 2016). Peak performance occurs when the mind and muscles move in harmony (Schneider et al., 1980). In the context of pencak silat, where matches last only a few seconds, high concentration and focus are essential to make decisions and react appropriately. However, there are still some athletes who have good skills but have difficulty achieving the targets set. This shows that internal obstacles can interfere with athlete performance.

In big competitions in Indonesia such as National Sports Week (Pekan Olahraga Nasional/ PON), National Student Higher Education Sports Week (Pekan Olahraga Mahasiswa Nasional/ POMNAS), or National Student Sports Week (Pekan Olahraga Pelajar Nasional/POPNAS), the athletes' physical and technical abilities are relatively equal, so the deciding factor is often mental. Anxiety before competition significantly affect an athlete's performance. Symptoms of anxiety such as anxiety, tension, and confusion can interfere with an athlete's focus and concentration, leading to less than optimal performance (Maksum, 2020). Anxiety can arise from internal and external factors. Internal factors include emotional problems, motivation and high anxiety, while external factors include

pressure from opponents, spectators and the surrounding environment (Martin, Kethleen A., E.Moritz, 1999). In competitive Sandra situations, anxiety can interfere with an athlete's thinking and physical processes, even in athletes who are in optimal physical condition (Ford et al., 2017). Solution to reduce anxiety before competing is by increasing self-efficacy. Selfefficacy refers to a person's belief in their ability to achieve certain goals. Athletes with high selfefficacy tend to be more confident in facing challenges, thereby reducing stress and anxiety levels. Previous research has demonstrated a relationship between self-efficacy and anxiety in the context of sport. A study by (Safitri & Masykur, 2017) on field tennis athletes showed that the higher the self-efficacy, the lower the level of anxiety when facing a match. However, there is still a lack of research that tries to analyze the relationship between competition anxiety, self-efficacy, and athlete performance, especially in the context of pencak silat. Taking into account these gaps in research, more comprehensive research is needed to understand how competition anxiety and self-efficacy affect the performance of pencak silat athletes. With a better understanding of these psychological factors, athletes' coaching and training can be more effective in preparing them for the challenges of competition.

#### **METHODS**

The approach used in this research is mixed method. Mixed methods research design is a procedure for collecting, analyzing and "mixing" quantitative and qualitative methods in a study or series of studies to understand the problems in the research (Creswell & Cark, 2018). Furthermore, (Sugiyono, 2014) stated that mixed research methods are a research method that combines or combines quantitative methods with

qualitative methods to be used together in a research, so that the data obtained is more comprehensive, valid, reliable and objective. In this research, qualitative data presentation is used to complete and explain so that the data obtained is more detailed and clear, while quantitative data in the form of numbers is used to provide analysis of the data taken. The population in this research is the 2024 Banyumas Regency Pencak Silat Sports Branch Regional Student Sports Week (Pekan Olahraga Pelajar Daerah/ POPDA) participants, totaling 300 samples. To take a sample of 42, the researcher used a purposive sampling technique with the inclusion criteria provisions, namely actively practicing and participating in pencak silat competitions for the last two years and training members from Public Vocational School 3 Purwokerto, Public Islamic Senior High School Purbalingga, Vocational School Muhamadiyah Bobotsari, Public Senior High School 2 Purbalingga and Islamic Integrated Senior High School Nurul Ihsan. Exclusion criteria were not being willing to be used as a research sample and having experienced a serious or chronic injury in the last two years. The data collection method used in this research used a closed questionnaire. This research uses a questionnaire using primary data sources. The questionnaire was distributed directly to participants by the researcher and filled in by the participants themselves with the researcher's guidance to avoid the risk of errors in filling it out. This questionnaire includes the Competition Anxiety questionnaire, Self-Efficacy questionnaire and Peak Performance (Peak Performance Scale) questionnaire. The questionnaires in the research consisted of three competition types, namely anxiety questionnaires, self-efficacy questionnaires, and peak performance questionnaires. The competition anxiety questionnaire was developed by researchers based on the anxiety dimension,

namely the State Anxiety dimension which consists of several indicators in the form of Motivation, Tension, Changes in respiratory rhythm, Knee tremors, excessive cold sweat, paleness, and Heart rate. As well as the Trait Anxiety dimension which consists of several indicators in the form of anxiety, fear of failure, emotional changes, lack of self-confidence, feeling threatened, digestive disorders, local muscle contractions. Validity and reliability tests were carried out before the questionnaire was used on the research sample. The efficacy questionnaire refers to the 3 dimensions described by (Swihasnika, 2019), namely: Level, Strength and Generality. And the peak performance questionnaire is a questionnaire using a scale of 4 answer choices prepared based on the theory of peak performance characteristics according to Garfield and Bennet (In Satiadarma, 2000). The data obtained by researchers from a closed questionnaire with a Likert scale is quantitative data. This data was analyzed using descriptive statistics. The data obtained was then subjected to statistical tests with the help of a statistical processing application, namely SPSS statistics for Windows version 24.0. The collected quantitative data was analyzed using descriptive techniques by calculating relative frequencies expressed in percentage form. Hypothesis testing in this research uses a correlation test to find out the relationship between competition anxiety and peak performance and the relationship between self-efficacy and peak performance. Before testing the hypothesis, the researcher carries out a classic assumption test or prerequisite test consisting of a normality test and a linearity test so that the use of the type of correlation test is appropriate to the character of the data obtained.

All research procedures carried out were based on research ethics and received permission from the local research commission and all parties involved.

#### **RESULTS AND DISCUSSION**

The results of the data obtained by the researcher then carried out several tests on the data so that it was known that the data normality test used the Shapiro-Wilk test with the help of SPSS. Data can be declared to be normally distributed if the significance value is sig. > 0.05. The results of the normality test show that the results of data analysis using the residual technique for dependent and independent variables show that the data results are normally distributed because the sig value. greater than 0.05 (Sig > 0.05).

Tabel 1 Linearity test

3			
Variable	P Value	σ	
Anxiety Competes with Peak Performance	0.01	0.05	
Self-Efficacy with Peak Performance	0.01	0.05	

Test the linearity assumption on the two variables using SPSS 22.0, if the p value <  $\alpha$  means the two variables are linear with each other (Rangkuti & Wahyuni, 2016). The results of the linearity assumption test on the two variables can be seen in table 1, showing that the competition anxiety variable and peak performance have a linear relationship and the self-efficacy variable with Peak Performance also has a linear relationship.

Tabel 2 Rank Spearman Correlation Test

Variable	p value	σ
Anxiety Competes with Peak Performance	0.01	0.05
Self-Efficacy with Peak Performance	0.01	0.05

The correlation test aims to determine the relationship between the variable competition anxiety and peak performance and self-efficacy and peak performance using Rank Spearman.

Based on table 2, p value of 0.01 is obtained from the anxiety variable competing with peak performance and a p value of 0.01 from the self-efficacy variable with peak performance. The p value  $< \alpha$  (0.05) can be interpreted as meaning that competition anxiety is related to peak performance and self-efficacy is related to the peak performance variable.

Tabel 3 Correlation Coefficient Value

- 140012 0011014	Correlation		
Variable	Coefficient	Interpretasi	
	Value		
Anxiety		Vans Ctuon o	
Competes with	0.701	Very Strong	
Peak Performance		Relationship	
Self-Efficacy with	0.830	Very Strong	
Peak Performance	0.830	Relationship	

Based on table 3, the relationship between competition anxiety and peak performance has a correlation coefficient of 0.701 or can be interpreted as a very strong relationship, while the relationship between self-efficacy and peak performance has a correlation coefficient of 0.830 or can be interpreted as a very strong relationship. Based on table 3. The self-efficacy coefficient value of 0.830 is higher than the competitive anxiety coefficient value of 0.701, which means that self-efficacy is very supportive in determining aspects for athletes to be able to display their best performance or peak performance. This is reinforced by research conducted by (Zulkarnaen & Rahmasari, 2013) which states that athletes' because competitive anxiety decreases taekwondo athletes have good self-efficacy so that the optimism factor does not really influence the efficiency of anxiety when competing. Maximum achievement for an athlete is supported by good performance on the field (Berthelot et al., 2015). An athlete's self-efficacy is one of the internal factors that is effective in reducing the anxiety felt by athletes before

competing and during the competition (Zagórska & Guszkowska, 2014). Another benefit of selfefficacy is that if an athlete has good self-efficacy, it can be ensured that the athlete can handle anxiety when facing a competition (McCormick et al., 2019). This is in accordance with (Husdarta, 2010) explaining that anxiety in athletes can be reduced by the athlete's selfefficacy. Self-efficacy is seen as effective because it can provide a greater sense of confidence in the athlete's abilities. Confidence in the athlete is one of the internal factors that greatly influences the athlete's success on the field (Iso-Ahola, 1995). Self-efficacy has a very important role in the world of sports in showing good performance during matches. This is in accordance with research by (Safitri & Masykur, 2017) which states that athletes who have high self-efficacy will have a more positive view of perfectionism. Competitive anxiety is one of the observers of athletes who fail to unleash their full potential or peak performance. But there are several ways to reduce athletes' anxiety when facing competitions, including by carrying psychological interventions during the training program and increasing athletes' flying hours through competition trials, self-talk or other things (Hatzigeorgiadis et al., 2009). Athletes' self-efficacy has an important role in sports competitions because if athletes have the characteristics of good self-efficacy management, this can reduce the athlete's anxiety in facing the competition and can support the athlete to be able to produce optimal athlete performance or what is known as peak performance (Fajri et al., 2022). Athletes can learn how to achieve peak performance with training discipline and greater consistency. To do this, athletes can benefit by becoming more aware of their specific ideal performance states and developing psychological skills and coping strategies

necessary to achieve and maintain the mental state of peak performance.

#### **CONCLUSION**

Based on the results of research and discussion, the conclusion in this study is selfefficacy plays a crucial role in athletes' performance and ability to manage anxiety during competitions. Research suggests that athletes with high self-efficacy tend to experience less anxiety and have greater confidence in their abilities, which positively impacts performance. Psychological interventions and increased exposure to competition can help reduce athletes' anxiety levels. Moreover, athletes can enhance their performance through training discipline, consistency, and the development of psychological skills and coping strategies tailored to achieving and maintaining peak performance states.

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