



## JUARA: Jurnal Olahraga

E-ISSN 2655-1896 ISSN 2443-1117

<https://doi.org/10.33222/juara.v7i3.2413>



### Evaluation of Pangkep District Archery Athletes on Pre-Porprov Achievements

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#### Info Artikel

Article History:

Received 15 July 2022

Approved 10 October 2022

Published 23 October 2022

#### Keywords:

*Anxiety, Arm Muscle Strength, Athlete Performance, Archery Athletes*

#### Abstract

Pangkep archery athletes have competed in Pre Porprov to go to Porprov Sinjai in 2022; based on the results of an evaluation that has been carried out by researchers, that mentality which includes an athlete's anxiety, is very important to note because it has a significant impact on the athlete's achievement, things that must also be considered in addition to Athlete anxiety is an athlete's physical condition itself because the combination of the suitable mental and reasonable physical is an achievement. In archery, the physical component that supports is the strength of the arm muscles because the arm is the main foundation for aiming at a target. The research method used in this research is descriptive analysis and also correlation and regression tests. Based on the results of a study that has been carried out that there is a significant relationship between anxiety and arm muscle strength (58%) and shows that the anxiety level of Pangkep archery athletes is in the moderate category, as many as 13 athletes (43.3%) and arm muscle strength is in the middle class. Twenty-seven athletes (90%). The conclusion is that the anxiety level of Pangkep archery athletes is in the medium category, and the arm muscle strength of Pangkep, archery athletes, is in the moderate type, which affects the performance of Pangkep archery athletes to compete in Porprov Sinjai in 2022.

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#### INTRODUCTION

Archery is a sport similar to shooting, where players or athletes must focus on aiming at one target. Conceptually, the two are almost

identical, only differing in the tools used, because archery uses bows and arrows as the medium (Marzuki & Pamuji, 2018; Sors et al., 2018). Archery is one of the oldest sports in

the world; since ancient times, archery has been used as a tool for war because it is efficient and effective to carry everywhere. After all, the essential ingredients of a traditional bow are only made of wood and rope (Astrawan, 2020; Chiu et al., 2020).

Then in 1676, the function of archery began to shift from being used as a tool during wars to being used as a sport; even archery is an exclusive sport and is much in demand because of the easy-to-understand technique of using tools. In archery, a player or athlete must concentrate highly when aiming at the target; it is when seeking that many factors cause a player or athlete not to get the targeted points (Ramadan & Iskandar, 2018). One of the causes of a player or athlete not reaching the targeted points is the athlete has anxiety or excessive anxiety when aiming at the target it interferes with concentration during the match (Huda, 2014; Ramadan & Ningrum, 2019).

Anxiety plays a vital role in sports that focus on the mentality of a player or athlete; if a player or athlete does not have a good mentality, it will significantly affect his achievements in that sport (Ramadan et al., 2021b). Anxiety is natural to experience during a match. Still, excessive anxiety can also hinder the course of the game because an athlete's mental condition is unstable, caused to extreme pressure about the process or results of the match (Kauh, 2020).

Many novice players or athletes who lack flying hours do not realize or even deny experiencing excessive anxiety. As a result, these players or athletes still force themselves

to run matches in a state of anxiety and without overcoming their anxiety first, without them realizing it has an impact negative mentally (Sartono et al., 2020).

The mentality of a player or an athlete is essential to pay attention to because it has a significant impact on his achievement; an athlete who has a good track record of achievement is an athlete who has a winning mentality where the athlete can control and even know how to overcome the feelings of anxiety he feels (Prasetya et al., 2018).

Besides the athlete's mentality, what must also be considered is the athlete's physical condition because the combination of a good mentality and good physical condition is an achievement. Many coaches out there only pay attention to the physical condition of an athlete without paying attention to the athlete's mentality (Iskandar & Agustan, 2018).

In archery, the physical component that supports is the strength of the arm muscles, and if the arm muscle strength is good, then the others can also follow over time. Why are the arm muscles so influential in aiming at a target or target requires arm muscle strength so that the bow does not change position when seeking. Therefore physical training is needed to support arm muscle strength (Heriyadi & Hadiana, 2018). An athlete can perform various physical activities with good arm muscle strength without experiencing fatigue and difficulty. For an archery athlete to last a long time when aiming, maximum arm muscle

strength is needed so that the shot does not shift.

In addition to being physically fit to get maximum results, an archery athlete must pay attention to his mentality. However, in reality, on the field, there are still many who pay less attention to the athlete's mentality, which includes anxiety during matches. Still, on the other hand, the physical side must also be considered so that an athlete can win a championship and make achievements (Fan & Song, 2020). Therefore, it is necessary to evaluate Pangkep archery athletes for the accomplishments that have been achieved during the pre-porprov to support the achievements towards Porprov Sinjai.

According to (Ramadan & Ningrum, 2019), anxiety is an individual's emotional expression of a situation that he considers threatening to himself, but this is not a natural thing to see, and a physiological reaction follows this emotion. According to (Hendrayana, 2011), Anxiety or anxiety comes from the Latin *angere*, which means to choke or to be choked/obstructed. This understanding is suitable for sports where a person is hampered under pressure. Based on the above opinion, it can be concluded that anxiety is an emotional state that is consciously felt during a match.

The general understanding of competition anxiety is a worry that something undesirable will happen to someone. (Lin et al., 2022) reveals that anxiety is an emotional reaction to a threatening condition. Define anxiety as a negative emotional state

characterized by feelings of worry and anxiety and accompanied by increased arousal of the body's physiological system (Muhtarom, 2018). Anxiety is more clearly seen as a mental tension usually accompanied by bodily disturbances that cause the individual concerned to feel helpless and experience fatigue because he always has to be in a state of constant vigilance against an unknown threat of danger (Lai et al., 2022).

Based on the above understanding, anxiety, in general, is a negative emotional state of mental tension characterized by worry and anxiety and accompanied by increased arousal of the body's physiological system, which causes individuals to feel helpless and experience fatigue.

The arm muscles consist of the upper arm muscles and the forearm muscles. According to (Lai et al., 2022), the upper arm muscles consist of 32 flexor muscles, namely *m.biceps brachii*, *m.brachialis*, *m.korakobrachialis* and extensor muscles, namely *m.triceps brachii*. While the forearm muscles consist of *extensor carpiradialis longus*, *extensor carpiradialis brevis*, *extensor carpiulnaris*, *supinator*, *pronator*, *teres*, *flexor deep*, *extensor digitorum*.

Arm muscle strength is the ability of a group of finger muscles to contract as much as possible to fight resistance. For callisthenics sports, arm muscle strength is most dominantly used because this sport mainly uses or is played with the arms and hands. The greater the arm muscle strength produced, the more optimal its function will be. The

functions of the components include holding, lifting, pushing, pulling, etc. Arm muscle strength is the ability of a group of muscles in the arm to resist the load in one effort. In archery sports, arm muscle strength is used when lifting the bow and holding it while aiming at the target until the arrow is thrown towards the target being aimed at.

According to (Ramadan et al., 2021a), achievement is a fundamental ability that results from the interaction between various factors that influence both internal and external individuals in learning. While the definition of achievement according to A. (Gustaman, 2019) Achievement is a fundamental ability (actual ability) achieved by individuals from one activity or business. Based on the opinion above, it can be concluded that achievement results from someone doing it in reaching a predetermined goal.

**METHODS**

This research was carried out on archery athletes in Pangkep district by providing a basic understanding of anxiety and arm muscle strength and distributing anxiety level questionnaires from the sports competition anxiety test instrument and arm muscle strength test using the push-up method. This component is dominantly needed to achieve peak performance at the 2022 Porprov Sinjai (Ramadan & Juniarti, 2020).

**FINDINGS AND DISCUSSION**

Descriptive data analysis is intended to get a general picture of the research data, which includes the total value, average, standard deviation, range of values, variance, maximum value and minimum value carried out on the level of anxiety and arm muscle strength in archery athletes who will participate in porprov in 2022.

Table 1. Results of descriptive analysis of data

	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
Anxiety Level	30	17	10	27	18.17	.808	4.426
Arm Muscle Strength	30	26	26	52	39.67	1.403	7.685
Valid N (listwise)	30						

For the anxiety level of 30 archery athletes, an average value of 18.17 is obtained with a standard deviation of 4.426 and a variance value of 19.592 from a range of 17 with a maximum weight of 27 and a minimum value of 10. For the arm muscle strength of 30

archery athletes, an average value is obtained - intermediate 39.67 with a standard deviation of 7.685 and a variance value of 59.957 from a range of 26 with a maximum weight of 52 and a minimum value of 26.



It can be seen that 14 of the 30 athletes who took this test had a low level of anxiety, or 46.7% of the sample. Meanwhile, 13

athletes had a moderate level of anxiety or 43.3% of the sample, and three athletes had a high level of anxiety or 10% of the sample.



The descriptive data analysis results are the anxiety and arm muscle strength of archery athletes in Pangkep. The data needs to describe the relationship and mutual influence between the independent and dependent variables. To prove whether there is a significant relationship between the independent variable and the dependent variable, it is necessary to test the correlation

and regression whether there is a relationship between the independent variable and the dependent variable.

Based on the results of the regression analysis, it is known that the F count is 40.982 with a  $p = 0.000$ . if the p-value is compared with  $\alpha = 0.05$ , it can be concluded that  $p < \alpha$ , which means the null hypothesis ( $H_0$ ) in this study is rejected and the alternative view ( $H_a$ )

is accepted. Compared with using F count 40.982, the result of the F table is 4.18, meaning F count > F table. The conclusion is that Ho is rejected; in other words, there is a significant effect between anxiety and arm muscle strength in archery athletes. Based on the results above, it can be seen that there is a significant effect of anxiety on arm muscle strength. The Adjust R Square result is 0.580, which means that the anxiety variable affects the arm muscle strength variable by 58%, and other factors besides anxiety influence 42%.

Based on the hypothesis testing that has been done, the results obtained are that Ho is rejected and Ha is accepted, which shows an effect of anxiety on arm muscle strength. The point is that the higher the level of anxiety of an athlete, the lower the strength of the arm muscles in archery athletes. And vice versa, the lower the level of anxiety of an athlete, the power of the arm muscles will increase, which can lead to increased achievement.

## CONCLUSION

Competition anxiety has an effect of 58% on arm muscle strength, and the rest is influenced by other factors outside of this study. According to mardiyah (2022), in general, anxiety is an individual's emotional expression of a situation that is considered self-threatening, but this is not something that can be seen. This emotion is followed by a physiological reaction.

Based on the above opinion, it can be concluded that an athlete who has excessive anxiety can give an excessive physiological

reaction; in this case, it means that it can reduce the strength of the athlete's arm muscles so that during a match, the athlete cannot perform at his best and causes a lack of achievement in the athlete. The. Based on the results of the pre porprov in 2021 for archery athletes held in maros in 2021, out of a total of 184 athletes, only 70 athletes qualified for the porprov sinjai in 2022, which is almost less than half of the pre-porprov athletes where this goes according to this research, which is athletes who have excessive anxiety will affect the athlete's performance during competition. If only the athlete focuses on managing anxiety that occurs before or after the match, then there will be no decrease in arm muscle strength caused by the athlete's concentration being distracted so that an increase in anxiety levels, decreased concentration, and lack of self-confidence can occur which will affect the decrease in arm muscle strength in athletes the.

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