

## VALIDITY OF SPORTS COMPETITION ANXIETY TESTS FOR AMATEUR BOXING ATHLETES

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### Abstract

Anxiety is a normal symptom that arises in athletes before the game, one of the sports that affects anxiety is boxing. The purpose of the study was to develop a sports competition anxiety test for amateur boxing athletes. This research method uses a mixed method by combining quantitative and qualitative approaches to collect valid and complete data. The participants of the study were 20 experts. The experts have a qualification of 3 expert lecturers in sports psychology, 7 national certified boxing coaches and have a master of sport science diploma, and 10 national certified boxing coaches. This validity test uses the Aiken' V formula with the delphi technique. In judging, experts are given assessment sheets as well as using scale values that include some specific values, the value of the scale is: value 1 = not appropriate, value 2 = less appropriate, value 3 = appropriate, value 4 = very appropriate. From these results, the sports competition anxiety test for boxing from the aspect of (1) the definition aspect of the sports competition anxiety test with instrument conformity has a coefficient value of V of 0.950; (2) the material clarity aspect of anxiety with instrument conformity has a coefficient value of V of 0.783; (3) the aspect of conformity of the statement to the conditions of the amateur boxing competition with the conformity of the instrument has a coefficient value of 0.750; (4) the aspect of the suitability of the score with the anxiety category with the conformity of the instrument has a coefficient value of V of 0.767; and (5) the procedure aspect of filling the test with instrument conformity has a coefficient value of V of 0.900. Hence the anxiety test of sports competitions for amateur boxing is declared valid.

**Keywords:** Sports competition anxiety test; boxing anxiety; amateur boxing.

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### INTRODUCTION

Anxiety is a normal symptom that arises in athletes before the game. Athletes can experience anxiety i.e. before, during the game, or after the game (Mangolo et al., 2021)&(Yong, 2021). Factors that influence anxiety can come from athletes, coaches, referees or supporters. Then sports, gender and age as well as athletes influence the level of anxiety (Sanader et al., 2021). Feelings of anxiety

are caused by shadows before the game or during the game. This happens because of the psychological pressure when playing and the nature of sports competitions which are full of changes in the state of the game or natural conditions that makes the athlete's self-confidence decrease.

In boxing, anxiety can arise because the sport is a sport with physical contact (Páez-Ardila et al., 2020). So the risk of injury is high and causes trauma to the boxer. The possibility that occurs during a match is also difficult to predict, so boxers are expected to be able to master good technical skills, tactics, and physical condition during the match (Faro et al., 2020). In boxing, anxiety is a very important condition for every coach and athlete to pay attention to before the game (Alejo et al., 2020). To find out the level of anxiety, it is necessary to have a test to measure anxiety in boxing athletes.

Previous studies that used tests to measure anxiety in boxing athletes were using an anxiety assessment scale with some modifications to the questions (Bugaevsky et al., 2020) & (Ababei, 2020). Statistical calculations by measuring pulse, psychological tests, psychoemotional status, electroencephalography tests, namely tests to measure electrical activity in the brain, and measurements heart rate (cardiointervalography) (Maksutova et al., 2020). Then use a questionnaire from the Psychological Skills Inventory for Sports (PSIS) using the Ex-post facto method with a causal-comparative retrospective design (Dongoran et al., 2019). So the findings of the study became the basis for developing a more valid anxiety test. The purpose of the study was to develop an anxiety test for amateur boxing athletes with a method that is easy to use and analyze, but with the quality of the test or grain A valid question with the sport of boxing and acceptable.

Anxiety is one of the psychological symptoms identical to negative feelings. Anxiety can arise at any time, one of the causes of the occurrence of anxiety is excessive and prolonged tension. Feelings of anxiety are characterized by nervousness, worry, and fear and are related to activation or excitement in the body (Ramcharitar, 2020). Anxiety before the game has two components, which consist of cognitive anxiety which is characterized by anxiety about something

happening, while the second is somatic anxiety which is characterized by a measure of a person's physical state (SOPA, 2021).

### Sports Competition Anxiety Test (SCAT)

To assess different aspects of anxiety, different psychometric scales have been developed within the realm of sports. In addition to attempts to measure anxiety, the main focus in the sports anxiety literature is to explore the impact of anxiety on appearance and why it occurs. Competition anxiety test for boxing, adapted from the sports measurement and evaluation test book from (Narlan & Juniar, 2020).

**Table 1.** Anxiety test questionnaire

No	Statement	Infrequently	Sometimes	Often
1	Competing against others is socially fun			
2	Before competing, I felt uncomfortable			
3	Before competing, I am afraid that it will not perform well			
4	I am a good sportsman, when I compete			
5	When I compete, I'm worried about making mistakes			
6	Before I competed, I was calm			
7	Setting goals is important when competing			
8	Before the match, my stomach felt sick			
9	Just before the match, I noticed a faster heart rate than usual			
10	I like to compete in games that demand a lot of physical energy			
11	Before I competed, I relaxed			
12	Before I went on the field, I was nervous			
13	Team sports are more exciting than individual sports			
14	I feel nervous when I want to start the game			
15	Before I compete, I usually get tense			

**Table 2.** Anxiety Questionnaire Score

No	Infrequently	Sometimes	Often
1	0	0	0
2	1	2	3
3	1	2	3
4	0	0	0
5	1	2	3
6	3	2	1
7	0	0	0
8	1	2	3
9	1	2	3
10	0	0	0
11	3	2	1
12	1	2	3
13	1	2	3
14	1	2	3
15	1	2	3

**Table 3.** Anxiety Level Categories

Total Score	Analysis
<17	Low Anxiety Levels
17 - 24	Moderate Anxiety Levels
> 24	High Anxiety Levels

### Validity Test

Validity is the ability of a measurement tool to describe what is designed to measure. Validity means the extent of the accuracy and accuracy of a measuring instrument in performing its size function. So that is one condition of a valid instrument is an instrument that measures what it should measure. The way to test the validity of this study is to use the formula Aiken's V (Lewis. R. Aiken, 1985) namely:

$$V = (\sum (r_i - l_o) / [n(c-1)])$$

Description:

V = appraiser approval index regarding item validity

r = score given by the assessee

l<sub>o</sub> = lowest validity score (1 on a scale of 1-4)

c = highest validity score (4 on a scale of 1-4)

n = number of assessors who assessed

## METHOD

This research method uses a mixed method by using quantitative and qualitative approaches to collect valid and complete data. The participants of the study were 20 experts. The experts have the qualifications of 3 expert lecturers in sports psychology, 7 boxing coaches have a national certificate and have a *master of sport science* diploma, and 10 coaches national boxing certificate. This validity test uses the delphi technique, in this technique each expert does not meet during the assessment of this instrument. In judging, experts use scale values that include several specific values, the values of such scales are: value 1= non-conforming, value 2 = less appropriate, value 3 = appropriate, value 4 = very appropriate. Data analysis uses the Aiken' V formula to calculate the index of achievement of the results of the assessment of the validity of the contents.

Research instruments in the form of expert assessment sheets expert assessment are used to determine aspects of how relevant (1) aspects of the definition of sports competition anxiety tests (2) aspects of material clarity about anxiety, (3) aspects of suitability statements with boxing competition conditions, (4) aspects of score compliance with anxiety categories, (5) aspects of test filling procedures.

## RESULT

**Table 4.** The validity result of the content of the sports competition anxiety test from Aiken'V

Rater	Aspect 1		Aspect 2		Aspect 3		Aspect 4		Aspect 5	
	Score	S	Score	S	Score	S	Score	S	Score	S
1	4	3	3	2	3	2	3	2	4	3
2	3	2	3	2	3	2	3	2	4	3
3	4	3	3	2	3	2	3	2	3	2
4	4	3	3	2	3	2	3	2	4	3
5	3	2	3	2	3	2	3	2	4	3
6	4	3	3	2	3	2	3	2	4	3
7	4	3	3	2	3	2	4	3	4	3
8	4	3	3	2	3	2	3	2	4	3
9	4	3	3	2	3	2	3	2	4	3
10	4	3	3	2	3	2	4	3	4	3
11	4	3	4	3	4	3	3	2	3	2
12	4	3	4	3	4	3	4	3	4	3
13	3	2	3	2	4	3	4	3	3	2
14	4	3	3	2	3	2	4	3	4	3

15	4	3	4	3	3	2	3	2	4	3
16	4	3	3	2	3	2	4	3	4	3
17	4	3	4	3	3	2	3	2	3	2
18	4	3	4	3	3	2	3	2	4	3
19	4	3	4	3	4	3	3	2	3	2
20	4	3	4	3	4	3	3	2	3	2
$\sum s$		57		47		45		46		54
V		0,950		0,783		0,750		0,767		0,900

From these results, the sports competition anxiety test for boxing from the aspect of (1) the definition aspect of the sports competition anxiety test with instrument conformity has a coefisien value of V of 0.950; (2) the material clarity aspect of anxiety with instrument conformity has a coefisien value of V of 0.783; (3) the aspect of conformity of the statement to the conditions of the amateur boxing competition with the conformity of the instrument has a coefisien value of 0.750; (4) the aspect of the suitability of the score with the anxiety category with the suitability of the instrument has a coefisien value of V of 0.767; and (5) the aspect of the procedure for filling the test with the conformity of the instrument has a coefisien value of V of 0.900. In the table Aiken V (Lewis. R. Aiken, 1985) with appraisers from 20 and a scale of 4, it produces a minimum of Aiken criteria values with a minimum range of V values of 0.65 - 0.70. This implies that the appraisers strongly agree with their own opinions. Based on this explanation, it means that the instrument has a high value of validity. In other words, all appraisers have a high approval value.

## DISCUSSION

Anxiety is a component that coaches and boxers should pay attention to. One way to find out a boxer's anxiety is to use a sports competition anxiety test that has previously obtained a high validity score to make it more measurable. But if the boxer has not been able to overcome his anxiety, then it is necessary to support from the surrounding environment such as a trainer to provide enthusiasm and motivation (Pertiwi & Aulia, 2021).

Another way to relieve boxer anxiety before a match is with imagery training. Imagery training can help improve mentality and stay focused on yourself and your opponent before and during a match (Azeez et al., 2021). If the anxiety

experienced by boxers decreases, then when competing, they will not have any burden or fear. So that boxers can perform a combination of techniques – tactics well.

## CONCLUSION

The need for further development of anxiety tests of amateur boxing-specific sports competitions. Currently, the test is not specific about the sport of amateur boxing. It is hoped that subsequent research can provide anxiety tests for amateur boxing-specific sports competitions to have high levels of validity and reliability.

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