Relevansi antara *self efficacy* dengan kecemasan sebelum bertanding pada atlet futsal putri

*Relevance of self efficacy and female futsal athletes’ anxiety before the match*

Aliyyah1, Bagus Wicaksono1, Rahmah Saniatuzzulfa1, & Agus Mukholid2

1Department of Psychology, Faculty of Medicine, Universitas Sebelas Maret Surakarta, Jl. Ir. Sutami No. 36 A Jebres, Surakarta, Center Java Province, 57126, Indonesia

2Department of Physical Education, Health, and Recreation, Faculty of Sports, Universitas Sebelas Maret Surakarta, Jl. Menteri Supeno No. 13 Manahan, Surakarta, Center Java Province, 57126, Indonesia

Received: 8 January 2020; Revised: 5 April 2020; Accepted: 11 April 2020

**Abstrak**

Performa atlet akan maksimal ketika atlet mampu mengelola mentalnya dengan lebih baik. Aspek mental seperti kecemasan harus diminimalisir untuk mencapai performa yang diinginkan. Beberapa penelitian sebelumnya menjelaskan bahwa kecemasan yang dialami berhubungan erat dengan *self-efficacy*. *Self-efficacy* yang bersifat positif akan membantu atlet dalam mengendalikan kecemasan yang dirasakannya. Penelitian ini bertujuan untuk mengetahui adanya hubungan antara *self-efficacy* dengan kecemasan sebelum bertanding. Penelitian ini melibatkan 44 atlet futsal putri Universitas Sebelas Maret Surakarta. Untuk mengukur variabel pada penelitian ini digunakan skala kecemasan sebelum bertanding (reliabilitas=0,927) dan skala *self-efficacy* (reliabilitas=0,859). Hasil uji hipotesis r= -0,343 menunjukkan bahwa terdapat hubungan negatif dan signifikan antara *self-efficacy* dengan kecemasan sebelum bertanding, artinya semakin rendah *self-efficacy* maka semakin tinggi kecemasan sebelum bertanding pada atlet (P= 0,023; p<0,05). Penelitian ini terbatas pada atlet futsal putri. Studi lanjutan diharapkan dapat melibatkan atlet putra dari berbagai cabang olahraga.

**Kata kunci**: atlet, futsal putri, *self-efficacy*, kecemasan.

**Abstract**

The athletes performance will be excellent with the support of healthy mind. Psychological state such as anxiety must be lessened to achieve the desired performance. Several previous studies suggest that anxiety is closely related to self-efficacy. Positive self-efficacy helps the athletes in controlling their anxiety. This study aims to determine the relationship between self-efficacy and anxiety before the match. The research involves 44 female futsal athletes of Sebelas Maret University in Surakarta. To measure the variables in this study, the anxiety scale before the match (reliability = 0.927) and self-efficacy scale (reliability = 0.859) are used. Hypothesis test result of \( r = -0.334 \) shows that there is a negative and significant relationship between self-efficacy and anxiety before the match, which means the lower self-efficacy, the higher athletes’ anxiety before the match.
the match ($P = 0.023; p < 0.05$). This research is limited to female futsal athletes. Further studies are expected to involve male athletes and other sports.

**Keywords**: anxiety, athletes, female futsal, self-efficacy.

**INTRODUCTION**

Futsal is more known as men's sports, because biologically, men's physique is stronger than women; physically, women are smaller and calmer (Arifin, 2018). Even so, these assumptions do not rule out the possibility that women also play futsal. First professional league championship of Indonesia Women's futsal at national level held in 2006 (Saryono, 2006) and since that, female futsal athletes have made many achievements internationally. Also, at the university level, the female futsal team is also established; one of them is Sebelas Maret University Surakarta (UNS) female futsal team. The quality of athletes' performance is influenced by physical, technical, and psychological readiness. Harsono (2008) reveals that 80% of athlete performance is influenced by mental aspects and the rest 20% is affected by other aspects of physical, approach, and technical aspects. Therefore, to achieve a respectable performance, an athlete must mentally be ready to be more mature, systematic and planned. Compared to the athletes' physical and technical aspects, psychological aspect is not visible so that there are only few researches on it. Psychological entity can not be touched or seen, such as panic, tension, confusion and self-confidence. Specifically, one of the important athletes’ psychological states usually appears before and during competition is anxiety. According to a survey conducted by Dharmawan (2016) on anxiety before the match of 200 futsal athletes, it is stated that 52.5% of athletes experience the tension, 45.5% of them experience faster heart beats and 45% of them experience nervousness and then 41.5% of them experience sweat on the palms. According to Husdarta (2010), these conditions arise due to physiological reactions in the body of an athlete who is going to compete. Anxiety also often affects the athlete's performance. According to Sari (2017), anxiety affects the athletes’ performance so that athletes are not able to perform maximum abilities they have during their training.
Bandura, Freeman, & Lightsey (1999) mention anxiety symptoms are influenced by several factors, including self-efficacy and outcome expectancy. Self-efficacy is an individual's belief in his ability to cope with the situation (Bandura et al, 1999) and outcome expectancy is an individual's estimation of the likelihood of certain consequences that might affect anxiety suppresses. This proves that self-efficacy supports athletes’ self-confidence by believing their own ability in encountering the upcoming championship.

Anxiety is a feeling of being scared, anxious, or worried of threatening perceived assumption (Harsono, 2008). Bandura et al (1999) states that anxiety is affected by several factors, including self-efficacy and outcome expectancy. Cox (2007) reveals that pre-match anxiety is a state of distress experienced by an athlete in which an improving negative emotions coresponds the Athlete’s interpretation and evaluation of match circumstances. Anxiety in pre-competition is included in the state anxiety, which means it is experienced based on the encountered situation and event (Jarvis, 2006).

Cox (2007) proposes two components of anxiety in pre-competition level, namely (1) cognitive component is a mental component of state anxiety and is caused by things, such as fear of negative evaluation of the environment, fear of failure, difficulty in concentrating and loss of self-esteem. (2) somatic component is a physical component of anxiety, that manifest itself in of psychological responses, such as increased heart and breath rate, increased blood pressure, shaking, sweating, nausea and vomiting, insomnia, diarrhea, fatigue, feverish, dizzy, pale.

Furthermore, Cox (2007) attempts to explain the causes of anxiety in pre-competition level, such as (a) Fear of failure, the anxiety of losing in the upcoming match; anxiety emerges as an athlete being afraid of losing to the considered weak opponent. It poses a serious threat to an athlete. b) Fear of physical injury from the opponent's attack will pose a serious threat which results on improving anxiety. (c) Fear of social judgment because the athlete is afraid of the negative audience judgement of the
upcoming match also increases anxiety. Pate, McClenaghan, & Rotella, (1993) explain that the public or in this case the audience, tend to praise athletes who performed well; on the contrary, those whose performances are less satisfying will obtain negative judgment. The fear of performing poorly and being judged negatively by the audience also cause anxiety. (d) Ambiguous match situations, sometimes anxiety arise when athletes do not know when the match will start. (e) Disruption to routine training, athletes feel anxious without training practice before the match.

Self-efficacy according to Bandura (1997) is a person's hope or belief in his/her ability of successfully completing a particular task or current behavior. Moreover, Bandura (1997) explains several aspects of self-efficacy, including (1) Magnitude or the task level of difficulty is an aspect which an individual believe to be able to perform a task with definite level of difficulty. This aspect influences an Individual chosen behavior based on their belief of ability to complete such task. People will complete tasks that they can do and will avoid the tasks that are unable to do. (2) Generality is the aspect of the wide range of an individual behavior related to the things they are able to do. An individual's self-understanding of his ability influences his belief of his ability, either in a particular activity or in wider and more varied activities. (3) Strength is the aspect related to how strong an individual confidence of his/her abilities. A strong belief will affect the individual's efforts to achieve goals even though without experience. In the contrary, if the confidence is low, a person will easily be shaken even with bunch of experiences.

The cause of respondents' anxiety in pre-competition is various such as the fear of the opponent team, the concern for slippery field, the worry to disappoint a friend who visit the game. Dealing with such anxiety, the respondents report they would be praying, shouting, listening to the coach's words, trusting the team, trusting in their own abilities, being confident in the previous physical training, and being confident to present their best capability in the match. Hence, understanding the link between self-efficacy and anxiety of futsal athletes in pre-competition level is
important. Given the differences between anxiety in men and women, this study examines anxiety of female futsal athletes in pre-competition level. Generally, women tend to be more anxious than men. The reason is women are more sensitive than men (Rezkisari, 2019).

The lack of empirical data on the relevance of self-efficacy and anxiety before the match in female futsal athletes interests the researchers to study under this topic. Hence, this study aims to determine the relation of self-efficacy and anxiety before the match in Female futsal athletes. In addition, the research findings are expected to give contribution especially to athletes and coaches. By understanding the state, it is expected that athletes and their coaches find an effective way of handling anxiety symptoms, especially anxiety before the match starts.

METHOD

This study uses a population with a sample of 44 Sebelas Maret University female futsal athletes who are still actively participating in training and competition. To measure the variables, this study employs two scales, (1) Anxiety scale in pre-competition level, arranged based on Cox's (2007) theory, consists of two components, namely the somatic component and cognitive component, with a total of 25 items with a reliability of 0.927. (2) Self-efficacy scale, modified by researchers from the general self-efficacy scale based on aspects proposed by Bandura (1997), consists of Magnitude, Generality, and Strength, with a total of 10 items with a reliability of 0.859.

RESULTS

Basic Assumption test

The basic assumption test consists of normality test and linearity test. Based on the results of the normality test using one sample Kolmogrov Smirnov, test results obtained for 0.200, in which the significance level of the data obtained exceeds 0.05, so it can be said that the data distribution is normal.
Table 1. Normality Test One-Sample Kolmogorov-Smirnov Test

<table>
<thead>
<tr>
<th>N</th>
<th>44</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal Parameters&lt;sup&gt;a,b&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>.0000000</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>9.65197407</td>
</tr>
<tr>
<td>Absolute</td>
<td>.083</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>.083</td>
</tr>
<tr>
<td>Negative</td>
<td>-.073</td>
</tr>
<tr>
<td>Test Statistic</td>
<td>.083</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.200</td>
</tr>
</tbody>
</table>

Linearity test by comparing the mean test of linearity obtains results of 0.008, with a significance level of obtained data less than 0.05, which proves the relation of anxiety before the match and self-efficacy is a linear relationship.

Table 2. Linearity Test

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>(Combined)</td>
<td>Anxiety before the match * Self-Efficacy</td>
<td>2583.852</td>
<td>13</td>
</tr>
<tr>
<td>Linearity</td>
<td>535.094</td>
<td>1</td>
<td>535.094</td>
<td>8.202</td>
</tr>
<tr>
<td>Deviation from Linearity</td>
<td>2048.758</td>
<td>12</td>
<td>170.730</td>
<td>2.617</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1957.148</td>
<td>30</td>
<td>65.238</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4541.000</td>
<td>43</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hypothesis testing

Hypothesis testing employs Pearson product moment correlation test techniques which obtain significance level (p) of 0.023 (p <0.05) and can be interpreted that this study is significant, and obtains a correlation coefficient (r) of -0.334 which proves that the hypothesis can be accepted, Hence, the study finds the relevance between self-efficacy and anxiety before the match in Sebelas Maret University Surakarta Female futsal.
athletes. However, based on the interpretation of the correlation coefficient according to Priyatno (2012) such relationship is included in the low category.

**Table 3. The Interpretation of the Correlation Coefficient**

<table>
<thead>
<tr>
<th>Interval Koefisien</th>
<th>Correlation Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>0,00 – 0,199</td>
<td>very low</td>
</tr>
<tr>
<td>0,200 – 0,399</td>
<td>low</td>
</tr>
<tr>
<td>0,40 – 0,599</td>
<td>medium</td>
</tr>
<tr>
<td>0,60 – 0,799</td>
<td>strong</td>
</tr>
<tr>
<td>0,80 -1,000</td>
<td>very strong</td>
</tr>
</tbody>
</table>

**Table 4. Pearson Correlation Product Moment Analysis**

<table>
<thead>
<tr>
<th>Anxiety before the match</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety before the match</td>
<td>1</td>
<td>.023</td>
<td>44</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>-.343*</td>
<td>.023</td>
<td>44</td>
</tr>
</tbody>
</table>

In addition to the Pearson Product Moment analysis test, this study also identifies the results of the coefficient of determination. Based on R have value of -0.343, the relationship between the two variables is negative. R square value is 0.118. This indicates that 11.8% of the anxiety variables before the match can be explained by the independent variable used by researchers, namely self-efficacy, while the rest (100% - 11/8% = 88.2%) is explained by other factors outside the research variable.
Tabel 5. The Results of The Coefficient of Determination

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>R Squared</th>
<th>Eta</th>
<th>Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety before the match *</td>
<td>-.343</td>
<td>.118</td>
<td>.754</td>
<td>.569</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Descriptive Analysis

Descriptive analysis is performed to measure the normal distribution of data through mean, standard deviation, variance, and range. The results in the form of mean and standard deviation are used in the next stage of the categorization of respondents. This categorization process helps the scale scores interpretation. This category is divided into 3 levels of low, medium and high.

Based on the results, as many as 11.4% of total respondents have a high level of anxiety before the match, then as many as 77.2% of total respondents have a moderate level of anxiety before competing, and 11.4% of total respondents have a low level of anxiety before the match. Based on the statistical data above, respondents generally have anxiety levels before the match in a moderate level.

Likewise, self-efficacy variables shows as many as 15.9% of respondents have a high level of self-efficacy, then 72.7% of respondents have a moderate level of self-efficacy, and 11.4% of respondents have a low level of self-efficacy. Based on the statistical data above, respondents generally have a moderate level of self-efficacy.

DISCUSSION

The results of data interpretation indicate relevance of self-efficacy and anxiety before the match in Sebelas Maret University female futsal athletes. This can be seen in the significance level (p) at 0.023 (p <0.05). In addition, based on the results of the correlation coefficient values of -0.334 indicate the relationship of self-efficacy and anxiety before the match is in the category of low. Similarly, Riani & Rozali’s (2014) research also states the negative relations between self-efficacy and anxiety levels.
Similarly, Safitri’s research (2017) also finds the negative relation between self-efficacy and anxiety of tennis athletes who are facing a national championship. This research is conducted in INKAI Karate Student Activity Unit of Yogyakarta State University athletes to analyze the relation of self-efficacy and anxiety (Melysa, 2018).

This finding shows that self-efficacy has a role in certain situations before the game, one of which is to overcome anxiety. When a person is confident on his/her own ability to cope with anxiety, the body will directly produce mechanisms to reduce anxiety. Confidence leads a person to be calm and relaxed, and also enables a person to think straight when dealing with pressured situations or environments (Nurlaila, 2011). Confidence in his/her own ability affects the efforts to overcome a difficulty; if encountered a difficult situation, high levels of self-efficacy individual will show more efforts than low self-efficacy individual.

In sports, Self-efficacy appears in athletes’ confidence of their ability to perform tasks in specific sports and skills. This confidence influences the athletes’ emotional and behavioral reactions in a tense and stressful circumstance at matches (Besharat & Pourbohlool, 2011). Bandura (2001) in his research states that individuals with high levels of self-efficacy are less fragile and express more adaptive behavior. Self-efficacy helps athletes to be less affected by anxiety before the match which leads to better performance.

Bandura (1988) also emphasizes a negative relationship between perceived threats, such as anxiety, and self-efficacy, because inability of a person to deal with potential threats will cause them experience feelings of disturbance or specifically named as anxiety. The athletes will still feel the threat while playing competitively, but with good self-efficacy, they will be more ready to face the threat so the anxiety will be lessened.

Self-efficacy helps strengthen coping strategies that are efficient in dealing with anxiety before the match (Lombardo, Tan, Jensen, & Anderson, 2005). With these, athletes will be better facilitated to control and overcome tense situations or to improve their performance in sports.
Ursin & Eriksen (2004) suggest that positive coping significantly reduces anxiety during the match. This self-efficacy effect of controlling and reducing negative emotions has been confirmed by several studies including Bandura, (2001), Lombardo et al., (2005), Turk & Okifuji (2002). Accordingly, self-efficacy helps athletes control and reduce negative emotions such as anxiety before the match. This increases the athletes’ feeling of having power in facing matches (Besharat & Pourbohlool, 2011).

Self-efficacy in Sebelas Maret University Female futsal athletes is generally at moderate level which is proven by their self-efficacy scores in this study, as many as 15.9% of total respondents have a high level of self-efficacy, then 72.7 % of total respondents have a moderate level of self-efficacy, and 11.4% of total respondents have a low level of self-efficacy. In addition, the anxiety variable of Sebelas Maret University Female futsal athletes before the match is generally classified as moderate. This is analyzed from the anxiety score in which as many as 11.4% of total respondents have a high level of anxiety, then as many as 77.2% of total respondents have a moderate levels of anxiety, and 11.4 % of total respondents have a low level of anxiety before the match.

As elaborated before, this study concludes that self-efficacy has a significant relationship with Sebelas Maret University Female futsal athletes' anxiety before the match. Apparently, the role of self-efficacy in dealing with anxiety before the match is relatively small of 11.8%. This suggests that Anxiety before the match is also influenced by other things such as fear of failure, fear of physical injury, fear of social judgment, ambiguous match situation, and chaos of routine training.

Myers (2002) proposes several anxiety factors, one of which is self-efficacy. It is believed that ones who have a high self-efficacy will perform more tenacious effort and hardly feel depressed in dealing with any situation so that the anxiety level will be lessened. Cox (2007) also mentions the aspect of anxiety before the match called cognitive component. This is the mental component of anxiety which is caused by things, such as fear of society negative judgement, fear of failure, difficulty
in concentrating and loss of self-esteem. When an individual fails to cope with such component, he/she will suffer anxiety symptoms before the match that will cause reactions such as increased heart rate, increased blood pressure, increased breathing frequency, trembling, sweating, nausea and vomiting, sleeping difficulty, diarrhea, easy tired, body feels hot and cold, dizzy, pale. This should be avoided by all athlete especially Sebelas Maret University Female futsal athletes.

One way to overcome this anxiety is high self-efficacy. Bandura (1997) explains that one aspect of self-efficacy is strength, which means the strong of ones’ confidence on their own ability. Such mind will affect the efforts to achieve the final goals even without any experience. High self-efficacy of someone will minimize anxiety before the match. This view is line with this research.

In general, the results of this study indicate a significant relation between self-efficacy and anxiety before the match in Sebelas Maret University female futsal athletes. This topic is potentially studied deeper and wider; unfortunately, such process hasn’t been conducted due to the limitation of time and resources. In addition, this research limits its observation on female athletes. Moreover, the variables of study lacks of novelty. Future studies are expected to be able to add other variables related to self-efficacy and anxiety before the match as well as include other sports and take both genders, male and female athletes, as the respondents.

CONCLUSION

The finding shows that self-efficacy is related to anxiety before the match. The role of self-efficacy on anxiety before the match is classified as small, which is 11.8%. Anxiety symptoms before the match are also affected by other factors such as fear of failure, fear of physical injury, fear of social judgment, ambiguous match situation, and chaos of routine training.

Sebelas Maret University Female futsal athletes in Surakarta should strive to improve their self-efficacy by becoming more diligent taking part in
routine and sparring exercises. For further researchers, this study suggests larger data samples which are not limited to one place and one gender to conclude universal condition. Future researchers are also expected to develop this research in other sports, not only female futsal athletes.

REFERENCES


