

Gender Differences on the Sources of Anxiety and Level of Sport Performance Among Malaysian Athletes

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Abstract A few factors have been identified as the sources of anxiety, among them are high hope, fear of lose, perceived sport event as very important, negative evaluation, fear of injury, knowledge of the opposition team, uncertainty, past unpleasant experience, audience present, and playing at the opposition's place. However, the precise sources of anxiety are still not determined among athletes. Since perception of anxiety is different according to individuals, the sources of anxiety may also vary according to the individuals. The aim of this research was to identify the factors contributing to the level of anxiety by focusing on male and female athletes. Besides that, this research also evaluates the performance of athletes. The sample consisted of 908 athletes, male ($N = 502$) and female athletes ($N = 406$). The sample was drawn from athletes who competed in MASUM (sport between universities), MSSM (sport between schools), and Sukan Olimpik Muda (Young Olympic athletes Sport). The present study revealed that high hope as the highest, and playing at the opposition's place as the lowest source of anxiety among athletes. Results revealed that female athletes reported more sources of anxiety than male athletes. Results also showed that high-performance athletes experience low sources of anxiety. Sport psychologists, sport counselors, or coaches should use this research to recommend coping strategies, which is related to the source of anxiety to female athletes, to enhance their performance.

Keywords Anxiety · Sources · Sport performances

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1 Introduction

Anxiety, as a negative emotion, affects perceptions in sport competitions, where a large majority of athletes consider anxiety to be debilitating toward performance, which may result in decreases in performance [1, 2]. According to [3], sports psychologists have long believed that high levels of anxiety during competition are harmful, worsening performance and even leading to dropout.

A few factors have been identified, as the sources of anxiety, of both cognitive and somatic. Initial evidence suggest among the sources of anxiety are fear of injury, presence of audience, past unpleasant experiences, fear of lose, negative evaluation, knowledge of the opposition team, uncertainty, playing at the opposition's place, high hope, and perceived sport events as very important, and specifically, these factors have been identified as the source of anxiety among athletes. Fear of injury has been the main factor which causes high level of anxiety among athletes [3, 4], especially on football and rugby [5]. Many athletes have dropped out of sport because fear of injury [6–8]. According to the drive theory, the level of anxiety depends on the audience. The presence of an audience can increase noise in arena sports, which can contribute to the levels of anxiety among athletes [9, 10].

Besides audience presence, fear of losing, as the cognitive component, can be the factor of increasing the level of anxiety [3, 11]. Past unpleasant or bitter experience also can be the source of anxiety among athletes [12–14]. Research shows that past loss increased the level of anxiety and wins or victories lowered the level of anxiety [15]. Negative evaluation and thoughts also has been one of the main factors for contributing to the levels of anxiety, especially the cognitive anxiety [16–18]. The knowledge of the opposition team also can increase one's level of anxiety [19]. The more athletes knew about the opposition's ability, the higher the level of anxiety [4, 20].

Ambiguous situations in sport are associated with both uncertainty and anxiety [2, 21]. Uncertainty in sports event has a tendency for negative thoughts, fear of punishment, physical injury, loss, and doubts, which can increase anxiety [22–25], especially the level of cognitive anxiety [26]. Playing sports at the opposition's place or in another country has the tendency to increase the level of anxiety [27, 28]. Many research showed that athletes perform better when playing on the team's place rather than the opposition's or other countries [28–30].

Research showed that athletes with high hope, especially from parents, coaches, fans, and teachers, have the tendency to increase their levels of anxiety [23, 31, 32]. A number of research showed that the level of anxiety increases when athletes perceived sports event as very important [1, 21, 23, 33].

Researches on sources of anxiety among athletes are very limited. Most probably fear of injury can be one of the sources which increase the levels of anxiety among athletes, but to date, no research has determined it [34]. The model of sources of anxiety done by [21] is a notable exception; however, it requires additional research before accepting as an instrument to predict anxiety. Moreover, the precise sources of anxiety are still not determined among athletes [35]. Since perception on anxiety

is different according to individuals, the sources of anxiety may also vary according to the individuals [35]. This might make the sources of anxiety also different on gender. In order for a clearer understanding of the sources of anxiety and the effect of performance in sport, it would be important to identify the factors, which determine the level of anxiety among athletes.

The aim of this research was to identify the sources of anxiety among athletes. The present study sought to explore potential sources of anxiety, by focusing on gender. Besides that, this research also correlates the sources of anxiety and the level of sport performance on athletes.

2 Methods

2.1 Sample

The sample consisted of 908 athletes, of male ($N = 502$) and female athletes ($N = 406$). The sample was drawn from athletes who competed in MASUM (sport between universities), MSSM (sport between schools), and Sukan Olimpik Muda (Young Olympic athletes Sport). The highest level of participation of an athlete becomes his or category.

2.2 Instrument

Sources of Anxiety Questionnaire were used which comprised of high hope, fear of loss, perception of sport events as very important, negative evaluation, fear of injury, knowledge of the opposition team, uncertainty, past unpleasant experiences, presence of audience, and playing at opposition's place. Furthermore, Level of Sport Performance Questionnaire was used to determine the level of sport performance among athletes.

3 Results

3.1 Source of Anxiety

Results revealed that high hope ($M = 2.57$) is the highest source of anxiety among athletes, followed by fear of loss ($M = 2.49$), perception of sport event as very important ($M = 2.49$), negative evaluation ($M = 2.38$), fear of injury ($M = 2.37$), knowledge of the opposition team (2.34), uncertainty ($M = 2.29$), past unpleasant

Table 1 Sources of anxiety according to gender

Gender	Mean	Value- <i>t</i>	Value- <i>p</i>
Male	22.2824	5.429*	0.000
Female	24.7468		

* $p < 0.01$ **Table 2** The relationship between the sources of anxiety and the level of sport performance

Subject	Sport performances
The sources of anxiety	-0.710* (0.000)

* $p < 0.01$

experiences ($M = 2.26$), presence of audience ($M = 2.10$), and playing at the opposition's place ($M = 2.04$).

3.2 Gender

Independent *t*-test indicated significant gender effect ($p < 0.01$), with female athletes, having higher sources of anxiety than males (Table 1).

3.3 The Sources of Anxiety and the Level of Sport Performance

The correlation coefficient of -0.071 was noted between the sources of anxiety and the level of sport performance in the evaluation of 908 athletes, which is significant ($p < 0.01$) (Table 2).

4 Discussion

4.1 Source of Anxiety

The purpose of this study was to identify the potential sources of anxiety, which enhance the level of anxiety. The result revealed that high hope is the main factor causing anxiety among Malaysian athletes. A few previous researches supported this result. High hope on athletes, especially on successful athletes, has a great tendency to increase the level of anxiety [23, 31, 32]. In an interview, Alex Baumann, champion of Canada Olympic Sport 1984, revealed that higher hope on him increased his anxiety and stress levels, which resulted in low performance [36]. Most of the higher hopes on athletes come from parents, coach, and teachers [23].

4.2 Gender

The present study reveals that females had reported more sources of anxiety than male athletes. A number of researches support this result. Research of [37, 38] showed that females have a higher tendency to fear than males. This research supported the above result. Fear of loss ($M = 2.49$) stand as the second highest source of anxiety in this research. One possible explanation for this finding is that in general, females tend to be more sensitive and emotional and this is not a surprising matter as they easily cry, get angry, nervous, and feel fear. In Malaysian culture, females are still not allowed to be involved in outdoor activities [39], especially sports. There exist myths that female will lose their virginity and femininity, if they were involved in sports, and certain people still believe this [40, 41]. This kind of fear can increase females' anxiety in sport. Culture plays an important role on fear among females [37, 38].

4.3 Performance

Results showed that high-performance athletes experience low sources of anxiety. This result supported research of [15, 35, 42] that fear of loss tends to deteriorate performance among athletes. Athletes, who fear, tend to interpret physiological responses wrongly, which can increase their anxiety and affect their performance [1]. Athletes who fear that others might evaluate them negatively experience disturbances in concentration and this deteriorates their performance [1, 17, 18]. Furthermore, pressure of high hope of others tends to deteriorate performance [23, 32, 36].

5 Conclusions

As the conclusion of this study, it is found that sources of anxiety among male and high-performance athletes are less or low. The findings emphasize the importance of using coping strategies based on their sources of anxiety. The use of coping strategies impacts on anxiety and improves athletes' performance. Sport psychologists, sport counselors, or coaches should use this research to recommend coping strategies, which is related to the source of anxiety, and also promote this strategy to less successful and female athletes, to enhance their performance. For example, [43] stated that thought stopping and goal setting are effective coping strategies for athletes fear of losing and high hope. Since this research has identified the factors which contribute anxiety, it can be used to predict the level of anxiety.

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