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THE PSYCHOLOGY AND MOTIVATION OF THE JUNIOR BADMINTON ATHLETE IN THE COMPETITION

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ABSTRACT

To gain the athletes achievements is not an easy process for sport athletes. One of the main challenges is the psychological and motivational aspects of the athletes as they are lack of confidence in performing during matches, therefore they sometimes cannot show the best performance and can hinder the achievement of athletes. Various research to find out the influence of motivational and psychological aspects, including age, experience of competition, and number of weekly exercises. This research uses the descriptive quantitative method. Participants consists of 45 junior athletes in Malang, Indonesia. Data analysis was performed using SPSS windows 2016. The results of the study found significant differences in the aspects of psychology with age (sig.0.034), aspects of psychology with experience of competing (sig. 0.039) and aspects of psychology with the number of weekly exercises (sig. 0.040). The study also shows the results of motivation with age (sig. 0.032), aspects of motivation with the experience of competing (sig. 0.000), aspects of motivation with the number of weekly exercises (sig. 0.020). The conclusion is that there are significant differences between psychological and motivation aspects based on age, experience of competing, and the amount of training of junior badminton athletes. In addition, there are differences in psychology and motivation based on indicators of age, experience of competing, and the number of weekly exercises of junior badminton athletes.

INTRODUCTION

Psychological and motivation are important aspects in all sports specially during matches. Motivation is a desire or strength in a person that can trigger the achievement of a certain goal (Hamzah B. Uno., 2011). In other words, motivation is a condition of living beings that inspires them to strive to meet

their needs, both physically and mentally. There will be no high achievement in any sports if there is no motivation from the athletes. The success of sporting achievements provides a kind of satisfaction for all human beings including the athletes. If a person continues to succeed, then he or she becomes more motivated and inspired. Without motivation, no coach can encourage athletes to train or compete. Literature in the field of sports psychology shows that the motivation of achievement is the most significant and important predictor of performance to participate in a sports competition (Deaner, Balish, & Lombardo, 2016), (Ayers, 2010). Motivation is distinguished into two types, namely intrinsic and extrinsic motivations. Intrinsic motivations (from within athletes) including feelings of self-esteem, desire for achievement, pride, confidence, and healthy feelings. While extrinsic motivation (from outside the athlete) includes position and reward. Intrinsic motivation is a character or characteristic that from birth, motivation from within (intrinsic) can also be obtained through a process of practicing and learning (Evangelos Bebetsos, Aggelakis, Bebetsos, & Gargalianos, 2020), (Khan, Haider, Ahmad, & Khan, 2011). In other words, fun exercises can attract athletes to be more motivated so that the goal of exercise can be achieved (Sumaryanti, Tomoliyus, & Ndayisenga, 2019).

In addition, the failure of athletes in achieving a lot can also be caused by the psychological aspect of anxiety (Hagan, Pollmann, & Schack, 2017). Anxiety is a state in which a person thinks consciously about an anxious and tense condition that is bound by a stimulus to the autonomic nervous system, so anxiety is neither an emotion of the mind nor physiological (Ford, Ildefonso, Jones, & Arvinen-Barrow, 2017). There are two types of anxiety: mental anxiety (cognitive) and physical anxiety (somatic) (Chovatiya & Medzhitov, 2014), (Evangelos Bebetsos & Antoniou, 2012) i.e. (a) mental anxiety (cognitive) is caused by negative thoughts about performance and success, or it can be due to negative self-assessment. Therefore, it can cause concern and make a person's mentality to drop. When athletes are anxious or worried about his or her performance, they will think extra about any possible failures in the competition. As a result of this thought, they are (a) cannot focus on their goals, (b) physical anxiety (somatic) as the stress might cause his physical condition to decrease and affect their performance. However, this physical anxiety affects are minimal compared to mental anxiety (Salmon, 2001).

Based on literature studies, there are still at least research on psychological aspects and motivation aspects that can be reviewed based age, experience of competition and number of exercises. This study aims to understand the differences in the influence of psychological aspects and motivational aspects based on age, experience of competing and the number of exercises in junior badminton athletes per week.

LITERATURE REVIEW

According to Evangelos Bebetsos *et al*., (2020), psychological factors can affect the quality and performance of athletes. The research was conducted on young kayak canoe athletes grouped by competing group, competing experience and gender. Based on the research conducted, there are significant differences between the group of junior men with teenage boys and junior women with

teenage girls. Other results showed that there was a difference between the most experienced, intermediate and least experienced athletes but there was no influence between the male and female genders of both juniors and teenagers.

Another studies (Papadopoulou, Theodorakis, Tsigilis, & Tsalis, 2006), (Givens, 2008), (E. Bebetsos, Filippou, & Bebetsos, 2017) (Merkel, 2013) show that experienced athletes are tend to have higher scores on aspects of confidence, personal result and leadership compared to young athletes with less experience. The more experience the athletes, the more they develop. This is in line with the opinion of (Carron & Spink, 1993) that athletes who have more experience in competing tend to have a high level of confidence and prestige, so the level of satisfaction is higher. Gender factors have no effect on athlete satisfaction levels. This opinion is reinforced by the statements by (E. Bebetsos & Goulimaris, 2015) that athletes who are more experienced in sports are better in managing the situations, especially in individual sports.

Method

This study applied the survey method. The collection techniques in this study used questionnaires. The participants consisted of 45 junior badminton athletes in Malang, Indonesia. Male and female athletes were subjected for a purposive sampling technique for the championships or exercises for badminton branch in 2021 in Malang, Indonesia. While the characteristics of the subjects are shown in table 1.

Table 1. Subjects of Descriptive Characteristics

Variable N%	**N**	**%**
Age		
12 y. o	15	33,3
13 y. o	15	33,3
14 y. o	15	33,3
Athlete's experience		
0 – 2 years	15	33,3
3 – 4 years	17	37,7
≥5 years	13	26,6
Weekly exercise		
0-2 times	12	26,6
3-4 times	18	40
>5 times	15	33,3

Source: Personal study

Psychological Instruments

The data collection of the psychological aspect used the instrument from the Greek version (Stavrou, Zervas, Kakkos, & Psichountaki, 1998) from "CSAI-2" (Martens, Burton, Vealey, Bump, & Smith, 1990) that included three sub-scales: there are 5 items on each scale. Based on the scale (from 4 points) (1 = none, 4 = very high), the respondents rated the intensity of anxiety and the experience of competition of their confidence. The questions are as follows: (1)

Mental anxiety (five questions, for example "I worry if my performance in a good match"), (2) Physical anxiety (five questions, for example, "I find it difficult to sleep on the night before the game"), and (3) Confidence (five questions, for example "I can show the best performance during the match").

Motivational Instruments

The motivational instrument used the Greek version of the "Athlete Satisfaction" scale. Questionnaire consists of 10 questions that measure athlete satisfaction in two dimensions (E. Bebetsos & Theodorakis, 2003), (Chelladurai & Riemer, 1997), namely leadership (seven question points, such as "My coach's leadership"), and personal results (three questions, such as "My performance in the match"). Respondents (athletes) were asked to fill out questionnaires according to their satisfaction level using a scale (from 7 points). The data analysis was performed using the Anova to determine the significant differences between groups with Windows 16 SPSS.

RESULTS

Uni-variate analysis was conducted to test whether or not there was an influence between the psychological aspects and the motivational aspects of athletes in the review of age, experience of competing and the number of weekly exercises. Furthermore, the study was conducted to understand if there is an advanced influence with a *post hoc test* to understand difference in indicators from different ages: 12, 13, and 14 years old; 0-2, 3-4 and ≥ 5 years old; and the number of weekly exercises from 0-2 times, 3-4 times and ≥ 5 times a week. The significant consideration is from sig. value of more than 0.05.

Table 2. Psychology

Psychology			
	Age	**Athlete experience**	**Weekly exercises**
Sig value	0.034	0.039	0.040

The results of Anova test with SPSS Windows 2016 from age and psychological aspects showed a sig score of 0.034 < 0.05 and show a significant influence between age and psychological aspects during the competition. The results of the Anova test between the experience of competing and the psychological aspect showed a sig score of 0.039 < 0.05 so it is explained that the experience of competing has a significant influence with psychological aspects during competition.

The number of weekly exercises with psychological aspects is obtained by a sig score of 0.040 < 0.05 which means that there is a significant influence on the aspect of the number of weekly exercises in influencing athletes during the competition. The further *post hoc test*s were conducted to determine the difference between aspects of psychology with the ages of 12, 13, 14 years old, the experience of competing athletes and the number of exercises. The results are as follows:

Table 3. Psychological Post Hoc Test

Pos Hoc Psyhcology		
Age	**Age**	**Sig**
12 y. o	13 y. o	**0.191**
12 y. o	14 y. o	**0.652**
13 y. o	14 y. o	**0.029**

Source: Personal Data

Pos Hoc Psychology		
Athlete experience	**Athlete experience**	**Sig**
0-2 years	3-4 years	**0.464**
0-2 years	>5 years	**0.031**
3-4 years	>5 years	**0.326**

Source: Personal Data

Pos Hoc Psychology		
Weekly exercise	**Weekly exercise**	**Sig**
0-2 times	3-4 times	**0.731**
0-2 times	>5 times	**0.036**
3-4 times	>5 times	**0.179**

Source: Own data

Post hoc tests were conducted to determine the differences in the psychological aspects with indicators of age, including 12, 13, 14 years old, differences in value between athletes 0-2, 3-4, and > 5 years' experience, and differences in value between aspects of weekly exercise, 0-2 times, 3-4 times, > 5 times, with a sig. test of < 0.05.

Age

Post hoc test results on the psychological aspect show that athlete age 12-13 years old has sig. value of 0.191 > 0.05 which means that there is no meaningful difference between the age of 12 and 13 years old in the aspect of psychology during competition. The results of age 12 with 14 years showed a sig. value of 0.652 > 0.05, there is no meaningful and performance differences during the competition. For age 13 and 14, sig. value is 0.029 < 0.05 indicating that there is a significant difference between the age of 13 and 14 years old and there is a psychological aspect which has a significant difference between the two during competition.

Experience Of the Athletes

Post hoc test results on the psychological aspect with indicators of athlete experience in participating in the match in the results of 0-2 years of competition experience with 3-4 years showed a sig. value of 0.464 > 0.05 which means no meaningful difference in the psychological aspect of athletes to the performance

during competition. Experience of competing for the 0-2 years old compared with (> 5 years) showed sig. value of 0.031< 0.05, there is a meaningful difference between the experience of competing athletes 0-2 years and > 5 years. This also suggested that the psychological aspect of athletes with experience of 0-2 years is different with the > 5 years' experience. Furthermore, the experience of 3-4 years with > 5 years experienced showed sig. values of 0.326 > 0.05 which means that there is no meaningful difference in the psychological aspect between 3-4 years' experience with > 5 years' experience.

Number Of Exercise Per Week

Post hoc test results of psychological aspects with indicators of the number of weekly exercises showed the following results: the number of weekly exercises of 0-2 times with 3-4 times obtained sig values of 0.731 > 0.05 indicating that there is no meaningful difference. The number of exercises of 0-2 times a week vs. 3-4 times a week does not differ in the performance during the competition. The number of weekly exercises 0-2 times vs. > 5 times obtained a sig value of 0.036 < 0.05 which means that there is a meaningful difference between the two and there is a difference in athlete performance during competing with psychological aspects. The number of weekly exercises 3-4 times vs. > 5 times had sig values of 0.179 > 0.05, there is no meaningful difference to the appearance of athletes when competing in the psychological aspects.

Table 4. Motivation

Motivation			
	Age	**Athlete experience**	**Weekly exercises**
Sig	0.032	0.000	0.020

The results of the Anova test with SPSS Windows 2016 between age and motivation aspect obtained a sig score of 0.032< 0.05 indicating that there is a significant influence from the age category from the junior athletes in competition. Then the results of the Anova test between the experience of competing and the motivational aspect obtained a sig score of 0.000 < 0.05 so that it can be stated that there is an influence experience of competing with the motivational aspect effects of junior athletes. The results of weekly exercises with motivational aspects obtained a sig score of 0.020 < 0.05 showing a significant influence from the number of weekly exercises with the motivation of athletes during competition. Furthermore, *post hoc test*s were conducted to find the difference between the motivational aspect and age, the athlete experience and number of exercises per week. Here are the results:

Table 5: Test Post Hoc Test of Motivational Aspects

Post Hoc Motivation		
Age	**Age**	**Sig**
12 y. o	13 y. o	**0.030**
12 y. o	14 y. o	**0.148**
13 y. o	14 y. o	**0.742**

Source: Personal Data

Post Hoc Motivation		
Athlete experience	**Athlete experience**	**Sig**
0-2 years	3-4 years	**0.000**
0-2 years	>5 years	**0.000**
3-4 years	>5 years	**0.886**

Source: Personal Data

Post Hoc Motivation		
Weekly exercise	**Weekly Exercise**	**Sig**
0-2 times	3-4 times	**0.128**
0-2 times	>5 times	**0.653**
3-4 times	>5 times	**0.017**

Source: Personal Data

Advance test of *Post hoc test* was conducted to find the difference in motivation aspects of athletes in competing at each indicator age: 12, 13, 14 years, differences in value between the experience of competing athletes 0-2 years, 3-4 years, > 5 years, and the difference in value between aspects of weekly exercise, 0-2 times, 3-4 times, and >5 times with sig. test of < 0.05.

Age

The results of the advanced *Post hoc test* on the motivation aspect showed that indicators age 12 with 13 years obtained a sig value of 0.030 < 0.05 suggesting a meaningful difference, and a difference in the appearance of athletes from ages of 12 years and 13 years based on the motivation aspect. Age 12 to 14 years have sig score of 0.148 > 0.05 which shows no meaningful difference and performance of junior athletes aged 12 years with 14 years. Age 13 to 14 years obtained sig. results of 0.742 > 0.05 showing a significant difference between the age of 13 years and 14 years. It means that the motivational aspect in athletes aged 13 to 14 years have no significant difference in the performance of athletes in competition.

Number Of Experience (Years)

Post hoc test results on motivational aspects with indicators of athlete experience are as follows: 0-2 years with 3-4 years in the sig values of 0.000 < 0.05 indicating that there is a meaningful difference in the motivation aspect of junior athletes during competition. The 0-2 years with > 5 years experiences showed sig value of 0.000 < 0.05 which means there is a meaningful difference between the experience of competing athletes 0-2 years and athletes with > 5 years, the motivational aspect of athletes with 0-2 years of competing experience is different from the experience of competing athletes > 5 years. The experience of competing athletes 3-4 years with athlete with > 5 years' experience obtained sig value of 0.886 > 0.05 which means no meaningful difference in the motivational aspect between the two groups.

Number Of Exercise Per Week

Post hoc test results with motivational aspects with indicators of the number of weekly exercises obtained shows results as follows: weekly exercises 0-2 times vs. 3-4 times obtained sig score results of 0.128 >0.05 means that there is no meaningful difference, the motivation of competing athletes and no difference in performance during the competition. The number of weekly exercises 0-2 times vs. weekly exercises >5 times obtained a sig score of 0.653 > 0.05, meaning that there is no meaningful difference between the two and there is no difference in the performance of motivation of athletes during the competition. The number of weekly exercises 3-4 times with > 5 times in the sig score of 0.017 < 0.05 indicating that there is a meaningful difference in the performance between the two groups.

DISCUSSION

This research aims to find out the influence of psychology and motivation of junior badminton athletes in Malang, Indonesia during competition. There is a few literature in badminton in terms of psychology and motivation, but international research has been conducted on canoe kayak sprints in Greece (Evangelos Bebetsos *et al*., 2020) that the experience of competing and the competing group of teenage and junior athletes have a different performance in the competition but on the gender aspect of men and women has no the difference during the competition. Therefore, the discussion of this study reflects continued efforts to interpret the influence of psychological and motivation aspects with aspects of age, experience of competing, and the number of weekly exercises in junior badminton athletes in Malang, Indonesia. The aspects of psychology shows that age has a significant influence the experience of competing and has a significant influence. The number of weekly exercise of athletes also showed a significant influence. It was concluded that indicators of athlete age, experience of competing and the number of weekly exercises showed a significant influence on the performance of junior badminton athletes during the competition and supported from previous study (Pelupessy & Dimyati, 2019), (Wijaya, 2018) that the psychology (e.g. anxiety) affects the performance of badminton athletes during competition. Further tests were conducted to determine the difference in each indicator age 12, 13, 14 years, the 0-2 years' experience, 3-4 years' experience and more than 5 years' experience, and 0-2 times exercise per week, 3-4 times exercise per week, more than 5 times exercise per week in the psychological aspect. Indicator's age of 12 to 13 years and 12 to 14 years showed no significant difference in the competition, but there were differences in the performance of athletes from the psychological aspect at the age of 13 to 14 years while competing. Indicators of 0-2 years' experience with 3-4 years and 3-4 years with more than 5 years of experience showed no significant difference, which means that there was no difference in the appearance of junior athletes during matches. The 0-2 years' experience with > 5 years' experience showed significant results, which means that the psychological aspect affects the appearance of athletes during competition. Weekly exercise showed that the psychological aspect between the number of weekly exercises of 0-2 times with 3-4 times and the number of exercises 3-4 years with weekly exercises more than 5 times showed no

significant difference during competition. The number of weekly exercises 0-2 times with weekly exercises vs. more than 5 times showed that between the number of exercises had significant differences, and the psychological aspect showed differences in the performance of junior athletes during competition.

Aspects of motivation obtained that the age difference there is a significant influence and is supported by research from (Egli, Bland, Melton, & Czech, 2011), (Juan A. Moreno *et al*., 2010), (Maïté Verloigne *et al*., 2011) and that the motivational aspect is obtained, the difference is the motivation to perform the physical activity between ages. The experience of competing shows there is a significant influence. The number of weekly exercises also shows a significant influence. It is concluded that indicators of athlete age, experience of competing and the number of weekly exercises show a significant influence on the appearance of junior badminton athletes when competing.

Further tests were conducted to determine the difference in each indicator age 12, 13, 14 years, experience competing 0-2 years, 3-4 years, more than 5 years and the number of exercises in a week 0-2 times, 3-4 times, more than 5 times on the motivation aspect. Indicators at the age of 12 to 14 years and 13 to 14 years found no meaningful differences indicating that the motivation of athletes at the comparison between those ages showed no significant difference in the performance. At the age of 12 years with 13 years of age obtained results show a meaningful difference, which means that the age of 12 to 13 years shows a difference in motivation in the appearance of junior athletes when competing. The experience of competing athletes 0-2 years with 3-4 years and 0-2 years with more than 5 years show significant results or there are meaningful differences and there is a difference in the appearance of junior athletes when competing. The athletes 3-4 years' experience and more than 5 years' experience show no meaningful difference which means there is no difference in the performance of athletes when competing. Weekly exercise 0-2 times with 3-4 times and 0-2 times with more than 5 times show no significant difference and no difference in the performance of junior athletes when competing, while the number of exercises 3-4 times with weekly exercises with more than 5 times exercise show that there is a significant difference and a difference in performance when competing.

The results showed similarities with previous studies suggesting that athletes who have experience in sports are more able to manage situations more casually, especially in individual sports (Evangelos Bebetsos & Antoniou, 2012).

Conclusion

The conclusion of this study understands the aspects that affect the performance of junior athletes in badminton matches. The results showed that there were significant influences that influenced the appearance of junior athletes in the review on the psychological aspects of age, experience of competition and the number of weekly exercises. As well as on the motivational aspects in the review of age, the experience of competing, the number of weekly exercises. So, it is concluded that age, experience of competing and the number of weekly exercises affect the performance of junior badminton athletes in Malang, Indonesia in competition.

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