

# Analysis of Achievement Motivation in Male and Female Tennis Athletes at the Competitive Level of Yogyakarta

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**Abstract** Motivation is one of the most important variables in the training process and competition, especially in tennis sports. There are two bases of achievement motivations in athletes: intrinsic and extrinsic. Tennis athletes at a competitive level have a high achievement motivation, both for female and male athletes. This motivational comparison between female and male athletes has been made in competitive sports. However, it is necessary to conduct an empirical investigation of this in competitive tennis motivation. At which level is this motivation? Is it the same between male and female athletes? Therefore, this study analyzes competitive motivation in tennis athletes by comparing male and female athletes. This study used a survey as research. The research instrument used the Achievement Motivation Scale for the Sports Environment (AMSSE). Data collection used a form with a scale of 1-4. Points: a. always (4 points); b. often (3 points); c. Sometimes (2 points); d. never (1 point). The research subjects in this study were team sports athletes and individual sports, with a total of 81 athletes. The Normality Test was assessed using the Kolmogorov-Smirnov (KS). Levene's test is used to test the homogeneity of variance. Data analysis in this study used One-Way ANOVA. The results of this study show that the difference between males and females showed a p-value of 0.743. It can be said that these results showed that there is no difference in achievement motivation for male and female athletes. However, based on the mean value, it indicates a difference

between the average value of males and females, namely competitive Tennis athlete for male Mean = 49.36, while for female Mean = 48.60. The result of this study shows that male athletes are more motivated to reach achievement than female athletes, but it shows a not so significant difference level.

**Keywords** Motivation, Achievement, Athlete, Tennis, Competitive

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## 1. Introduction

Motivation is one of the most important variables in competitive sports training. However, what is the meaning of motivation? How is it defined? Then, what is the correlation with competitive sports like tennis? The most frequently accepted definition of motivation is a hypothetical construct that represents the internal and environmental influences that cause a tennis athlete's behaviour to be initiated, directed, intense, and persistent. Motivation has been defined in a variety of circumstances. So, drive results in athletes action [1]. Though it must be deduced from an athlete's behaviour because motivation is not something that can be seen in plain sight [1]. It means a trainer might consider sports athletes motivated after they exercise. Therefore, a coach needs to classify the level of

participation motivation, especially in competitive sports. Crespo et al, [2] specifically study the influence of motivation required by tennis athletes. It can encourage psychological conditions that improve athletes' skills and performance in a better direction. These concepts are very important for athletes and tennis coaches as data for future development by knowing what athletes feel and think, influencing their environment and performance [3, 4]. The level of athlete motivation data can assist coaches, and sports administrators in developing training programs.

Recently, motivational perspectives on competitive sports such as tennis have been broad and goal-oriented, but self-improvement is more dominant in avoiding failure [5, 6]. Besides that, also in previous studies it was found that to achieve goals requires motivation from within an athlete (intrinsic) and things from outside that influence (extrinsic). Many theories explain that these motivational factors have an influence on young athletes in achieving their goals, depending on whether they are intrinsic or extrinsic [7,8]. They use a questionnaire that asks participants to calculate the importance of motives in participating in the sport. Sports are used to achieve a goal rather than just for sports experience. Then, it is called intrinsic motivation. For those who pursue rewards outside of sports goals, it means they are extrinsically motivated to do sports [1]. For example, a tennis athlete who plays in one of the games to get the trophy gains the fame and attention that usually accompany this type of success [9]. It was found that the type of extrinsic motivation is very diverse, depending on the athletes' underlying desire to achieve [10]. Categorized as some of the lowest level indicators of an athlete's motivational desires are external, external traits that have been identified and integrated in the need for rewards [10].

External factors are characterised by behaviour that is regulated through external means such as trophies and medals and the avoidance of barriers such as social pressure. Athletes that internalise their motivations for their activities exhibit introjected regulation. Through internalisation, external sources of control are replaced by internal ones. (i.e., guilt and anxiety). The factors identified are more attitude-driven and involve a conscious appraisal of goals so that the action is accepted as important to the athlete personally [10]. Finally, the factors associated with participation in sport from an extrinsic perspective are "choice" [1]. For example, the athlete who chooses to adjust the situation because of the importance of the aspect of him or her, such as staying at home rather than being in social activities in preparation for the next day's competition [1],[11].

However, athletes participate in a competitive environment to gain sporting experience and satisfaction from participating in sporting competition. In that case, they are categorized as intrinsically motivated. An example would be if tennis athletes play tennis because it is fun and

exciting, they enjoy learning many of the skills that correlate with their imagined skills. According to Vallerand & Bissonnette [7], it is said that there are several types of intrinsic motivation, as follows; a) intrinsic motivation is dominant in how much interest in knowledge, such as the desire to exercise because of interest; b) intrinsic motivation to achieve, which indicates that an athlete participating in sport must compete [11]. Another study by Deci & Ryan; Campbell [9],[12] analyzed task motivation or interest orientation.

Task orientation has more to do with matters involving sportsmanship in sport, while ego representation has more to do with the "product" or focus on results. Another easier way to define extrinsic versus intrinsic motivation is by the outcome-orientated (external) and process-orientated (intrinsic) focus of participation. Other research, such as Pugh et al; Pugh, SF [13, 14], analyses the reasons why people participate in sports using qualitative approaches [15,16]. Pugh et al [14] found that the reasons for participation mainly found in youth baseball athletes, the reasons they participate are their fondness, skills development, and interaction with the sport environment [16]. This motive will align the athletes most closely with the task or intrinsic motives. Pugh, S. F; Weiner [13,15] discovered that social and self-challenges are the main sources of motivation for international rugby players. It is also called Self-efficacy or behavioral basis that influences strength, decision, and effort in facing obstacles or resilience to difficulties [17].

Finally, motivation, or lack of motivation, may become a reason the athlete does not participate in. This concept has been linked to a person's choice not to engage in the activity, despite the fact that it is not measured by the study's instruments. Motivation can be explained from various theories, such as goal achievement theory, self-determination theory and attribution theory, which have also been linked to a lack of motivation [10,18,19,20]. In the sports sector, some specific assessment instruments and methods on motivation can be used. Researchers in this study chose the Achievement Motivation Scale for the Sports Environment (AMSSE). The instrument was later redesigned by Randy Fox while completing his master's degree, after which Rushall and Fox published it [16]. The AMSSE was created to assess athletes' "approach success" and "failure avoidance" in practise and competitive situations [16]. Success athletes are driven to succeed, whereas failure avoiders are driven to succeed both in practise and in competition.

As athletes may use different training settings compared with actual competition, it is important to emphasise that individual measurements should be obtained due to different conditions [22]. The purpose of this study was to analyze the achievement motivation of Yogyakarta tennis male and female athlete athletes at competitive level participation.

## 2. Methods

The participants of this study were 81 competitive level Tennis athletes, 43 female athletes, and 38 male athletes. Participants voluntarily participated in this study. The motivation scale measurement instrument used was the "Achievement Motivations Scale for Sports Environments" (AMSSE). The AMSSE score provides information about two sports motivation approaches: striving for success or avoiding failure. There were 28 items, and each must be corresponded to on a four-point scale: a. always (4 points); b. often (3 points); c. sometimes (2 points); d. never (1 point). The reliability instrument was calculated at 0.80, using the Kuder-Richardson-20 formula [16]. AMSSE produces six scores: Approach Success (MSO), Avoidance-Failure (MFO), Approach-Success in Competition (MSC), Approach Success in Training (MST), Avoidance-Failure in Competition (MFT), and Avoidance-Failure in Training (MFT). The research procedure was carried out by distributing AMSSE to participants. Then the data results were taken by processing One-Way ANOVA statistical analysis. Normality was assessed using the Kolmogorov-Smirnov (KS). Levene's test was used to measure homogeneity of variance. Surveys with missing data points for the dependent variable are excluded. The data analysis of this study used (SPSS) version 22. Data were expressed as mean  $\pm$  standard deviation (SD) and a

0.05 alpha confidence level.

## 3. Results

There has been an uncertainty about achievement motivation between male and female tennis athletes at a competitive level. Are the results of achievement motivation of male athletes better than females or vice versa? The analysis is carried out with a successful or avoiding failure approach as a motivational reason from AMSSE. The average calculation is used to determine whether there is a significant difference. The results of the analysis are shown in table 1 below.

Based on **table 1**, it shows there is a difference between the average male and female. Male athletes are more motivated to pursue achievement than female athletes. Several reasons related to the intrinsic motivation section are explained by Benenson, JF; Campbell, A [12, 21]. The male athletes excelled in physical aggression, and females were more dominant in indirect charges, such as strategic play. Most researchers said that males generally show greater interest than females. Motivation was a significant variable when the comparative context presented was gender. Holden et al [1] define motivation as an internal/external force that leads to one's actions.

**Table 1.** The average results of achievement motivation for males and females

	N	Means	std. Deviation	std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Female	43	48.6047	10.21003	1.55702	45.4625	51.7468	25.00	74.00
Man	38	49.3684	10.65027	1.72770	45.8678	52.8691	24.00	84.00
Total	81	48.9630	10.36031	1.15115	46.6721	51.2538	24.00	84.00

**Table 2.** The Results of Achievement Motivation between male and Female

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	11,768	1	11,768	,108	,743
Within Groups	8575,121	79	108,546		
Total	8586,889	80			

Based on **table 2**, it shows that the Sig value was 0.743. It can be said to be the motivational result of the athlete's failure avoidance approach, and their efforts to succeed, males and females, do not significantly differ. These results indicate that the average achievement motivation of males is superior to that of females, but the difference is not significant. In prior research, it was found that the ego of male athletes was more stable during training and competition than females. In particular, the types of motivation are intrinsic and extrinsic. Some athlete motivation for doing sport is the method to achieve their goal. It is not just doing sport for health. Deci & Ryan [9] athletes with extrinsic motivation want more such as awards and fame, and their participation is based on satisfaction and pleasure. So, it is intrinsic motivation. The basis of this motivation can be found in the team and individual categorical sports such as tennis. However, it can still be ascertained whether the level of competition will affect the type of motivation in athletes. In line with Harwood, CG [11], most studies have not considered that specific motivation is more contextual between training and competition.

#### 4. Discussion

The objective of this study was to analyze the motivation of male and female tennis athletes in Yogyakarta at a competitive level. Motivation is the determining motive and consequence that affect the results of athlete achievement [23]. Many factors influence athlete motivation. In general, research on motivation always focuses on the intrinsic and extrinsic factors that underlie an athlete. In some cases, there are significant differences between females and males. In theory, Garfield Bester [24] found that in a competitive context, male athletes are more motivated by avoidance of failure (**MFO**), while conversely, females are significantly motivated by the pursuit of success (**MSO**).

However, in this study, the participation test was carried out using the AMSSE concept, as a whole, for (**MSO, MFO, MSC, MST, MFT, and MFT**) with a focus on comparisons based on motivation between males and females. The result is the avoidance of failure, and the effort to succeed in tennis at the competitive level for males is superior to females, but there is no significant difference. N. Gillet et al. [23], but motivation can differ based on the nature of sports activities, such as sport (individual vs. team) or sport structure (competitive vs. recreational). AMSSE's tendency towards intrinsic motivation is directly related to the nature of competitive sports activities [25].

Besides that, in competitive sports, in general, the avoidance of failure for males and females does not have significantly different results, but the basis of motivation is intrinsically dominant, males are more motivated by the fear of failure [26]. Then it also found physiological facts that the development of females is faster emotionally and

physically than males [27]. It causes less control over females' fear of failure in sports. The orientation to competitive tennis is about achieving better results. apart from discussions between men and women, in general the most important part of sports coaching is regular training to increase physical work both psychologically and physiologically [28]. The female athlete appears less oriented towards competitive structures, more open to cooperation, and less influenced by win/lose outcomes than the male [29].

Psychological factors such as motivational aspects are indeed the things that can drive athletes to achieve maximum performance for many unique reasons. The progress of tennis today is inseparable from the athlete's goals and training psychologically which has an impact on performance. Previous research has shown the influence of psychological factors on skill performance, motivation and personality of tennis athletes using different methods. [30] have conducted research by including psycho-physical programmes and found the results of 9 out of 14 athletes consisting of (6 men and 3 women) because of the motivation of physical attributes such as strength, speed, and endurance of athletes improve performance. Psycho-physical programmes applied in training, have tested that a number of athletes can maintain control when under pressure and the results of the influence of psychological attributes dominant by 57%. [31] with the research objective of identifying differences in motivation in early age tennis athletes. It was found that psychomotor developed differently and skill performance achieved good results.

#### 5. Conclusions

The research result shows that the achievement motivation of female and male tennis athletes at the competitive level does not have a significant difference. However, the average results of the achievement motivation of male tennis athletes are superior if compared to the female athlete, intrinsically and extrinsically. Then a successful approach and a sense of avoiding failure are parts of the AMSSE concept. This research outlines motivation as one of the psychological factors that has influenced the beliefs and personalities of male and female athletes to produce results at a competitive level. For the next research on the motivation of tennis athletes, it is important to investigate the emphasis on the context of training and competition, age, or individual and team categories.

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