

# Contribution of Intelligence and Emotional Quotients with Performance Athletes Pencak Silat

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**Abstract.** This study aims to determine whether there is a significant relationship between intellectual intelligence and emotional intelligence with the achievement of pencak silat athletes PPLP West Java. The method used is descriptive method with a correlation technique. Sample of pencak silat athletes PPLP West Java as many as 14 people using total sampling technique. The instrument used is an IQ test, EQ test, and scores of search results the athlete's performance. The results showed that 1) There is a significant relationship between the intellectual accomplishments of pencak silat athletes PPLP West Java; 2) There is a significant correlation between emotional intelligence and achievement pencak silat athletes PPLP West Java; 3) There is a relationship between the intellectual, emotional intelligence with pencak silat achievements of athletes PPLP West Java with a contribution of 78.6% and the remaining 21.4% is influenced by other factors.

## 1. Introduction

Sports achievements have high competitive climate characteristics, thus encouraging the athletes to always practice enhance its capabilities. Athletes will be trying to perform as good as possible to achieve maximum performance. An athlete who competed in the competition situation is influenced by various factors, namely: physical, technical, tactical, and psychological. As expressed by Harsono [4] explains that: The purpose and main goal of the exercise or training is to help athletes improve their skills and performance as possible. To achieve that, there are four aspects of practice that need to be considered and carefully trained by athletes, namely (a) exercise, (b) technical training (c) tactics and (d) a mental exercise. The fact that occur in the field, only the physical aspects and techniques are predominantly trained by coaches to the athletes. This is in line with that expressed by Husdarta [4] that "the psychological aspect of an athlete is often overlooked by the coaches and athletes in running drills. Though psychological aspect is very influential on the performance of athletes".

Psychological and mental aspect can directly affect the athlete's performance. According to [5] sport achievement was not only depend on the sport technical skills and physical health which is owned athletes are concerned, but also on the psychological state and mental health'. Among the psychological factors that influence achievement is the level of intelligence or IQ (Intelligent Quotient) and emotional or EQ (Emotional Quotient). Intelligence or intelligence is an important factor that often determines victory in sport [1, 2]. Particularly in certain branches such as football, badminton, table tennis,



basketball, tennis, martial arts or branches. This means that in those sports that require the ability to think quickly and accurately, then act fast to anticipate his opponent. Similarly, in a match of martial arts sparring category which is a full body contact sport, an athlete needed mental mastery of tactics and in the face of his opponent. Therefore, intelligence achievement in sport is very important.

To get an achievement not just rely on talent, strength, speed, and flexibility derived from the physical. In addition, there are other factors beyond the physical context that is psychologically closely related to mental an athlete to manage his emotions. According to [4.7] that "Psychological factors such as the structure and functions of personality such as motivation, emotion, confidence, discipline, anxiety, tension, group coaching, social interaction, etc. Plays an important role in the pan performance in sports ". These factors are part of emotional intelligence to be possessed by an athlete during practice or during a game. Matters relating to the mental condition can be achieved when an athlete has a good emotional intelligence. EQ is the ability to motivate themselves, control their feelings and impulses keep the stress does not turn off the ability to think, empathize and applying emotional intelligence effectively [2]. Good emotional intelligence is intimately associated with the management of mental and psychological condition of an athlete in a game, as proposed [6] that is in addition to motor abilities, other factors can contribute to differences in people's performance. One of these factors is the mood of the individual. In the 1970s Dr. William Morgan of the University of Wisconsin used the "Profile of Mood States" inventory to assess the mental health of successful and unsuccessful candidates for the 1974 U.S. Olympic crew team and for the 1972 and 1976 U.S. Olympic wrestling teams. That found that successful candidates (i.e., those who made the team) scored higher on vigor and lower on depression, anger, fatigue, and confusion than did their less successful counterparts. These findings indicate that mood is one factor that can differentiate the performance of sport participants.

Research conducted by Morgan stated that in addition to motor skills, other factors may contribute to differences in the performance of people. One of these factors is the mood of the individual. In the 1970s Morgan from the University of Wisconsin successfully use the "Profile of Mood State" to assess the mental health, but it did not work in 1974 on a prospective crew and for the US Olympic team in 1972 and 1976 at the US Olympic wrestling team. Morgan found that the success of the candidate (ie, the people who make the team) achieve higher scores on the strength, the level of depression, anger, fatigue, and confusion that are lower than their peers who are less successful. These findings indicate that the mood is one factor that distinguishes performance sports participants. Thus, the mood is a very important factor and affect the performance of athletes, and is one component of emotional intelligence to be possessed by an athlete.

EQ has been equated with intelligence in determining the success rate. IQ does not function properly without a person's emotional appreciation. An athlete is not only trained to improve all abilities body parts, but also to strengthen the will, the ability of creativity and ability to solve problems related to tactics and strategy to compete. Therefore, to select talented players in one sport needed research and talent of the athlete candidates carefully, one of which is the athletes who have intellectual and emotional intelligence are good. Based on the above explanation, that the intellectual, emotional intelligence, and technical skills are important aspects in wash performance in sports, especially for martial arts athletes PPLP West Java, the athletes are groomed to become future athletes. The fact that occur in the field, just do a physical ability test and engineering capabilities just in martial arts athlete selection process at the Centre for Development and Student Exercise (PPLP), West Java, while the psychological aspects relating to the athlete does not do. For the research on the relationship between intelligence quotient or IQ, EQ with martial arts achievements of athletes PPLP West Java.

## 2. Methods

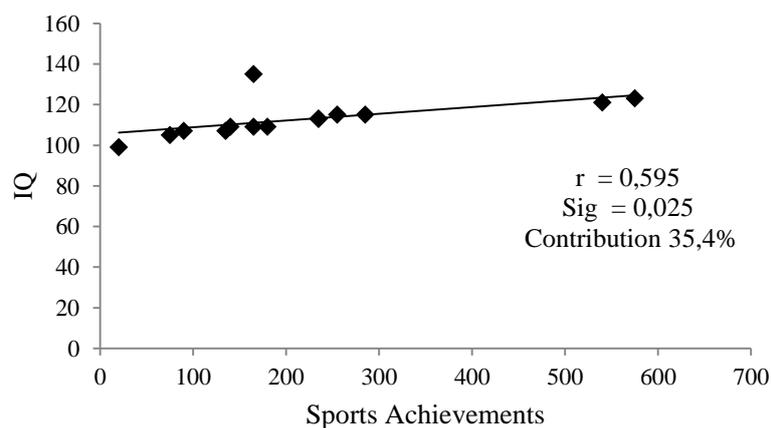
This study used descriptive quantitative method, because it is only intended to determine whether there is a relationship between the intellectual and emotional intelligence and achievement pencak silat athletes PPLP West Java.

The sample used in this study was 14 athlete pencak silat PPLP West Java. The sampling technique used is total sampling.

Instruments in this study is the IQ test, EQ test, the test motor skills basic techniques of martial arts, and the score results of the search athlete's performance. IQ tests conducted at the University Center Staff Unit Technical Implementation Guidance and Counseling Institute UPI. The test used is APM (Advanced Progressive Metrics). EQ tests using questionnaires that modifying Tyas (2013), instrument-making begins with making the grille to the validity and reliability of the instrument. Search achievement pencak silat athletes PPLP West Java conducted with recaps the results of the achievements during the game the last three years.

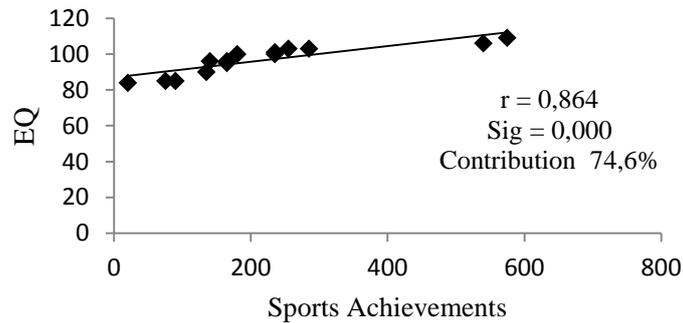
## 3. Result and Discussion

Based on the processing and analysis of data that has to be obtained the following results:



**Figure 1.** The relationship between IQ with sports achievement

The above results explain the correlation test results the intellectual accomplishments pencak silat, Pearson correlation between IQ accomplishments generate numbers 0595, this shows the level of correlation between the IQ of the achievements is moderate, with a significance value of 0.025, which means that there is a significant relationship between intellectual intelligence with achievement. With the determination coefficient of 35, 4%. If the data is spread around the diagonal line, then the degree of correlation between IQ accomplishments is very strong. Conversely, if the data is spread far from the diagonal line, or do not follow a diagonal direction, the degree of correlation between IQ with achievement is very low. Based on the graph, the data spread around the diagonal line but there are some that do not spread on a diagonal line. Thus, IQ has a moderate correlation with the level of achievement.



**Figure 2.** The relationship between EQ with sports achievement

The results of correlation emotional intelligence and achievement pencak silat, Pearson correlation between EQ accomplishments generate 0.864, this shows the level of correlation between EQ with achievement is very strong, with a significance value of 0.000, which means that there is a significant relationship between emotional intelligence and achievement, With a coefficient of determination (EQ contribution to the achievement) of 74.6%. If the data is spread around the diagonal line, then the degree of correlation between the sport achievement and EQ is very strong. Conversely, if the data is spread far from the diagonal line, or do not follow a diagonal direction, the degree of correlation between EQ with achievement is very low. Based on these graphs, data is spread very close around a diagonal line, it shows that the degree of correlation between the sport achievement and EQ is very strong.

To corroborate the results of correlation test that proves an association between intellectual intelligence and emotional intelligence with the athlete's performance, then continued multiple regression test with the aim to see how big a percentage estimate of the influence exerted by the intellectual, emotional intelligence, and technical skills with the athlete's performance. The results of processing the data in Table 1.

**Table 1.** Results Multiple Regression Coefficients Test

Model	R	R Square
1	.886 <sup>a</sup>	.786

The results show that the correlation between (X1 and X2) simultaneously with (Y), namely R of 0.886 with a coefficient of determination R square = 0.786. This shows the determination index, i.e. the percentage of the contributing influence of variables (X1 and X2) with a variable (Y). R square implies that intelligence, emotional intelligence, and technical skills (X1 and X2) accounted for 78.6% of the achievements (Y), while the remaining 21.4% is influenced by other factors.

#### 4. Conclusion

Based on the analysis, it can be concluded that there is a significant relationship between intellectual intelligence and emotional intelligence with the achievement of pencak silat athletes PPLP West Java.

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