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# Contribution of Athletes' Physical and Mental Abilities to Their Performance

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Abstract—This study aimed to identify the contribution of athletes' physical and mental abilities to their performance when they are competing. The method used in this study was descriptive analysis. The sample was selected through a purposive sampling technique. The sample consisted of wrestling athletes registered as Bandung and Bogor's athletes in Indonesia. As many as 36 athletes were chosen to be the sample of this study. Based on the results of the data analysis, it was found that the physical ability variable was not normally distributed so that the statistical analysis used was non-parametric calculated with the help of SPSS 21 for Windows. It is concluded that both physical and mental abilities have positive contribution to the athletes' performance when they are in a match.

Keywords—wrestling; physical and mental abilities; athletes' performance

### I. INTRODUCTION

In wrestling, Indonesia's achievement is decreasing indicated by the lack of championship won. According to Harsono, there are four skills in need of improvement including physical training, techniques, tactical strategies, and mental abilities of the athletes [1]. Physical ability seems to play an important factor in the success of athletes. Thus, every athletes should have a comprehensive physical training. Physical ability consists of both aerobic and anaerobic skills enabling the athletes to have good stamina. According to Giriwijoyo and Sidik, anaerobic skills enables athletes to perform motions starting from the lightest to the heaviest repetitively [2]. In relation to this, the existence of skilled trainers is inevitable. However, skilled trainers are hard to find so that there are some malpractice of training found [3]. Ideally, trainers of coaches should have adequate knowledge and experiences to be able to conduct a comprehensive training model or program.

In addition, self-confidence of the athletes is another important factor to their performance. Ibrahim points out that self-confidence is a state of believing one's skills to be able to perform well [4]. Thus, both physical and mental abilities will make a great combination in any sport including wrestling.

Some of the benefits of having good physical conditions are:

• Improvement of heart performance

- Improvement of strengh, agility, stamina, speed, and other physical components
- Better motion management
- Fast response of the body

Based on the aforementioned reasons, this study aimed to identify the contribution of both physical and mental abilities of wrestlers when they are having a match.

# II. METHOD

This study employed a descriptive method aiming to provide clear description on the contribution of Indonesian wrestlers' physical and mental abilities when having a match. In this study, the independent variable is athletes' self-confidence and the dependant variable is their performance when having a match.

# III. RESULTS AND DISCUSSION

The statistical computation revealed that the data of athletes' physical ability are not normally distributed so that this study combined the contribution of both physical and mental abilities (X1 and X2) towards athletes' performance (Y) when having a match. The results proved that there is a positive contribution of self-confidence and physical ability towards their performance when having a match. This finding is in line with Komarudin stating that self-confidence has a positive correlation to the improvement of athletes' performance [5]. Thus, an athlete should have a good mental state and self-confidence. The result is also in good agreement with Ibrahim highlighting that it is inevitable for athletes to have both good physical ability and mental ability [4].

It has been discussed earlier that there is an axiom of athletes' success as follows

# P = f (Fs x Tk x Tt x Mn)

Meaning that athletes performance depends very much on their physical condition, technical skills, tactical strategies, and good mentality. Of all the four skills, mentality should be trained even prior to their coaching session. Thus, athletes will have a positive mind whenever they have training. This state will trigger them to have better performance of physical, technical, and tactical abilities in any types of sport, including



wrestling. Coaches, in this case, should have good understanding on this so that they will create a well systematic training program.

# IV. CONCLUSION

Based on the results of the data analysis, it can be inferred that both physical and mental abilities have positive contribution to the performance of Indonesian wrestlers when having a match.

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