

# Anxiety and Mental Toughness Among Athlete Students

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**Abstract**—*This research purpose was to analyze the relationship between anxiety and mental toughness among athlete students. A quantitative method with correlation design was used in this research. Subjects of this research were one hundred and twenty-eight athlete students. All participant were athlete students at State Senior High School of Sport or namely SMANOR in Sidoarjo, East Java, Indonesia. There were seventy eight male and fifty female. The average age of participants was sixteen and half years old. Data were collected using two instruments: An adapted Sport Anxiety Scale with unfavorable score to measure an anxiety, A mental toughness scales to measure mental toughness. The research result indicates that there was a significant relationship between anxiety and mental toughness with coefficient correlation zero point seventy-five. These results can be interpreted that the higher the level of anxiety, the lower the level of mental toughness is. This is because of anxiety make athlete students have bad feeling and negative emotion that influence their mental toughness.*

**Keywords**—*Anxiety, mental toughness, student Athlete*

## I. INTRODUCTION

Sports is any systematic activity that aims to encourage, foster and develop various potential, such as physical, spiritual, and social. Sports is also a useful activity for humans, especially to improve health and fitness. In sporting activities, sometimes there are many positive things such as the value of competition, pioneering, struggle, cooperation, respect, communication and integration, physical endurance, mental endurance, togetherness, responsive attitude, honesty, and sportsmanship, leadership and decision making.

Not only useful for physical and psychological health, exercise is also useful to demonstrate the ability of competitiveness for the country. Through sports, the government has a long-term target in winning sporting championships at various world events, besides other sports programs aimed to promote a healthy life spirit. The government realizes that the sport is important to do, since there are a lot of positive benefits for the nation, in general.

Worry is one of condition problem faced by many athletes. According to Kusumajati [1], anxiety is any circumstances that the opposing emotion that includes subjective interpretation and arousal or excitatory physiological (reaction body on physiological is, for example breathing faster, angry, heart pounding, and sweating). According to Kusumajati [1], anxiety is a soul character circumstances can be put forward on traditional as source jealousy and worries. That is what makes athlete students at SMANOR Sidoarjo less in reaching achievement, because they always feel high nervous every time they will start a match, though they have 3 or 4 matches experiences. However, when the match is started they will begin to be confident.

Feelings anxious used to happen to every athlete when they are facing a certain circumstance, such as when the match is time consuming, in which it affects their confident and become defeated. This circumstance used to be called as *state anxiety*. According to Kusumajati [1], *state anxiety* is Emotional circumstances happened suddenly (on time certain) marked with anxiety, fear and tension and usually followed by feeling deep dismay accompanied with tension.

On the side *state anxiety* as well-known as *trait anxiety*, which is the anxiety that is nature-nature or from their internal factors. *Trait anxiety* is a character of personal settle (like self-carriage). Athlete who have *trait anxiety* usually easy to show their anxious face in facing various problems, in particular problems related with personal security. Feeling anxious basically happen because the individual is worried his personal security will be disturbed, because of that he is easier to show anxious symptoms, containing fear.

Every athlete student in SMANOR used to be afraid, sweating, and anxious in the beginning of the competition. This is because their mental endurance is low and create an unconfident situation that makes them experience a high level of anxiety. Therefore, athlete students have to have a *mental toughness*, or set values, attitudes, behaviors, and

emotions which allows someone to be able to conserve their emotion and resolve constraints, difficulties, or pressures, and concentrate to achieve their final goal [2]. *Mental toughness* can make them permanently feel relax, calm, and excited, because they could develop two skills that is draining a positive energy as perceived, eliminating difficulty and thinking to behave or ignoring problems, pressures, errors during the competition[2].

The important component that can determine the success of the athlete in the match is not only a mental toughness [3]. Gucciardi, et al. [4] explains mental toughness is set values, attitudes, behavior, and emotions that make athlete able to preserve during the match through diverse obstacles, distress, or pressures. Estimating worried is related with mental toughness possessed by an athlete. Dominic, Fauzee, Abdullah, Meesin, & Choosakul, Raynadi, et al. [5] said Mental toughness is an estimation that could reduce the level of worry and build a confident.

On the side others, having mental toughness is important in achieving the achievement, since 80% of victory factor by professional athlete is determined by the mental [2]. Another opinion said that 50% of the competition results determined by psychological factor [6]. Any other aspect of competition such as physical, engineering and tactics will be easier to be defeated if their mental aspects never have been trained yet [7]. Therefore, to reach an optimal performance an athlete must have a balance in both physically and mentally.

Besides, *mental toughness* is a high provision of the athlete's heart that is able to face a pressed situation to make him remain focus during the match [2]. *Mental toughness* is a set psychological attribute that only a superior athlete who can master it both before and during the exercise or match [2]. *Mental toughness* on athlete will shows a persistence beyond ordinary though [2].

Based on the description above, it can be assumed that there is the negative relationship between *mental toughness* with *anxiety*. It strengthened every dimension of *mental toughness* that tends to be *thrive though challenge* or able face up challenge, *sport awareness* or able work in team, *though attitude* or able face up pressure, *desire success* or always thinking optimistic for reach success [2]. In which these dimensions oppose the *anxiety* attribute like worry cognitive, anxiety affective, anxiety motor and worry somatic tend to be always prejudiced as worry, fear of failure, heart pounding-spread, anxious, tense, and reckless in facing a pressure or challenges [8].

## II. METHOD

This research uses quantitative research method with correlational design that aims to determine the correlation (relationship) between the two variables. This is a traditional research that has been used for so long and has met the scientific norms that are concrete, objective, measurable, rational, systematic, and using numbers and using statistical analysis [9].

The sample of the research are athlete students of State Senior High School or SMANOR in Sidoarjo, East Java Province, Indonesia. The population of the research are 128 athlete students, that consists of 78 males and 50 females with the average age of sixteen and a half years old.

The independent variable (X) is *Anxiety*. *Anxiety* is an opposing or unpleasant state of emotion that includes subjective interpretation and arousal or physiological stimuli (physiological body reactions are, for example, breathing faster, becoming angry, palpitations, and sweating). *Anxiety* scale (anxiety) is prepared based on *cognitive, motoric, affective, and somatic*, from *Sport Anxiety Scale (SAS)* [10].

The dependent variable (Y) is *mental toughness*. *Mental toughness* (mental toughness) is a person's attitude or self-assessment, especially athlete to overcome obstacles, difficulties, even pressures, in order to maintain concentration and motivation that determine a positive energy to achieve a goal in surviving throughout the game. The *mental scale of toughness* is based dimensional *thrive though challenge, sport awareness, tough attitude, and success desire* [4].

## III. RESULT AND DISCUSSION

Based on the correlation test it obtained a data of personnel of 0.094 and significant of 0.750, that showed a significant correlation between anxiety with mental toughness. This shows that there is a negative relationship between anxiety and mental toughness. The higher the mental toughness possessed by the athlete in SMANOR the lower the anxiety is and vice versa.

The analysis data results show that the higher the level of n, means the level of mental toughness will be increasingly low. This is because the anxiety makes the athlete students have bad feelings and negative emotions that affect their mental toughness.

It is similar with the early prediction that the relation of both variables is negative reaction. Therefore it can be said that anxious, worried, not calm, tense, even afraid lose in something match, oppose the *mental toughness* that tends to bring up positive reaction in resolving constraints,

difficulty, pressure on someone especially for athlete during the competition [10].

There are several factors that influence this research, one of which is their age category, teenagers. A teen athlete ate lack of experience and skills that affect their performance during the competition. The reaction of these problem is worried during matches, having negative thinking, high *pressure*, unstable mental reactions [11]. It is strengthened with the theory about teenagers that a teenager has a reckless attitude and behavior, fear of failure, unconfident. This is because of their transitional age from childhood to adolescence [12].

This research is also supported with the previous studies, it is miss perception if only by improving *mental toughness* can reduce the *anxiety*. The anxiety of course could reduce the worries level on athlete by using relaxation technique to the body muscles, besides the *imaginary* technique could be used too for the relaxation by direct imagining of the situation and condition of the competition [11], or by doing to improve a *confident* physically and mentally. It is similar with studies that confidence (*self-belief*) or self-trust is not only the one important aspect of personality to activate one's potential [13]. Meaning that an activity that able improve *mental toughness* are by giving relaxation training, *imaginary*, and any other activity that able to improve confidence.

This research found that the anxiety problem not only happen to volleyball athlete, but also to all athlete that eve have completion experiences, since the most influential factor of winning the match is 80% psychological factor [14]. Based on the explanation above, the whole subject of this research shows a good behavior, even some of them are still a teenager they could already show medium *mental toughness*. One of the variables that can improve *mental toughness* and reduce *anxiety* is *self-confident* variable [15].

Regardless, the study regarding this topic is still relatively new especially in Indonesia so results research this worth for development knowledge of the sport's psychology practically for the athlete as well the sports coach. However, this research could not predict the cause and effect of the related variable. Therefore, it hoped that the other researcher could find them out in the next research.

## CONCLUSION

Based on the results of research it can be concluded that the hypothesis is accepted or there is a relationship between mental toughness with anxiety. The higher the mental toughness possessed by the athlete students is, the lower the anxiety will be and vice versa. Further replication of the study in a wider group of subjects or even testing the causality of both longitudinal and experimental studies is strongly recommended.

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