

The Relationship between Motivation and Stress Resistance in Gymnastic Athletes

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Abstract: This study aims to investigate the relationship between motivation and resistance to stress among gymnastics athletes in Yogyakarta province. This correlational research was conducted with 12 Yogyakarta National Gymnastics athletes in 2019 with a purposive sampling method. The data analysis used in this study is linear regression. The results of data analysis showed a significant positive relationship between motivation and stress resistance with a significance level of 0.000.

1 INTRODUCTION

In sport, an achievement of each athlete means being capable of showing special performance and reaching maximum accomplishment. Several factors are required to reach the maximum performance namely physical, technical, tactical, and mental factors. These factors have their own mutually continuous meaning and task in reaching a success of the athlete. Rushall in Komaruddin (2014) explains that some individuals feel that the process of good performance is 70 to 90% influenced by mental factor.

Since in the championship sports arena or in other words competition sport mental fitness can play an important role to play in better performance, research in the field of sport psychology can be in the forms of some questions related to individual and team behaviors in sports motor activity (Austin et.al, 2005; Bailey, 1996).

Therefore, psychological factor in sports is one of the factors that need to be investigated. There are several psychological indicators that influence sports achievement. In this study, the focus of the discussion includes motivation and resistance to stress.

Most previous studies have demonstrated that a regulatory fit in motor and cognitive tasks will lead to performance improvements. However, it remains unclear which neurobiological mechanism lay behind this fit-benefit. Higgins and Spiegel (2004) assume that an increased motivational intensity can translate into superior goal-performance. Higgins (2000) postulates that an increased task-enjoyment and an

extended intrinsic motivation may cause this fit-effect. The notion that stress as a physiological parameter could also be a potential mediator to explain the better performances in motivational fit-situations is also remains a question. The aim of the present study was to examine if physiological stress responses, especially the activation of the sympathetic nervous system (SNS), could explain the enhanced performance in motivational fit-situations. Such a relationship between motivational fit and stress has not been examined yet.

In addition to these emotional disadvantages, the factors that influence athlete's performance may also include stress resistance. Maramis (2005) says how much the individual's ability to deal with stress is what is called tolerance to stress which describes stress resistance or the threshold value of frustration. In line with this opinion, Chaplin (2006) states that tolerance to stress is the ability to bear or withstand tension and suffer from failure, but without undue psychological or physiological damage. Having a tolerance to high stress is certainly very necessary for someone to be able to survive and adapt well to stressors. A person with this kind of tolerance will not experience significant psychological and physical problems so that he or she can still think and behave efficiently as usual. Conversely, someone who has low stress tolerance is not able to adapt to stress well so he or she experiences distress.

2 METHOD RESEARCH DESIGN

This is a correlational study.

3 RESEARCH SUBJECT

The research subjects in this study were twelve National Gymnastics athletes in Yogyakarta province in 2019. These participants were recruited through purposive sampling technique.

4 RESEARCH INSTRUMENT AND DATA COLLECTION TECHNIQUE

The data were collected using a questionnaire to measure the level of motivational and stress resistance. These data were then analysed by using linear regression.

5 RESULT AND DISCUSSION

The hypothesis test in this research was performed by using linear regression. The explanation about the result of hypothesis test in this research is presented in Table 1.

The result of linear regression on the variable of motivation and stress resistant showed significance of 0.000. Therefore, the hypothesis mentioning that there is a correlation between motivation and stress resistance in gymnastic athletes is accepted.

6 DISCUSSION

The result showed that there is an inverse and significant relationship between motivation and stress resistance. The first motivational orientation is the ego-oriented motivation, which consists on valuing one's own ability by comparing oneself with other people, giving priority to the result of one's behaviour over effort and execution. On the other hand, the task-oriented motivation is characterized by assessing the ability of the individual in a criterial way, prioritizing effort and execution more than the results obtained. This notion means that during the sports practice, personal improvement and a greater mastery of sports skills is pursued. In their daily life, people interpret the different situations that they face, defining success and failure in an individual way as a function

of the predominating motivational orientation that they adopt. If an individual orientates towards the task, they will focus on overcoming personal challenges, putting a special emphasis on effort and interpreting situations in which they make mistakes as an important part of a progress. On the other hand, if the predominant orientation is towards the ego, a person will focus on bettering the performance of others and purely demonstrating their ability. As a result, any mistake is considered as failure as opposed to being an important part of personal progress.

Aside from the dispositional factors related with the personal motivational orientation of each individual, environmental factors also exist such as the prevailing motivational climate, which promote the diverse agents involved in the context of physical activity engagement. Furthermore, the involved agents, such as the trainers, coaches or physical education teachers can promote motivational climates, which are orientated either towards the task or the ego. A certain climate can emerge over the other as a function of the characteristics of these agents. This in turn impulses their athletes or students to become oriented predominantly towards the ego or towards the task. As much in the academic context as in physical activity or sport, motivation constitutes a fundamental element in all teaching-learning processes. This can be seen through the fact that individuals who identify objectives that they seek to achieve in the form of personal goals, will also acquire a higher motivation and their learning will be more efficacious and long-lasting. The motivational climate is considered as a set of signals, as much explicit as implicit, such as the use of feedback, grouping systems, type of evaluation, and task design, which predispose individuals to achieve success. Depending on how this set of signals is used, motivational climates will be created, which are orientated towards ego and performance, or towards task and mastery.

In the context of team sports, coaches will create motivational climates that will affect the motivational orientation of athletes, generating more frequent task-oriented motivational climate. This condition not only strengthens the ethic work, the persistence and the improvement in the executions, but also strengthens the social responsibility and the capacity of cooperation between the members of the group, as well as increases the interest for learning. The task-oriented motivational climates protect athletes from feelings of frustration and demotivation. Nevertheless, athletes who work in a context related to ego-oriented climate prevail and tend to have a greater difficulty maintaining high-perceived

competence. This will increase when they overcome the opponent and demonstrate greater skill than the rest, but will decline when this objective is not achieved, thus reducing their interest in carrying out the activity and decreasing their level of effort.

Following the indications of Cervelló et al., (2007); Duda et al., (1992); and Chase (2001), athletes who work in motivational contexts focused on the task show behaviours that promote maximum motivation in physical activity, regardless of the level of their skill perceptions. This is because athletes judge their skill level with their own reference standards and not with the rest of their teammates and rivals. This goal disposition implies a greater effort and persistence in the realization of task and exercises, a lower state-anxiety and a greater level of enjoyment for the accomplishment of the activities. However, motivational climates focused on the ego are characterized by focusing on the adaptive model of achievement, in which, if athletes perceive high levels of ability, they will be motivated to persist in the task. On the contrary, if the perceived ability is low, a model of little adaptive achievement will be developed, which implies a reduction of effort, high state-anxiety, attributions centred on the ability, and a negative response to failure, decreasing motivation, and the persistence in the activity.

AM, or the absence of motivation, refers to athletes who do not believe their actions have an effect on performance outcomes and has been related to decreased athletic performance (Gillet & Gobance, 2009; Pelletier, 1995). AM may be a particular interest due to its correlation with athlete burnout. Athlete burnout is a condition that is characterized by physical and emotional exhaustion, reduced personal accomplishment, and sport devaluation (Raedeke & Smith, 2001). This construct has been linked to negative performance consequences and decreased well-being, and may result in the discontinuation of sport. Burned-out athletes generally show a shift from a self-determined involvement in sport to a lesser degree of self-determination, the extreme of which is AM.

Past research has also demonstrated that individuals with high levels of conscientiousness are more likely to have self-determined motivation. In support of these claims, conscientiousness significantly predicted all three facets of AM, as well as the facet of extrinsic motivation with the highest level of self-determinism (i.e., identified regulation). This suggests that high levels of conscientiousness predicted high levels of self-determined motivation in our sample, which was expected. Alternatively, high levels of conscientiousness were predictive of low

levels of AM or the least self-determined type of motivation. Conscientiousness is related to being task and goal oriented, which is somewhat contrary to the learned helplessness observed in AM. These results could be important when attempting to identify athletes at risk for burnout. In other words, conscientiousness may serve as a protective factor for this condition.

7 CONCLUSION

There is a significant relationship between emotional maturity and resistance to stress among twelve National Gymnastics athletes in Yogyakarta province.

The present study also offers some recommendations as follows: 1) the need to pay attention to factors or psychological conditions of athletes who are trained to always be controlled; 2) the need for exercises that involve psychological aspects.

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