

Relationship between Stress, Physical Exercise, and Mental Health among Athletes

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Abstract

The purpose of current literature review is to identify the association between stress, physical exercise, and mental health among athlete. The outcomes of this investigation reveal stress and physical exercise have crucial role on the level of mental health; they likewise can impact on mental health positively and negatively. As well, this study focused on mental health as a main factor among athlete that increase the level of their activities in sports fields. Moreover, lack of attention to this main factor that influenced via stress and physical exercise appeared various results. Therefore, the current paper supports athletes requirements based on two main factors stress and physical exercise to accomplish mental health.

Keyword: Athlete, mental health, physical exercise, stress.

Introduction

In the last decades, there are lots of consideration to psychology issues that are related with physical activity and mental health. The mental health is one of the main factors in sport society that has significant role among athlete (Alibakhshi Kenari, 2014). This factor defined as any emotional, psychological, and social well-being. Specifically, it assumed as an individual condition with regard to his or her psychological and emotional well-being (Walsh, 2011). In effect, the mental health impacted by outside factors and also inherent factors. In point of fact, there are several factors that positively or negatively linked to mental health (Chiu, 2002). Additionally, there are a number of theories and models that focused on mental health, and explained about different factors that influence on mental health in various ways, widely. For instance, in health belief model concentrated on individuals to adopt suggested physical activity behaviors; also referred to threatening factors that cause of debases (Stretcher & Rosenstock, 1997). In other word, the mental health has significant role on lifestyle and also in the sport psychology context; therefore, considering to the effective factors that influence on it, is very noticeable (Walsh, 2011).

In previous studies focused on inherent factors such as age, sex, ethnic origin; and also considered outside factors such as social class, occupation, education, environment, nutrition etc. (Chui, 2002). Additionally, some of them examined relation between symptoms of physical on anxiety, social dysfunction depression, while in the present study focused on stress and physical exercise in relation to athlete mental health.

Stress expresses as simply reaction to a stimulus that disturbs physical or mental equilibrium of individual. In reality, it is an omnipresent part of life. Usually, a stressful event can activate the abnormal motivations, causing hormones such as adrenaline and cortisol to flow through the body (Segerstrom & Miller, 2004). High rate of stress is known as predictor and related to mental health problems in both clinical and non-clinical (Lloyd, 1980; Heim & Binder, 2012; Uebelacker et al., 2013; Fried, Nesse, Guille, & Sen, 2015; Technow, Hazel, Abela, & Hankin, 2015). Perceived stress is the feeling about how much stress they are facing with at the moment or in another period of time and also the evaluation of it can explain the correlation between perceived life stress and mental health problems among athlete (Cohen, Kamarck, & Mermelstein, 1983; Stevens, Loudon, Yow, Bowden, & Humphrey, 2013). In the same vain, Nicolas, Vacher, Martinet, & Mourot (2016) explained that stress is a key issue for decreasing athletes' mental health and also it is so threatening for their well-being.

In the present research likewise will look into how physical exercise influences on mental health among athlete. Physical experience is any bodily movement that improves physical ability and also overall health. As well, the physical exercise refers to any physical activity that improves or preserves bodily fitness and general health and wellness. Many people do exercise for different reasons such as strength muscles, to improve athletic skills for weight management or just for enjoyment. This research obviously indicates relationship between physical exercise and mental health. Also, the physical exercise is considered as the most acceptable solution to reduce mental health difficulties. Regarding psychologists the physical exercise is one of the main ways that reduce the mental health. They explained that there is strong relationship between physical exercise and mental health (Alibakhshi Kenari, 2014). In a similar study, Samad et al. (2004) explained that physical exercise has an important role in reducing effect of stress. Additionally, this factor improves mood and mental health. The physical exercise has many benefits on behavior and reducing stress (Brunner & Suddarth, 2004).

Considering to the main role of mental health amongst athlete, lack of attention to this factor can lead to low level of activity, failure instead of success in the competitions, appearing some disorders in later years, and reduction of general activity (McGannon & Poon, 2005). Furthermore, the mental health is essential to study on. Additionally, the presence of stress during athlete training has negative influence on body and reduce their performance (Humphreys, 2003). Athlete may

face unavoidable stresses because of new social environment people instead of family, occupation, debt and financial pressure etc. for these athlete may have experience mental health problems; therefore, stress should be take into consideration (Nicolas, Vacher, Martinent, & Mourot, 2016). Obviously, neglecting to athlete mental health status may be irreparable damage to athlete family and also sport community (Alibakhshi Kenari, 2014).

Therefore, the present study attempts to recognize the relationships between stress, physical exercise, and mental health among student athlete. It is vital to find main factors that have strong relation with mental health and increase it at sport community. Also, the study focuses on stress and physical exercise factors that have positive or negative impacts on mental health and limit or improve it, meaningfully.

THEORIES

In this study, the main elements of the theoretical approaches include the Health belief model (HBM) (1950s) proposed by social psychologists at the U.S. Public Health Service for mental health (Nancy & Becker, 1984). In this theory focused on main factors that have considerable impact on mental health and change its level. On the other hand, the Cannon-Bard theory developed by Walter Cannon and Philip Bard for stress (1920a-1930a). This theory focused on the role of stress that can be harmful for individual activities and his or her thoughts (Friedman, 2010). And the Self-determination theory (SDT) proposed by Deci and Ryan for physical exercise. This theory has been emphasized on positive influence of exercises on mental and physical health (Ryan, Kuhl, & Deci, 1997).

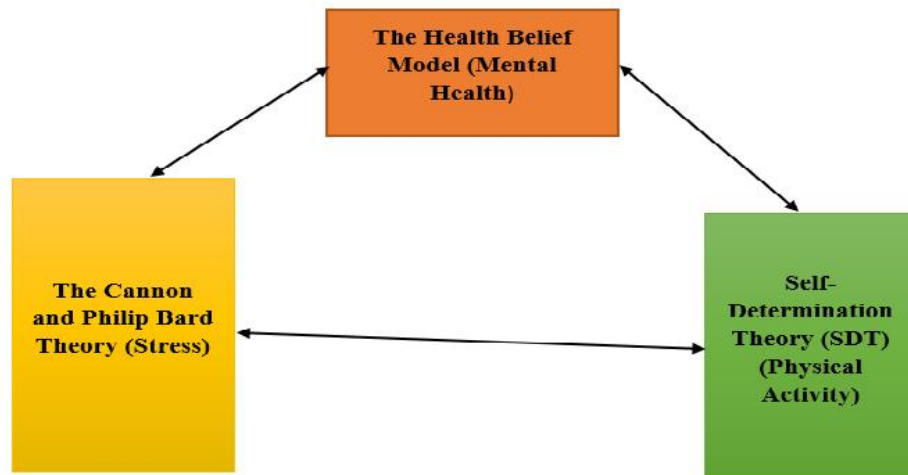


Figure 1: The Conceptual Framework of Theories

Mental Health, Stress, and Physical Exercise

There are several research have been done about each of these factors in different countries, culture, population etc. while due to the rate of mental disorders that refer to mental health, the present study attempts to focus on the mental health of athlete that impacted by stress and physical exercise. Some investigators such as Nancy and Becker (1984), McGannon and Poon (2005), Chiu (2002), Walsh (2011), Sterling (2011), and Alibakhshi Kenari (2014) have been focused on mental health, and determined this factor as one of the imperative factors has been impacted by diverse elements such as stress and physical exercise.

On the other hand, Lloyd (1980); Cohen, Kamarck, & Mermelstein, (1983); Kellmann & Kallus (2001); Segerstrom & Miller (2004); Friedman (2010); Heim & Binder (2012); Uebelacker et al. (2013); Stevens, Loudon, Yow, Bowden, & Humphrey (2013); Fried, Nesse, Guille, & Sen (2015); Technow, Hazel, Abela, & Hankin (2015); Nicolas, Vacher, Martinent, & Mourot (2016) have been emphasized to the negative role of stress on the mental health that can reduce level of activities, considerably.

Besides, Ryan, Kuhl, & Deci (1997); Stampfer, Hu, Manson, Rimm, & Willett (2000); Brunner & Suddarth (2004); and Samad et al. (2004) have been explained positive and operative role of physical exercise on the mental health. Also, the researchers described this factor influenced by different elements such as stress and decreases, noticeably.

Conclusion

Low level of mental health is one of the basic problems amongst athletes. The most imperative consequence is decrease the amount of their activities and presence in sports fields and competitions. Therefore, the ministry of sport has great role managing and monitoring the athlete condition and offering them to acceptable facilities. Most of the time, the managers of these main organizations do not have sufficient awareness and information for producing proper atmosphere amongst athlete. As a result, all of them essential to have properly information for improving satisfactory condition for athlete and offer them good facilities. Thus, this literature review displays the operative factors that should be control and supported by ministry of sport or any related organization.

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