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REVIEW ARTICLE

Athletes' Psycho-physical Training and Cognitive Restructuring Module To Enhance University-athlete Students' Well-being

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Abstract:

Many health practices demonstrate that some integrative approaches could be beneficial in fostering self-care and well-being for a healthy lifestyle. Athletes are exposed to elevated rates of stress and low control of performance during the competition, which puts them at increased risk for a range of mental health problems and poor well-being. Despite the psychological risks associated with their competitive circumstances, limited attention has been given to identifying the psycho-physical and cognitive strategies contributing to the well being of university athletes' The integration of psycho-physical and cognitive restructuring may be an effective technique for increasing the well being and performance of university athletes' . Therefore, in this module, the researchers have included numerous elements related to physical training, psychological training and cognitive restructuring in order to improve university student-athlete to further construct positive self-esteem, confidence, expectations, good performance and also enhance monitoring and control over the internal and external environment in which lead to having a beneficial influence on anxiety, stress or tension that may experience in an extreme situation such as a sports competition. We discuss the benefits of this module and provide practical strategies and techniques to implement for sports psychologists, counselors, and educational authorities. This module urges university athletes to create mental health, well-being awareness and early cognitive prevention strategies to improve the educational environment and contribute to the athletes' performance.

Keywords: Mental health, Well-being, Psycho-physical, Cognitive restructuring, Athletes, Training.

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1. INTRODUCTION

1.1. Mental Health and well-being

Mental health and well-being are increasingly recognized as a serious, worldwide public health concern. It includes our psychological, emotional, and social well-being that affects how we think, behave, and feel. The National Health and Morbidity Survey 2017 reported 29 percent of Malaysians had depression and anxiety disorders compared to 12 percent in 2011 due to environmental and individual-related stress [1]. According to the National Health Morbidity Survey 2015, there has been an increase in mental health problems from 10.6 percent in 1996 to 29.2 percent in 2015. Sports as a regular physical activity is vital in preserving a healthy lifestyle. Physical inactivity is presumed to be the foremost cause of hypertensive illness and disorders which are estimated to cause two million deaths per year [2]. Physical activity showed signi-

ficant effects on the prevention and treatment of physical diseases and psychological disorders [3 - 5]. Nevertheless, in Malaysia, more than half of the adult population does not assume good physical activities to increase their health benefits [6]. Hence, it is imperative to develop complementary modules and interventions regarding psycho-physical aspects to improve university-athlete students' well-being as well as physical activities in their daily life.

Three indicators of health are used worldwide: life expectancy, infant mortality, and well-being. In contrast to life expectancy and infant mortality, well-being (SWB) focuses on one's perceptions and self-judgments of health. Well-being, which encompasses a person's feelings of happiness and life satisfaction, has a significant effect on health [7]. The main applied goal of researchers who study well-being is the improvement of people's lives beyond the elimination of misery. Well-being is a key component of quality of life, its measurement is crucial to understanding how to improve people's lives. In addition, a growing body of research shows that high levels of well-being are beneficial to the effective

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functioning of societies beyond the advantages they bestow on individuals.

Additionally, mental health issue is an important concern among adults and closely correlates with well-being. Even though there is increasing recognition of the importance of maintaining and promoting the mental wellbeing of individuals globally (Naci & Ioannidis, 2015 cited in [8], mental health concern among Malaysian population has yet to be established [8]. Nowadays, the issue of mental health has started to gain importance because there is an alarming increase of prevalence in individuals aged 16 years old and above experiencing problems related in mental health, which increased to 29.2 percent in 2015 from 10.6 percent in 1996 [9], and data from the National Health and Morbidity Survey (NHMS) in 2015 showed that the prevalence of mental health problems among children in Malaysia was 11.1 percent [10]. Thus, well-planned strategies for maintaining and improving well-being are needed as primary prevention [11]. An inactive lifestyle, anxiety, stress, and depression have been proven to have a negative impact on mental health, especially on the quality of life, mood, and self-esteem, and can cause moodiness and lack of enthusiasm in activities that an individual used to find enjoyable [12]. In Malaysia, previous studies have reported widely on fitness and mental health among the specific population with focused on aerobic exercise interventions such as dance exercise, walking, jogging, aqua Zumba, or soccer [13 - 16]. This conceptual paper is based on Malaysian university-athlete students and offers a unique opportunity to promote, maintain and improve wellbeing. Investigation of psycho-physical intervention effects on mental health conditions could be relatively important.

1.2. Psycho-physical Training

The term psycho-physical training refers to training learners on the basis of two psychological and physical

domains. It is notable that each athlete's mental training is directly related to their physical training, based on sports training, physical endurance, physical exercise, and more. Sports training can be considered a system involving the following physical, tactical, technical, and psychological components. These aspects of preparation are associated in unity - the psycho-physical of the athlete and the results of sports show the effect of these two components on athletes' performance [17]. Mental training is a pedagogical process for improving mental processes, qualities, and personality traits in order to increase efficiency and improve health. That is, mental training is a pedagogical process to form mental readiness. The goal of psychic training is to form a mental preparedness for actions in extreme situations [18]. The expression of individuality, creativity, and uniqueness of using high cognitive skills is essential for high sporting skills to achieve top sporting achievements.

In order to regulate mental activity, it is necessary to optimize the situational psychological readiness and the adaptation of the person because it is the situational psychological readiness to judge the reliability of the person in extreme situations [19]. Emotional problems such as anxiety and stress in sports have negative impacts on athletes' performance and sporting achievement. It includes various methods to measure anxiety in athletes, such as physiological, biochemical, or psychometric investigations. Despite, various anxiety measurements, there are different kinds of interventions to assist athletes in coping adequately with their anxiety levels [20]. According to individual anxiety levels, different kinds of interventions should be required to assist athletes adequately [20, 21] stated physical readiness includes physical (motor) qualities such as strength, coordination, endurance, balance, speed, and flexibility. Moreover, Fisher and his colleagues indicated different vital factors of physical and mental for psycho-physical training, such as responsibility, confidence, control, and concentration (Fig. 1) [22].

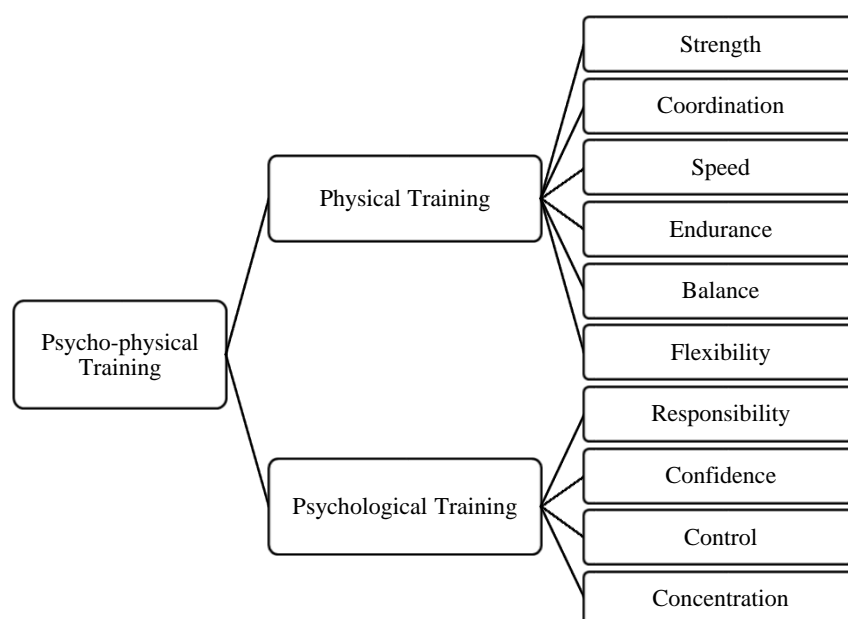


Fig. (1). The components of physical and mental training.

All these psycho-physical qualities for the athletes' training further construct positive self-esteem, confidence, expectations, and good performance and also enhance monitoring and control over the internal and external environment, which lead to a beneficial influence on anxiety, stress or tension that may experience in an extreme situation such as a sports competition.

1.3. Cognitive Restructuring

Cognitive processes are significant for human development, the thinking process has a special role in creating, directing and persistence of human moods and behaviors. On the basis of the cognitive approach, Rational-Emotive and Cognitive Behavior Therapy (RE & CBT) educate clients to disprove cognitive distortions, or fundamental faulty thinking to replace one's irrational, counter-factual beliefs with more accurate and beneficial ones by cognitive restructuring techniques. Furthermore, RE & CBT emphasizes the clients' responsibility for creating their behaviors and dysfunctional emotions, such as depression, anxiety, and stress, that affect their well-being. Consequently, RE & CBT advises changing such irrational beliefs and substituting more rational ones [23]. Thus, the investigation of this intervention as a crucial subject for Malaysian experts to train Malaysian university-athlete students to distinguish, challenge, and replace their irrational thoughts with rational and productive thoughts on the basis of Rational-Emotive and Cognitive Behavior Therapy (RE & CBT) is necessary and valuable research [24].

It is notable that when athletes encounter some problems with a high rate of difficulties, their cognitive process will focus on task-irrelevant thoughts instead of task-relevant ones.

Attention to task-irrelevant thoughts makes to process irrelevant issues and the results will be unrelated to the actual task. In addition, when athletes create unrelated consequences that cannot produce the desired results, it creates negative emotions such as fear, anxiety, anger, hate, sadness, etc. More adequate task-relevant thoughts, positive automatic thoughts, rational beliefs, and interpreting rationally directly enable athletes to substitute the task-irrelevant thoughts with task-relevant thoughts in order to impact negative and maladjustment emotions. Completing the Athletes Cognitive Restructuring Module can assist athletes to understand how their cognitive process can influence positively or negatively their behavior and emotions related to physical training. Similarly, athletes will educate to disprove cognitive distortions or fundamental faulty thinking to replace irrational beliefs with rational ones. This module is a combination of the most famous cognitive therapeutic methods, such as Rational Emotive Behavior Therapy [23, 25], Cognitive Behavior Therapy, and Systematic Rational Restructuring [26]. All forms of cognitive therapy are based on the premise that negative emotional disturbances are a result of distorted cognition, automatic negative thoughts, and illogical or irrational beliefs. Although rational-emotive and cognitive behavior therapy give the rationale for cognitive restructuring, also systematic, rational restructuring organizes this rationale into a series of more systematic steps and procedures [27]. Athlete cognitive restructuring module consists of eight psycho-educational counseling sessions that focus on training athletes to cope properly with psycho-physical problems, negative emotions, and maladaptive behaviors in sports performance (Fig. 2).

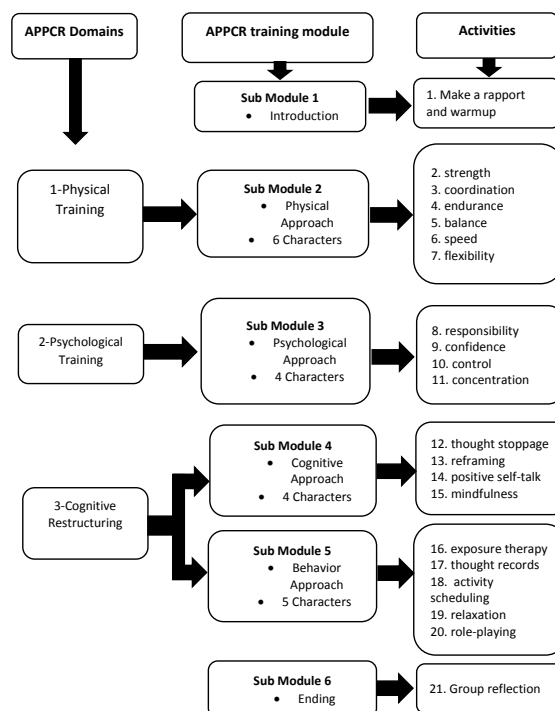


Fig. (2). Framework of Athletes' Psycho-physical and Cognitive Restructuring module (APPCR) training module.

CONCLUSION

University athletes will be able to clarify the positive effects of confidence, control, and concentration on sports performance and achievement through psycho-physical training and modified a cognitive restructuring module. Correspondingly, on the basis of systematic, rational restructuring (SRR), university athletes will learn the impact of their irritating task-irrelevant and task-relevant thoughts on competitive situations, and recognize how to control their negative emotions, such as anxiety and stress by controlling their task-irrelevant thoughts. Also, cognitive restructuring therapy will help athletes to modify techniques to restructure their faulty thinking related to sports performance and well-being. The psycho-physical training and cognitive restructuring module could be reliable interventions to assist university athletes in combating properly with common negative emotional problems related to their competitive circumstances, which impact their sports performance and well-being. Athlete's psycho-physical training and cognitive restructuring module will have used for athletes and may be applied to other emotional disorders such as depression, phobia, anger, and so on in order to enhance mental health.

On the other side of view, a number of significant limitations need to be considered in this intervention, such as making sessions interesting for university athletes which they are more comfortable with physical activities, presenting the contents in simple, scientific, and sporty forms, and applying a complementary or integrative training which involves different methods and skills such as psychological, physical, and cognitive restructuring techniques. In conclusion, this module has thrown up many questions in need of further investigation. Further experimental investigations are needed to estimate this module's effects on university athletes regarding cross-cultural studies.

Last but not least, this study is expected to have great impacts on society, the economy and the nation. By focusing on examining the status, level and characteristics of mental health among young Malaysian athletes. These students will be able to understand their mental health (well-being) capacity and be able to seek help once needed before leading to severe mental disorders, for example, chronic depression, anxiety, and test anxiety from experiencing academic situations that are intolerant. Moreover, it addresses the aim of Eleventh Malaysian Plan in promoting the wellness of the society to ensure balanced development in tandem with economic growth. With the expected enhanced module on psycho-physical and cognitive restructuring, the introduction of guidelines for mental health promotion and programs for academic and educational situations can also be implemented. Comprehensive mental health strategies and direction in psychological health will help in improving the quality of educational performance for young athletes.

LIST OF ABBREVIATIONS

- SWB** = Subjective Well-Being
NHMS = National Health and Morbidity Survey
RE&CBT = Rational-Emotive and Cognitive Behavior Therapy

SRR = Systematic Rational Restructuring

CONSENT FOR PUBLICATION

Not applicable.

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CONFLICT OF INTEREST

The authors declare no conflicts of interest, financial or otherwise.

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