

“RUN, FORREST, RUN... OR DON'T? THE CASE OF EXERCISE ADDICTION”

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Introduction: Regular physical activity should be encouraged given its major role in health maintenance and disease prevention. However, in excess, exercise has the potential to cause physical and psychological harm and can become addictive. Excessive exercise can be described in an obsessive-compulsive dimension but it is included among the behavioural addictions since it presents some of its typical characteristics such as mood modification, tolerance, withdrawal symptoms and relapse after periods of abstinence or control.

Objective: The authors aim to describe the concept of Exercise Addiction and the current understanding of its symptoms, diagnosis criteria, epidemiology, etiology and mechanisms.

Methods: Exhaustive review of the literature on Exercise Addiction and its symptoms, diagnosis criteria, epidemiology, etiology and mechanisms, using PubMed.

Results: The most addictive type of exercise varies with countries. Studies show that physical exercise activates the dopamine reward system contributing to stress reduction and there is evidence of the association between running, endorphins and cannabinoids – explaining the 'runner's high' that can cause addiction. Genetic studies reveal that the same genes control preference for drugs and for naturally rewarding behaviours. Psychological approaches focus on reward, habituation, social support, stress-relief, avoidance of withdrawal and anxiety reduction.

Conclusions: Exercising regularly has several positive effects on physical and mental health but in excess, may have serious physiological and psychological consequences. There are several hypotheses for the mechanisms of exercise addiction including reward, stress reduction, the euphoric effect, mood regulation and sympathetic arousal. More studies are needed to improve our understanding of this behavioural addiction.