

Executive functions as mediator variables between binge eating symptoms and body mass index: A mediation analysis

Bernadette Gálfi¹, Kinga Kálcza - Jánosi², István Szamosközi³

^{1, 2, 3}, Babeş - Bolyai University, Faculty of Psychology and Educational Sciences,
Department of Applied Psychology, Cluj Napoca, Romania

Abstract

In recent years, the topic of executive functions has played a significant role in the context of clinical psychology. Maladaptive patterns can impair several aspects of physical and mental health, thus the main goal of the present study is to explore the relationship between executive functions, binge eating symptoms and body mass index. 103 participants showing binge eating symptoms have been involved in the present study, who completed the Binge Eating Screener, the short Hungarian version of the Behavior Rating Inventory of Executive Function - Adult - Self Report scale, and a demographic questionnaire. We conducted an explorative study, since contrary to previous research, we did not only point out the linear relationship between binge eating symptoms and body mass index, but also studied the mediating role of executive functions (cognitive regulation, emotion regulation and behavior regulation) in this relationship. In this model, binge eating symptoms can be defined as predictor variables, while the output variable is the body mass index. Our results show that there is a significant positive correlation between body mass index, binge eating symptoms and certain components of executive functions (cognitive regulation problems and behavior regulation problems). We also found that behavior regulation problems are present as mediators in the relationship between binge eating symptoms and body mass index.

Keywords: binge eating symptoms; body mass index; executive functions; mediation analysis