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Explanation of the Eating Behavior based on the Behavioral-Brain Systems; The Mediating Role of Emotion Regulation

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Abstract

Aim: This research aims to explain the eating behavior based on brain-behavioral systems and executive functions and the mediating role of emotional regulation was performed. **Methods:** The method of the current research was a correlational description. The statistical population of the research was all men and women between 30 and 40 years of age in Tehran in 1400, of which 190 people were selected as the research sample using the random multi-stage cluster sampling method. In this research, tools of eating behavior (Dutch, 1986), brain-behavioral system (Jackson, 2009) and cognitive-emotional regulation (Garnefsky and Kraij, 2006) were used. Amos-V8.8 software was used to analyze the data. In order to analyze the research data, the structural equation modeling method was used. **Results:** The research findings showed that the research model has a good fit. Also, the results showed that the standard coefficient of the direct path between eating behavior and 5 subscales of the brain-behavioral system, namely the behavior activation system (0.196), the behavior inhibition system (0.217) and avoidance (0.256) with a significance level less than 0.05 and war (0.436) and freezing (0.379) are significant with a significance level less than 0.01, so the brain-behavioral system positively and significantly predicts eating behavior. **Conclsion:** the results showed that the brain-behavioral system positively and significantly predicts eating behavior through the mediation of emotional cognitive regulation. Therefore, the behavioral brain systems and emotional regulation play an important role in predicting the eating behaviors of overweight and obese people, which should be considered in prevention and treatment programs.

Keywords: *emotional regulation, eating behavior, brain-behavioral systems.*

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