

Effects of Impulsivity and Poor Inhibitory Control on Food Addiction Symptoms

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Problem: Food addiction, which is characterized by poor control of eating and dietary habits, has been linked to aspects of reduced executive functioning, including impulsivity and impaired inhibitory control. Impulsivity and inhibitory control can be measured by subjective self-report inventories and objective, performance-based cognitive tasks. No prior works have examined whether subjective or objective assessment is more closely related to symptoms of food addiction. The current study examined this question. We predicted that objective assessment of executive functioning would be more closely related to symptoms of food addiction.

Method: Participants were 79 undergraduate students at a large Midwestern University (Mean age= 20.32, SD= 2.26, 73.4% female). Participants completed a food addiction scale (Yale Food Addiction Scale; YFAS), a questionnaire measuring impulsivity (Effortful Control Scale—Impulsivity; ECS-I), and a battery of tests to measure executive function (Stroop Color Word Test (SCWT), Trail Making Test (TMT), and Controlled Oral Word Association (COWAT)).

Results and Conclusion: Bivariate correlations revealed no significant associations between the YFAS and the ECS-I. In contrast, significant associations emerged between the YFAS and the COWAT, ($r = -.23$, $p = .04$), TMT-B ($r = -.23$, $p = .04$), and SWCT-Color ($r = -.27$, $p = .02$), such that poorer cognitive test performance was associated with greater YFAS symptom endorsement. These results demonstrate that performances on objective tests of executive functions are more closely related to symptoms of food addiction than are self-report measures of impulsivity.

Key words: Impulsivity, inhibition, food addiction, executive functioning, objective, subjective