A prospective study on the link between weight-related self-stigma and binge eating: Role of food addiction and psychological distress

Ahorsu, D.K.^a, Lin, C.-Y.^a, Imani, V.^b, Griffiths, M.D.^c, Su, J.-A.^{d,e,f}, Latner, J.D.^g, Marshall, R.D.^g, Pakpour, A.H.^{h,i}

^aDepartment of Rehabilitation Sciences, the Hong Kong Polytechnic University, Hung Hom, Hong Kong

^bPediatric Health Research Center, Tabriz University of Medical Sciences, Tabriz, Iran

^cInternational Gaming Research Unit, Psychology Department, Nottingham Trent University, Nottingham, United Kingdom

^dDepartment of Psychiatry, Chang Gung Memorial Hospital, Chiayi, Taiwan

^eSchool of Medicine, Chang Gung University, Taoyuan, Taiwan

^fDepartment of Nursing, Chang Gung Institute of Technology, Taoyuan, Taiwan

^gDepartment of Psychology, University of Hawaii at Manoa, Honolulu, HI, United States

^hSocial Determinants of Health Research Center, Research Institute for Prevention of Non-Communicable Diseases, Qazvin University of Medical Sciences, Qazvin, Iran

ⁱDepartment of Nursing, School of Health and Welfare, Jönköping University, Jönköping, Sweden

Abstract

Objectives: This prospective study investigated the link between weight-related self-stigma and binge eating by (a) examining the temporal association between weight-related self-stigma and binge eating; (b) investigating the mediating role of food addiction in the association between weight-related self-stigma and binge eating; and (c) examining the mediating role of psychological distress in the association between weight-related self-stigma and binge eating.

Method: Participants comprised 1,497 adolescents (mean = 15.1 years; SD = 6.0). Body mass index and weight bias were assessed at baseline; psychological distress (i.e., depression, anxiety, and stress) assessed and food addiction at 3 months; and binge eating at 6 months. The mediation model was analyzed using Model 4 in the PROCESS macro for SPSS with 10,000 bootstrapping resamples.

Results: There was no significant direct association between weight-related self-stigma and binge eating. However, food addiction and psychological distress significantly mediated the association between weight-related self-stigma and binge eating.

Discussion: These findings highlight the indirect association between weight-related self-stigma and binge eating via food addiction and psychological distress. Consequently, intervention programs targeting food addiction and psychological distress among adolescents may have significant positive effects on outcomes for weight-related self-stigma and binge eating. The findings will be beneficial to researchers and healthcare professionals working with adolescents during this critical developmental period.