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The Mediating Effects of Eating Disorder, Food Addiction, and Insomnia in the Association between Psychological Distress and Being Overweight among Iranian Adolescents

Chung-Ying Lin ¹, Pauline Cheung ¹, Vida Imani ², Mark D. Griffiths ³ and Amir H. Pakpour ^{4,5,*}

- ¹ Department of Rehabilitation Sciences, Faculty of Health and Social Sciences, The Hong Kong Polytechnic University, Hung Hom, Hong Kong; cylin36933@gmail.com (C.-Y.L.); paulinekaka@hotmail.com (P.C.)
 - ² Pediatric Health Research Center, Tabriz University of Medical Sciences, Tabriz 5166/15731, Iran; dr.v.imani@gmail.com
 - ³ Nottingham Trent University, International Gaming Research Unit, Psychology Department, Nottingham NG1 4FQ, UK; mark.griffiths@ntu.ac.uk
 - ⁴ Social Determinants of Health Research Center, Research Institute for Prevention of Non-Communicable Diseases, Qazvin University of Medical Sciences, Qazvin 3419759811, Iran
 - ⁵ Department of Nursing, School of Health and Welfare, Jönköping University, SE-551 11 Jönköping, Sweden
- * Correspondence: Pakpour_Amir@yahoo.com; Tel.: +98-28-33239259

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Abstract: With obesity and excess weight remaining a serious concern worldwide, investigating the mechanisms underlying this is of great importance. Psychological distress is a possible trigger contributing to excess weight for adolescents. Moreover, the association between psychological distress and excess weight may be mediated by eating disorder, food addiction, and insomnia. The present study utilized parallel mediation analysis to assess the aforementioned associations and possible mediation effects among Iranian adolescents. Through stratified and clustered sampling, adolescents ($N = 861$; mean \pm SD age = 15.9 ± 3.2 ; 372 males) participated and were followed for a one-year period. Excess weight (standardized body mass index, z-BMI); psychological distress (Depression, Anxiety, and Stress Scale-21); eating disorder attitudes (Eating Attitude Test-26); food addiction (Yale Food Addiction Scale for Children); and insomnia (Insomnia Severity Index) were assessed. Eating disorder attitudes, food addiction, and insomnia were significant mediators in the association of psychological distress and z-BMI. Additionally, psychological distress had direct effects on z-BMI. Given that eating disorder attitudes, food addiction, and insomnia showed mediated effects in the temporal association of psychological distress and excess weight, healthcare providers are encouraged to design programs on improving these three mediators to help adolescents overcome excess weight problems.

Keywords: eating disorder; food addiction; insomnia; psychological distress; excess weight gain

1. Introduction

The issue of childhood obesity and excessive weight gain is of great concern worldwide although plateaued prevalence of childhood overweight has been reported in some countries, especially in the developed countries [1,2]. More specifically, the prevalence of childhood overweight is still high although not necessarily increasing. Recent statistics from the Centers for Disease Control and Prevention (CDC) in the U.S. reported that 13.9% of 2- to 5-year-olds; 18.4% of 6- to 11-year-olds; and 20.6% of 12- to 19-year-olds