

Effects of Weight Status and Sedentary Behavior on Depression among Young Adults

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ABSTRACT

It has been a global concern that nearly one-third of young adults have persistent depressive disorder (Ibrahim et al., 2013). Engaging in excessive sedentary behavior coupled with the high prevalence of overweight and obesity among young adults have been known to be high-risk factors for depression (Tychenne et al., 2015). **PURPOSE:** The purpose of this study was to investigate the effects of weight status (normal weight vs. overweight/obese) and sedentary behavior (< 3 hrs vs. ≥ 3 hrs) among male and female young adults, respectively. **METHODS:** A total of 139 young adults (96 females, 43 males; mean age = 22.44, SD = 3.71) were recruited from one public university in Northern Texas. Participants' body mass index (BMI) was calculated from self-reported height and weight. Depression was assessed by a 20-item Center for Epidemiologic Studies-Depression Scale (CES-D; Radloff, 1977). Sedentary behavior was measured using accelerometers over seven days from 8:00 am-8:00 pm. The 2 (normal weight vs. overweight/obese) by 2 (< 3 hrs vs. ≥ 3 hrs) univariate analyses of covariance (ANCOVA) were performed to test the group differences on depression for both females and males, respectively. **RESULTS:** Among the participants, 54% were normal weight (BMI < 25) and 46% were overweight and obese (BMI ≥ 25); 61% of participants spent less than 3 hours daily being sedentary and the remaining spent 3 or more hours daily. These young adults had an average of 11.07 on the depression scale with 19.6% categorized with depressive symptoms (CES-D score ≥ 16; Radloff, 1977). No statistical significance of depression between groups was observed in this sample of young adults ($p > .05$). It was noticed that overweight/obese females tend to have a higher risk of depression when they spent more than 3 hours being sedentary (13.20 vs. 10.15; $d = .51$) compared to their counterparts. Regardless of their weight status, young adult males reported higher depression when sitting for more than 3 hours daily (10.83 vs. 9.6; $d = .15$). **CONCLUSION:** The present study indicated that sedentary behavior plays an important role in the tendency of depressive symptoms among young adults, regardless of weight status. Reducing sedentary behavior (< 3 hrs daily) is recommended for both female and male young adults, especially overweight/obese females.