

Empirical Research

The impact of acceptance and commitment therapy (ACT) on the psychological defense mechanism and weight loss program: A randomized controlled trial among university students during COVID-19 movement control order

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Received 23 December 2022, Revised 15 June 2023, Accepted 3 July 2023, Available online 4 July 2023, Version of Record 13 July 2023.

Abstract

This study examined the effectiveness of acceptance and commitment therapy (ACT) in changing the psychological defense mechanism and promoting weight loss among overweight or obese (OW/OB) university students. A sample of 152 OW/OB university students who reported high immature and neurotic defense styles was randomly assigned into ACT, ACT-EX (ACT and structured exercise program), or a control group (CG) for a six-week intervention program. Group × time interactions showed that the BMI and all defense styles improved in the ACT and ACT-EX groups. The BMI was significantly lower in ACT-EX than in ACT, while the within-group effect size was larger in ACT than in ACT-EX for immature and neurotic defense styles. The mature defense style showed a significant improvement albeit with a small effect size in both ACT and ACT-EX. Both ACT interventions were found to be effective in promoting weight loss and improving the psychological defense mechanism, including experiential avoidance.

Keywords

Acceptance and commitment therapy, Overweight, Obese, Psychological defense , mechanism, Weight loss

Introduction

The COVID-19 pandemic has resulted in significant disruptions to daily routines, increased stress, and emotional turmoil, which can lead to changes in eating habits and physical activity levels. Previous research has shown that individuals with higher body mass index (BMI) are more likely to experience weight gain during times of deviation from routine, such as holidays. One particular concern is that individuals with overweight and obesity (OW/OB) are at higher risk for COVID-19 complications (Poppin et al., 2020). Moreover, the pandemic has had a significant impact on mental health, with adverse mental burdens potentially leading to emotional eating, decreased physical activity, and exacerbating weight gain (Di Renzo et al., 2020; Ammar et al., 2020).

Obesity is a serious endemic issue in Malaysia, with half of all adults being overweight (BMI ≥ 23 kg/m²) or obese (BMI ≥ 25 kg/m²) according to the Asian BMI classification. This is particularly concerning given that research has shown that people of Asian descent tend to have a higher percentage of body fat at lower BMIs than people of other ethnicities. The current global prevalence of obesity has quadrupled since 1975, with the trend showing no signs of slowing down (WHO, 2021). According to WHO (2021), the global prevalence of obesity among youths above the age of 18 has grown drastically from less than 4% in 1975 to more than 18% in 2016. In 2016, approximately 13% of the world's adult population was obese. The annual prevalence of OW/OB shows increasing prevalence in Malaysia. The National Health Morbidity Survey (NHMS) II found that 20.7% and 5.8% of Malaysia's adult population were OW/OB, respectively (Ismail et al., 2002). Moreover, the prevalence increased to 30% and 17.7% in 2015 (IPH, 2015), followed by 30.4% and 19.7% respectively in 2019 (IPH, 2020).

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<https://doi.org/10.1016/j.jcbs.2023.07.003>

Received 23 December 2022; Received in revised form 15 June 2023; Accepted 3 July 2023

Available online 4 July 2023 2212-1447/© 2023 Association for Contextual Behavioral Science. Published by Elsevier Inc. All rights reserved.