



# Structural equation modeling of eating attitude based on self-differentiation, emotional reactivity and negative urgency with the mediation of emotion regulation difficulty in female students

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## Abstract

**Aim:** Today, eating disorders are one of the most common mental disorders that cause many problems in physical health, mental functioning, and quality of life. This research was conducted with the aim of modeling the structural equations of eating attitude based on self-differentiation, emotional reactivity and negative urgency with the mediation of emotion regulation difficulty in students of Islamic Azad University, Zanjan branch. **Methods:** The method of conducting the research was correlational using the SEM structural equation modeling method and the statistical population of this research included all undergraduate students in the number of 4730 people. 284 people were selected by cluster sampling method. The research tools include Garner and Garfinkel (1979) Eating Attitude Test, Drake, Murdock, Marszalek and Barber (2015) short form of differentiation inventory, Impulsive Behavior Scale (UPPS), Positive and Negative Affect Scale (PANAS) and Gratz Emotion Regulation Difficulty Scale. and Roemer (2004). To collect data, descriptive and inferential statistics and structural equations were used using SPSS26 and AMOS24 software. Bootstrap method was used in MACRO program to analyze mediating relationships. **Results:** The findings showed that the relationship between the structural model of eating attitude based on self-differentiation, emotional reactivity (positive and negative emotional) and negative urgency with the mediation of students' emotion regulation difficulty has a good fit ( $P < 0.001$ ). Differentiation relationship with negative and inverse eating attitude, relationship between emotion regulation difficulty and direct and positive eating attitude has been estimated ( $P < 0.001$ ). Also, positive emotional reactivity had a negative and inverse relationship with eating attitude ( $P < 0.001$ ). **Conclusion:** The findings of this study emphasize the effective role of differentiation, emotion regulation and emotional reactivity in the attitude of eating disorders in students. Therefore, the necessary training to regulate and control emotions should be done in this important segment of the society, in order to prevent the complications and consequences of disordered eating attitude, which is eating disorders. **Keywords:** Eating attitude, differentiation, emotional reactivity, negative urgency, emotion regulation difficulty.

## Introduction

Considering the fact that students are an important target group for promoting a healthy lifestyle among the adult population, and research conducted both within and outside of Iran indicates that this demographic in this age group is at the highest risk for the onset of eating disorders, and taking into account the background of research and the importance of eating disorders in youth, and abnormal eating behaviors in those who do not have a clear clinical disorder, and consequently the physical, psychological, and social problems resulting from eating disorders, efforts to reach a correct understanding of this disease and ways to prevent and treat it seem very important and vital. As a result, identifying psychological constructs related to defects in eating behavior control and attitudes towards eating can be a useful step towards a better understanding of this disorder, preventive actions, and therapeutic interventions. The literature collected in recent years on eating disorders (especially among youth) shows that restricted and compulsory eating, apart from eating disorders, has a significant detrimental effect on the psychosocial functioning of individuals (Brusov & Levitsen, 2017). Therefore, understanding how the difficulty of emotion regulation and constructs related to it in eating attitudes can help advance knowledge overall and the findings of this research can contain useful points for prevention programs and can be used in nutritional and psychological clinics for providing psychological counseling services to achieve correct eating attitudes and control and regulate emotions, preventing the occurrence of eating disorders in this important segment of society. It is hoped that the findings from this study can contribute to a greater understanding of eating disorders and the development of effective therapeutic interventions.

Studying eating attitudes in a non-clinical population (students), this important segment of society, based on the psychological constructs mentioned in the text and considering the background of Iranian and foreign research that did not have all variables in a model designed in this study, indicates the novelty of the subject and can lead to the identification of factors effective in the emergence of distorted eating attitudes and ultimately eating disorders. Limited examination of the research variables' relationships in the literature and the prevalence of eating disorders in recent years, the adverse consequences of these disorders on physical and mental health, and the study of various aspects of this disorder including important and influential variables in the etiology of the disease are of special importance.

## Method

The method of conducting the research was correlational using the SEM structural equation modeling method and the statistical population of this research included all undergraduate students in the number of 4730 people. 284 people were selected by cluster sampling method. The research tools include Garner and Garfinkel (1979) Eating Attitude Test, Drake, Murdock, Marszalek and Barber (2015) short form of differentiation inventory, Impulsive Behavior Scale (UPPS), Positive and Negative Affect Scale (PANAS) and Gratz Emotion Regulation Difficulty Scale. and Roemer (2004). To collect data, descriptive and inferential statistics and structural equations were used using SPSS26 and AMOS24 software. Bootstrap method was used in MACRO program to analyze mediating relationships.

## Results

The findings showed that the relationship between the structural model of eating attitude based on self-differentiation, emotional reactivity (positive and negative emotional) and negative urgency with the mediation of students' emotion regulation difficulty has a good fit ( $P < 0.001$ ). Differentiation relationship with negative and inverse eating attitude, relationship between emotion regulation difficulty and direct and positive eating attitude has been estimated ( $P < 0.001$ ). Also, positive emotional reactivity had a negative and inverse relationship with eating attitude ( $P < 0.001$ ).

## Conclusion

This research aimed to model the structural equations of eating attitudes based on self-differentiation, emotional reactivity, and negative urgency with the mediation of emotion regulation difficulties in students. The results showed that self-differentiation has a significant direct relationship with eating attitudes in students. Therefore, one of the hypotheses of this research, which stated that there is a statistically significant relationship between self-differentiation and eating attitudes, is accepted.

To support the research hypotheses, the following suggestions are offered: Given a deep understanding of the constructs related to eating disorders, the results could help enhance clinical performance. Also, as the findings support the relationship of differentiation in eating pathology, it will have significant theoretical and practical implications for prevention programs and important and effective psychological interventions. Therefore, it is suggested that education-focused interventions aiming to teach differentiation for solving the dependency-autonomy conflict and emotional awareness in individuals, especially those with eating problems, be considered. Moreover, given the pervasive relationship of emotion regulation difficulty with eating attitudes, emotion regulation training could be a significant target for individuals with eating issues in adopting preventive methods. As a result, addressing the issue of emotion regulation difficulty as a prominent variable in predicting eating behaviors can be an important step for professionals in adopting strategies and therapeutic approaches. It is also recommended that various aspects of impulsivity be considered in the therapeutic actions of eating disorders.

This research, due to its unique and pioneering nature in terms of title and research scope at the national level, can provide a favorable basis for future research to interested researchers. Therefore, in this section, the researcher intends to make recommendations for future researchers as follows: Exploring the experience of individuals with eating disorders in qualitative studies, conducting this research in populations other than students, repeating this research in larger sample sizes and individuals with overweight and obesity, examining the process of eating disorder formation with a focus on clinical and clinical samples, comprehensive assessment of psychological variables in the population with eating disorders and comparing it with general populations, psychosocial assessment of clinical samples with disordered eating attitudes and eating disorders in adolescents and young adults, the impact of emotion control and impulse control training on eating disorders in an experimental study, it is suggested that future research examine the research model using longitudinal data to determine the effect of university years on students.

**References**

- Brockmeyer, T., Skunde, M., Wu, M., Bresslein, E., Rudofsky, G., Herzog, W., & Friederich, H.-C. (2014). Difficulties in emotion regulation across the spectrum of eating disorders. *Comprehensive psychiatry*, 55(3), 565-571.
- Brosos, L. C., & Levinson, C. A. (2017). Social appearance anxiety and dietary restraint as mediators between perfectionism and binge eating: A six month three wave longitudinal study. *Appetite*, 108, 335-342.
- Doba, K., Berna, G., Constant, E., & Nandrino, J.-L. (2018). Self-differentiation and eating disorders in early and middle adolescence: A cross-sectional path analysis. *Eating Behaviors*, 29, 75-82.
- Fakhari, N., Latifian, M., & Etemad, J. (2014). Psychometric properties of the short form of the Differentiation of Self Inventory among Iranian students. *Educational Measurement Quarterly*, 4(15), 35-58. (In Persian)
- Hasking, P., Boyes, M., & Greves, S. (2018). Self-efficacy and emotionally dysregulated behaviour: An exploratory test of the role of emotion regulatory and behaviour-specific beliefs. *Psychiatry research*, 270, 335-340.
- Hay, P., Mitchison, D., Collado, A. E. L., González-Chica, D. A., Stocks, N., & Touyz, S. (2017). Burden and health-related quality of life of eating disorders, including Avoidant/Restrictive Food Intake Disorder (ARFID), in the Australian population. *Journal of eating disorders*, 5(1), 1-10.
- Juarascio, A. S., Felton, J. W., Borges, A. M., Manasse, S. M., Murray, H. B., & Lejuez, C. W. (2016). An investigation of negative affect, reactivity, and distress tolerance as predictors of disordered eating attitudes across adolescence. *Journal of adolescence*, 49, 91-98.
- Lam, C. M., & Chan-So, P. C. (2015). Validation of the Chinese version of Differentiation of Self Inventory (C-DSI). *Journal of marital and family therapy*, 41(1), 86-101.
- Landrau, E., & Short, J. (2010). The role of relationship attachment styles in disordered eating behaviors. *Colonial Academic Alliance Undergraduate Research Journal*, 1(1), 11.
- Lu, Q., Tao, F., Hou, F., Zhang, Z., & Ren, L.-l. (2016). Emotion regulation, emotional eating and the energy-rich dietary pattern. A population-based study in Chinese adolescents. *Appetite*, 99, 149-156.
- Mirzaei, M., Zarei, I., & Sadeghifard, M. (2019). The role of self-differentiation and economic factors, mediated by family conflicts, in preventing psychological and social damages. *Culture of Counseling and Psychotherapy*, 10(37), 143-170. (In Persian)
- Mohammadzadeh, A., & Rezaei, A. (2014). The role of gender in the factor structure of eating disorder attitudes in a student population. *Behavioral Sciences Research*, 12(3), 406-415. (In Persian)
- Qian, J., Wu, Y., Liu, F., Zhu, Y., Jin, H., Zhang, H.,... Yu, D. (2021). An update on the prevalence of eating disorders in the general population: a systematic review and meta-analysis. *Eating and Weight Disorders-Studies on Anorexia, Bulimia and Obesity*, 1-14.
- Racine, S. E., & Horvath, S. A. (2018). Emotion dysregulation across the spectrum of pathological eating: Comparisons among women with binge eating, overeating, and loss of control eating. *Eating disorders*, 26(1), 13-25.
- Rotella, F., Fioravanti, G., Godini, L., Mannucci, E., Faravelli, C., & Ricca, V. (2015). Temperament and emotional eating: A crucial relationship in eating disorders. *Psychiatry research*, 225(3), 452-457.

- Sahlan, R. N., Taravatrooy, F., Quick, V., & Mond, J. M. (2020). Eating-disordered behavior among male and female college students in Iran. *Eating Behaviors, 37*, 101378.
- Stice, E., Shaw, H., & Marti, C. N. (2007). A meta-analytic review of eating disorder prevention programs: Encouraging findings. *Annu. Rev. Clin. Psychol., 3*, 207-231.
- Svaldi, J., Griepenstroh, J., Tuschen-Caffier, B., & Ehring, T. (2012). Emotion regulation deficits in eating disorders: a marker of eating pathology or general psychopathology? *Psychiatry research, 197*(1-2), 103-111.
- Tajik, N., & Lotfi Kashani, F. (2019). Correlation of eating attitude with Emotional cognitive regulation styles, anxiety sensitivity and attachment style in women with obesity. *Journal of Health Promotion Management, 8*(6), 48-56.
- Tajik, N., & Lotfi Kashani, F. (2019). The correlation of attitude towards eating with cognitive emotion regulation styles, anxiety sensitivity, and attachment style in obese women. *Journal of Health Promotion Management, 8*(6), 48-56. (In Persian)
- Wilksch, S. M., O'Shea, A., Ho, P., Byrne, S., & Wade, T. D. (2020). The relationship between social media use and disordered eating in young adolescents. *International Journal of Eating Disorders, 53*(1), 96-106.
- Yavuz Güler, Ç., & Karaca, T. (2021). The role of differentiation of self in predicting rumination and emotion regulation difficulties. *Contemporary Family Therapy, 43*(2), 113-123.