



The relationship between childhood emotional maltreatment and disordered eating behaviors among students: Mediating role of emotion dysregulation: A cross-sectional study

Nasim Ghanei¹, Hossein Pourshahriar¹, Omid Shokri²

1 Department of Applied Psychology, School of Education and Psychology, Shahid Beheshti University, Tehran, Iran

2 Department of Educational and Developmental Psychology, School of Education and Psychology, Shahid Beheshti University, Tehran, Iran

Original Article

Abstract

BACKGROUND: Previous studies have shown that childhood emotional maltreatment (CEM) plays a role in development of disordered eating behaviors (DEBs). Difficulty in emotion regulation is another factor influencing disordered eating. This study was directed to examine the association between CEM and DEB among students, by considering the emotion dysregulation as a mediator.

METHODS: This correlational study was conducted in form of a cross-sectional design, using structural equation modeling (SEM) to analyze the data collected from 401 non-native undergraduate students through convenience sampling method. Childhood Trauma Questionnaire (CTQ) was used to assess childhood emotional abuse and neglect. Emotion dysregulation and DEB were respectively measured using the Difficulties in Emotion Regulation Scale (DERS) and Eating Attitude Test (EAT).

RESULTS: The partial mediation model of difficulties in emotion regulation in the association between CEM and DEB among male and female students had a good fit to the data. The outcomes of the gender specificity of structural relations in the model confirmed gender invariance of the structural model. All regression weights in the model were statistically significant and the CEM and emotion dysregulation variables accounted for 22%, 17%, and 35% of the variance of DEB among the entire sample, female students, and male students, respectively.

CONCLUSION: The outcomes are in line with research findings suggesting a relationship between CEM and DEB, and confirm the role of emotion dysregulation as a mediator. This highlights the importance of assessment of childhood experiences in treatment of eating disorders and introduce emotion regulation as a significant target for intervention.

KEYWORDS: Eating Disorders; Emotional Regulation; Emotions

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Introduction

Eating and feeding behaviors are changing dramatically around the world. Along with the change in the beauty ideals, the concept of eating behavior patterns has also undergone a

change. Significant shift in beauty standards of society toward a leaner body has led to obsession with dietary restraint and weight loss, as well as an increasing prevalence of disordered eating behaviors (DEBs). Epidemiological studies report that the prevalence rate of eating disorders among female students lies within a range of 11%-17%¹ and among male students is about 4%.² DEBs are defined as problematic eating behaviors, compulsive overeating, restricted

Corresponding Author:

Nasim Ghanei; Department of Applied Psychology, School of Education and Psychology, Shahid Beheshti University, Tehran, Iran

Email: nasim.ghanei@yahoo.com

eating, meal skipping, and inappropriate weight loss or weight control methods including purging behaviors (e.g., self-induced vomiting and/or misuse of laxatives/diuretics) that due to inadequate frequency and/or severity do not satisfy the diagnostic criteria for a feeding or eating disorder namely anorexia nervosa, bulimia nervosa, binge-eating disorder (BED), or other specified/unspecified feeding or eating disorder. DEBs, although less severe, are more prevalent than eating disorders, and negatively impact the affected individuals' health and quality of life;³ they have become one of the health challenges worldwide in recent years.⁴

Childhood maltreatment, as a multidimensional construct, consists of various types of abuse and neglect, including physical abuse, sexual abuse, emotional abuse, physical neglect, and emotional neglect. The experience of childhood maltreatment has played a role as a risk factor in development of eating disorders.^{5,6} Emotional maltreatment has been defined as a construct including emotional abuse and emotional neglect. Emotional abuse has been defined as "verbal assaults on a child's sense of worth or well-being, or any humiliating, demeaning, or threatening behavior directed toward a child by an older person"; and emotional neglect has been described as "the failure of caretakers to provide a child's basic psychological and emotional needs, such as love, encouragement, belonging, and support".⁷ The association between childhood emotional abuse and DEBs has been supported by research findings.⁸⁻¹⁰

Emotion regulation refers to the ability to recognize emotions as well as control how emotions are felt, experienced, and expressed^{8,11} and is an attempt to influence which emotions are experienced, and when and how the emotions are experienced or expressed. Gratz and Roemer¹² conceptualized emotion regulation/dysregulation as a multidimensional construct which involves the ability to modulate

emotional arousal, to have an awareness and understanding of emotional experience, to accept emotional response, and to function purposively regardless of emotional state. Among all forms of childhood maltreatment, emotional maltreatment showed stronger associations with emotion dysregulation.^{8,9}

Since DEBs are often associated with negative consequences in the areas of physical and mental health, disordered eating has the potential to become a clinical eating disorder if no measures are taken to prevent and treat it. The role of "childhood emotional maltreatment (CEM)" and "emotion dysregulation" as risk factors in the development of eating psychopathology reflects the need to formulate preventive measures for childhood traumatic events. Given that no similar research has been directed in this population, this study's purpose was to examine the association between CEM and DEBs among undergraduate male and female students, considering emotion dysregulation as a mediator.

Materials and Methods

The present correlational study was carried out in a cross-sectional design using structural equation modeling (SEM). The study population consisted of all non-native undergraduate male and female students of Shahid Beheshti University, Tehran, Iran. The research sample was selected through convenience non-probability sampling method due to executive constraints, including failure to access the population members list. The data were collected from 401 participants (aged 18-23 years), of whom 54.1% were women, at Shahid Beheshti University from February to June 2018. Given the research sample size and the number of parameters included in the hypothesized model, the ratio of 16 to 1 was achieved. Inclusion criteria were: 1) being 18 to 24 years old, 2) enrolment in the second semester of 2017-2018 academic years at Shahid Beheshti University and residency in

the dormitories of the university, and 3) obtaining informed consent. The research data were collected by demographic questionnaire, Childhood Trauma Questionnaire (CTQ), Difficulties in Emotion Regulation Scale (DERS), and Eating Attitude Test (EAT). The data were analyzed using SEM by SPSS Amos software (version 26.0, IBM Corporation, Armonk, NY, USA). To examine the gender invariance of the hypothesized model, the multi-group SEM was used. Firstly, the baseline unconstrained model (the hypothesized model without parameter constraints) was tested. Subsequently, the gender-based equivalence of the hypothesized model was analyzed through imposing equality constraints on measurement residuals, structural residuals, structural covariances, structural weights, and measurement weights in the two groups of male and female participants. In this study, the researcher emphasized on the theoretical and empirical evidence and hypothesized that some of the common dispersions between the conceptual circles of emotional maltreatment and DEBs in male and female students were explained by emotion dysregulation. The assumptions of SEM were examined. To handle the missing values which were less than 5% of the entire dataset for each variable, the Expectation-Maximization (EM) imputation method was used. The distribution of data was also found to be normal. The assumption of linear relationships was verified by examining the scatterplots. Further, the assumption of multicollinearity was examined by tolerance and variance inflation factor (VIF) and the criterion was confirmed. All stages of the study were conducted based on the latest version of the Declaration of Helsinki.

Demographic questionnaire, CTQ, DERS, and EAT were utilized for data collection in this study.

Demographic checklist: This checklist was designed and used by the researcher to collect

data including the participants' age, sex, education, weight, and height.

CTQ: CTQ⁷ was used to assess childhood maltreatment experience. This instrument consists of 28 items and measures childhood maltreatment in five dimensions of physical abuse, sexual abuse, emotional abuse, physical neglect, and emotional neglect and provides a score from 5 to 25 for each of subscales. CTQ also provides a total score for childhood maltreatment scale. The internal reliability of this tool has been reported to be acceptable in the study of Khosravani et al.¹³ This research study used the emotional abuse and the emotional neglect subscales to measure CEM. The internal consistency of the emotional abuse subscale and the emotional neglect subscale was reported to be 0.82 and 0.80, respectively, in this study.

EAT-26: This questionnaire was developed as a self-assessment screening tool for eating-related disordered attitudes and behaviors. The tool has 26 items, using a six-point Likert scale, and consists of three subscales of dieting, bulimia and food preoccupation, and oral control. This scale provides a total score and three proprietary scores for the named subscales. The higher scores on each subscale and the whole scale indicate more abnormalities in eating attitudes and behaviors. The psychometric properties of this measure were reported to be optimal in Iranian sample. The internal consistency of this tool was reported to be 0.76-0.92, its test-retest reliability was 0.26-0.64, and the discriminant validity of the tool was reported acceptable. In this research, internal consistency coefficients of overall score and dieting, bulimia and food preoccupation, and oral control were estimated to be 0.80, 0.81, 0.72, and 0.67, respectively.

DERS: DERS is a self-report measure, consisting of 36 items, developed by Gratz and Roemer¹² to assess the difficulty in emotion regulation in six dimensions. Responses are measured using a five-point Likert scale from 1

(almost never) to 5 (almost always). This tool has six subscales of non-acceptance of emotional responses, difficulty engaging in goal-directed behavior, impulse control difficulties, lack of emotional awareness, limited access to emotion regulation strategies, and lack of emotional clarity. The outcomes of the research conducted by Cancian *et al.*¹⁴ showed that this tool had acceptable simultaneous factor analysis, validity, and reliability. In this research, the internal consistency coefficients of the total score and subscales of non-acceptance of emotional responses, difficulty engaging in goal-directed behavior, impulse control difficulties, lack of emotional awareness, limited access to emotion regulation strategies, and lack of emotional clarity were estimated as 0.90, 0.84, 0.85, 0.84, 0.77, 0.86, and 0.75, respectively.

Results

Descriptive indices of the research variables for male and female participants are presented in table 1.

Descriptive findings showed that the sample consisted of 184 male and 217 female students. Test results of the correlation between aspects of CEM including emotional abuse and emotional neglect with dimensions of emotion dysregulation, including non-acceptance of emotional responses, difficulty engaging in goal-directed behavior, impulse control difficulties, lack of emotional awareness, limited access to emotion regulation strategies, and lack of emotional clarity, and facets of DEBs, including dieting, bulimia and food preoccupation, and oral control showed that there were positive and significant relationships between childhood emotional abuse and childhood emotional neglect and the dimensions of emotion dysregulation and DEBs in the two groups of male and female students ($P < 0.05$). Furthermore, the correlations between the dimensions of emotion dysregulation and the facets of DEBs were all positive and significant in both male and female students samples ($P < 0.05$).

Table 1. Descriptive indices of research variables in male and female students (sample size = 401)

Overall factor	Subscales	Group	Mean \pm SD
CEM	Childhood emotional abuse	Male (n = 184)	7.47 \pm 3.32
	Childhood emotional neglect		10.16 \pm 3.72
Emotion dysregulation	Non-acceptance of emotional responses		14.42 \pm 5.19
	Difficulty engaging in goal-directed behavior		14.59 \pm 4.22
	Impulse control difficulties		15.11 \pm 4.59
	Lack of emotional awareness		16.35 \pm 3.92
	Limited access to emotion regulation strategies		19.55 \pm 6.26
	Lack of emotional clarity		12.56 \pm 3.77
DEBs	Dieting		2.65 \pm 2.30
	Bulimia and food preoccupation		1.04 \pm 1.11
	Oral control		2.62 \pm 2.70
CEM	Childhood emotional abuse	Female (n = 217)	7.28 \pm 2.93
	Childhood emotional neglect		10.11 \pm 4.24
Emotion dysregulation	Non-acceptance of emotional responses		13.17 \pm 5.16
	Difficulty engaging in goal-directed behavior		14.73 \pm 4.64
	Impulse control difficulties		14.82 \pm 4.96
	Lack of emotional awareness		15.61 \pm 4.77
	Limited access to emotion regulation strategies		19.62 \pm 6.10
	Lack of emotional clarity		11.90 \pm 3.67
DEBs	Dieting		3.67 \pm 3.27
	Bulimia and food preoccupation		1.12 \pm 1.83
	Oral control		2.47 \pm 2.61

CEM: Childhood emotional maltreatment; DEB: Disordered eating behavior; SD: Standard deviation

In order to explain the statistical dispersion of the distribution of DEBs by CEM and the mediation of emotion dysregulation in the samples of male students, female students, and the entire students, SEM was used, as presented in figure 1. The hypothesized model of the structural relationships between CEM and DEBs through mediation of difficulty in emotion regulation was tested in the entire sample of male and female students, the sample of female students, and the sample of male students and the results are presented, respectively.

The fit indices of the hypothesized model in

the entire sample of students including chi-square (χ^2), the ratio of chi-square to degree of freedom (df) index (χ^2/df), comparative fit index (CFI), goodness of fit index (GFI), adjusted GFI (AGFI), and root mean square error of approximation (RMSEA) were computed as 151.05, 3.68, 0.87, 0.88, 0.85, and 0.09, respectively. The values greater than 3 for the ratio of chi-square to df index (χ^2/df), values greater than 0.08 for RMSEA, and values less than 0.90 for CFI, GFI, and AGFI stress the necessity of modifying the hypothesized model in order to improve its fit to the data.

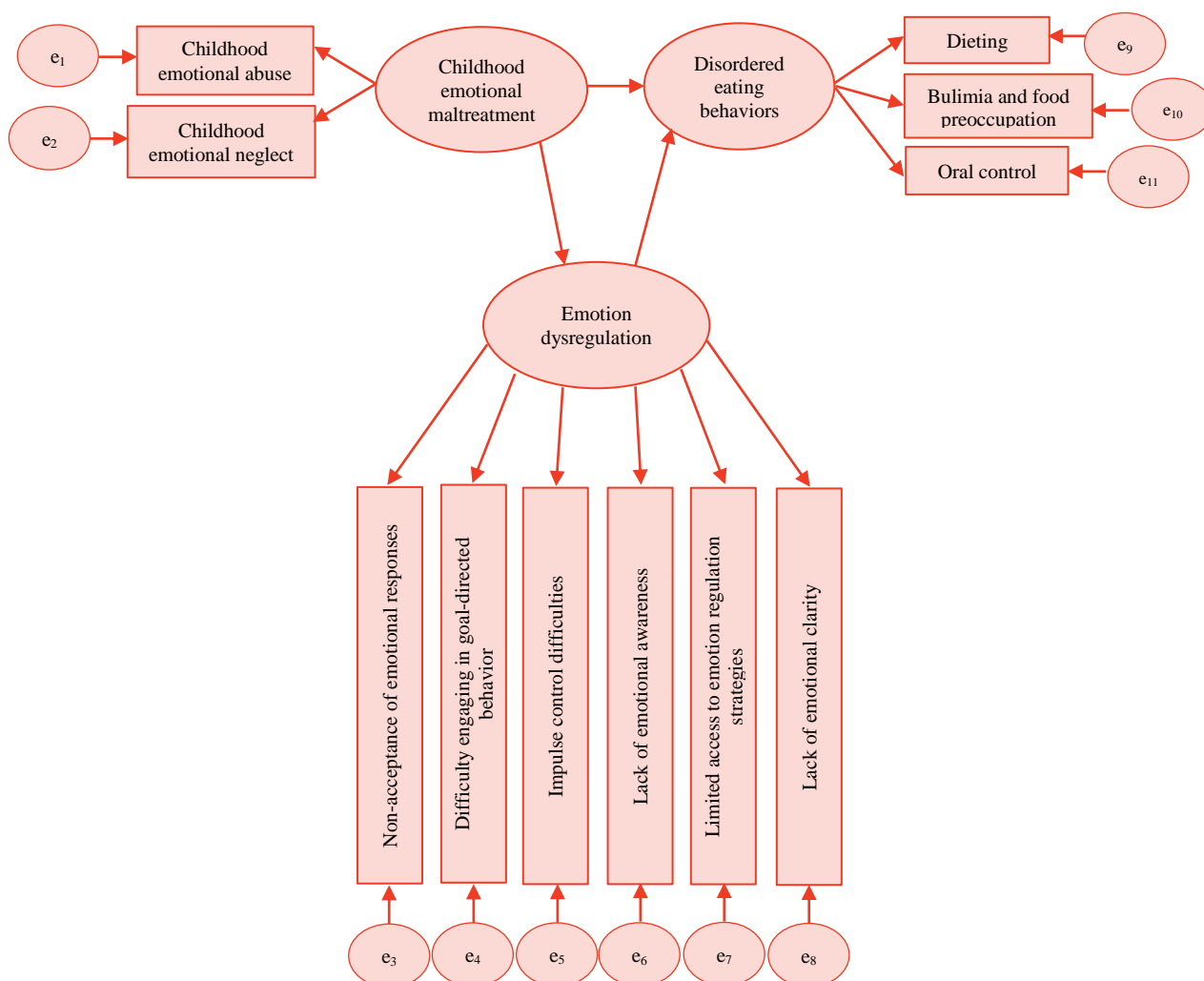


Figure 1. The hypothesized model of mediating role of emotion dysregulation in relationship between childhood emotional maltreatment (CEM) and disordered eating behaviors (DEBs)

In order to improve the model fitness to the sample data, a covariance was considered between error residuals of emotional abuse and emotional neglect indicators of CEM latent variable. For emotion dysregulation latent variable, the covariances were considered between the error residuals of difficulty engaging in goal-directed behavior and impulse control difficulties, difficulty engaging in goal-directed behavior and lack of emotional awareness, as well as lack of

emotional awareness and lack of emotional clarity indicators. Another covariance was taken into account between the error residuals of dieting and bulimia and food preoccupation indicators of DEBs latent variable, as presented in figure 2. Given the applied modifications and a 5-unit decrease of the df in the modified model, the numerical value of χ^2 in the model was dropped by 65.38 units and the values of other fit indices were improved, satisfying Meyers *et al.* rule, as provided in table 2.

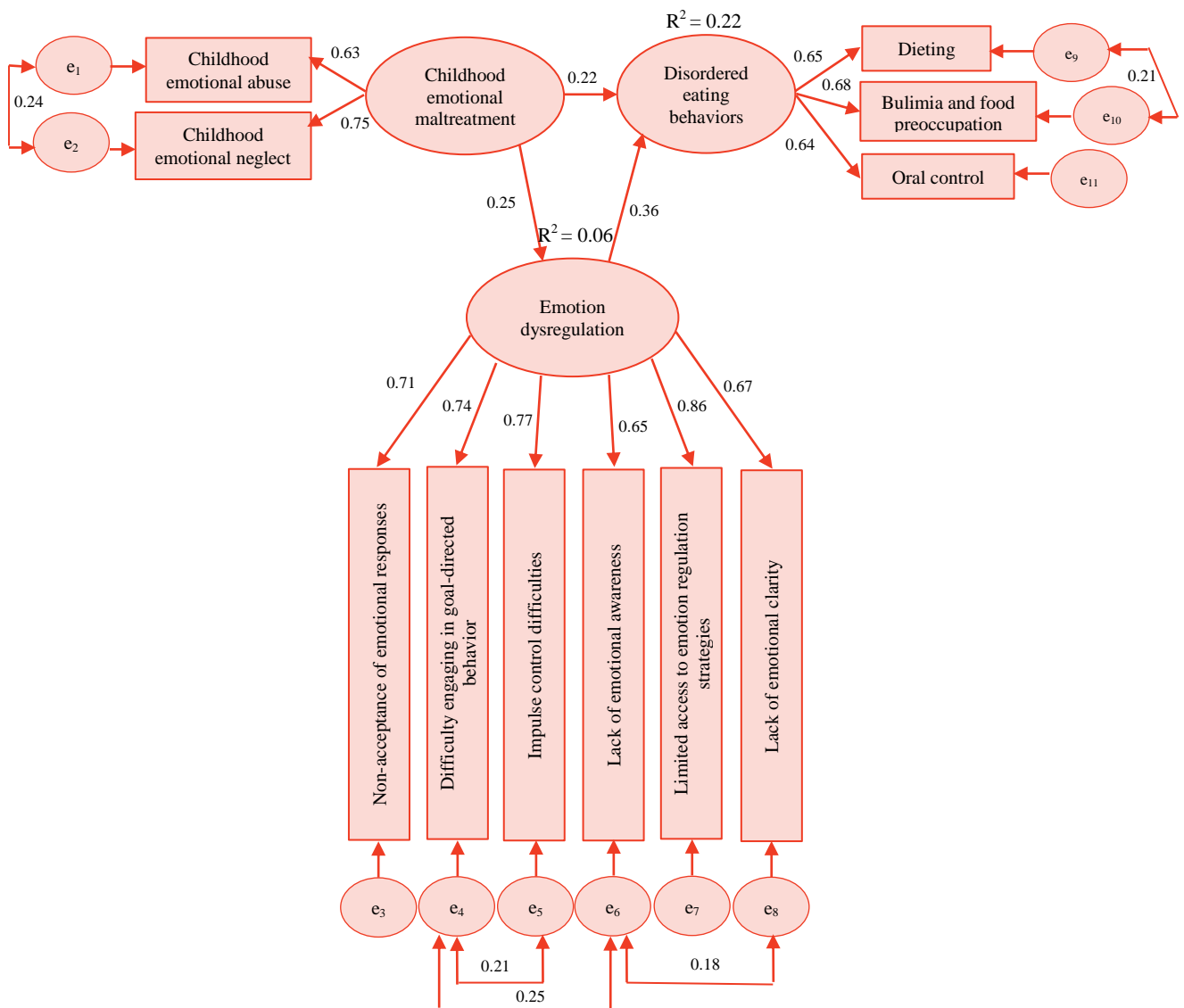


Figure 2. The modified model of mediating role of emotion dysregulation in relationship between childhood emotional maltreatment (CEM) and disordered eating behaviors (DEBs) among the entire sample of female and male undergraduate students

Table 2. Goodness of fit indices (GFIs) for the hypothesized model in the entire sample of students

Model	χ^2	df	χ^2/df	GFI	AGFI	CFI	RMSEA
Before modification	151.05	41	3.68	0.88	0.85	0.87	0.09
After modification	86.68	36	2.41	0.96	0.93	0.96	0.05

df: Degree of freedom; GFI: Goodness of fit index; AGFI: Adjusted goodness of fit index; CFI: Comparative fit index; RMSEA: Root mean square error of approximation

On the basis of findings presented in figure 2, in the hypothesized partial mediation model of emotion dysregulation in association between CEM and DEBs in the entire sample of male and female students, all path coefficients between the latent variables were statistically significant ($P < 0.05$). Moreover, 6% of emotion dysregulation distribution variance was explained by CEM. CEM and emotion dysregulation together accounted for 22% of the DEB scores variance.

In this research, bootstrap method was utilized to determine the statistical significance of the indirect effect of CEM on DEBs through emotion dysregulation. In this model, the indirect effect of CEM on DEBs through emotion dysregulation in the entire sample of male and female students was found to be 0.10 which was statistically significant ($P < 0.05$).

The hypothesized model of the structural relationships between CEM and DEBs through mediation of emotion dysregulation in the sample of female students was subsequently tested. The results of the fit indices of the hypothesized model in female students including chi-square (χ^2), the ratio of chi-square to df index (χ^2/df), CFI, GFI, AGFI, and RMSEA were computed as 158.56, 3.86, 0.85, 0.86, 0.82, and 0.10, respectively. Given the values of the fit indices, Meyers et al. stressed the necessity of modifying the hypothesized model in order to improve its fit to the sample data. After applying the modifications

presented in figure 3 and a 5-unit decrease in the df in the modified model, χ^2 of the model dropped by 72.79 units and the values of other fit indices were improved, as provided in table 3.

On the basis of findings presented in figure 3, in the hypothesized partial mediation model of emotion dysregulation in relationship between CEM and DEBs in the sample of female students, all path coefficients between the latent variables were statistically significant ($P < 0.05$). Moreover, 8% of emotion dysregulation distribution variance was explained by CEM. CEM and emotion dysregulation together explained 17% of the DEB scores variance.

Bootstrap method was used to determine the statistical significance of the indirect effect of CEM on DEBs through emotion dysregulation in the sample of female students. In this model, effect of CEM on DEBs through emotion dysregulation in the sample of female students was found to be 0.08 which was statistically significant ($P < 0.05$).

The hypothesized model of the structural relationships between CEM and DEBs through mediation of emotion dysregulation in the sample of male students was tested in the next step. The fit indices of the hypothesized model in the sample of male students including chi-square (χ^2), the ratio of chi-square to df index (χ^2/df), CFI, GFI, AGFI, and RMSEA were computed as 121.79, 2.97, 0.86, 0.90, 0.85, and 0.09, respectively.

Table 3. Goodness of fit indices (GFIs) for the hypothesized model in the sample of female students

Model	χ^2	df	χ^2/df	GFI	AGFI	CFI	RMSEA
Before modification	158.56	41	3.86	0.86	0.85	0.87	0.10
After modification	85.77	36	2.38	0.94	0.90	0.94	0.06

df: Degree of freedom; GFI: Goodness of fit index; AGFI: Adjusted goodness of fit index; CFI: Comparative fit index; RMSEA: Root mean square error of approximation

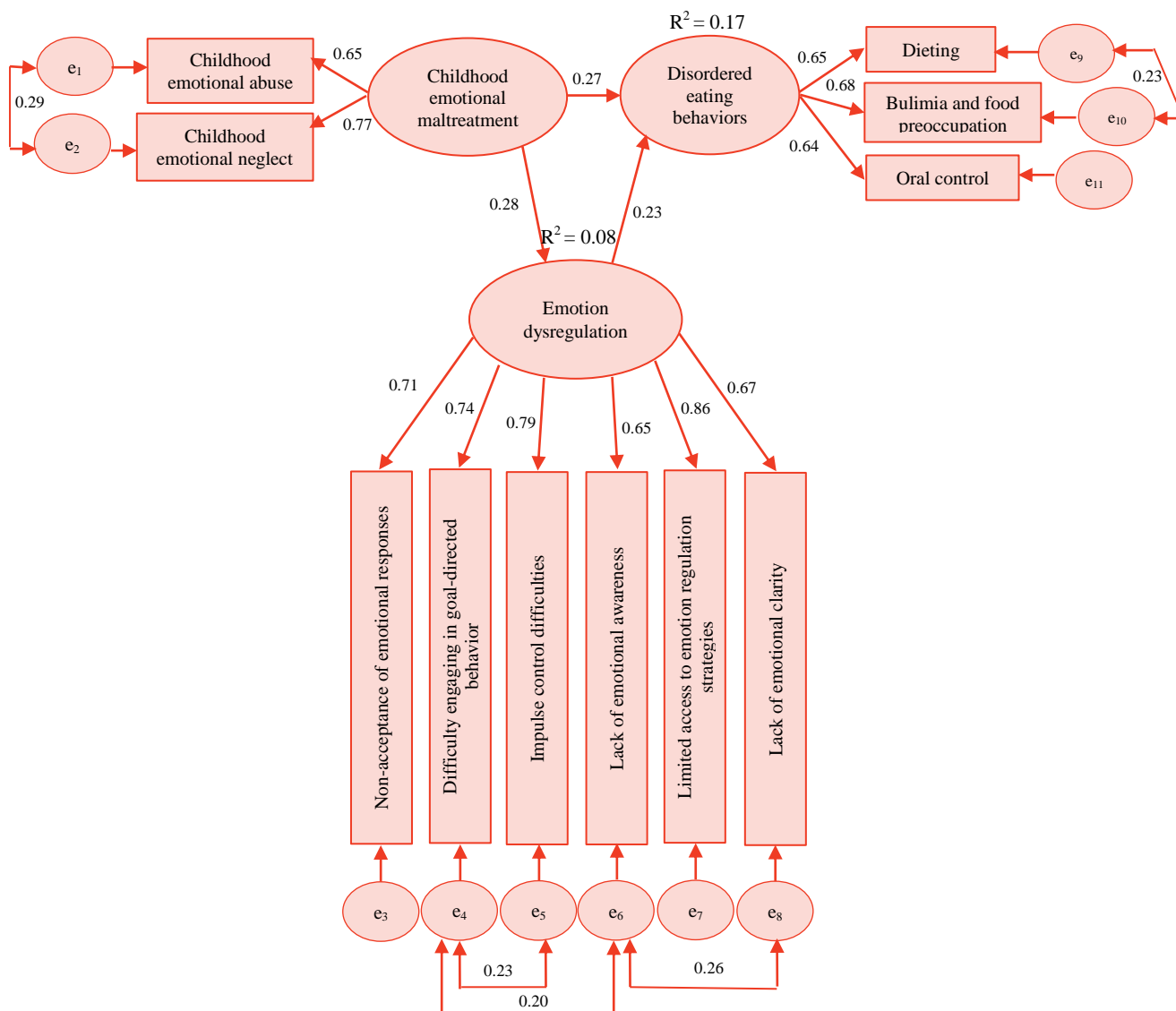


Figure 3. The modified model of mediating role of emotion dysregulation in relationship between childhood emotional maltreatment (CEM) and disordered eating behaviors (DEBs) among female undergraduate students

The fit indices of the hypothesized model in the sample of male students including chi-square (χ^2), the ratio of chi-square to df index (χ^2/df), CFI, GFI, AGFI, and RMSEA were computed as 121.79, 2.97, 0.86, 0.90, 0.85, and 0.09, respectively. Consequently, the necessity of modifying the hypothesized model to improve its fit to the sample data are stressed. After applying the modifications presented in figure 4 and a 3-unit decrease of the df in the

modified model, χ^2 of the model dropped by 72.79 units and the values of other fit indices were improved as provided in table 4.

On the basis of findings presented in figure 4, in the hypothesized partial mediation model of difficulty in emotion regulation in the relationship between CEM and DEBs in the sample of male students, all path coefficients between the latent variables were statistically significant ($P < 0.05$).

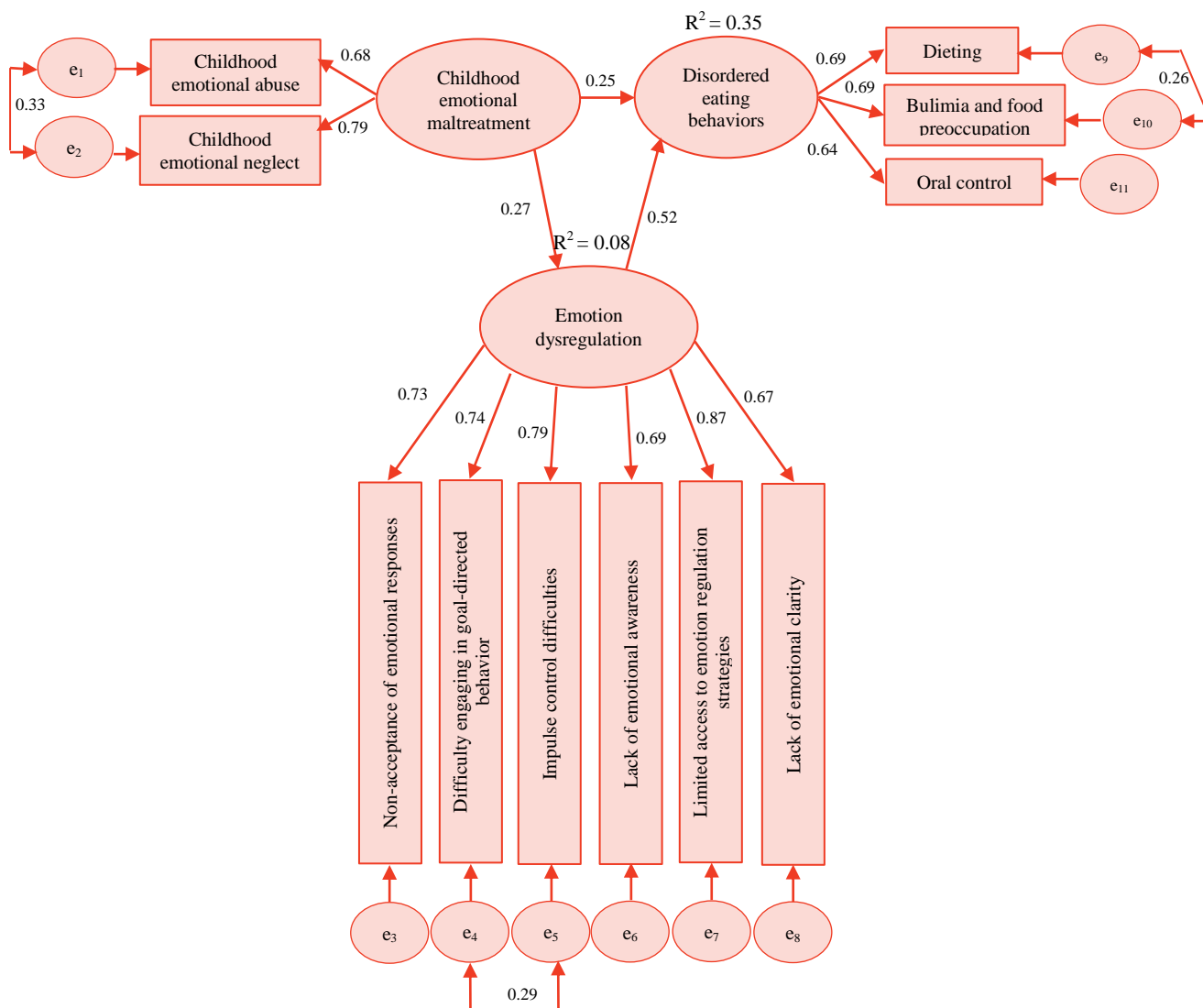


Figure 4. The modified model of mediating role of emotion dysregulation in relationship between childhood emotional maltreatment (CEM) and disordered eating behaviors (DEBs) among male undergraduate students

Moreover, 8% of emotion dysregulation distribution variance was explained by CEM. CEM and emotion dysregulation together accounted for 35% of the DEB score variance.

Bootstrap method was used to determine the statistical significance of the indirect effect of the CEM on DEBs through emotion dysregulation in the sample of male students.

Table 4. Goodness of fit indices (GFIs) for the hypothesized model in the sample of male students

Model	χ^2	df	χ^2/df	GFI	AGFI	CFI	RMSEA
Before modification	121.79	41	2.97	0.90	0.85	0.86	0.09
After modification	40.04	38	1.05	0.96	0.93	0.99	0.01

df: Degree of freedom; GFI: Goodness of fit index; AGFI: Adjusted goodness of fit index; CFI: Comparative fit index; RMSEA: Root mean square error of approximation

Table 5. Gender invariance of the hypothesized partial mediation model of emotion dysregulation

Model	Constrained/ unconstrained	χ^2	χ^2/df	CFI	GFI	AGFI	RMSEA	$\Delta\chi^2$	Δdf	P
Unconstrained	Unconstrained model	120.620	1.680	0.962	0.948	0.904	0.041	-	-	-
Constrained	Measurement residuals	141.980	1.690	0.945	0.927	0.905	0.041	20.350	19	0.25
	Structural residuals	132.240	1.540	0.964	0.943	0.912	0.037	11.620	14	0.64
	Structural covariance	132.230	1.570	0.962	0.943	0.910	0.038	11.610	12	0.48
	Structural weights	132.210	1.590	0.961	0.943	0.909	0.039	11.590	11	0.40
	Measurement weights	127.040	1.590	0.963	0.945	0.909	0.038	6.410	8	0.60

df: Degree of freedom; CFI: Comparative fit index; GFI: Goodness of fit index; AGFI: Adjusted goodness of fit index; RMSEA: Root mean square error of approximation

In this model, indirect effect of CEM on DEBs through emotion dysregulation was found to be 0.15 in the sample of male students which was statistically significant ($P < 0.05$).

In order to analyze the gender invariance of the structural relationships in the hypothesized partial mediation model of emotion dysregulation in association between CEM and DEBs, the equivalence of structural relationships in the model was tested for male and female students groups. Accordingly, firstly, a baseline unconstrained model was developed and tested in two groups of male and female students. Subsequently, gender-based equivalence of the hypothesized model was tested by imposing equality constraint on measurement residuals, structural residuals, structural covariances, structural weights, and measurement weights in the two groups of female and male students. As the results provided in table 5 reflect, the gender invariance of the structural model in male and female students groups were confirmed.

Discussion

The study was directed to examine the association between the experiences of CEM and DEBs among undergraduate students, by considering emotion dysregulation as a mediator. The findings confirmed that the hypothesized partial mediating model of emotion dysregulation in association between

CEM and DEBs had a good fit to the sample data. The outcomes of the gender specificity of structural relations in the hypothesized model were equivalent for both groups of male and female undergraduate students. Furthermore, a significant part of the dispersion of DEB scores was explained by CEM and emotion dysregulation in the hypothesized model for the entire sample of students, the sample of female students, and the sample of male students.

This study's findings support the hypothesized model of the relationship between CEM experience and DEBs through mediation of emotion dysregulation in line with previous studies^{8,10} although some researches have studied this relationship in clinical communities.¹⁰

On the basis of findings of previous studies, there is a positive and significant relationship between childhood emotional abuse and DEBs through mediation of alexithymia and general distress (as a component of depression and anxiety) among female students.¹⁵ The study's results also supported a positive and significant relationship between childhood emotional abuse and alexithymia and a weak though significant complex association between childhood emotional abuse and DEBs.

Further, Mills *et al.*⁸ showed that disordered eating was associated with childhood emotional abuse, dysfunctional strategies of emotion regulation, and female gender among

adolescents (14 to 18 years). Further, an indirect relationship between childhood emotional abuse and eating psychopathology through dysfunctional strategies of emotion regulation was revealed. In this study, emotional neglect predicted lower levels of effective emotion regulation. This study's findings confirmed emotion regulation's role as the mediator of the association between childhood emotional abuse and DEBs and revealed that experience of emotional abuse and emotional neglect had distinguishing effects on emotion regulation. The research study by Corstorphine indicated that dysfunctional emotion regulation, rather than lack of effective emotion regulation, was associated with disordered eating; as some researchers have argued, DEBs are a form of dysfunctional emotion regulation strategy.¹⁶ Accordingly, there are some overlaps between the criterion variable (symptoms of eating disorders) and the mediating variable (dysfunctional emotion regulation).

The study by Moulton *et al.*¹⁰ provides further evidence to support an indirect link between childhood traumatic events and eating psychopathology. This research evaluated a wide range of childhood traumatic events. Child emotional abuse, physical abuse, emotional neglect, and physical neglect but not child sexual abuse showed a significant association with disordered eating. All types of childhood maltreatment significantly predicted difficulty in emotion regulation (and dissociation) although child emotional abuse was recognized as the only type of childhood maltreatment that independently predicted emotion dysregulation.

Bakalar *et al.*⁶ research findings indicated that experience of childhood adversity was associated with high body mass index (BMI) and eating disorders. Kimber *et al.*¹⁷ research study showed that individuals with childhood emotional abuse and neglect experiences were more likely to develop eating disorders in

adulthood. In this regard, Ergang *et al.*¹⁸ also revealed a significant negative association between the quality of maternal care and emotional eating in adulthood, reflecting the effects of the primary environment in development of eating disorders and DEBs.

Consistent with this study's findings, results of Mallorqui-Bague *et al.*¹⁹ research showed that deficit in emotion regulation was the core of all eating disorders and improved emotion regulation, especially in individuals affected by bulimia nervosa, was associated with desired therapeutic outcomes. In line with results of this study, Aguera *et al.*²⁰ research study indicated that difficulty in emotion regulation was observable in men with eating disorders, similar to women. The findings of Anderson *et al.*²¹ study revealed the importance of employing therapies focused on development of adaptive emotion regulation strategies in the treatment of eating psychopathology.

Emotional maltreatment, where the child's emotions or the importance and validity of the child's emotions are ignored, can lead to difficulties in identifying, expressing, and managing emotions. The caregiver's inappropriate reaction to emotional experiences of the child may result in the child's confusion about his or her emotion, which may negatively affect one's capacity to tolerate and regulate emotions in long term.

Deficit in emotion management ability exposes the individual to experience more general distress and in the absence of more adaptive strategies, DEBs may be a way to cope with severe psychological distress and unpleasant experiences associated with these distresses.

Given that the experience of childhood emotional abuse and neglect will have consequences as difficulty in managing and regulating emotions, individuals who are considered victims of CEM will profit from the interventions which train and develop adaptive strategies to manage psychological

distresses and negative emotions.

This research study was conducted with some limitations. Since eating disorders are still widely considered as a feminine issue, men affected by eating disorders face challenges to attend clinical settings for diagnosis and treatment or even to express their symptoms. Reliance on self-report instruments to collect data should be cautious since such measuring tools rely on the accuracy, precision, and integrity of participants about their experiences and behaviors, and thus, the provided data may be biased. It is suggested that biological evaluations be also used in future studies along with paper and pen tools. Finally, retrospective studies and evaluation of childhood experiences can be biased.

Conclusion

In summary, this study provides a theoretically useful and economical model integrating the experience of CEM, emotion dysregulation, and DEBs in adulthood that fits the data collected from undergraduate students residing in dormitories of Shahid Beheshti University. The findings of this research study confirm the relationship between the experience of emotional abuse and emotional neglect in childhood and DEBs in adulthood directly and indirectly through mediating role of emotion dysregulation among male and female undergraduate students. The findings of this research study provide further empirical evidence for the stress-vulnerability model and the trauma theory indicating that traumatic experiences lead to deficits in emotion processes.

Conflict of Interests

Authors have no conflict of interests.

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