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MOTHERS' OVERPROTECTION AND EATING PROBLEMS IN COLLEGE STUDENTS: A MEDIATING ROLE OF EMOTION DYSREGULATION

School of Professional Psychology, University of Management and Technology, Lahore - Pakistan

Address for correspondence:
Ghuncha Naqvi
School of Professional Psychology, University of Management and Technology, Lahore - Pakistan

E-mail:
ghuncha.naqvi@umt.edu.pk

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Farah Iqbal, Ghuncha Naqvi✉, Sadia Saleem, Sayyeda Taskeen Zahra

ABSTRACT

Objectives: To find out the disordered eating behavior and its relationship with mother overprotectiveness and emotion dysregulation and to find out the mediating role of emotional dysregulation between mother's overprotection and eating problems.

Methodology: Correlational research design was used in this research. Through multistage sampling, data was collected from 300 college students (Men=166, Women=134). Three measures were used in this study which were EMBU-A, Eating Disorder Examination Questionnaire and Emotion Regulation Scale. Pearson product moment correlation was conducted to determine relationship among disordered eating behavior, mother's overprotectiveness and emotional dysregulation. Mediation analysis was carried out by Hayes model bootstrapping approach.

Results: Correlation analysis revealed that mother's overprotection and emotion dysregulation were significantly positively correlated with eating problems ($r = .13, p < .05$) and eating problems ($r = .24, p < .001$). Moreover, emotion dysregulation significantly mediated the relationship of mother overprotection and eating problems = .21, $SE = .05$.

Conclusion: Emotions can shift the focus of eating behaviors while considering the role of gender and maternal bonding during the adolescence period. A healthier relationship demands positive maternal practices that helps in decreasing the prevalence of disturbed eating behaviors. Based on the results awareness needs to be created among mental health professional to arrange seminars and trainings for students and parents from both gender regarding the consequences of disordered eating behavior in their children.

Keywords: Mother's overprotection; Emotion regulation; Eating behaviors; College students

INTRODUCTION

Following the disruptive eating practices, an alarming change worldwide have led to witness rapid transition within different cultures. This shift in eating patterns prevalence among adolescents is dependent on amalgamation of physiological, psychological, behavioral and cognitive components.¹ Reflecting on it through stress paradigm, weight stigma keeps evolving under the influence of adapted psychological mediation framework.² Mass media within this stress paradigm is becoming major concern in producing disturbed eating attitudes among students imposing hazardous effects of stigmatizing and discrimination on individual mental health.^{3,4} It has been found that many socio-cultural factor induces increased prevalence rate in eating disorders within culture-bound syndrome.⁵ The vulnerability of comparing oneself with an ideal figure highlight the significance of understanding positive and adverse aspects of this problem among the adolescents that

usually further develops into chronic illness.⁶ Adolescence is a significant developmental life stage where health behaviors are often established and become habitual. Unhealthy eating behaviors are particularly common characteristics of many adolescents girls and have a significant influence on both instant and long term physiological and mental health conditions. During adolescence, challenges may arise in the parent-adolescent relationship that are most commonly related with mothers and adolescents adjusting to teen-agers' biological development, social life changes, role moves, and fluctuations in self-identities, as well as the adolescents' individuation and autonomy-striving.⁷

Simultaneously, perceptions of the Pakistani youth addressed impact of these factors to be highly dependent on the intervention of the family members as they play or lack crucial role when it comes to determining individuals' food choices and eating behaviors.⁸

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The prevalence of eating disorders agreeing with the DSM, the prevalence of anorexia nervosa amongst young girls is around 0.4%. The occurrence of Bulimia Nervosa in young adolescents is 1 to 1.5%, whereas the occurrence of binge eating disorder among young adult men and women 1.6 and 0.8% respectively. Therefore, the prevalence and incidence of disordered eating behaviors in are much more recurrent as compared to eating disorders which met the full criteria. From a research it was concluded that 40-50% of college student's express some specific sort of disordered eating patterns.⁹ Anorexia nervosa and bulimia nervosa are much prevalent in girls as compared to boys.¹⁰

Many factors have been highlighted in the previous researches that can leads toward disruptive eating behaviors. Substantial life-changing transitions have been observed in both western and Asian countries regarding the eating problems. These findings highlighted that students perceive certain factors as potential drivers to different eating problems.¹¹ Following the present study perspective, prior study highlighted the relationship between role of mother and disordered eating behaviors revealing that mothers' remarks about weight were associated with much symptoms of depression in their daughters.¹² This constant presence of mother involvement introduces university adolescents to the behaviors like feeling remorse, lacking empathetic behaviors towards others, impulsivity and sometimes even superficial charms which are usually categorized as psychopathic traits.¹³ Emergence of these psychopathic tendencies induces a high-risk factor with parenting styles and family communication which can later submerge into producing eating problems.¹⁴

Another factors that has been highlighted by the literature is emotional dysregulation which leads towards unhealthy eating behaviors. It has been found that individuals

who binge eat report greater levels of general emotion dysregulation, which may facilitate binge-eating behavior.¹⁵ Emotional dysregulation has been linked with self-image, where negative self-image led exclusively in the development of eating disorder symptoms. This aspect brings to the mindful parenting style that needs to be adopted by the mothers as emergence of eating problems and body-related issues during adolescence period.^{16,17}

As the maternal bonding prospers and refrains adolescents from becoming the target of the environmental challenges and inner conflicts, emotional self-regulation remain in check. Maladaptive emotional regulation precedes binge-eating and this claimed that approaching to their child through the inter-generational transmission of maternal bonding can positively influence the emotional regulation of the adolescents.^{18,19}

The present study provides a parenting framework in this context to sustain a link in promoting positive social behaviors with identified environmental determinants while university students are trying to adjust with them. This enables to look out for the barriers that are working as hindrance when approaching for the healthy eating behaviors. Detailed overview of these identified beneficial effects highlights the struggles of adolescents of different gender facing body-image problems that are usually associated with emotional eating patterns.²⁰ Emphasizing on the maternal approach, parent-child interactions will prosper as mother foster the use of adaptive strategies of emotion self-regulation among adolescents, leading to better adjusted psychological outcomes.^{21,22}

There is slight work has been done on work done on disordered eating behaviors as people do not considered this as a problematic condition. During the last few decades some researches has been done on eating disorder but disordered eating still remain

a neglected and unresolved in Pakistan. So basic rationale behind this study is to identify the disordered eating behavior in our culture despite of relying on western studies. Along with the understanding of disturbed eating in culture, mothers will be able to direct their attention to the child and maintain active presence during communication in longer run as it can assist in enhancing individual's attitude of compassion, and responsiveness by developing emotional awareness of the self and the adolescents' needs.

METHODOLOGY

The current study utilized a correlational research design to investigate the relationships among mothers' overprotection, eating problems, and emotion dysregulation. The study was approved by the Institutional Review Board (IRB) of the Institute of Clinical Psychology, University of Management and Technology, Lahore, Pakistan, with IRB No. 2019-05-066. Informed consent was acquired from all study participants with the assurance of confidentiality and anonymity.

The sample consisted of 300 adolescents, with a gender distribution of 55% women and 45% men, aged 14 to 19 years old ($M = 17.16$, $SD = 1.07$). The sample size was determined using Green's and Harris' recommendation of recruiting at least 30 participants for each predictor.^{23,24} Data were collected from government and private colleges in Lahore using a multistage sampling technique. The sample was divided into two strata: first-year students with 35% women and 65% men and second-year students with 68% women and 32% men. Participants with any diagnosed physical or psychological illnesses were excluded, and only adolescents from the 1st and 2nd years were included.

Several measures were used in the study. The perceived overprotection of mothers was measured using the mother overprotection

subscale of the EMBU-A scale developed by Gerlsma et al.²⁵ This scale consists of six items, and responses were scored separately for mother and father on a scale of 0 to 3, with higher scores indicating greater levels of overprotection. The Cronbach Alpha for mother overprotectiveness was 0.71, indicating good reliability.

Eating disorder indications and the severity of eating disorder features were measured using the Eating Disorder Examination-Questionnaire (EDE-Q) developed by Fairburn and Beglin.²⁶ This scale comprises 28 items, and responses were scored on a scale of 0 to 5, with higher scores indicating greater levels of eating problems. The Cronbach Alpha for EDE-Q was 0.81.

Emotion dysregulation was measured using the emotion regulation scale developed by Durrani.²⁷ This scale consists of 25 items, and responses were scored on a scale of 0 to 3, with higher scores indicating greater levels of emotion dysregulation. The Cronbach Alpha for emotion dysregulation was 0.89.

The study followed ethical considerations, with formal permission taken from the Institute of Clinical Psychology and provided to the different government and private colleges and academies that participated in data collection. Informed consent was obtained from the participants, and they were briefed about the aim and objectives of the research. Participants were provided with the right to withdraw, and those who agreed were debriefed at the end. The research protocol followed a specific sequence: demographic variables, emotion regulation scale, EMBU-A, and the Eating Disorder Examination-Questionnaire. Participants were also provided with debriefing, and concerns regarding the questions or while filling the questionnaire were addressed. The average time for the test was approximately 25 to 30 minutes. After all the questionnaires were filled, a series number was assigned to each

form. Pearson Product-Moment Correlation was used to explore the relationships among mothers' overprotection, eating problems, and emotion dysregulation. Mediation Analysis was carried out using Hayes Model in PROCESS.²⁸

RESULTS

Table 1 shows that there are women and men both participated in the study. Total number of women are 166 (55%) and men are 134 (45%) selected from private (35%) and government colleges (65%) of Lahore. Participants in this study were predominantly belonged to joint family system (53%) and studying in second year (62%).

Table 2 showed the relationships of mother-overprotection, emotion dysregulation and eating problems was explored through Pearson Product-Moment Correlation. Table 1 depicts that mother-overprotection is positively associated with emotion dysregulation ($r = .13, p < .05$) and eating problems ($r = .24, p < .001$). Furthermore, emotion dysregulation is also positively associated with eating problems ($r = .20, p < .001$). The r value of these correlations depicted that all study variables are moderately associated with each other.

Correlation analysis showed significant association of mother overprotection, emotional dysregulation, and eating problems therefore, the mediating role of emotion dysregulation in the association of mother over-

protection and eating problems was investigated by using Hayes model bootstrapping approach as reported in Table 2.

Table 3 shows the findings of mediation analysis showing the significant total effect of mother overprotection on eating problems ($\beta = .24, SE = .05, p < .001$). Additionally, results also portray significant direct effects of mother overprotection on emotion dysregulation ($\beta = .13, SE = .06, p < .05$) and emotion dysregulation on eating problems ($\beta = .18, SE = .06, p < .01$). Results suggests that emotion dysregulation significantly mediates the relationship of mother overprotection and eating problems, as after controlling the emotion dysregulation, the direct effect of mother over protection on eating problems is significant but the strength of association is reduced ($\beta = .21, SE = .05, p < .001$).

DISCUSSION

Following the present study, this relationship of how mother overprotectiveness and emotional dysregulation contribute towards the development of disordered eating behavior highlights that the mothers and emotion regulation are two important pillars in the development and growth of an individual.

With the present study results highlighting mother overprotectiveness positive relationship with disordered eating behaviors and fluctuating mediating role of emotional dysregulation, As Psychoanalytical theory signifies that how insight into the potential

Table 1: Frequencies and percentage of the demographic characteristics of the participant (n=300)

Variables		Men f(%)	Women f(%)	Total f(%)
Gender		134 (45)	166 (55)	300 (100)
Class	First Year	74 (65)	40 (35)	114 (38)
	Second Year	60 (32)	126 (68)	186 (62)
Institute	Private	102 (52)	93 (48)	105 (35)
	Government	32 (31)	73 (70)	195 (65)
Family System	Nuclear	68 (49)	72(51)	140 (47)
	Joint	66 (41)	94 (57)	160 (53)

Table 2: Correlation among mothers' overprotection, emotion dysregulation, and eating problems (n = 300)

Variables	M	SD	ED	EP
MOP	9.60	3.15	.13*	.24***
ED	33.42	14.03	-	.20***
EP	37.15	28.30	-	-

Note. ED = emotion dysregulation, EP = eating problems *p < .05, ***p < .001, df = 299.

Table 3: Regression coefficients, standard error, and model summary information for the mother overprotection, emotion dysregulation and eating problems (n=300)

Antecedent	Consequent							
	M(ED)				Y(EP)			
		β	SE	p		β	SE	p
MOP(X)	a	.13	.06	.02*	c'	.21	.06	.001***
ED(M)		---	---	---	b	.18	.05	.002**
Constant	i	.00	.06	1.00	i	.00	.06	1.00

Note. MOP = mother overprotection; ED = emotion dysregulation; EP = eating problems *p< .05, **p< .01, ***p<.001.

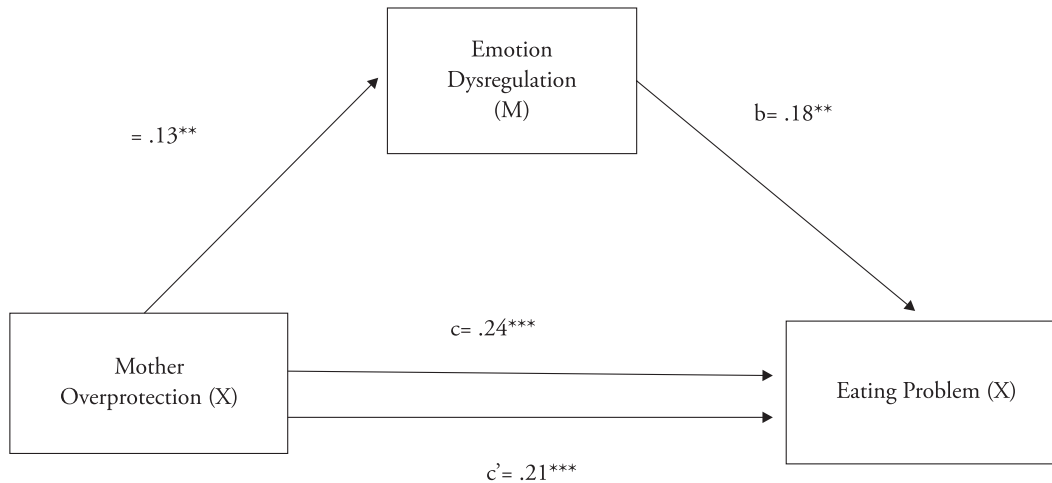


Figure 1: Mediation model of emotion dysregulation (M) on the association between mother overprotection (X) and eating problems (Y).

unconscious and symbolic representations of eating disorder symptoms can become consistent with the controlling or maternal overprotectiveness.²⁹ Prior literature also sheds lights on this stance where mothers themselves showing concerns regarding weight talk altering the emotional regulation of the adolescents and their eating behaviors. As in a cross-sectional study, researchers investigated a large sample of mothers from the most populous city in the American state of Minnesota in survey-based research. The researchers were interested in understanding the manner in which parenting choices diverged in terms of feeding the children. An effort was put in examining issues around

weight and eating practices in which parents were involved. The self-report account provided by maternal caregiver revolved around pushing child to eat judiciously, limit food with high carbohydrates, and pressuring the children to eat. The researchers bracketed parenting practices into high, medium, and low food secure homes. The researchers found that mothers who were more prone to self-report as food insecure constantly urged their ward to eat less, diet more, offer verbal remarks on the weight of the child as compared to mothers who self-reported to be more food-secure per se. Food-insecure mothers were also more occupied in passing comments on the weight of their son. Sim-

ilarly, in a step ever drastic, mothers who self-reported to be very low on food security went on to physical restrict their female child from eating. This was in stark contrast to food secure mothers who did not report exhibiting any such traits.³⁰

Findings of the following study are also consistent with the current research findings that sowed positive association between emotion dysregulation and eating behaviors. In a high school sample of 2700 male and female student, using a cross sectional study method, the researchers investigated the relationship between eating disorder behaviors and emotional dysregulation. The findings of

the study were based on the self-report by the students. Results indicated that the cycle of bingeing and purging had a relationship with emotional dysregulation. Bodily shape concerns e.g. weight and shape of the body concerned also had a direct relationship with purging and bingeing cycle. With respect to fasting, shape and weight concerns were proportionately concerned with the severity of fasting. It can be concluded that among young individuals there is a relationship between eating disorder behaviors and emotional regulation.³¹ Current research findings also supported from the previous researches, as it has been found that parent's psychological control has been associated with disordered eating behavior.³²

Furthermore, while attaining the comprehensive understanding of the disordered eating problems among college students showed that emotion dysregulation and mother over protection were found to be significant predictors of disordered eating behavior. Emotional dysregulation being a substantial predictor in developing disordered eating behavior in young college students determines that these adolescents might be facing hindrance in possessing appropriate strategies in regulating their emotions. From a psychological perspective where a period of identity development revolves arounds different intrapersonal, interpersonal and sociocultural domains and imbalance or over intervention of certain factor can impose adverse effects on adolescence.³³ Further evaluating these identity commitments to be usually affected by the traditional gender roles as characterized by the maternal figure of the households that disrupts emotional regulation of the adolescents' boys.³⁴ Outcomes of the present study being in line with the former research highlight descriptions of the clinical experience claiming disordered eating behavior to be sustaining poorer identification of emotions in terms of facial expression and voice tone.³⁵ This brings to the significance of how emotional dysregulation

mediating with overprotectiveness of mother or eating habits. Development of these dysfunctional eating patterns imposes risk factors among adolescents in respect to quality of maternal relationship and demands for emphasizing on bringing in prevention and treatment-based efforts to regulate emotions.^{36,37}

Limitations of the study includes that the present study compromising the validity of the results with the use of self-report measures as influence of the social desirability might have interfered with participants reporting their inner states reliably. Furthermore, longitudinal designs or triangulation studies may ascertain the direction of the associating variables by identifying the more beneficial aspect of mediating model of emotional dysregulation at clinical level.

RECOMMENDATIONS

Considering the role of gender and maternal bonding during the adolescence period, emotions can shift the focus of eating behaviors. Bringing in the holistic perspective from the findings of the study, a healthier relationship demands positive maternal practices that further assist in decreasing the prevalence of disordered eating patterns. With this aspect under consideration, mother being significant part of adolescence and academic institutions witnessing the actions of undergraduates can emphasize on inducing healthy activities through guidance or counselling. With this in consideration, the study implies identifying healthy and positive eating behaviors and parenting practices especially among mothers that assist in creating low prevalence of emotional dysregulation among adolescents.

CONCLUSION

Hence contributing to the literature, the following study is highlighting the impact of disordered eating patterns evolving within

Pakistani culture and provides the holistic framework of contributing factors leading to the development of certain behaviors. This signifies how focus can now be diverted towards understanding the critical role of perceived mother overprotectiveness and emotion dysregulation during certain adolescent developmental phase.

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Author's Contribution

FI conceived the idea, collected data, and conducted data entry, while GN drafted the manuscript as corresponding author and provided guidance and oversight throughout the study. SS and STZ assisted with data analysis and also conceived the idea. Authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Conflict of Interest

Authors declared no conflict of interest

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None

Data Sharing Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.