Family Relations, Alexithymia, and Eating Attitudes in Pakistani University Student

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Abstract

This study was done to examine the relationship between family relations, alexithymia, and eating attitudes in university students. It was hypothesized that a relationship is likely to be there between family relations, alexithymia, and eating attitudes in university students. Further, family relations, and alexithymia are likely to predict eating attitudes in university students. It was also hypothesized that there would be gender differences across family relations, alexithymia, and eating attitudes in university students. This was a correlation study with cross-sectional research design. Non-probability convenient sampling strategy was used to recruit N=230 university students. Assessment measures were self-constructed demographic information sheet, Index of Family Relations (Hudson, 1993), Toronto Alexithymia Scale (Bagby et al., 1986), Eating Attitudes Test (Garner & Garfinkel, 1979). Results reveal that family relations were positively correlated with alexithymia and eating attitudes and alexithymia was also positively correlated with eating attitudes in university students. There were no gender differences in family relations, alexithymia, and eating attitudes in university students. This study has implications for family, therapists, university counselors, and policy makers.

Keywords: alexithymia, eating attitudes, family relations, university students

Introduction

Emerging adulthood (18-25) is one of the critical developmental periods, where it is important to explore eating and weight conditions along with other health habits (Tavolacci et al., 2015). Body image and weight concerns at this age frame along with the difficulties in emotion regulation are a crucial research area.

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Family relations and the process of years of emotional attachment also have to play their part in determining how individuals develop eating patterns (Li et al., 2024). The study focuses on establishing the impact of these factors on the eating habits of teenagers in Pakistan which is a new field of research. It is imperative to define each of them and how they can interact to affect the diet of an individual before delving into the role of each of them. Knowing how family relations and emotional consciousness influence the decision-making process can be useful in designing specific interventions that can result in healthier dieting and general well-being and mental studies development. The healthy family environment is all about facilitating emotional well-being, helping to develop a person and also ensuring the members feel safe and understood. Conversely, a number of adverse psychological consequences are also rooted in the poor relationships and family conflicts (Wang & Zhou, 2015) and this can become reflected in different areas of the life of an individual such as emotional control and food preferences. Family functioning has a massive impact on mental health outcomes, and positive family relationships promote mental health, whereas negative ones prevent it. Family togetherness is credited with positive mental health whereas negative mental health problems have been associated with family conflicts which imply that family-related and family-related interventions have the potential of preventing and alleviating mental disorders (Landi et al., 2021).

According to Landi et al. (2021), the quality of family relationships is widely associated with depression, anxiety, and substance use, demonstrating how much varied forms of dysfunctional behaviors in a family influence different yet specific kinds of illnesses. The research underscores the significance of intervening in the context of families so as not only to help individuals who are suffering from these conditions but also promote overall family mental health that will be spanned across existence.

Harmony between family members plays an important part in mitigating the relationship between risky behaviors (such as drug abuse and delinquency) and exposure to among adolescents. This is supported by the research findings that good family bonding weakens the link between hazardous behavior and encountering violent activities. It has been observed that support from family minimizes the negative effects of engaging in dangerous behaviors when exposed to violence. Cohesion between family has also been found to reduce significantly the risky behavior and coming

in contact with violence. (Karimi et al., 2024)

Alexithymia is an impaired ability to recognize, identify, and describe one's own emotions along with externally oriented and concrete thinking (Shah et al., 2016). Alexithymia causes individuals to struggle with understanding and differentiating between their bodily sensations. This makes it difficult for them to understand the feelings of others and their own. The term "alexithymia" is derived from the Greek words "a" (meaning without), "lexis" (meaning word), and "thymos" (meaning emotion), reflecting the core deficit of language-based emotion processing (Samur et al., 2024). The term was initially coined by Sifneos (1973), as difficulty in identifying emotions and also in the distinction of bodily sensations. The occurrence of alexithymia in the general public is estimated to be around 10%, with higher rates observed in clinical populations, particularly those with psychiatric conditions such as depression, anxiety, and post-traumatic stress disorder (Tang et al., 2022). Despite its significant impact on mental health and social functioning, alexithymia remains relatively understudied and often overlooked in clinical practice.

Currently university students are quite vulnerable to the possibility of developing obesity, anorexia and disordered eating patterns. This is considered to be one of the major contemporary health problems (World Health Organization [WHO], 2000), especially in western countries. One of the major influencers of these unhealthy actions is parental behavior and general home environment (Savage et al., 2007) as it impacts the adolescent's attitude towards eating habits.

Research has also found that family relations and restrictions are more likely to cause the adolescent to develop negative eating attitudes. The adaptation of such an attitude is manifestation of maladaptive coping strategy (Gruber et al., 2020). On the other hand, positive and cohesive family relations can protect the adolescent from harmful eating attitudes. According to the research, it is also related to better physical and mental health (Mistry, 2025).

Both family relations and alexithymia have been found to have a significant impact on an individuals' eating attitudes. Research has shown that family interaction patterns, such as family-expressed emotion, can be associated with disordered eating attitudes in young adult females while emotion suppression or emotional inhibition can be associated with higher

body mass index (BMI) which occurs through greater emotional eating and lower fruit and vegetable intake (Ferrer et al., 2017)

Attachment Theory is considered to be an important complement to the Family Systems Theory (Rothbaum & Wang, 2011). This theory concerns the interdependency of families, especially with regard to the attachment between parents and children, and how this relationship affects personality within the familial context (Byng-Hall, 2002). When Attachment Theory is applied to the lens of Family Systems Theory, it can be easier to understand such phenomenon as parentification, which refers to a process when the child is expected to behave like an adult in a family (Hooper et al., 2015).

Moreover, Bowen Family Systems Theory has been influential in shaping the field of family therapy by providing a comprehensive understanding of family functioning (Brown, 1999). This theory highlights the importance of the dynamics of the family they were born or raised in, influencing the psychological well-being and health of adults, emphasizing the interplay between familial processes and individual factors (Haefner, 2014). Bowen Family Systems Theory also suggests that disturbances within an individual or relationships can reflect underlying issues within the family system itself indicating that family disturbances have a major impact on an individual (Haefner, 2014).

According to self and interpersonal theories of alexithymia, this condition is thought to related to the ability to interact with others and comprehend social scenarios (Spitzer et al., 2005). The individuals with alexithymia could not describe their feelings to other people and as such, they would probably have poor communication and less bonding in their relationships with others (Spitzer et al., 2005). Shah et al. (2016) found that alexithymia may link to greater social reliance and lesser self interest in social decisions. Moreover, alexithymia, has been found to occur in some somatic conditions; these somatic conditions have a combination of psychological and physical aspects of the self. This review delves into the intricate interplay between family dynamics, the construct of alexithymia defined as the difficulty in identifying and describing one's own emotions and various maladaptive eating attitudes observed among Pakistani university students.

Given that alexithymia is frequently combined with eating disorders, depression, anxiety, and obsessive-compulsive behaviors, understanding its

prevalence and association with familial factors is critical (Qaisy & Darwish, 2018). This is particularly relevant in young adult populations, where emotional regulation challenges can significantly impact overall well-being and academic performance. Furthermore, the previous research indicates a substantial link between alexithymia and emotional eating, suggesting a potential pathway through which emotional dysregulation influences eating behaviors (Hussain, 2021; Qaisy & Darwish, 2018). Research has consistently shown that individuals with higher alexithymic traits are more prone to dysfunctional eating patterns, including purging and fasting, as well as holding negative beliefs about their emotions (Hussain, 2021).

Rationale

The rationale for conducting the study is rooted in the unique socio-cultural context of Pakistan and the critical role that family relations and alexithymia play in shaping the eating attitudes of the individuals. In Pakistan, family is the most important social group and family influences the behavior and perception of people especially in eating habits. Nevertheless, the type and effects of such familial interactions and its link with the eating attitudes of adolescents in Pakistan has been explored to a limited extent. This research therefore seeks to find out in what way does the family environment in the context of Pakistan influence the body weight and eating behavior of university students

As for the psychological state regulating the eating behavior, one can identify alexithymia as a set of phenomena that implies the disturbance of the capacity to experience and communicate feelings and emotions. Owing to such reasons, Alexithymia has been associated with emotional eating and, therefore, increased intake of energy dense food products (Evers, 2010). However, there is an uncertainty about the part that alexithymia plays in the eating attitudes of Pakistani university students. This research expanded this relationship within the cultural context of Pakistan. The eating attitudes of university students in Pakistan are a critical area of research. Disordered eating patterns, such as the consumption of harmful diets and emotional eating, are common among adolescents and tend to coexist (Pengpid et al., 2025). Such actions can lead to various health issues, including obesity and eating disorders. However, there is not enough diversified and complete research on this topic in the Pakistani context.

Objectives

- To examine the relationship between family relation, alexithymia and eating attitudes in university students.
- To identify family relation and alexithymia as predictors of eating attitudes in university students.
- To find out gender differences across family relation, alexithymia and eating attitudes in university students.

Hypotheses

- There is likely to be a relationship between family relations, alexithymia and eating attitudes in university students.
- Family relations and alexithymia are likely to predict eating attitudes in university students.
- There are likely to be gender differences in family relation, alexithymia and eating attitudes in university students.

Method

Research Design

Correlational study with cross-sectional research design was used in this study.

Sample and Sampling Strategy

The sample comprised of (*N*=230) university students. Convenient sampling strategy was used to recruit the sample. The sample was included by using following criteria

Inclusion Criteria

- University students with age range of 17-27 were included in the study.
- Participants with immediate family relations (parents, siblings, etc.) were included in the study.

Exclusion Criteria

- Those without immediate family connections or unwilling to disclose family information were excluded.
- Those who are living independently or far from family were excluded.

Table 1

Socio-demographic Variables of Study Participants (N = 230)

Variables	N	%
Gender		
Men	116	50.4
Women	114	49.1
Age		
17-20	84	36.5
20-27	146	63.5
Education Qualification		
Bachelors	205	10.9
MPhil	25	89.1

Assessment Measures

Demographic Information Sheet

The demographic information sheet was used to gather academic and personal information from the participants. It included age, gender, and percentage in the previous board examinations.

Toronto Alexithymia Scale

The Toronto Alexithymia Scale developed by Bagby et al. (1986) (TAS-20) is a 20-item self-report scale that measures difficulty in identifying and describing emotions, which is a big part of alexithymia. Alexithymia refers to people who have difficulty identifying and explaining emotions, as well as a tendency to minimize emotions and focus on the outside world. The instrument exhibits strong internal consistency with a Cronbach's alpha coefficient of .81.

Index of Family Relations

The Index of Family Relations (IFR) scale was developed by Hudson (1993) devised with the primary objective of quantifying the extent, severity, or magnitude of relational challenges encountered by family members, as subjectively discerned by the survey respondent. The IFR serves as a relevant instrument for evaluating the family dynamics of the individual, offering a rudimentary index of the quality of family life as perceived by the client. The scale yields scores spanning from 0 to 100, and, for practical purposes, these scores can be considered genuine ratio scale values. A score of 0 signifies the absence of any attributes, while a score of

100 denotes the maximum stress level within the scale's measurement capacity. This scale demonstrates an Alpha coefficient of .80.

Eating Attitudes Test

The Eating Attitudes Test (EAT) designed by Garner and Garfinkel (1979), is a self-administered assessment tool designed to evaluate eating attitudes, comprising a 26-item scale that gauge's symptoms and concerns related to eating disorders. The EAT-26 is structured into three sections: (a) self-reported height and weight, which are used to calculate a person's body mass index (BMI), (b) a set of 26 items, rated on a six-point Likert scale, assessing the frequency of specific behaviors, with response options ranging from "*Always*" to "*Never*," and (c) five additional items, also on a six-point Likert scale, examining the frequency of disordered eating behaviors experienced over the preceding 6 months. Research indicates that the EAT-26 demonstrates high reliability of .91.

Procedure

The study utilized a convenient sampling method to recruit sample. Convenient sampling was chosen due to its practicality and ease of access to the target population. As a starting point, the participants' written and informed consent were sought before they responded to the questionnaires. To ensure that participants are free and able to respond willingly and without any influence or interruption, a quiet and comfortable environment was created for the participants to fill the questionnaires. The proper statistical techniques were applied to analyze the gathered data. Anonymity and confidentiality were maintained throughout the study to ensure that the participants were not embarrassed, harmed or identified in any way. All subjects for this study were voluntary and every participant was made aware of the purpose of the research.

Ethical Considerations

It was made sure that the participants were aware of the objective of the whole study and the processes, the hazards and advantages of the study, the use of their identity before they agreed to participate. They were confirmed that all the participants involved in the study provided their consent and each of the participants was told that they can withdraw from the research study at any time without being subjected to any repercussions. To ensure non-disclosure of the participants, data were encrypted, participants were assigned pseudonyms and password protection was applied to the data to

ensure that data collected was not accessed by other people.

Results

The current study aimed at identifying the relationship between family relations, alexithymia and eating attitudes in university students.

Descriptive Statistics and Psychometric Properties

This section of descriptive analysis provides detailed description about the measures of family relations, alexithymia and eating attitudes and about the demographics which were used in the current study.

Table 2

Psychometric Properties of Study Variables (N=230)

Variables	*M*	*SD*	Range	α
Family Relations	114.6	14.15	98	0.80
Alexithymia	57.4	8.18	58	0.81
Eating Attitudes	142	16.31	104	0.91

Table 1 shows the descriptive statistics and reliability of study variables, indicating that reliabilities were within acceptable range. Index of Family Relations with a Cronbach alpha value of 0.80, Toronto Alexithymia Scale with 0.81 and Eating Attitudes Test with 0.91 indicated good reliability estimates.

Pearson Product Moment Correlation Analysis

Pearson Product Moment Correlation was used to check the direction of relationship among family relations, alexithymia and eating attitudes

Table 3

Correlation between Family Relations, Alexithymia and Eating Attitudes (N = 230)

Variables	*M*	*SD*	1	2	3
1. Family Relations	116.8	10.28	-	-	-
2. Alexithymia	63.38	9.54	.247**	-	-
3. Eating attitudes	108.8	10.42	.626**	.178**	-

Note. ***p < .01*

Table 3 shows the Pearson correlation coefficients among family relations, alexithymia and eating attitudes. Results revealed that family relations were positively correlated with alexithymia, where increased score

on family relations meant to have weak family bonds and an increased score on alexithymia meant to have increased difficulty in identifying and regulating emotions. Alexithymia was also positively correlated with disordered eating attitudes. Weak family relations are also significantly positively correlated with disordered eating.

Table 4

Multiple Linear Regression for family relations, alexithymia and eating attitudes (N = 230)

Variables	*B*	*S.E*	*t*	*p*	95% CI
Constant	33.66	6.51	5.16	.000	[20.82, 46.49]
Alexithymia	.027	.058	.467	.641	[-.088, .142]
Family Relations	.629	.054	11.61	.000	[.522, .735]

In Table 4, the linear regression suggests that family relation was significant positive predictor of eating attitudes while alexithymia did not predict eating attitudes.

Table 5

Family Relations, Alexithymia, and Eating Attitudes in Men and Women (N = 230)

	Men (n = 116)		Women (n = 114)		*t*	*p*	95% CI	
Variables	*M*	*SD*	*M*	*SD*			*LL*	*UL*
Family Relations	117.6	9.81	115.9	10.71	-1.27	.124	-4.39	.949
Alexithymia	63.37	9.58	63.40	9.58	.029	.771	-2.46	2.53
Eating Attitudes	110.1	10.57	107.5	10.17	-1.93	.790	-5.36	.045

In Table 5, independent sample t test shows that there were no gender differences in family relations, alexithymia, and eating attitudes in university students.

Discussion

The main aim of this study was to investigate the relationship between family relationships, alexithymia and eating habits among adolescents in Pakistan. This study found a strong association between family relationships, alexithymia, and eating disorders. High levels of alexithymia were associated with disordered eating attitudes. Good family relationships are associated with healthy eating habits, while poor family relationships are associated with unhealthy eating habits. Family relations were strong

predictor of youth developing eating disorders.

Existing literature about the correlation between alexithymia and eating disorders is in line with these findings. People who have high levels of alexithymia often struggle to identify and control their emotions which in turn leads to poorly adjusted coping strategies such as disordered eating. They use such eating habits as their coping strategies (Depboylu & Fındık, 2024). This is especially relevant during adolescence, a period during where youth struggle with managing their emotions and identity development already. This supports theories even further which suggest that the development of eating disorders is heavily impacted by emotional dysregulation. Alexithymia limits an individual's ability to process and express emotions which aggravates it even further, resulting in the use of food as an emotional vent (Zhou et al., 2025).

Family systems theory, which states that family interactions significantly impact individual behaviors including eating habits, aligns with the significant role of family relations in shaping eating attitudes. (Sigman-Grant et al., 2015). Having positive and good family interactions during early adolescent years helps in modeling of healthy behaviors, providing emotional support and stability, which are crucial for the development of the youth. Meanwhile negative or bad family interactions contribute to the development of eating disorders due to the stress and emotional distress that accumulates due to said interactions. Since familial bonds and the influence of family is quite significant in Pakistani society, the quality of family relationships plays an important role in the psychological well-being and behaviors of adolescents. These findings clearly show how crucial culturally sensitive approaches are when dealing with eating disorders in various socio-cultural settings. Although both alexithymia and family relations are proven to be significant indicators of disordered eating attitudes, family relationships have a slightly more profound influence on them. This shows that while individual emotional regulations do impact the disordered eating behaviors among youth, the social and environmental factors might play a more dominant role in their development. This interplay between family dynamics and alexithymia indicates a clear need for interventions to address personal emotional skills as well as family environments to be successful. Most of the participants were females who were enrolled in four-year Bachelor of Science programs and were mainly psychology majors (Hussain, 2021).

This demographic profile, although typical for a correlational study of psychological constructs (Hussain, 2021), requires careful thought about generalizability, particularly when generalizing to larger populations (Al-Eithan et al., 2021).

Although convenient to collect data from, such samples may introduce biases owing to their relative homogeneity in age, socioeconomic status, and cognitive development that may limit the external validity of the findings. This view is supported by Gina et al. (2023) and Hussain (2021).

Further, the over representation of female participants and psychology majors could bias the findings concerning emotional processing and relationships, as established differences between genders in the expression of emotions and the self-selection into the study of psychology exist (Al Shahrani & Hammad, 2023). Given the cross-sectional and correlational design of the study, the findings should be interpreted as associations rather than causal relationships. Although alexithymia showed significant positive correlations with disordered eating attitudes, it did not emerge as a significant predictor in the regression analysis. This suggests that emotional identification difficulties may be associated with eating attitudes but become less influential when family relational factors are considered simultaneously, indicating a stronger contextual role of family dynamics

Limitations and Suggestions

There are several general limitations to the study. First, the sample of 230 Pakistani university students represents a small and specific segment of the population. The findings might have limited generalizability to nonstudents, adolescents, older adults, and people from rural or diverse socio-economic backgrounds. Since university studies are typically based on convenient sampling, it may indicate that not all types of students were represented within the sample, as those who opted to participate may differ from those who did not. Another limitation is that the measures for assessment of family relations, alexithymia, and eating attitudes were self-report questionnaires. Such instruments are prone to biases of social desirability, underreporting of symptoms, and limited emotional self-awareness associated with alexithymia. The ability to draw causal inferences is limited by the cross-sectional nature of the study. Although significant associations were discovered, it is still not completely certain whether alexithymia and family relations lead to eating disorders, even the

fact that the reverse of it could also be true is plausible. Self-reported data are subject to biases since people may not tell the truth or remember things incorrectly. Future studies should use methods like talking to patients, conducting clinical interviews or observing them to check if the answers they give are correct.

Types of parenting, significantly predicts alexithymia and eating attitudes in university students, while body checking serves as the mediator (Hatami et al., 2021). Hence, the research model can be improved by adding the role of further mediating and moderating variables.

Future research should employ longitudinal designs to better examine directional relationships among family relations, alexithymia, and eating attitudes. Additionally, incorporating potential mediators or moderators such as parenting styles, emotional regulation strategies, or peer influences may enhance methodological robustness.

By conducting long-term studies, we can gain insights into how alexithymia, family dynamics, and eating habits are connected. It is needed to conduct various researches which observe the effectiveness of specific interventions that address both emotional regulation and family dynamics. This will be helpful in the development of effective treatment programs for adolescents with eating disorders. Comparative studies conducted in different cultural contexts can reveal general and culture- specific relationships between alexithymia, family relations, and disordered eating attitudes. In this way strategies and treatment programs which are culturally tailored can be developed.

Implications

Family-based interventions should be emphasized for managing eating disorders, such as Family-Based Treatment (FBT). Improving family dynamics can lead to better outcomes for adolescents. Risk factors which are associated with eating disorders can be reduced by improving family communication, conflict resolution, and emotional support (Erriu et al., 2020). For adolescents with high levels of alexithymia, interventions such as emotional relaxation therapy may help improve emotional and cognitive control and reduce the likelihood of eating disorders. (Malagoli et al., 2024).

Implementing educational programs in schools that focus on emotional intelligence, stress management, and healthy eating habits can provide adolescents with the tools they need to manage their emotions and develop

positive eating behaviors (Chamberlin, 2018). Workshops and resources for parents can help them understand the impact of their relationship with their children regarding their children's eating behaviors. Teaching parents to create supportive and nurturing home environments is crucial. Improving emotional regulation can significantly contribute to a decrease in the prevalence of disordered eating behaviors among students at the university level. Interventions like EFST help students identify, label, and regulate their emotions more appropriately, which is very important for students who have displayed higher alexithymic features. This increase in emotional clarity results in less reliance on the use of maladaptive coping strategies, which includes problematic eating as well.

University-based psychoeducational programs that emphasize healthy family communication patterns can also contribute to better psychological outcomes. As students learn how to handle family expectations more effectively, to articulate their needs with greater clarity, and to cope with interpersonal stress, vulnerability to disordered eating may decrease. Programs designed to enhance assertiveness and emotional expression might offer protective benefits.

Culturally sensitive mental health initiatives could be especially effective when incorporating elements of family values, collectivistic norms, and social expectations. Approaches that recognize the cultural emphasis on involvement by the parents and familial decision-making may result in stronger engagement and superior adherence to treatment for Pakistani youth.

In addition, interventions for the regulation of emotions by means of mindfulness may be useful for those subjects who show a difficulty in interpreting their emotional experience. Mindfulness meditation practices, body awareness training, and acceptance-based strategies may enhance internal awareness and decrease the risk of using eating as a coping strategy.

Thus, routine screening for emotional dysregulation and problematic eating attitudes within the academic environment could help in the early identification of students at risk. Early interventions, combined with culturally sensitive support structures, might prevent the escalation of eating-related problems and enhance general well-being.

Conflict of Interest

The authors of the manuscript have no financial or non-financial conflict

of interest in the subject matter or materials discussed in this manuscript.

Data Availability Statement

Data supporting the findings of this study will be made available by the corresponding author upon request.

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