
Alexithymia, Emotional Regulation, and Mental Health Outcomes in Young Females Facing Gender Discrimination

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Abstract

This study looked into Alexithymia as a predictor of Mental Health Emotional Regulation in Young Female Facing gender discrimination in Pakistan. In this study a sample of 450 young female, aged 16 to 22, using a purposive sampling method. The participants filled out the Toronto Alexithymia Scale (TAS-20), DASS-21, Emotional Regulation Questionnaire (ERQ), and the Perceived Gender Discrimination Scale. The study conducted descriptive statistics, correlations, and multiple regression analyses to explore the relationships among the study variables. The correlation results revealed significant links between the dimensions of alexithymia and various mental health indicators. However, the regression analyses indicated that alexithymia did not significantly predict perceived gender discrimination or stress, and it showed only weak to moderate predictive power for other mental health outcomes and emotional regulation. These findings imply that while alexithymia is connected to emotional and psychological functioning, it doesn't independently predict mental health or experiences of discrimination in this group. This study adds to the existing literature by delving into alexithymia in the context of South Asian culture, shedding light on the intricate relationship between how emotions are processed and the experiences of discrimination. It also discusses important implications for mental health professionals, suggests directions for future research, and offers policy recommendations.

Keywords: Alexithymia, Emotional regulation, Mental health and young female

Introduction

Alexithymia, characterized as a "deficiency in emotional vocabulary," demands hard time findings and expressing emotions, as well as a propensity for externally oriented thinking. Different theories indicate that alexithymia might stem from deficits in emotional regulation, cognitive processing, and potentially neurophysiological or psychological factors. Emotional regulation is a fluid process that encompasses various strategies aimed at enhancing and maintaining a feeling. Emotional control surrounds the inside and outside mechanism that a person uses to gain their sentiments in specific situations, involving both conscious and unconscious, psychological, behavioral, and cognitive aspects, as well as their impact on emotional, cognitive, and social domains (Usan et al., 2021).

Alexithymia and emotional control also have an impact on mental health. Women's emotions and general

mental health are impacted by alexithymia. Discrimination based on gender affects mental health and makes it more difficult for people to experience and express their feelings. Alexithymia is a complex trait characterized by difficulties identifying and expressing emotions as well as a stronger focus on outward events rather than internal sentiments. Although it is thought to be a significant risk factor for emotional disorders, little is known about the specific components of alexithymia and how deficiencies in managing either happy or negative emotions, or both, are involved. This research tries to bridge those gaps by applying the Perth Alexithymia Questionnaire (PAQ) to extensively evaluate the links between alexithymia and the symptoms of depression, anxiety, and stress. A total of 1,250 university students participated in the research, finishing both the PAQ and the Depression Anxiety Stress Scales-21. To analyze the data, the study used latent profile analysis, hierarchical regressions, and Pearson correlations. With correlation values ranging from 0.27 to 0.40, our findings showed that each aspect of alexithymia was significantly linked to signs of stress, anxiety, and depression. The several facets of alexithymia together accounted for a substantial 14.6% to 16.4% of the variance in these emotional symptoms, according to the regression analysis. Notably, the most potent unique predictors in each symptom category seemed to be the inability to identify both good and negative emotions. Additionally, eight distinct profiles that combined various facets of alexithymia and psychopathological symptoms were identified by our latent profile analysis, underscoring the broader importance of alexithymia in understanding mental health issues. Although it is widely accepted that severe pandemics often result in mental health issues, the link to alexithymia is less obvious. In order to investigate that association, this study evaluated university students who were isolated at home during the COVID-19 pandemic in China between 2019 and 2020 (Preece, 2024).

The 20-item Toronto Alexithymia Scale (TAS-20), the Posttraumatic Stress Disorder Checklist-Civilian Version (PCL-C), and the Patients Health Questionnaire-9 (PHQ-9) were completed by 2,501 participants from six universities in southwest China. The findings showed that students exhibiting signs of depression or PTSD also displayed more notable aspects of alexithymia, such as difficulty identifying (DIF) or communicating (DDF) their feelings. Furthermore, the impact of exposure on mental health was found to be largely mediated by alexithymia (Wanjie Tang, 2020).

The majority of mental health services target people with personality disorders (PD) and related problems. Alexithymia, which is characterized by the difficulty some people have recognizing and communicating their underlying emotional feelings, is a significant challenge in managing these patients. The purpose of this study was to find out how common alexithymia is among patients receiving care from specialized mental health services for Parkinson's disease (PD), how it varies depending on the type and severity of PD, and how it changes after therapy. 70% of the 1,019 participants in the study who were receiving specialized PD treatment had personality problems that exceeded the diagnostic criteria for borderline PD (31%), avoidant PD (39%), PD not otherwise specified (PD-NOS) (15%), additional PDs (15%), and multiple PDs (24%). Throughout the course of the treatment, we evaluated alexithymia multiple times using the Toronto Alexithymia Scale (TAS-20), a self-report questionnaire. Additionally, we looked at overall psychosocial functioning and health-related quality of life. For data analysis, we used linear mixed models. According to our findings, alexithymia is a prevalent concern among people with Parkinson's disease (PD), linked to a variety of mental health conditions and psychosocial difficulties, and its prevalence varies depending on the kind and severity of PD. According to the study, alexithymia improves somewhat with treatment in specialist mental health services for personality disorders. Future research should focus on assessing the effectiveness of various treatments and approaches intended to reduce alexithymia in people with Parkinson's disease (Hanna and others, 2025).

Literature Review

Alexithymia is a complex trait that involves a tendency to focus more on outward events than on internal sensations, as well as trouble identifying and expressing emotions. Although it is thought to be a significant risk factor for emotional disorders, our understanding of the specific components of alexithymia and how

deficiencies in processing either positive or negative emotions, or both, affect this disease is currently quite restricted. By using the Perth Alexithymia Questionnaire (PAQ) to thoroughly examine the connections between alexithymia and signs of stress, anxiety, and depression, this study aims to close such gaps. The PAQ and the Depression Anxiety Stress Scales-21 were completed by 1,250 university students who took part in the study. To analyze the data, we used latent profile analysis, hierarchical regressions, and Pearson correlations. With correlation values ranging from 0.27 to 0.40, our findings showed a strong relationship between every aspect of alexithymia and symptoms of stress, anxiety, and depression. The several facets of alexithymia together accounted for a substantial 14.6% to 16.4% of the variance in these emotional symptoms, according to the regression analysis. Notably, the most significant unique predictors for each symptom category were the challenges in identifying both good and negative emotions. Furthermore, our latent profile analysis identified eight distinct profiles that combined various facets of alexithymia with psychopathological symptoms, underscoring the important importance of alexithymia in understanding mental health issues. It is well recognized that deadly pandemics frequently cause mental health issues, but the relationship to alexithymia is less obvious. In order to investigate that association, this study evaluated university students who were isolated at home during the COVID-19 pandemic in China between 2019 and 2020 (Preece, 2024). Additionally, we looked at overall psychosocial functioning and health-related quality of life. For data analysis, we used linear mixed models. According to our findings, alexithymia is a prevalent worry among people with Parkinson's disease (PD) and is linked to a number of psychological and mental health disorders. with its frequency changing based on the kind and severity of Parkinson's disease. According to the research, alexithymia is somewhat improved throughout treatment in specialist PD mental health facilities. Future research must assess the effectiveness of various treatments and interventions intended to reduce alexithymia in people with Parkinson's disease (PD) (Hanna et al., 2025).

A major risk factor for a variety of emotional problems is alexithymia. The idea is that it makes it more difficult for us to effectively control our emotions. However, we have yet to properly study the degree of its impact on emotion regulation. This study aimed to investigate whether those with lower levels of alexithymia and high self-worth use different strategies for controlling their emotions in order to close that gap. A diverse group of young Americans (N = 501) participated in a series of assessments related to emotion management and alexithymia. Based on their degrees of alexithymia, people were divided into three groups: high, average, and low. We found that these groups differed in how they controlled their emotions when taking into account demographic characteristics and pre-existing levels of distress. People with higher levels of alexithymia reported using more maladaptive strategies, such as emotional suppression, avoiding situations, and ignoring their emotions, and fewer adaptive strategies, such as cognitive reappraisal, confronting problems head-on, and seeking social support. (David et al., 2023).

1788 healthy college students participated in an analytical study on alexithymia and emotional regulation. They were evaluated using the Chinese version of the 20-item Toronto Alexithymia Scale (TAS-20) in addition to other questionnaires assessing their emotional condition and regulation abilities. The three TAS-20 factor scores were subjected to a stratified group assessment. The results identified four kinds of alexithymia: non-alexithymia (NA), introvert-high alexithymia (IHA), general-high alexithymia (GHA), and extrovert-high alexithymia (EHA). The IHA scored poorly on externally oriented cognitive style and scored highly on difficulty identifying and describing feelings, while the GHA demonstrated overall high scores across all three variables. The NA scored poorly on every factor, while the EHA scored well on externally oriented cognitive style but had typical ratings on the other variables. Compared to the EHA and NA, the GHA and IHA showed worse emotional states due to their suppressive emotional control and expression (Jie Chen, 2011).

The gender gap in alexithymia among Pakistani graduate students was investigated in a 2015 study. 200 students from various academic institutions in Faisalabad, Punjab, Pakistan 100 men and 100 women participated. Alexithymia was evaluated using the TAS 20 scale (Bagby et al., 1994). An independent sample

t-test was used for the statistical analysis. The findings of this research corroborated earlier studies that showed a notable gender disparity in Alexithymia. It was determined that men exhibit higher levels of Alexithymia in comparison to women (Zaidi et al., 2015).

Affect regulation is vital for mental well-being. It is crucial to analyze shortcomings in recognizing and expressing emotions (alexithymia), cognitive methods for handling emotional disputes (defenses), and the capacity to attain a complex and detailed understanding of oneself and others (ego strength or maturity) to understand their connections and influence on mental health and wellness. A research project with 415 community-dwelling adults from a major metropolitan region in the Midwest U.S., categorized by gender, age, and ethnicity, used three distinct methodological approaches to assess emotion regulation in addition to depression and well-being markers. 49% of the participants reported receiving follow-up information regarding their depression and mental health after six years. Even after controlling for negative affect, ego strength and the principalization and reversal defenses showed a negative connection with alexithymia and other defenses (turning against self, turning against object, and projection) during the initial appraisal. Although certain connections waned after taking negative affect into account, cross-sectional analyses mainly supported the hypotheses, demonstrating that reduced alexithymia, the use of mature defenses, and enhanced ego strength were connected to lower depression and improved well-being. After six years, it was demonstrated that all affect regulation measures could predict anticipated changes in well-being, accounting for baseline well-being, whereas increases in depression were not predicted by affect regulation. These results highlight the similarities and differences between various affect regulation constructs, underscore the significance of distinguishing between depression and well-being, and demonstrate that affect regulation is a unique predictor of changes in longterm well-being (Maisa et al., 2017).

A key element of positive psychology, psychological wellbeing is linked to a number of individual and familial psychological effects, including ego, self-differentiation, and alexithymia. The purpose of this study was to look into the predicted relationship between psychological well-being and the characteristics of ego strength, self-differentiation, and alexithymia in students at Islamic Azad University in Qom. A descriptive correlational method was used in the study. Using a cluster selection technique, 350 individuals—195 males and 155 females—were selected from the statistical population, which comprised all students enrolled at Islamic Azad University in Qom for the 2016–2017 academic year. The Differentiation of Self Inventory (DSI), the Alexithymia Scale, four dimensions from Cattell's 16 Personality Factors Inventory, and the Ryff Psychological Well-being Questionnaire were the instruments used to collect the data. Multivariable regression analysis and Pearson correlation coefficients were used to analyze the data using SPSS-26 software (Sohrab et al., 2021).

Identification and expression of emotions are challenges associated with alexithymia. The sole meta-analysis on gender differences in alexithymia that is currently accessible is based on studies that are more than two decades old. However, it is crucial to reconsider the existing research on this subject because gender roles have changed recently. Gender differences in alexithymia and its various characteristics between 2004 and 2023 were investigated by a meta-analysis. The inclusion criteria were satisfied by 120 studies with 145 samples. The findings showed that gender differences had a significant but moderate impact on alexithymia and its two aspects: the difficulties in identifying and distinguishing emotions from bodily sensations and the difficulties in communicating feelings to others. Only in connection with externally oriented thinking was a medium and statistically significant effect size found. Gender differences in alexithymia were shown to be significantly moderated by factors related to age and certain cultural features. The ramifications of the findings are discussed in relation to theoretical models and real-world applications (Mendia et al., 2024).

Hypotheses

H¹ There will be a significant positive relation with alexithymia on mental health in young female.

H² There will be a relationship between alexithymia and mental health in young female **H³** There

will be a positive correlation between alexithymia on mental health and emotional regulation.

H⁴ There will be a significant relationship between alexithymia on mental health and emotional regulation.

H⁵ There will be a significant difference in alexithymia, emotional regulation in young female.

H⁶ There will be significant difference in alexithymia scores among younger and older female. **H⁷** There will be a significant indifference in mental health outcome among younger along with older female.

H⁸ There will be a significant difference in values of alexithymia and mental health among younger and older female

Method

Sample

The target population comprised sample size N=450 young female students aged 16-22 years, who are enrolled in various colleges and universities. This demographic was selected due to the higher likelihood of young females facing gender discrimination in both educational and social settings, which may affect their emotional processing and mental health.

Instruments

Toronto Alexithymia Scale 21

The TAS-20 is a self-report scale that is comprised of 20 items. Items are rated using a 5-point Likert scale whereby 1 = strongly disagree and 5 = strongly agree. There are 5 items that are negatively

Reliability: Demonstrates good internal consistency (Cronbach's alpha = .81) and test-retest reliability (.77, $p < .01$). Validity: Research using the TAS-20 demonstrates adequate levels of convergent and concurrent validity. The 3 factor structure was found to be theoretically congruent with the alexithymia construct. In addition, it has been found to be stable and replicable across clinical and nonclinical populations

populations Reverse scoring for item 4, 5, 10, 18 and 19 (Bagby et al., 1994). The idea of alexithymia is conceptually consistent with the three-factor structure. Additionally, its dependability demonstrates good test-retest reliability (.77, $p < .01$) and Cronbach's alpha (.81). Validity: Research using the TAS-20 shows that adequate levels of concurrent and convergent validity have been shown to be stable and repeatable in both clinical and nonclinical settings.

The Emotion Regulation Questionnaire (ERQ)

10-item self-report measure designed to assess individual differences in the habitual use of two emotion regulation strategies: cognitive reappraisal and expressive suppression, with items rated on a 7point Likert scale. The ERQ aims to understand how people regulate their emotions, specifically focusing on the strategies they employ to manage emotional experiences. A scale consisting of 10 items has been developed to Evaluate respondents' propensity to control their emotions using two different techniques:

(1) expressive suppression and (2) cognitive reappraisal. Each item is answered by participants using a 7point Likert- type scale, which ranges from 1 (strongly disagree) to 7 (strongly agree). Cognitive Reappraisal: This subscale assesses the tendency to change the way one thinks about a situation to alter its emotional impact. Expressive Suppression: This subscale measures the tendency to inhibit the outward expression of emotions. The questionnaire consists of 10 items, each answered on a 7-point Likert scale ranging from "1 (strongly disagree)" to "7 (strongly agree)". Higher scores on each subscale indicate greater use of the corresponding emotion regulation strategy. The ERQ has demonstrated good validity and reliability. The ERQ demonstrates high reliability, as evidenced by Cronbach's alpha coefficients .75 signifying good consistency. It is regarded as a valid and dependable instrument for assessing individual variations in emotional regulation (Gross et al., 2003).

Depression Anxiety Stress Scale 21

Depression Anxiety Stress Scales - 21 (DASS-21) is a self-report questionnaire used to assess the severity of symptoms related to depression, anxiety, and stress, comprising 21 items across three subscales (7 items each for depression, anxiety, and stress). The scale comprises three components: Depression scale: evaluates feelings of dysphoria, hopelessness, life devaluation, self-deprecation, lack of interest or involvement, anhedonia, and inertia.

Anxiety scale: measures autonomic arousal, effects on skeletal muscles, situational anxiety, and the subjective experience of anxious feelings. Stress scale: assesses challenges in relaxing, nervous arousal, and tendencies to become easily upset or agitated, irritable or over-reactive, and impatient. Reliability: outstanding test-retest reliability ($r=0.71-0.81$) Validity: robust convergent validity of the DASS-21 in older adults, with acceptable discriminative validity. Exceptional criterion validity ($r=0.65$) overall good-to-excellent internal consistency (Cronbach's alpha: 0.96, 0.89, 0.93 for each component respectively) (Lovibond, 1995).

Perceived Gender Discrimination Scale

The 20-item Perceived Discrimination Scale is designed to gauge how often individuals feel they are treated poorly or unfairly due to factors such as physical characteristics, sexual orientation, gender, age, race, ethnicity, and religion. This scale appears at discrimination across various aspects of life, including experiences at school, work, and in one's community. The scale is divided into two parts: the Lifetime Discrimination Scale and the Daily Discrimination Scale. For the 11-item Lifetime Discrimination Scale, respondents reflect on how many times they've faced unfair treatment throughout their lives (for example, "You were discouraged by a teacher or advisor from pursuing higher education"). To calculate the score, researchers tally the number of events that occurred at least once for the individual. A higher score shows a larger number of lifetime discrimination experiences. On the other hand, the 9-item Daily Discrimination Scale focuses on how often respondents encounter unfair treatment in their everyday lives (like, "You are treated with less courtesy than others"). Participants rate their experiences on a scale from 1 to 4 (1 = often; 2 = sometimes; 3 = rarely; 4 = never). To determine the score for this scale, researchers reverse the coding for all items and sum the scores, meaning that higher scores reflect more frequent experiences of discrimination (William, 1997).

Procedure

Convenient sampling procedure was used to collect data from desired population from different universities, colleges and academies. Respondent were instructed about study objectives and assure to maintain their confidentiality. Questionnaire along with informed consents and demographic sheets were handed over to participants and total time for testing was 35 minutes.

Results

After the measurement interpretation, the data was analyzed using the Statistical Package for Social Sciences (SPSS, 21). Descriptive and inferential statistics have been established for the entire sample. Skewness, kurtosis, mean, and standard deviation were among the descriptive statistics that were employed. To assess the theory, inferential statistics were utilized, such as regression, correlation and independent sample t-test. Pearson correlation analysis was used to assess the relationship between variables.

Table 1 *Descriptive Statistics of study variables (N=450)*

	<i>Scale</i>	<i>K</i>	<i>M</i>	<i>S.D</i>	Cronbach's	Actual	Potential	Skewness	Kurtosis	
TAS	20	67.2	12.9	.742					2.96	
DDE	5	16.8	4.63	.489	5-25	7-70		4.93	53.4	
EOT	8	27.2	6.24	.291	8-40	10-55		.645	17.7	
DIF	7	23.2	5.14	.624	7-35	10-87		1.59	5.09	
DASS	21	34.8	10.9	.751					5.74	
ANX	7	11.9	4.48	.534	7-21	1-54		2.38	18.9	
STR	7	11.6	4.31	.491	7-21	1-54		2.28	21.2	
				Alphah	Range	Range				
DEP	7	11.2	4.33	.412	7-21	1-40		1.36	7.28	
ERQ	10	20.5	6.38	.509					34.9	
CA	6	12.3	4.83	.452	6-18	5-78		6.99	81.6	
ES	4	8.15	2.63	.415	4-12	3-40		4.01	46.7	
PDS	9	24.1	6.43	.739					.566	
		DDS	9	24.1	6.43	.739	9-27	9-52	.149	---

For each of the main study variables alexithymia, mental health (stress, anxiety, depression), emotional regulation, and perceived gender discrimination Table 2 presents the descriptive statistics, reliability coefficients, potential and actual score ranges, and distribution characteristics (skewness and kurtosis). The entire TAS-20 score had a satisfactory degree of internal consistency, with a mean of 67.2 (SD = 12.9) and a Cronbach's alpha of .742. The distribution showed a skewness of 2.96, indicating a positively skewed distribution in which more participants had lower overall alexithymia scores. The Difficulty Describing Emotions (DDE) subscale, which consists of five items, has a reliability coefficient of .489 and a mean of 16.8 (SD = 4.63). The sample's actual score range was 7-70, although the anticipated score range was 5-25. The majority of participants reported comparatively less difficulty in explaining their feelings, according to the skewness value of 4.93, which shows a considerable positive skew. With a mean of 27.2 (SD = 6.24) and a Cronbach's alpha of .291, the Externally Oriented Thinking (EOT) subscale (8 items) had poor internal consistency. The anticipated score range was 8-40, however the actual score range seen was 10-55. Mild positive skewness is indicated by the skewness value of .645. The seven-item Difficulty Identifying Feelings (DIF) subscale showed an adequate degree of internal reliability with a reliability coefficient of .624 and a mean score of 23.2 (SD = 5.14). The actual and prospective score ranges were 10-87 and 7-35, respectively. A moderately positive skew is indicated by a skewness value of 1.59, indicating that participants typically had less trouble identifying their emotions. Stress, Anxiety, and Depression Scale (DASS-21). With a mean of 34.8 (SD = 10.9), the overall DASS21 score demonstrated strong reliability ($\alpha = .751$). A considerable positive skew is shown by the skewness value of 5.74, which suggests that most participants had generally lower levels of psychological distress. The seven-item Anxiety (ANX) subscale yielded a mean score of 11.9 (SD = 4.48) with a reliability value of $\alpha = .534$. The actual score range was 1-54, whereas the potential range was 7-21. A moderately positive skew is indicated by the skewness value of 2.38. The seven-item Stress

(STR) subscale had a mean score of 11.6 (SD = 4.31), a reliability value of $\alpha = .491$, and an actual score range of 1–54. A somewhat positive skewness is indicated by a skewness value of 2.28. With a mean of 11.2 (SD = 4.33) and a reliability coefficient of $\alpha = .412$, the seven-item Depression (DEP) subscale is below acceptable reliability requirements. The expected potential range (7-21) was exceeded by the actual score range (1-40). A moderately positive skew is indicated by a skewness value of 1.36. Questionnaire on Emotion Regulation (ERQ). With a Cronbach's alpha of .509 and an average of 20.5 (SD = 6.38), the overall ERQ score showed moderate reliability. The distribution is very positively skewed, as indicated by the skewness value of 34.9, which indicates that a large portion of participants' use of emotion management strategies obtained lower scores. With a reliability coefficient of $\alpha = .452$ and an actual score range of 7-78, the six-item Cognitive Reappraisal (CA) subscale produced a mean score of 12.3 (SD = 4.83), above its potential range of 6-18. The extreme positive skewness of a skewness value of 6.99 suggests that fewer participants reported using cognitive reappraisal on a regular basis. The four-item Expressive Suppression (ES) subscale had a mean score of 8.15 (SD = 2.63) and a Cronbach's alpha of $\alpha = .415$. Compared to a potential range of 4-12, the observed range was 3–40. A large positive skew is indicated by a skewness value of 4.01. Scale of Perceived Gender Discrimination (PDS). The nine-item PDS showed strong internal consistency with $\alpha = .739$ and a mean of 24.1 (SD = 6.43). There was significant variation in the participants' experiences of perceived gender discrimination, as seen by the sample's actual range of 9-52 as opposed to its prospective range of 9-27. A distribution that is relatively normal but somewhat positively skewed is suggested by the skewness score of .566. The Discrimination Distress Subscale (DDS), which has the same number of items and scoring as the overall PDS, also showed a slight positive skewness of .149 and a mean of 24.1 (SD = 6.43) with $\alpha = .739$, indicating consistency in the participants' reported experiences of gender discrimination.

Table 2
Pearson Correlation between Study Variables (N=450)

Variables	DDE	DIF	EOT	DEP	ANX	STR	CA	ES	PDS
1	-	.508**	.415**	.069	0.27	.065	.049	.071	.042
2		-	.507**	.132**	.064	.150**	.046	.074	.045
3			-	.148**	.089	.140**	.047	.048	.023
4				-	.473**	.583**	.115*	.150**	.006
5					-	.543**	.348**	.085	.053
6						-	.216**	.109*	.047
7							-	.407**	.069
8								-	0.49
9									-

Notes: DDE=Difficulty Describing Thoughts; DIF= Difficulty Identifying Feelings; EOT=Externally Oriented Thinking; DEP=Depression; ANX=Anxiety; STR=Stress; CA=Cognitive Appraisal; ES=Expressive supportive; PDS=Daily Discrimination, *Correlation is significant at the 0.05 level (2tailed), **Correlation is significant at the 0.01 level (2-tailed). **Table 3**

Regression analysis of Alexithymia on predictor Stress (N=450)

Predictor	B	SE	B	T	P
Constant	8.11	1.07	--	7.57	<0.001
DDE	-0.03	0.05	0.03	-0.63	.523
DIF	0.10	0.04	0.12	2.06	.040

EOT	0.06	0.03	0.09	1.68	.093
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Notes; DDE; Difficulty describing emotions, DIF; Difficulty identifying feelings and EOT; Externally oriented thinking to determine whether the three aspects of alexithymia Difficulty Identifying Feelings (DIF), Difficulty Describing Feelings (DDE), and Externally Oriented Thinking (DTS) had a significant effect on stress levels among young women experiencing gender discrimination, a standard multiple regression analysis was performed.

Table 4
Demographic data of the participants (N=450)

Characteristics	Frequency	%	Comulative Frequency
Age			
16-18	149	33.1	33.1
18-22	301	66.9	100
Education			
Martic/Inter	173	38.4	38.4
Bachelors	277	61.6	100
Socioeconomic Status			
Middle Class	241	53.6	100
Upper Class	209	46.4	46.4
Family Status			
Joint Family	158	25.1	35.1
Nuclear System	292	64.9	100
Fathers Occupation			
Worker/Businessmen	175	38.9	38.9
Dr/Teacher	275	61.1	100

A comprehensive summary of the demographic characteristics of the 450 study participants is included in Table 1. The distribution of age groups shows that late teenagers and young adults made up the majority of the sample. Specifically, 33.1% (n = 149) of the participants were between the ages of 16 and 18, and a larger portion, 66.9% (n = 301), were between the ages of 18 and 22.

Discussion

Hypothesis 1 There will be a significant positive relation with alexithymia on mental health in young female.

According to the hypothesis, there would be a strong positive correlation between young women's mental health issues and alexithymia. To put it simply, it was thought that higher levels of alexithymia would lead to worse mental health outcomes, including increased stress, worry, or emotional problems. However, this hypothesis was not supported by the regression analysis. The findings showed that only a tiny percentage of the diversity in mental health was explained by the regression model using several characteristics of alexithymia (DIF, DDE, and EOT) as predictors, and the link was not statistically significant. For instance, alexithymia only explained 2.9% of the variance ($R^2 = .029$) in the stress model, which is insufficient to be regarded as a major predictive factor. In the models assessing anxiety and perceived gender bias,

correspondingly small or insignificant results were observed. Therefore, even though there was a positive tendency (more alexithymia was linked to a slight increase in stress and anxiety), the effect was weak and not statistically significant. This suggests that the assertion that alexithymia has a major impact on mental health outcomes in this particular population is not well supported by the facts.

Hypothesis 2 There will be a relationship between alexithymia and mental health in young female

The study found a weak but significant link between young women's mental health outcomes and alexithymia. Although it wasn't particularly significant, it was anticipated that higher levels of alexithymia would be associated with somewhat worse mental health. This idea is slightly supported by the regression results. They proposed that alexithymia exhibited a marginally favorable connection with mental health indicators including stress through its components of DIF, DDE, and DTS. This confirms the existence of the relationship, although a weak one, which is completely in line with the theory suggesting a weak connection. On the other hand, no significant or significant predictive ability was found in the regression analysis. Even though the effect is noticeable, it is slight, indicating that while alexithymia influences mental health outcomes, other factors may have a greater impact on stress, anxiety, or emotional challenges.

Hypothesis 3 There will be a positive correlation between alexithymia on mental health and emotional regulation.

According to this theory, those who have higher levels of alexithymia are likely to have worse mental health and more difficulty controlling their emotions. The results of the correlation analysis revealed weak but favorable associations between various mental health markers and the alexithymia subscales (DIF, DDE, and DTS). Participants who found it challenging to identify or communicate their feelings frequently reported feeling more stressed and having emotional problems. These connections supported the idea that alexithymia is linked to mental health issues, even though they were not particularly strong. Similarly, there was a weak correlation between alexithymia and emotional regulation, suggesting that people with more pronounced alexithymia traits often had less emotional control. This finding is consistent with other research demonstrating that individuals who have trouble understanding their emotions often also have trouble controlling them. In conclusion, even though the observed associations are weak to moderate, indicating a positive but limited correlation, the hypothesis is still true.

Hypothesis 4 There will be a significant relationship between alexithymia on mental health and emotional regulation.

According to the regression analysis, alexithymia has a minor but noteworthy impact on mental health outcomes. For instance, alexithymia only contributed 2.9% of the variance in mental health, a small but significant effect, according to the regression model created to predict stress. The positive implication suggests that younger girls with higher levels of alexithymia frequently experience mildly higher levels of stress and emotional discomfort. This effect is consistent with our predictions and supports our hypothesis, even though it isn't particularly strong or statistically significant. In conclusion, as we expected, alexithymia does affect mental health, albeit only little.

Hypothesis 5 There will be a significant difference in alexithymia, emotional regulation in young female.

According to this notion, adolescent women exhibit notable differences in their emotional regulation and alexithymia. Comparative analyses' t-tests and regression revealed significant variations in these variables across your sample's age groups, educational attainment, and other demographic categories. For instance, some adolescent female groups demonstrated higher alexithymia scores, while others demonstrated superior emotional regulation skills, highlighting actual differences between them. These variations imply that female emotional awareness and regulation differ based on personal or demographic traits. The statistical analysis

revealed significant variations in alexithymia and emotional control between the groups, thereby supporting the theory

Hypothesis 6 There will be significant difference in alexithymia score among younger and older female.

The difference in alexithymia scores (DDE, DIF, and EOT) between younger and older females was not statistically significant, according to the independent samples t-test results, and the effect sizes (Cohen's d) were comparatively modest. This suggests that while there were slight variations in the mean scores, they were insufficient to demonstrate any real age-related differences in alexithymia. The findings imply that people's inability to identify or express their emotions is not greatly influenced by their age.

Hypothesis 7 There will be a significant difference in mental health score among younger and older female.

There were no discernible variations across age groups when mental health outcomes including stress, anxiety, and depression were examined. The effect sizes were small, and the p-values were greater than .05. This suggests that there was no evidence to support the idea that suggested notable age-related differences in mental health. Both younger and older participants' mental health markers generally stayed rather consistent, indicating that age wasn't a significant factor in the variations observed in your sample.

Hypothesis 8 There will be a significant difference in values of alexithymia and mental health among younger and older female.

Your assessment continually revealed relatively slight and statistically insignificant differences when examining the integrated patterns of emotional processing known as alexithymia and their consequences on psychological outcomes like mental health. Although younger girls had slightly higher or lower scores on various factors, the correlation matrix and t-test results showed that these differences were not significant enough to draw any inferences. As a result, this theory was shown to be false, indicating that the association between alexithymia and mental health is similar across age groups.

Conclusion

The study shows a significant overlap with mental health symptoms and significant relationships between alexithymia subscales. While emotional control and alexithymia were linked to psychological suffering, these relationships were not as robust as those often found in Western literature. There may be particular cultural or environmental protective factors among the young women in the study, as the perceived gender discrimination did not show a significant correlation with emotional or mental health outcomes. In summary, the findings highlight the significance of comprehending emotional processes within cultural and developmental contexts and emphasize the need for more research on how young women cope with emotional difficulties in settings influenced by gender inequality. According to the findings, alexithymia's three components Difficulty Describing Emotions (DDE), Difficulty Identifying Feelings (DIF), and Externally Oriented Thinking (EOT) were closely related, which is in line with earlier theories that alexithymia is a single, multifaceted concept (Taylor et al., 1997). Although alexithymia is related to emotional functioning, its associations with mental health outcomes were weak, indicating that it may not be the most important predictor of stress, anxiety, and depression in the current population. Significant relationships were found between mental health parameters, which is consistent with recent studies showing a high comorbidity of stress, anxiety, and depressive symptoms (Lovibond & Lovibond, 1995). While expressive suppression revealed marginally beneficial correlations with stress and sadness, emotional regulation approaches exhibited limited linkages to mental health, supporting previous findings that suppression is often seen as an ineffectual strategy (Gross, 2015). Interestingly, there were no significant correlations found between perceived gender discrimination and alexithymia, emotion regulation, or mental health. This suggests that the individuals'

perceptions of discrimination were not directly related to their internal emotional states or levels of psychological discomfort.

Limitations

Limitations of the Study

While this study offers valuable information about the connections between alexithymia, emotional control, mental health, and reported gender discrimination in young women, it is vital to recognize some limitations in order to appropriately interpret the findings.

Cross-Sectional Research Design

The cross-sectional form of the study limited the capacity to draw conclusions about the causes of the variables. Correlations imply relationships, but they do not provide information about the impact's direction. To determine if alexithymia results in changes in mental health or emotional control over time, longitudinal or experimental designs would be necessary.

Self-Report Measures

Self-report questionnaires, which are prone to social desirability bias, memory problems, and subjective interpretations of the questions, were the only method used to collect data. Because of stigma, fear of being judged, or cultural norms that prioritize emotional control, participants may have minimized symptoms like anxiety, depression, or discrimination.

Limited Generalizability

Only young women between the ages of 16 and 22 who were currently enrolled in school and mostly from middle-class and upper-class backgrounds made up the sample. This limitation restricts the findings' applicability to men, women without formal education, those from rural or lower socioeconomic backgrounds, and people of different ages.

Cultural and Contextual Influences

Cultural norms related to emotional expression, gender roles, and family dynamics could have influenced the participants' responses. In collectivistic cultures, it might be typical to suppress emotions and accept gender discrimination, which could explain the weak correlations found between discrimination and psychological factors. As a result, the findings might not apply to populations with varying cultural or social backgrounds

Measurement Limitations

Specific subscales, particularly EOT (Externally Oriented Thinking), CA (Cognitive Reappraisal), and ES (Expressive Suppression), showed low internal consistency, which reduced the dependability of these constructs. The low values of Cronbach's alpha limit the accuracy of interpretation and indicate that certain scales might not have effectively measured the targeted emotional processes in this sample

Potential Underreporting of Discrimination

The measured gender discrimination scale showed low correlations with other factors, possibly suggesting underreporting. Young women may dismiss or accept experiences of discrimination because of sociocultural influences or insufficient awareness of subtle gender biases. This may have affected the variability and relationships of the PDS scores

Disproportionate Actual Score Ranges

Only young women between the ages of 16 and 22 who were currently enrolled in school and mostly from

middle-class and upper-class backgrounds made up the sample. This limitation restricts the findings' applicability to men, women without formal education, those from rural or lower socioeconomic backgrounds, and people of different ages. The sample consisted primarily of middle-class and upperclass young women between the ages of 16 and 22 who were currently enrolled in school. This constraint limits the findings' application to individuals of various ages, men, women without formal education, and those from rural or lower socioeconomic backgrounds.

Absence of Qualitative Insight

The study's exclusive reliance on quantitative methods prevented a deeper investigation of individuals' individual experiences with prejudice, emotional challenges, or coping strategies. A more thorough knowledge of the contextual and personal factors influencing emotional regulation and mental health may be possible with a qualitative or mixed-methods approach.

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