

UNDERSTANDING EMOTIONS IN SILENCE: A MULTI-GROUP STUDY OF ALEXITHYMIA, EXECUTIVE DYSFUNCTION, AND MENTAL HEALTH ACROSS ADULTS IN PAKISTAN

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Abstract

Because of the strong link to various mental health issues, more attention is being given to alexithymia, a condition in which it is hard to recognize, describe and show emotions. Most of the research so far has examined alexithymia among clinical and student groups, but not much is understood about it in other wage-earning jobs in developing regions. Alexithymia was studied in teachers, community stakeholders and politicians from Punjab, Pakistan, to see if there was a link between this condition and anxiety, depression and occupational stress. A cross-sectional survey was performed using the TAS-20, HADS and OSI to assess 450 participants. From the statistics, a higher level of alexithymia was observed among politicians relative to others. Relations of a strong positive nature were noted between alexithymia and anxiety, depression and stress at work. According to hierarchical regression analysis, anxiety was the leading cause of alexithymia, followed by depression and work-related stress and the model could explain 48% of the data. This shows that professional positions with a lot of responsibility often cause stress which requires urgent support and protective health programs for all professionals in Pakistan.

Keywords: Alexithymia, emotional expression, anxiety, depression, occupational stress, professionals, Pakistan

Introduction

The human experience depends on emotions, since they have an impact on thinking, behavior and relationships with others. Being able to sense and express emotions helps people lead a healthy psychological life and get along well with others. Yet, certain people deal with constant difficulties in knowing and describing their emotions which is known as alexithymia. Two researchers, Nemiah and Sifneos, described it in the 1970s as a set of challenges in recognizing emotions, thinking in an externally focused manner and having a low level of imagination (Taylor, Bagby, & Parker, 1997). Though it's a common personality feature, it is still related to many psychological and physical health problems (Bagby & Taylor, 2007; Lumley, Neely, & Burger, 2007).

Studies have shown that individuals with alexithymia often have depression, anxiety, somatization and difficulty in communicating well with people (Herbert, Herbert, & Pollatos, 2011). Many studies have examined alexithymia in students and people seeking therapy, but not much is known about it among adults in stressful positions such as educators, politicians and

those involved in community work (Derksen, Kramer, & Katzko, 2002; Ali, Rafiq, & Abbas, 2020).

Problem Statement

Alexithymia is found in roughly 8–15% of the global population, but these numbers may change based on the method used and culture (Franz et al., 2008; Mattila, Salminen, Nummi, & Joukamaa, 2009). Even so, research is quite restricted in Pakistan and looks at students, with scientists finding more instances of addiction than the global average (Imran et al., 2023; Jafer, Nasir, & Khan, 2021). Researchers have not studied alexithymia in adults who play key roles in leadership and education. Alexithymia is likely to be common and damaging in groups from Pakistan where showing emotion is normally considered inappropriate and expected to vary depending on gender and rank (Farooq & Zafar, 2021). It is very important to know how alexithymia occurs in these populations to guide specialized treatment plans.

Rationale of the Study

There is a lack of research on alexithymia in Pakistan and so most study has focused on students and patients. Because it addresses just a specific area, the theory does not take into account the challenges that teachers, politicians and stakeholders have with emotional processing in their roles. On top of that, dealing with specific emotions is important for such groups and managing them appropriately impacts their effectiveness and happiness. Researching alexithymia in such populations will help reveal emotional challenges causing some psychological problems and poor job performance. It will also supply data to the field of alexithymia that relates to Pakistan, enabling appropriate strategies for mental health care and developing emotional literacy.

Objectives

This is meant to examine:

1. Try to understand the level of alexithymia reported by teachers, politicians and community stakeholders in Pakistan.
2. Find out if a person's age, gender, level of education and works have any relationship with alexithymia.
3. Investigate the relationship between alexithymia and feelings of anxiety, depression and work-related stress.
4. Find out what cultural and job-related factors may contribute to alexithymic traits.

Research Questions

1. How many community stakeholders, teachers and politicians in Pakistan experience alexithymia?
2. How are socio-demographic characteristics related to alexithymia here?
3. Is it true that alexithymia can cause people to feel psychological stress and stress in their jobs?
4. What influences personality, career or life situation may be the source of alexithymic traits?

Significance of the Study

It helps satisfy the need for more data on emotional understanding by focusing on groups other than the normal medical patients and learners. The outcomes will improve people's knowledge of how alexithymia relates to one's work and interpersonal connections in Pakistan. The study aims to give mental health professionals and policymakers knowledge needed to

create interventions that address emotional literacy and psychological health among key members of society.

Literature Review

Alexithymia consists of several aspects such as the inability to recognize and express one's feelings, external-mindedness and restricted ability to imagine possibilities (Taylor, Bagby, & Parker, 1997). Alexithymia first appeared in psychosomatic research and has since become recognized across psychology, psychiatry and social sciences because of its link with different mental health issues (Bagby & Taylor, 2007). This review summarizes and examines research done in other countries and Pakistan on alexithymia related to its prevalence, correlates among people and possible effects on their mental health.

A number of studies around the world have shown that the general population has alexithymia in about 10% of people, though estimates can differ because of various testing tools and cultures (Franz et al., 2008; Mattila, Salminen, Nummi, & Joukamaa, 2009). Because the Toronto Alexithymia Scale (TAS-20) has been validated world-wide, researchers can study people from various cultures (Bagby, Taylor, & Parker, 2001). Several studies have found that people with alexithymia often have depression, anxiety and less emotional control (Honkalampi et al., 2001; Li, Zhang, Guo, & Zhang, 2015). Herbert, Herbert and Pollatos (2011) believe that because alexithymia means impaired awareness of internal cues, people with the condition have trouble experiencing emotions. Such deficits could leave people in jobs with high stress, for example, teachers and politicians, more likely to develop exhaustion and physical health problems (Derksen, Kramer, & Katzko, 2002; Lumley, Neely, & Burger, 2007).

Culture also has an important influence on how and how often alexithymia appears in people. Igarashi et al. (2012) state that since emotional restraint is valued in collectivist cultures, people from these cultures often display more alexithymia. It is very important to consider this cultural difference when studying alexithymia in South Asia. Although alexithymia is widely studied globally, there is still little research on this topic in Pakistan and most of it looks at students and patients (Imran et al., 2023; Nadeem, Khan, & Younas, 2022). It appears from available studies that approximately 15 to 23 percent of Pakistani university students experience alexithymia which is more than the global rates; this could be due to exposure to stress in Pakistani society. For example, in their study, Imran et al. (2023) found a positive link between alexithymia and emotional distress among students. Their findings highlight that more research is needed in communities. Additionally, recent studies point out that there are differences in alexithymia mainly based on gender and age in Pakistani samples. Compared to men, women report stronger alexithymia which may result from socialization that stops them from showing their feelings (Farooq & Zafar, 2021; Hashmi, Khawaja, & Shahid, 2021). In the same way, older adults have higher alexithymia, in line with international research that reports an age-related drop in processing emotions (Mattila et al., 2009; Jafer et al., 2021). Furthermore, very few studies have looked at occupational groups in Pakistan, but the findings suggest that people with alexithymia tend to feel much more stressed and experience burnout (Rama, 2020; Ridha and Kazmi, 2023). Because teachers and people with political responsibilities usually deal with (a lot of) emotional situations, alexithymia can negatively influence their choices, relationships and ability to cope with stress.

It is thought in this theory that alexithymia is related to weak emotional awareness and dysfunctions of the brain and mind (Lane & Schwartz, 1987; Moriguchi et al., 2006). Because of these deficits, people in jobs that demand a lot of emotions may have issues with connecting with

others and their mental well-being. Whereas research from international studies has revealed the strong connections between alexithymia and mental health (Grabe, Spitzer, & Freyberger, 2004; Marchesi, Brusamonti, & Maggini, 2000) such studies in Pakistan have not been conducted for various age brackets and occupations. In addition, since alexithymia seems to be influenced by family relations, gender expectations and educational history in Pakistan (Kausar & Hussain, 2020; Zainab, Khan, & Hameed, 2023), further research on these points is important. Moreover, since there is not a lot of epidemiological information on alexithymia, we are unable to learn how it may affect the health of the population or create special services to address it.

All things considered, alexithymia is recognized as a common and clinically significant factor in Pakistan and on a global scale, mostly among groups under high stress at work. Literature clearly highlights how important it is to use assessment and interventions that consider culture. However, research in Pakistan is still scattered and majorly concerned with student groups. Studies in the future should focus on teachers, political officials and those from the community together to understand alexithymia's different demographic characteristics, social links and influence on work performance. As a result, mental health policies will develop and there will be suitable interventions for psychology and social issues in Pakistani society.

Methodology

Research Design

The current research used a cross-sectional and correlational survey design to study alexithymia among those in emotionally challenging jobs in Pakistan. The selected design showed strong ability to look at psychological features of a population in one time frame and to observe what connects alexithymia to other psychosocial factors (Creswell & Creswell, 2018).

Participants and Sampling Strategy

From three main professional sectors educators, politicians and community members a total of 450 participants took part in the study. People for the study were selected from Lahore, Karachi and Islamabad to mix people from various backgrounds and jobs. To be included, people had to fulfill these conditions:

- The age of respondents was 25 to 60 years
- A minimum of five years of working experience in their profession
- Having an active job or public role
- Having the ability to understand English or Urdu

Stratification by profession was used in selecting the sample to reflect the correct proportion of participants. Using this method helped the researcher target certain groups related to the study's focus on emotional labor and social influence (Patton, 2015). Participants in the study included men and women from many educational and marital groups.

Instruments

1. TAS: 20 measures study participants' main outcome variable, alexithymia, as suggested by Bagby, Parker and Taylor (1994). This questionnaire covers three basic domains to evaluate your personality.

- Having Difficulty Identifying Feelings
- Experiencing trouble when trying to explain your emotions
- External Focused Thinking

The answers are given on a Likert scale from 1 (I strongly disagree) to 5 (I strongly agree). A score above 60 is a sign of clinically meaningful alexithymia and a score between 52 and 60 may indicate possible alexithymia. Researchers worldwide and especially in South Asia

have proved that TAS-20 shows strong psychological characteristics (Taylor et al., 1997; Imran et al., 2023). In this study, the value of Cronbach's alpha was 0.87.

2. Hospital Anxiety and Depression Scale (HADS): In order to measure psychological distress, the Hospital Anxiety and Depression Score (HADS) (Zigmond & Snaith, 1983) was applied. The scale measures anxiety and depression through the use of 14 items grouped into two subscales. People give each item a rating on a 4-point scale. Both clinical and non-clinical South Asian people have been found to use HADS properly (Hassan et al., 2015). Cronbach's alpha in this investigation was 0.82 for anxiety and 0.79 for depression.

3. Occupational Stress Index (OSI): Planemakers' jobs were evaluated for stress with the Occupational Stress Index which includes 46 items for role overload, role ambiguity, powerlessness and other important factors. Before, the Urdu version was also included in Pakistani occupational studies (Nadeem et al., 2022). The study had internal consistency reliability of 0.85.

Procedure

IRB approval of the University of Okara was acquired which allowed us to request formal permission from the necessary authorities to engage participants at their workplaces and community centers. Before the data was collected, every attendee was presented with a detailed sheet and asked to sign an informed consent form. Participants chose which language they wanted to use for the surveys Either Urdu or English and a trained assistant did the administration. To prevent interviewers from influencing the answers, standard guidelines were given. Taking only 25–30 minutes, each survey was completed entirely by participants. Everyone's privacy and anonymity were taken very seriously.

Data Analysis

All the data were handled and looked at using IBM SPSS Statistics Version 26. It used the following analysis strategy: Frequencies, means and standard deviations were worked out for each variable. Overall and for various occupations, cut-offs from TAS-20 were used to figure out the rate of both clinical and subclinical alexithymia.

Bivariate Analysis: Chi-square tests were applied to assess the connection between alexithymia and different groups by category. Pearson's product-moment correlations were used to examine the link between alexithymia, anxiety, depression and occupational stress.

Multivariate Analysis: To find out what affected alexithymia, a hierarchical multiple regressions was used while age, gender and profession were controlled. The data was checked by ANOVA to find out if mean TAS-20 scores differed between occupational sectors. We decided that significance levels would be $p < .05$. If missing data in each variable were less than 5%, the whole case with the missing value was omitted from the analysis.

Ethical Considerations

The researchers followed the Declaration of Helsinki (2013) when conducting this study. At any step of the process, people were allowed to withdraw from the experiment. Sensitive data was stored on drives with encryption being used only for research purposes.

Results

Table 1

Descriptive Statistics for Key Variables (N = 450)

Variable	M	SD	Range	α
Alexithymia	58.74	9.21	34–83	0.87

(TAS-20)				
Anxiety (HADS-A)	9.02	3.46	2–17	0.82
Depression (HADS-D)	8.41	3.59	1–18	0.79
Occupational Stress (OSI)	118.6	21.44	78–176	0.85

Table 1 shows the descriptive statistics of alexithymia, anxiety, depression, and occupational stress of the participants ($N = 450$). The average alexithymia score of alexithymia by using TAS-20 was $M = 58.74$ ($SD = 9.21$), with the overall range of 34-83, which means that the participants at an average gender are within the range of borderline to high alexithymia. The TAS-20 had good internal consistency ($\alpha = .87$). In the case of anxiety, which was measured with the HADS-A, the mean score was $M = 9.02$ ($SD = 3.46$), which has a range of 2 to 17 indicating some anxiety among the participants, but the levels are moderate. The coefficient of reliability of this scale was satisfactory ($\alpha = .82$). On the same note, the depression as assessed using the HADS-D had a mean score of: $M = 8.41$ ($SD = 3.59$) with a range of scores of 1 to 18 representing moderate depressive symptoms in the sample. The consistency within the scale of depression was acceptable ($\alpha = .79$). The mean score on the OSI was also quite high with a mean occupational stress of $M = 118.6$ ($SD = 21.44$), and a range of 78 to 176. The standard deviation is quite large, which means that there is a significant difference in the occupational stress levels of the participants, which might be due to job occupation or work environment differences. The OSI proved to be reliable enough ($\alpha = .85$). In sum, the internal consistency of all the variables of the study was between acceptable and good, which presupposes that the tools applied were suitable to the present sample.

Table

2

One-Way ANOVA for Alexithymia by Occupation

Source	SS	df	MS	F	p
Between	2321.41	2	1160.71	14.26	< .001
Within	36218.59	447	81.01		
Total	38540.00	449			

The level of alexithymia was analyzed in a one-way analysis of variance (ANOVA) in order to understand whether the difference between occupational groups in terms of alexithymia was significant. The findings showed that there is a statistically significant difference in alexithymia scores across the occupational groups, $F(2, 447) = 14.26$, $p < .001$. Compared to the within-group variance ($SS = 36218.59$), the between-group variance ($SS = 2321.41$) was far much larger and is therefore indicative of a significant effect of occupation on alexithymia levels among participants. These results indicate that people with varying religious backgrounds have been found to suffer varying a levels of alexithymia. Nevertheless, due to the fact that the ANOVA only explains that there is a difference between groups, the post hoc tests (e.g., Tukey HSD) would be needed to ascertain which two or more occupational groups significantly differ in each other in terms of alexithymia.

Table 3

Correlation Matrix

Variables	1	2	3	4
1	—			
2	.53**	—		
3	.49**	.58**	—	
4	.46**	.44**	.41**	—

Note. $p < .01$ (**).

The figures in Table 3 illustrate Pearson correlation between alexithymia, anxiety, depression and occupational stress. All of the statistical correlations indicated that the variables were linked closely and significantly at an extremely low level. There was a strong relationship found between alexithymia and anxiety ($r = .53$), depression ($r = .49$) and stress at work ($r = .46$). These links reveal that people who find it hard to describe and understand emotions are more at risk of dealing with stress in both their work and personal lives.

Table

4

Hierarchical Regression Predicting Alexithymia

Predictor	B	SE	β	t	p
Step 1					
Age	0.11	0.04	.14	2.87	.004
Gender (0 = F, 1 = M)	1.78	0.94	.09	1.89	.060
Profession (dummy coded)	2.14	0.83	.17	2.58	.010
Step 2					
Anxiety	0.79	0.11	.36	7.18	< .001
Depression	0.52	0.10	.27	5.06	< .001
Occupational Stress	0.21	0.05	.19	4.20	< .001

$R^2 = .14$ for Step 1, $\Delta R^2 = .34$ for Step 2, total $R^2 = .48$, $F(6, 443) = 67.95$, $p < .001$

A hierarchical multiple regression was conducted to examine whether anxiety, depression, and occupational stress predict alexithymia, after controlling for age, gender, and profession. In Step 1, demographic variables (age, gender, and profession) were entered. This model was significant, $F(3, 446) = 24.25$, $p < .001$, and explained 14% of the variance in alexithymia ($R^2 = .14$). Age ($\beta = .14$, $p = .004$) and profession ($\beta = .17$, $p = .010$) were significant predictors, whereas gender approached significance ($\beta = .09$, $p = .060$). In Step 2, anxiety, depression, and occupational stress were added to the model. The addition of these psychological variables significantly improved the model, $R = .34$, $F(3, 443) = 67.95$, $p < .001$, bringing the total variance explained to 48% ($R^2 = .48$). In the final model, anxiety ($\beta = .36$, $p < .001$), depression ($\beta = .27$, $p < .001$), and occupational stress ($\beta = .19$, $p < .001$) were all significant positive predictors of alexithymia, indicating that higher levels of these factors are associated with higher levels of alexithymia, controlling for demographic variables. Overall, results suggest that while demographics account for a modest proportion of variance in alexithymia, psychological factors especially anxiety and depression make a substantial contribution.

Discussion

The purpose of this study was to find out how many teachers, community stakeholders and politicians in Pakistan have the trait known as alexithymia and to look at its psychological effects on them. The study highlights how having emotional processing difficulties, especially in alexithymia, can lead to high stress, anxiety and depression among professionals from different work environments.

On average, the participants' alexithymia scores were high, pointing to the presence of many emotional processing difficulties among them. It was found that people in different occupational groups show a large variation in alexithymia levels. Those with alexithymia were mostly ranked as politicians, then community stakeholders and finally teachers. It shows that the occupation has an impact on a person's emotional awareness and ability to express it (Beresnevaite, 2000). Because politicians often encounter great pressure and must show emotional control, some may display or end up with alexithymic traits (Kojima, 2012). Teachers, who interact emotionally with students a lot, showed lower levels of alexithymia which is consistent with evidence that such jobs may lessen feelings of emotional numbness (Bagby et al., 2020). Also, the results of correlation analyses revealed that there are highly positive relationships between alexithymia and anxiety, depression and occupational stress. It is consistent with earlier studies that alexithymia is a factor that negatively influences different types of psychological problems (Honkalampi et al., 2000; Marchesi et al., 2005). According to the regression analysis, anxiety significantly impacted the presence of alexithymia more than depression and stress. Supporting this, stress and problems related to emotions can possibly make alexithymic tendencies more severe over the years (Lumley et al., 2007).

Theoretical and Practical Implications

- With these results, it becomes even clearer that alexithymia can result from emotional difficulties and may lead to problems. The findings prove that workplace mental health interventions should be designed for different professions, especially those with greater pressure and less understanding of emotions.
- Based on theory, the research supports the biopsychosocial model by including emotional traits, psychological conditions and environmental stresses. In addition, it confirms the link between deficient emotion regulation, external stress and mental health problems (Bagby & Taylor, 2000).
- Basically, the study points out that organizations including government institutions and civil servants should include training on emotions and stress reduction in their staff development. In the same way, school systems could still help teachers by providing them with resources for their emotional health.

Strengths and Limitations

Because the study looked at many different occupational groups and had a large sample, its results are transferable to other workers. Besides, TAS-20, HADS and OSI are reliable, well-established tests used to measure the results. Even so, it has several problems that need to be addressed. First, using cross-sectional data means that we cannot draw causes from the results. Next, people might report answers in a way that makes them look better in sensitive political situations. Third, even though the sample consisted of people from various industries, it was focused only in selected areas in Punjab, missing a national view.

Future Directions

Scientists should carry out studies over time to examine how stress at work affects emotions and can harm mental health. Besides, qualitative research may reveal the ways job responsibilities can affect how people express or control their emotions. Try looking at mindfulness, emotion-focused therapy and resilience training as possible solutions for alexithymia in professional situations.

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