

# The Impact of Alexithymia on Burnout and Job Performance among Management Education Teachers

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## ABSTRACT:

Management education teachers play a vital role in promoting students' development, but they often face high workload demands, performance pressure, and limited institutional support, increasing risk of burnout. This study examined the influence of alexithymia dimensions on burnout subtypes and job performance among management education teachers in higher education institutions in India. A quantitative design was used with 385 teachers (41.3% female, 58.7% male). Data were collected using the Toronto Alexithymia Scale, Burnout Clinical Subtype Questionnaire, and Job Performance Scale, and analyzed statistically. Results showed that externally oriented thinking was positively associated with the frenetic burnout subtype and job performance. Difficulty identifying feelings was positively related to the under-challenged subtype and negatively related to job performance. The worn-out subtype showed a negative association with job performance. Overall, alexithymia increased vulnerability to burnout. Emotional awareness and coping skills are essential for maintaining performance. Psychological support, emotional intelligence training, and stress management interventions are recommended for improving teacher well-being and effectiveness in higher education contexts in India overall.

**Keywords:** Alexithymia, Burnout, Management Education Teachers, Job Performance, Higher Education.

## Introduction

Teaching is one of the most demanding professions and deserves greater recognition. Unfortunately, the teaching profession is increasingly becoming a source of stress due to low pay, insufficient staffing, heavy workloads, and a negative working environment. As a result, high levels of stress can lead to job dissatisfaction and burnout (Üngüren, E., et al., 2024).

Burnout is a psychological syndrome that evolve

in individuals who have work relationships with others. Maslach (1976) noted that helping professions, such as social work and education, have the highest potential for emotional stress due to the constant interaction with other people and their challenges. Burnout can manifest as fatigue, frustration, decreased interest in one's work, emotional numbness, and a poor self-image (Khammissa, R. A., et al., 2022). Additionally, it may lead to negative workplace behaviors, including absenteeism, increased sick days, early retirement, substance abuse (such as alcohol and

excessive consumption of coffee and cigarettes), and workplace accidents. Moreover, burnout can negatively impact teaching standards, jeopardizing the overall quality of the educational system.

Farber (1990) identified three types of burnout

over the last two decades depending on people's level of dedication to their work-related responsibilities: frenetic, under-challenged, and worn-out. This framework was later formalized and expanded to apply to the general working population. Montero-Marin, García-Campayo, Mosquera, and López (2009) and Montero-Marin et al. (2011) provided a definition of burnout that reflects these categories. Employees with the frenetic subtype are driven to achieve results despite facing management and personal limitations. They work increasingly harder until they become exhausted. These individuals are motivated and deeply committed to their roles. The Overload subscale represents the tendency to sacrifice personal life and health for work success, while the Ambition subscale reflects a strong desire for achievement and high performance at work.

Additionally, the Involvement subscale indicates the daily overcome job-related challenges. Individuals with high burnout scores related to being under-challenged typically work in monotonous environments that do not promote professional growth. This lack of interest and enthusiasm for work is reflected in feelings of boredom, discontent, and indifference. A desire for development is often accompanied by a wish to pursue a different career that better aligns with one's interests and skills, frustration over untapped talents, and missing opportunities for personal advancement. The worn-out subtype refers to Employees who struggle with stress and rejection and often exhibit a fatigued demeanor. Organizational rigidity can have a detrimental impact on them, giving them a sense of lost control over their job outcomes.

The concept of "Lack of Control" describes a sense of powerlessness that arises from managing various situations that are beyond the employee's influence. The "Neglect" subscale

pertains to a lack of respect and a tendency to give up when faced with challenges at work. The "Lack of Acknowledgment" subscale indicates an employee's belief that the organization does not appreciate their efforts and commitment.

Job performance denotes the degree to which an individual contributes to an organization's attainment of its objectives. Various characteristics define and measure job performance, and the specific factors may differ depending on the chosen framework (Koopmans et al., 2011). However, most experts believe that job performance is comprised of two interconnected components. Borman and Motowidlo (1993) identified these two primary components of job performance: Task performance is often referred to as "in-role prescribed behavior" and refers to an employee's primary duties (Koopmans et al., 2011). Contextual Performance: This element extends beyond the formal responsibilities of an employee. The term

"discretionary extra-role behavior" is occasionally used (Koopmans et al., 2011).

Personality of individuals is another important determinant of burnout. By definition, alexithymia is a nature featured with struggle to recognize and express emotions effectively (Preece, D. et al., 2018). Alexithymia is strongly linked to management illnesses, as well as anxiety and depression (Liu, Z., He, S., & Hou, C. 2025). When compounded with these related issues, alexithymia can negatively impact Management Education Teachers' productivity and efficiency, ultimately affecting the overall quality of education. While research exploring the correlation between alexithymia and burnout is limited, a study in this area found that alexithymia and burnout are significantly correlated. However, antecedent studies have not revealed the relationship of alexithymia with subtypes of burnout and its repercussions on job performance of management Management Education Teachers in India. The purpose of this study is to fill the empirical gap in the existing literature.

## Review of Literature

Scarzello and Prino, (2025) - The degree of

burnout among Italian Management Education Teachers who work with children ages 0–6 was evaluated. The study involved 130 teachers in all. The results showed that personal achievement and alexithymia were negatively correlated, although emotional weariness and depersonalization were positively correlated. Of the three components of burnout, the most significant predictor was the alexithymia dimension associated with Difficulty Identifying Feelings. In contrast, job satisfaction was directly associated with personal achievement and indirectly associated with emotional exhaustion and depersonalization.

Zhang, X. et al., (2021) - The study looked at

how burnout among village doctors is influenced by personality, occupational engagement, and alexithymia. 2,684 village doctors from Jinan, Shandong Province, China, took part in the study between May and June 2019. To assess variables such as alexithymia, personality traits, work engagement, job burnout, and demographic factors, the study used a Likert scale in a self-completed questionnaire. According to the study, 65.2% of the village doctors suffered from burnout, with 34.9% exhibiting moderate to severe depersonalization, 61.6% having mild to severe low sense of personal achievement, and 54.3% exhibiting moderate to severe emotional weariness.

Saeidi, Z. et al. (2020) investigated the experiences of hospital nurses in Iran with reference to shift work, personality factors, occupational burnout, and alexithymia. Although the shift schedule was not significantly correlated with alexithymia, gender, work position, and personality characteristics showed significant correlations. Burnout is more common among nurses who have greater levels of alexithymia. The study emphasized the need for interventions, especially for women, to reduce both alexithymia and burnout due to the significant relationships identified between gender, work status, and alexithymia.

Romano et al. (2019) focused on the ways in which students' anxiety and resilience could mitigate the effects of alexithymia symptoms on

educational performance and burnout. The researchers utilized structural equation modeling for mediation analyses. The results indicated that the link between academic weariness, alexithymia, and performance was mediated by anxiety. However, when alexithymia contributed to burnout, resilience had no effect on job performance. The study emphasized that the negative effects of alexithymia on young people's scholastic and professional experiences can be mitigated by lowering anxiety and promoting academic resilience.

### Need And Significance of the Study

"Teachers can change lives with the right mix of chalk and challenges." - Joyce Meyer. In the 21st century, every occupation has become increasingly competitive, with individuals striving to succeed in their careers often at the expense of their personal lives.

Educators are working harder than ever to meet the diverse requisite of their students and institutions, particularly in the wake of the COVID-19 pandemic. Moreover, factors such as inadequate leadership, a lack of resources, overwhelming workloads, and administrative responsibilities have contributed to teacher burnout. Many studies have investigated alexithymia in recent years (Javadzadeh, A., et al., 2024; Gaggero, G., et al., 2020). Vandermeer underscored the need for further research and acknowledged the growing scientific evidence surrounding alexithymia.

A survey of the literature demonstrates that

much of the current research has focused on nurses (Saeidi et al., 2020; Li, Y., et al., 2025), mental health professionals (Akhtar & Khan, 2019), and nursing students (Romano et al., 2019), examining the effects of alexithymia on burnout, performance, work engagement, and self-esteem. However, there has been little research on management Education Teachers, particularly in the Indian context, and its impact on job performance. Given that this area is still largely unexplored, the goal of this study is to explore the association between alexithymia & various subtypes of burnout among management teachers. This study is

unique in its examination of the connection between alexithymia and the three subtypes of burnout—frenzied, under-challenged, and worn-out. Additionally, the paper will address the implications of these factors on the work performance of Management Education Teachers in higher education institutions in India.

### Objectives

This study analyzing the association of alexithymia with subtypes of burnout and job performance among Management Education Teachers in India.

### Materials and Method

The study used primary data to inspect the interdependence between alexithymia, subtypes of burnout, and work performance among Management Education Teachers in Indian higher education institutions. Data were collected through simple random sampling from management faculty at various types of universities (deemed to be universities, central universities, private universities, and state universities) via an online questionnaire. A total of 410 responses were received, with 385 used after excluding incomplete ones. One-way ANOVA and multiple regression analyses were employed to examine the evidence. Throughout the process, participants received assurances of anonymity and confidentiality. The study received ethical approval from Vignan's Foundation for Science, Technology & Research in India.

### Design

It was an exploratory research study.

### Study Tools

#### A. Toronto Alexithymia Scale

Data was collected using a demographic survey and the twenty-item Toronto Alexithymia Scale (TAS) by Bagby et al. (1994), which assesses difficulty articulating and identifying feelings, and externally oriented thinking. Rated on a Likert scale, TAS has acceptable validity (Cronbach's  $\alpha = 0.79$ ).

#### B. Job Performance Scale

Koopmans' (2012) Individual Work Performance Questionnaire (IWPQ) was used to assess task and contextual performance on a five-point Likert scale. The tool was very reliable, with a Cronbach's alpha of 0.96, showing great internal consistency.

#### C. Subtypes of Burnout

Montero-Marin and García-Campy (2010) employed the Burnout Clinical Subtype Questionnaire (BCSQ), which consists of 36 items scored on a 5-point Likert scale, to measure burnout risk across three scales and nine subscales. The Frenetic scale is composed of ambition, involvement, and overload. The Under-challenged scale measures indifference, lack of development, and boredom.

The Worn-out scale comprises neglect, lack of acknowledgment, and lack of control. Strong internal consistency was demonstrated by the tool (Cronbach's  $\alpha = 0.91$ ). A demographic survey was also conducted to collect information about the participants' age, gender, marital status, income, employment history, and level of education.

### Results

The study used SPSS ( $\alpha = 0.05$ ) for data analysis. Means and standard deviations summarized numerical data, while frequencies described categorical data. Multiple regression, and ANOVA, assessed relationships and differences in burnout and alexithymia across demographic variables.

**Table 1: Participants characteristics and their total mean scores of subtypes of burnout and alexithymia**

| Variables   | Characteristics | N   | %     | Burnout, mean | SD   | Alexithymia, mean | SD   |
|-------------|-----------------|-----|-------|---------------|------|-------------------|------|
| Gender      | Male            | 226 | 58.7% | 27.8          | 8.32 | 8.81              | 1.9  |
|             | Female          | 159 | 41.3% | 26.84         | 8.5  | 8.76              | 1.99 |
| Age (years) | 20-25           | 14  | 3.6%  | 28.06         | 8.93 | 9.30              | 2.24 |
|             | 26-30           | 45  | 11.7% | 26.77         | 8.42 | 9.34              | 2.06 |
|             | 31-35           | 79  | 20.6% | 28.41         | 8.57 | 8.90              | 2.04 |
|             | 36-40           | 77  | 20%   | 28.07         | 8.40 | 8.87              | 2.07 |
|             | 41-45           | 68  | 17.6% | 26.71         | 8.61 | 8.64              | 1.91 |
|             | 46-50           | 37  | 9.7%  | 27.78         | 8.81 | 8.59              | 1.54 |
|             | Above 50        | 65  | 16.8% | 26.38         | 7.94 | 8.60              | 1.70 |
| Experience  | 1-5             | 77  | 20%   | 27.75         | 8.13 | 8.88              | 2.06 |
|             | 6-10            | 74  | 19.2% | 27.32         | 8.88 | 8.85              | 4.97 |
|             | 11-15           | 90  | 23.3% | 28.16         | 8.42 | 8.75              | 1.99 |
|             | 16-20           | 50  | 13%   | 28.09         | 8.87 | 8.90              | 1.83 |
|             | Above 20        | 94  | 24.5% | 26.23         | 7.95 | 8.50              | 1.68 |

*The results of the one-way analysis of variance. SD: Standard Deviation*

A total of 385 Management Education Teachers participated in this study. The mean scores for burnout and alexithymia were higher among males than females. As shown in Table 1, a majority of participants were male (59%) and younger than 45 years (73.2%). The majority of participants, accounting for 62.5%, had fewer than 15 years of

work experience. The mean scores for alexithymia and burnout were  $8.79 \pm 1.94$  and  $27.24 \pm 8.45$ , respectively (see Table 2). The frenetic subtype and externally oriented thinking were linked to the highest mean scores for burnout subtypes. Additionally, the highest mean scores in job performance were linked to task performance.

**Table 2: The mean scores of alexithymia, burnout, and their subtypes and job performance**

| Variables                       | Mean  | SD   |
|---------------------------------|-------|------|
| <b>Alexithymia</b>              |       |      |
| Difficulty identifying feelings | 2.44  | 0.83 |
| Difficulty describing feelings  | 2.93  | 0.62 |
| Externally oriented thinking    | 3.42  | 0.49 |
| Total (Alexithymia)             | 8.79  | 1.94 |
| <b>Burnout</b>                  |       |      |
| Frenetic                        | 11.16 | 2.66 |
| Under-Challenged                | 7.87  | 2.84 |
| Worn-out                        | 8.39  | 2.95 |
| Total (Burnout)                 | 27.24 | 8.45 |
| <b>Job Performance</b>          |       |      |
| Task Performance                | 3.85  | 0.78 |
| Contextual Performance          | 3.81  | 0.82 |
| Total (Job Performance)         | 7.66  | 1.60 |

SD: Standard Deviation

**Table 3: The result of regression analysis for the prediction of alexithymia (Externally Oriented Thinking<sup>1</sup> and Difficulty Identifying Feelings<sup>2</sup>)**

| Variable                                                          | B      | SE    | Beta   | t-value | P-value |
|-------------------------------------------------------------------|--------|-------|--------|---------|---------|
| <b>Externally Oriented Thinking<sup>1</sup></b>                   |        |       |        |         |         |
| <b>Frenetic Burnout (1<sup>st</sup> stage of burnout)</b>         |        |       |        |         |         |
| Ambition                                                          | 0.491  | 0.092 | 0.274  | 5.355   | 0.000   |
| $R = .262, R^2 = .069, F = 28.247$                                |        |       |        |         |         |
| Overload                                                          | 0.339  | 0.105 | 0.168  | 3.227   | 0.001   |
| $R = .184, R^2 = .034, F = 13.391$                                |        |       |        |         |         |
| Involvement                                                       | 0.527  | 0.076 | 0.336  | 6.901   | 0.000   |
| $R = .300, R^2 = .090, F = 37.931$                                |        |       |        |         |         |
| <b>Job Performance</b>                                            |        |       |        |         |         |
| Task Performance                                                  | 0.511  | 0.073 | 0.323  | 7.000   | 0.000   |
| Contextual Performance                                            | 0.48   | 0.079 | 0.289  | 6.077   | 0.000   |
| <b>Difficulty Identifying Feelings<sup>2</sup></b>                |        |       |        |         |         |
| <b>Under-Challenged Burnout (2<sup>nd</sup> stage of burnout)</b> |        |       |        |         |         |
| Indifference                                                      | 0.38   | 0.07  | 0.342  | 5.42    | 0.000   |
| $R = .396, R^2 = .156, F = 71.024$                                |        |       |        |         |         |
| Lack of Development                                               | 0.255  | 0.075 | 0.221  | 3.38    | 0.001   |
| $R = .296, R^2 = .088, F = 36.867$                                |        |       |        |         |         |
| Boredom                                                           | 0.372  | 0.07  | 0.328  | 5.285   | 0.000   |
| $R = .419, R^2 = .176, F = 81.618$                                |        |       |        |         |         |
| <b>Job Performance</b>                                            |        |       |        |         |         |
| Task Performance                                                  | -0.325 | 0.043 | -0.346 | -7.507  | 0.000   |
| Contextual Performance                                            | -0.279 | 0.047 | -0.284 | -5.969  | 0.000   |

SE: Standard error

According to the regression analysis's findings, externally oriented thinking was significantly predicted by job burnout, its constituents—ambition, overload, and involvement (the first stage of burnout), as well as task and contextual performance ( $p = 0.001$ ; see Table 3). Additionally, the analysis revealed that job burnout, particularly the aspects of being indifference, lack of development, and boredom (the 2nd stage of burnout), along with task performance

and contextual performance, were significant predictors of difficulties in identifying feelings ( $p = 0.001$ ). This suggests that an increase in difficulties related to identifying feelings is associated with a rise in burnout related to the 2nd stage subtypes. From Table 3, after analyzing the t-values, it is evident that difficulty in identifying feelings has the most significant impact on task performance (7.507), followed closely by contextual performance.



**Table 4: The result of regression analysis for the prediction of job burnout (Ambition<sup>1</sup>, Involvement<sup>2</sup> and L. of Control<sup>3</sup>)**

| Variable                         | B     | SE    | Beta   | t-value | P-value |
|----------------------------------|-------|-------|--------|---------|---------|
| <b>Ambition<sup>1</sup></b>      |       |       |        |         |         |
| Task Performance                 | 0.198 | 0.04  | 0.223  | 4.895   | 0.000   |
| Contextual Performance           | 0.219 | 0.04  | 0.236  | 5.518   | 0.000   |
| <b>Involvement<sup>2</sup></b>   |       |       |        |         |         |
| Task Performance                 | 0.524 | 0.049 | 0.518  | 10.788  | 0.000   |
| Contextual Performance           | 0.594 | 0.048 | 0.561  | 12.454  | 0.000   |
| <b>L. of Control<sup>3</sup></b> |       |       |        |         |         |
| Task Performance                 | -0.11 | 0.041 | -0.135 | -2.687  | 0.008   |

SE: Standard error; L. of Control: Lack of Control

With Beta values of 0.223, 0.236, 0.518, and 0.561, the regression analysis shown in Table 4 shows a substantial positive link between job burnout and task and contextual performance, especially during the Ambition and Involvement stages (the initial stage of burnout). The third stage of burnout, the Lack of Control stage, on the other hand, exhibits a strong inverse association with task and contextual performance.

## Discussion

According to recent research, burnout and alexithymia are positively correlated. These results were confirmed by a previous study (Burla, T., eal., 2025). Alexithymia is linked to dissatisfaction with life (Atan, G. 2025) and lower perceived social support (Shayeghian, Z., 2020).

Regression analysis results showed that job burnout, particularly under-challenged (the second stage of burnout) and worn-out (the third stage of burnout) phases, are significant predictors of alexithymia, specifically the difficulty in identifying feelings. This is consistent with previous research showing a positive link between burnout and alexithymia (Saeidi et al., 2020). Conversely, frenetic stage of subtypes of burnout (the first stage) is a significant predictor of alexithymia related to externally oriented feelings. Supporting previous research, our findings showed that externally oriented

feelings, a subtype of alexithymia, did not demonstrate a relationship with stress (Panayiotou et al., 2020).

Moreover, our study revealed a positive correlation between teachers' job performance (task and contextual performance) and alexithymia regarding externally oriented thinking, along with an indirect correlation between job performance and alexithymia expressed as difficulty identifying feelings. Consistent with prior research, these findings suggest that high levels of alexithymia are interrelated with poorer job outcomes (Zhang, X. et al., 2021). Building healthy interpersonal interactions at work is frequently difficult for those with alexithymia (Isilay, U. D. 2023). On the other hand, burnout is less common among people who believe that their supervisors and coworkers are supporting them (Siddiqui, I., et al., 2023).

Furthermore, our study revealed that male teachers were more likely than their female colleagues to experience burnout, accounting for 58.7% of burnout cases. Only 3.6% of participants were between the ages of 20 and 25, according to age stratification. According to the findings, burnout is more common among younger teachers than among more experienced ones. This result aligns with earlier research (Ozamiz-

Ettxebarria, N., et al., 2023). Additionally, a statistical analysis showed that, consistent with previous studies, burnout declines with years of service (Liao, T., et al., 2024).

In this study, the total scores for alexithymia, subtypes of burnout, and job performance among Management Education Teachers were  $8.79 \pm 1.94$ ,

$27.24 \pm 8.45$ , and  $7.66 \pm 1.6$ , respectively. The regression analysis indicated that the frenetic and involvement stages of burnout (the first stage) show a direct relationship with job performance (both task and contextual performance). Conversely, a lack of control exhibited an indirect relationship with job performance. Individuals in the frenetic stage, driven by ambition and a desire for achievement, may initially show high job achievement (Bauernhofer et al., 2019). However, this level of performance is often unsustainable, leading to a decline over time. The frenetic stage can transition to the under-challenged stage and ultimately to the worn-out stage as individuals become increasingly exhausted (Edú-Valsania et al., 2022). Research shows that burnout is generally associated with reduced job performance (Kabir et al., 2016; Lubbadah & Ásványi, 2021).

Therefore, studies suggest that interventions

targeting alexithymia, particularly those incorporating mindfulness and cognitive-behavioral therapy, can help individuals reduce their alexithymia scores and develop coping mechanisms for better emotional well-being (Norman et al., 2019). This enables individuals with alexithymia to enhance their introspection,

boost self-regulation, and develop constructive strategies. Policymakers in educational institutions can design and implement intervention programs aimed at reducing alexithymia and its repercussions on job burnout and job performance among teachers.

### Conclusion/ Implications

The study concludes that alexithymia increases the risk of job burnout among teachers, especially in males, and negatively affects job performance. Externally oriented thinking correlates positively with frenetic (1<sup>st</sup> stage of burnout) and performance, while difficulty identifying feelings links to under-challenged (2<sup>nd</sup> stage of burnout) and poorer performance.

Frenetic burnout, particularly ambition and involvement, positively impacts job performance, whereas worn-out burnout reduces it. Enhancing teachers' emotional expression and communication through targeted interventions can help reduce alexithymia and burnout, improving overall work-life quality in educational institutions.

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### Declaration Of Interest Statement

The authors did not disclose any potential conflicts of interest.

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### References

- Akhtar, S., & Khan, M. J. (2019). Effect of occupational stress on burnout and alexithymia among mental health professionals. *Pakistan Journal of Physiology*, 15(1), 48–51. <https://doi.org/10.69656/pjp.v15i1.1147>
- Atan, G. (2025). Examination of the relationship between alexithymia and satisfaction with life in patients with epilepsy: A cross-sectional study. *Archives of Epilepsy*. <https://doi.org/10.4274/ArchEpilepsy.2024.24131>
- Bagby, R. M., Parker, J. D. A., & Taylor, G. J. (1994). The twenty-item Toronto Alexithymia Scale—I. Item selection and cross-validation of the factor structure. *Journal of Psychosomatic Research*, 38(1), 23–32. [https://doi.org/10.1016/0022-3999\(94\)90005-1](https://doi.org/10.1016/0022-3999(94)90005-1)
- Bauernhofer, K., Tanzer, N., Paechter, M., Papousek, I., Fink, A., & Weiss, E. M. (2019). Frenetic, underchallenged, and worn-out: Validation of the German “Burnout Clinical Subtypes Questionnaire”—Student survey and exploration of three burnout risk groups in university students. *Frontiers in Education*, 4, Article 137. <https://doi.org/10.3389/educ.2019.00137>
- Borman, W. C., & Motowidlo, S. M. (1993). Expanding the criterion domain to include elements of contextual performance. In N. Schmitt & W. C. Borman (Eds.), *Personnel selection in organizations* (pp. 71–98). Jossey-Bass.
- Burla, T., Zaffaroni, M., Marvaso, G., Mazzocco, K., Galli, G., Vincini, M. G., Mastroleo, F., Sarra Fiore, M., Pravettoni, G., & Jereczek-Fossa, B. A. (2025). Exploratory analysis of the professional quality of life in an Italian radiotherapy department: The role of empathy



- and alexithymia. *Tumori Journal*. Advance online publication. <https://doi.org/10.1177/03008916251324631>
- Edú-Valsania, S., Lagua, A., & Moriano, J. A. (2022). Burnout: A review of theory and measurement. *International Journal of Environmental Research and Public Health*, 19(3), Article 1780. <https://doi.org/10.3390/ijerph19031780>
- Farber, B. A. (1990). Burnout in psychotherapists: Incidence, types, and trends. *Psychotherapy in Private Practice*, 8(1), 35–44. [https://doi.org/10.1300/J294v08n01\\_06](https://doi.org/10.1300/J294v08n01_06)
- Isilay, U. D. (2023). The relationship between alexithymia and counterproductive behaviors in the workplace. *Organizational Psychology*, 13(2), 37–52. <https://doi.org/10.17323/2312-5942-2023-13-2-37-52>
- Javadzadeh, A., Sheikholeslami, F., Maroufizadeh, S., & Javadi-Pashaki, N. (2024). The relationship between alexithymia and burnout in nurses: A cross-sectional study. *Journal of Nursing Reports in Clinical Practice*, 1–9. <https://doi.org/10.32598/JNRCP.1.1.64>
- Kabir, M. J., Heidari, A., Etemad, K., Gashti, A. B., Jafari, N., Honarvar, M. R., Ariaee, M., & Lotfi, M. (2016). Job burnout, job satisfaction, and related factors among health care workers in Golestan Province, Iran. *Electronic Physician*, 8(9), 2924–2930. <https://doi.org/10.19082/2924>
- Khammissa, R. A. G., Nemutandani, S., Feller, G., Lemmer, J., & Feller, L. (2022). Burnout phenomenon: Neurophysiological factors, clinical features, and aspects of management. *Journal of International Medical Research*, 50(9). <https://doi.org/10.1177/03000605221106484>
- Koopmans, L., Bernaards, C. M., Hildebrandt, V. H., Van Buuren, S., Van der Beek, A. J., & de Vet, H. C. W. (2012). Development of an individual work performance questionnaire. *International Journal of Productivity and Performance Management*, 62(1), 6–28. <https://doi.org/10.1108/17410401311285273>
- Koopmans, L., Bernaards, C. M., Hildebrandt, V. H., Schaufeli, W. B., de Vet, H. C. W., & Van der Beek, A. J. (2011). Conceptual frameworks of individual work performance: A systematic review. *Journal of Occupational and Environmental Medicine*, 53(8), 856–866. <https://doi.org/10.1097/JOM.0b013e318226a763>
- Liao, T., Liu, Y., Luo, W., Duan, Z., Zhan, K., Lu, H., & Chen, X. (2024). Non-linear association of years of experience and burnout among nursing staff: A restricted cubic spline analysis. *Frontiers in Public Health*, 12. <https://doi.org/10.3389/fpubh.2024.1368548>
- Liu, Z., He, S., & Hou, C. (2025). The effect of alexithymia on depression: Evidence from meta-analysis. *Frontiers in Psychology*, 16, Article 1465286. <https://doi.org/10.3389/fpsyg.2025.1465286>
- Li, Y., Li, J., Zhou, C., Peng, H., Luo, B., Hu, Y., & Fang, J. (2025). Unravelling the link between alexithymia and psychological distress in nurses: A multi-hospital cross-sectional study exploring the mediating roles of workplace conflict and emotional exhaustion. *BMC Psychiatry*, 25(1), Article 319. <https://doi.org/10.1186/s12888-025-06709-z>
- Lubbadeh, T., & Ásványi, Z. (2021). The phenomenon of job burnout and its relation to employee's performance: Empirical evidence from the Jordanian banking sector with international perspective. *University of Pécs*. <https://doi.org/10.15170/MM.2021.55.01.02>
- Maslach, C. (1976). Burned-out. *Human Behavior*, 5, 16–22.
- Montero-Marin, J., Monticelli, F., Casas, M., Roman, A., Tomas, I., Gili, M., & Garcia-Campayo, J. (2011). Burnout syndrome among dental students: A short version of the Burnout Clinical Subtype Questionnaire adapted for students (BCSQ-12-SS). *BMC Medical Education*, 11, Article 103. <https://doi.org/10.1186/1472-6920-11-103>
- Montero-Marin, J., & García-Campayo, J. (2010). A newer and broader definition of burnout: Validation of the Burnout Clinical Subtype Questionnaire (BCSQ-36). *BMC Public Health*, 10, Article 302. <https://doi.org/10.1186/1471-2458-10-302>
- Montero-Marin, J., García-Campayo, J., Mera, D. M., & Del Hoyo, Y. L. (2009). A new definition of burnout syndrome based on Farber's proposal. *Journal of Occupational Medicine and Toxicology*, 4, Article 31. <https://doi.org/10.1186/1745-6673-4-31>
- Norman, H., Marzano, L., Coulson, M., & Oskis, A. (2019). Effects of mindfulness-based interventions on alexithymia: A systematic review. *BMJ Mental Health*, 22(1), 36–43. <https://doi.org/10.1136/ebmental-2018-300029>
- Ozamiz-Etxebarria, N., Legorburu Fernnandez, I., Lipnicki, D. M., Idoiaga Mondragon, N., & Santabábara, J. (2023). Prevalence of burnout among teachers during the COVID-19 pandemic: A meta-analysis. *International Journal of Environmental Research and Public Health*, 20(6), Article 4866. <https://doi.org/10.3390/ijerph20064866>
- Panayiotou, G., Leonidou, C., Constantinou, E., & Michaelides, M. P. (2020). Self-awareness in alexithymia and associations with social anxiety. *Current Psychology*, 39, 1600–1609. <https://doi.org/10.1007/s12144-018-9863-5>
- Preece, D., Becerra, R., Robinson, K., Dandy, J., & Allan, A. (2018). The psychometric assessment of alexithymia: Development and validation of the Perth Alexithymia Questionnaire. *Personality and Individual Differences*, 132, 32–44. <https://doi.org/10.1016/j.paid.2018.05.011>
- Romano, L., Buonomo, I., Callea, A., & Fiorilli, C. (2019). Alexithymia in young people's academic career: The mediating role of anxiety and resilience. *The Journal of Genetic Psychology*, 180(4–5), 157–169. <https://doi.org/10.1080/00221325.2019.1635077>
- Saeidi, Z., Ebrahimi, H., Areshtanab, H. N., Tabrizi, F. J., & Mostafazadeh, A. (2020). Alexithymia and its relationships with job burnout, personality traits, and shift work among hospital nurses: A cross-sectional study. *Nursing and Midwifery Studies*, 9(2), 83–89. [https://doi.org/10.4103/nms.nms\\_106\\_19](https://doi.org/10.4103/nms.nms_106_19)
- Scarzello, D., & Prino, L. E. (2025). Teacher burnout in pre-schools: The role of alexithymia and job satisfaction. *Psychology in the Schools*. Advance online publication. <https://doi.org/10.1002/pits.23518>
- Siddiqui, I., Gupta, J., Collett, G., McIntosh, I., Komodromos, C., Godec, T., Ng, S., Maniero, C., Antoniou, S., Khan, R., & Kapil, V. (2023).

- Perceived workplace support and mental health, well-being and burnout among health care professionals during the COVID-19 pandemic: A cohort analysis. *CMAJ Open*, 11(1), E191–E200. <https://doi.org/10.9778/cmajo.20220143>
- Shayeghian, Z., Amiri, P., Hajati, E., & Gharibzadeh, S. (2020). Moderating role of alexithymia in relationship between perceived social support, diabetes-related quality of life, and glycated hemoglobin in patients with type 2 diabetes. *Journal of Research and Health*, 10(1), 27–34. <https://doi.org/10.32598/JRH.10.1.1362.1>
- Üngüren, E., Onur, N., Demirel, H., & Tekin, Ö. A. (2024). The effects of job stress on burnout and turnover intention: The moderating effects of job security and financial dependency. *Behavioral Sciences*, 14(4), Article 322. <https://doi.org/10.3390/bs14040322>
- Vandermeer, M. R. (2014). *Secondary traumatic stress and alexithymia in high-risk professionals* (Master's thesis, University of Western Ontario). Western Libraries Electronic Thesis and Dissertation Repository. <https://ir.lib.uwo.ca/etd/2163/>
- Zhang, X., Bai, X., Bian, L., & Wang, M. (2021). The influence of personality, alexithymia and work engagement on burnout among village doctors in China: A cross-sectional study. *BMC Public Health*, 21, Article 1507. <https://doi.org/10.1186/s12889-021-11544-8>