

**ORIGINAL ARTICLE** 

# Occupational burnout and communication skills in private sector workers: a focus from occupational health

#### Wilder Zuñiga-Alcantara<sup>1,a</sup> 🗈 🗠

<sup>1</sup> Universidad Nacional Mayor de San Marcos, Lima, Perú.

<sup>a</sup> MD, Occupational Health Specialist.

#### Keywords:

burnout, professional; occupational health; aptitude; social interaction (Source: MeSH - NLM).

#### ABSTRACT

**Objective.** To determine the relationship between occupational burnout and communication skills in private sector workers in Lima (Peru). **Methods.** A quantitative study with a basic type and non-experimental design, with a correlational and cross-sectional scope. The population consisted of 128 private sector workers in Lima, while the sample was census-based. Two instruments were used, one for each variable, both valid and reliable. The Spearman's rho was used for hypothesis testing. **Results.** In the occupational burnout variable, the moderate level was the most frequent with 75.8%, and in the communication skills variable, the deficient level was the most frequent with 45.3%. Likewise, a relationship between occupational burnout and communication skills was found (rho = 0.791; p-value = 0.000). **Conclusions.** There is a relationship between occupational burnout and communication skills in private sector workers in Lima, both overall and in each of its dimensions.

# Desgaste ocupacional y habilidades comunicativas en trabajadores del sector privado: un enfoque desde la salud ocupacional

Palabras clave: agotamiento profesional; salud

laboral; aptitud; interacción social; agotamiento ocupacional (Fuente: DeCS - BIREME).

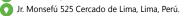
#### RESUMEN

**Objetivo.** Determinar la relación entre el desgaste ocupacional y las habilidades comunicativas en trabajadores del sector privado de Lima (Perú). **Métodos.** Estudio de enfoque cuantitativo, de tipo básico y diseño no experimental, con alcance correlacional y transversal. La población estuvo conformada por 128 trabajadores del sector privado de Lima, mientras que la muestra fue censal. Los instrumentos se utilizaron uno para cada variable, siendo ambos válidos y confiables. Para la contrastación de las hipótesis se usó el rho de Spearman. **Resultados.** En la variable desgaste ocupacional, el nivel moderado fue el más frecuente con un 75,8 %, y en la variable habilidades comunicativas, el nivel deficiente fue el más frecuente con un 45,3 %. Así mismo, se evidenció relación entre el desgaste ocupacional y las habilidades comunicativas en trabajadores del sector privado de Lima, a nivel general y en cada una de sus dimensiones.

**Cite as:** Zuñiga-Alcantara W. Occupational burnout and communication skills in private sector workers: a focus from occupational health. Rev Peru Cienc Salud. 2025; 7(1):41-9. doi: https://doi.org/10.37711/rpcs.2025.7.1.559

#### **Correspondence:**

O Wilder Zuñiga-Alcantara





Rev Peru Cienc Salud. 2025; 7(1):41-9 41

# 

Currently, there is a noticeable gap in scientific evidence regarding how occupational burnout relates to communication skills among private sector workers <sup>(1)</sup>. Investigating this aspect is essential to understand how physical, emotional, and cognitive exhaustion affects employees' ability to interact effectively in their work environment <sup>(2)</sup>.

Occupational burnout, characterized by chronic stress and task overload, can negatively influence communication skills such as active listening, verbal expression, and interpersonal interaction. These are all essential elements for efficient performance in teamwork and customer service. This analysis allows for the identification of preventive and corrective strategies that promote a healthy work environment, thereby improving both employee well-being and organizational productivity <sup>(3)</sup>.

At the international level, in the United States, Quigley et al. <sup>(4)</sup> showed that burnout affects organizational communication by reducing effective interaction (p < 0.05). Khan et al. <sup>(5)</sup>, also in the U.S., found that emotional exhaustion among service sector workers hinders communication with users and colleagues (p < 0.001). Likewise, Burner and Spadaro <sup>(6)</sup>, concluded that work overload limits communicative capacity (p < 0.01), recommending the inclusion of effective interventions.

At the national level, in Cusco, Siccos and Vargas <sup>(7)</sup> found that work stress in the Peruvian public sector reduces the quality of internal communication (p < 0.05). Rodríguez <sup>(8)</sup> concluded that emotional exhaustion does not significantly limit workers' communication (p < 0.05). In contrast, in Huancayo, Requena and Rivera <sup>(9)</sup> showed that high levels of occupational burnout reduce listening capacity in communication (p < 0.01).

At the local level, in Lima, Araujo <sup>(10)</sup> analyzed an institution and concluded that there is an inverse relationship between occupational burnout and effective employee communication (p < 0.05). In this vein, Guardian <sup>(11)</sup> found that emotional exhaustion reduces listening ability and a positive work environment (p < 0.05). Similarly, Aybar <sup>(12)</sup> showed that high stress levels limit communication and generate conflicts affecting occupational health (p < 0.05).

Clearly, ensuring a healthy work environment is essential to reduce the incidence of work-related

illnesses, such as musculoskeletal disorders and work stress <sup>(13)</sup>. Moreover, proper occupational health management improves overall employee well-being, which in turn helps to increase productivity, reduce absenteeism, and improve the organizational environment <sup>(14)</sup>.

Based on this evidence, the importance and relevance of exploring the relationship between occupational burnout and workers' communication skills from an occupational health perspective is supported. In this regard, the objective of this study was to determine the relationship between occupational burnout and communication skills in private sector workers in Lima.

# METHODS

### Type and study area

The research followed a quantitative approach, with a non-experimental, correlational, and cross-sectional design. It was conducted in a private commercial sector company located in Lima, Peru, during the year 2025.

### **Population and sample**

The study population consisted of 128 workers from a private company in the commercial sector. The entire accessible population was used as the sample <sup>(15)</sup>, due to the feasibility of reaching every subject in the study. The inclusion criteria were: being of legal age and completing the informed consent form. The exclusion criteria were: failure to complete the measurement instrument, participation in another study, or being under medical treatment.

#### Variables and data collection instruments

The first variable was "occupational burnout", measured using the Occupational Burnout Scale (see Appendix 1), designed and validated by Uribe-Prado <sup>(16)</sup>. A content validation was also performed, resulting in an Aiken's V coefficient of 0.88, which was considered highly satisfactory (17). The instrument consisted of 25 negatively worded items distributed across three dimensions: exhaustion ( $\alpha = 0.789$ ), depersonalization ( $\alpha = 0.774$ ), and dissatisfaction ( $\alpha = 0.862$ ). The items were answered using a Likert-type scale, with four response options ranging from strongly disagree (1 point) to strongly agree (4 points). Thus, the total score ranged from 25 to 100 points. Based on the score, occupational burnout was categorized as low (25-49 points), moderate (50-75 points), or high (76-100 points).

The second variable was "communication skills", measured using the Communication Skills Scale (see Appendix 2), designed and validated by Leal-Costa et al. (18). A content validation was conducted, resulting in an Aiken's V coefficient of 0.90, which was considered highly satisfactory <sup>(17)</sup>. The instrument included 18 positively worded items grouped into four dimensions: empathy ( $\alpha = 0.77$ ), informative communication ( $\alpha = 0.76$ ), respect ( $\alpha = 0.73$ ), and social skills ( $\alpha = 0.80$ ). Responses were recorded using a Likert-type scale with four options, ranging from strongly disagree (1 point) to strongly agree (4 points). The total score ranged from 18 to 72 points. Based on the score, communication skills were categorized as deficient (18-35 points), moderate (36-54 points), or optimal (55–72 points).

#### Data collection techniques and procedures

The technique used was the survey. Authorization was requested from the company through an official letter; upon approval, participation was conditioned upon the individual's acceptance through a face-to-face informed consent form, followed by a Google Forms® questionnaire. First, sociodemographic characteristics (age, sex, and socioeconomic status) were explored, and then the instruments were administered. Participants were given approximately 30 minutes to complete the process. The research adhered to the relevant ethical standards.

#### Table 1. Sociodemographic characteristics of the sample

|--|

Once the data were collected, they were processed using Microsoft Excel, which enabled the creation of a database and the development of tables for analysis and interpretation. Results were presented in terms of frequencies, percentages, mean, median, and standard deviation. Regarding inferential statistics, due to the ordinal nature of both variables, Spearman's rho correlation coefficient was used <sup>(19)</sup>. Prior to selecting the statistical test, the Kolmogorov-Smirnov test for normality was conducted, as the sample size was greater than 30.

#### **Ethical considerations**

All principles outlined in the Declaration of Helsinki were upheld. The informed consent process was implemented, and responsible research conduct was maintained throughout the study. The research was approved by the Ethics Committee of the Faculty of Medicine at the Universidad Nacional Mayor de San Marcos, under study code 0025-2025.

# 

Regarding the essential characteristics of the participants, males predominated, representing 52.3% of the total. In terms of age, the 18–30 age group stood out, accounting for 49.2% of the total. As for the self-perceived socioeconomic level, the low level was the most frequent, with 75.8% of the total (see Table 1).

Characteristic	n =	128
Characteristic	Freq.	%
Sex		
Male	67	52.3
Female	61	47.7
Age		
18 - 30 years	63	49.2
31 - 50 years	48	37.5
51 - 65 years	17	13.3
Socioeconomic level		
High	01	0.8
Middle	30	23.4
Low	97	75.8

Dimension	ltem	Mean	Median	Standard deviation
	11	3.08	3	0.67
	12	3.23	3	0.66
	13	3.21	3	0.69
	14	2.87	3	0.75
Exhaustion	15	2.26	2	0.60
	16	2.84	3	0.76
	17	2.89	3	0.72
	18	3.02	3	3 0.72
	19	3.15	3	0.66
	110	2.98	3	0.63
	111	2.91	3	0.63
	112	2.39	2	0.69
Depersonalization	113	3.04	3	0.73
Depersonalization	114	2.86	3	0.61
	115	3.21	3	0.62
	116	2.99	3	0.73
	117	3.11	3	0.79
	l18 3.03 3		3	0.80
	119	2.80	3	0.69
	120	2.17	2	0.59
Dissatisfaction	n 121 3.07 3	0.66		
	122	2.83	3	0.74
	123	2.26	2	0.61
	124	3.36	3	0.68
	I25	2.11	2	0.58

Table 2. Descriptive statistics	(numeric)	of occupat	tional burnout
by dimensions and items			

**Table 4.** Descriptive statistics (numeric) of communication skills by dimensions and items

Dimension	ltem	Mean	Median	Standard deviation
	11	3.11	3	0.78
	12	2.19	2	0.65
Empathy	13	3.03	3	0.73
	14	2.99	3	0.75
	15	2.97	3	0.77
	16	3.04	3	0.72
	17	2.90	3	0.75
Informative	18	3.26	3	0.79
Informative communication	19	2.05	2	0.63
	110	2.06	2	0.62
	11	3.11	3	0.79
	112	3.19	3	0.81
Respect	113	2.89	3	0.86
	114	2.88	3	0.77
	115	3.14	3	0.78
Social skills	116	3.10	3	0.73
	117	2.02	2	0.61
	118	2.37	2	0.67

For the occupational burnout variable in private company workers, the moderate level was the most frequent, representing 75.8% of the total (see Table 3).

In the communication skills variable, the highest value was in item I1 (mean = 3.11; median = 3; SD = 0.78). In the informative communication dimension, the highest value was in item I8 (mean = 3.26; median = 3; SD = 0.79). In the respect dimension, the highest value was in item I12 (mean = 3.19; median = 3; SD = 0.81). In the social skills dimension, the highest value was in item I15 (mean = 3.14; median = 3; SD = 0.78) (see Table 4).

**Table 3.** Level of occupational burnout in private sector workers in Lima

In the variable occupational burnout, the highest

value in the exhaustion dimension was found in item I2

(mean = 3.23; median = 3; standard deviation = 0.66).

In the depersonalization dimension, the highest value was in item 115 (mean = 3.21; median = 3; SD = 0.62).

Finally, in the dissatisfaction dimension, the highest value was in item I24 (mean = 3.36; median = 3;

Occupational burnout level	n =	n = 128		
	fi	%		
High	28	21.9		
Moderate	97	75.8		
Low	03	2.3		

**Table 5.** Level of communication skills in private sector workers in Lima

Level of communication skills	n = 128	
Level of communication skins	Freq.	%
Optimal	13	10.2
Moderate	57	44.5
Deficient	58	45.3

SD = 0.68) (see Table 2).

Table	6.	Correlation	between	occupational	burnout	and
comm	unic	ation skills di	mensions			

	Communication skills			
Variables	Spearman's rho coefficient	<i>p</i> -value		
Occupational burnout	0.791	0.00		
Dimensions				
Empathy	0.830	0.00		
Informative communication	0.773	0.03		
Respect	0.808	0.01		
Social skills	0.799	0.00		

For the communication skills variable among private company employees, the deficient level was the most frequent, representing 45.3% of the total (see Table 5).

The decision rule was met in each specific hypothesis and the general hypothesis (p < 0.05), therefore, all null hypotheses were rejected, confirming that there is a significant relationship between occupational burnout and communication skills among private company workers, both overall and in each of its dimensions (see Table 6).

## DISCUSSION

Investigating occupational burnout and communication skills among private sector workers from an occupational health perspective is essential, given that today's work environment is characterized by high levels of stress, pressure, and emotional demands, which can negatively impact employees' physical and mental health <sup>(20)</sup>. Occupational burnout has become a growing concern due to its consequences on employee well-being, productivity, and organizational environment—especially in the aftermath of the COVID-19 pandemic <sup>(21)</sup>.

Regarding the relationship between the two study variables, a significant correlation was found. This result is supported by the idea that effective communication is key to reducing stress and workplace conflicts. Workers with adequate communication skills—such as active listening and clearly expressing their needs—are better equipped to cope with difficult work situations with greater resilience <sup>(22)</sup>. These findings align with those reported by Quigley et al. <sup>(4)</sup> and Siccos and Vargas<sup>(7)</sup>, both internationally and nationally. However, multiple factors influence burnout, such as workload, lack of organizational support, or poor working conditions, which may be more determinant than individual communication skills <sup>(23)</sup>.

Likewise, a significant relationship was found between occupational burnout and the empathy dimension. This may be explained by the fact that empathy allows employees to better understand the emotions and needs of their coworkers, which helps reduce interpersonal conflicts and improve collaboration. Khan et al. <sup>(5)</sup>, demonstrated that better communicative understanding reduces burnout levels. An empathetic employee is more capable of managing stress and pressure, which may decrease the risk of burnout (24). Nevertheless, not all aspects of burnout can be explained by empathy alone. Although empathy is essential for improving interpersonal relationships, it is not sufficient on its own to prevent burnout—as highlighted by Rodríguez<sup>(8)</sup>, —since external factors such as workload, lack of resources, or poor leadership also significantly contribute to exhaustion <sup>(8)</sup>.

A significant relationship was also found between occupational burnout and the informative communication dimension. This can be explained by the fact that clear and effective communication is essential to reduce uncertainty and stress in the workplace. Employees who receive adequate information about their tasks, expectations, and organizational changes are less likely to feel overwhelmed or frustrated, contributing to a lower sense of burnout. These findings are consistent with those of Burner and Spadaro<sup>(6)</sup>, Requena and Rivera<sup>(9)</sup>, and Aybar<sup>(12)</sup>. Good informative communication also facilitates decision-making and problem-solving, which can relieve employees' emotional and mental burdens, thus reducing the risk of burnout (26,27). On the other hand, although informative communication may reduce confusion, there are situations where information overload or lack of clarity in other aspects-such as organizational support or workload-can still contribute to employee exhaustion (28).

Similarly, a significant relationship was observed between occupational burnout and the respect dimension. This can be attributed to the fact that respectful communication fosters a healthy work environment where employees feel valued and understood <sup>(29)</sup>. Disrespect—whether through disparaging remarks or ignoring others' opinions and emotions—can create a hostile and stressful environment, increasing the likelihood of burnout. However, although respect is a key component of workplace dynamics, there are cases where workload, unrealistic expectations, or lack of organizational support may be more decisive in causing burnout <sup>(30)</sup>. This is supported by Rodríguez <sup>(8)</sup>, who emphasizes the need to continue investigating the underlying causes of the relationship between these variables.

Lastly, a significant relationship was found between occupational burnout and the social skills dimension. This is supported by the notion that employees with strong social skills—such as the ability to build positive relationships and manage interpersonal interactionsare better equipped to cope with stress and conflicts in the workplace (31,32). Social skills facilitate problem-solving and the development of support networks within the company, reducing feelings of isolation and exhaustion. These findings align with those of Araujo <sup>(10)</sup> and Guardian <sup>(11)</sup>. However, the relationship between burnout and social skills may not be as decisive as suggested. While social skills can aid in conflict management, burnout may still result from structural factors such as excessive workload, lack of recognition, or poor leadership. Even employees with strong social skills may experience burnout if working conditions are unfavorable, regardless of their ability to interact effectively with coworkers (33).

One of the main limitations of this study is that it focused solely on one sector, which may limit the generalizability of the findings to other work environments with different characteristics. Another limitation is the reliance on self-reported measurement instruments, which may be subject to response biases such as social desirability or subjective interpretation of questions. Additionally, the cross-sectional nature of the study prevents the establishment of causal relationships between the variables, limiting the deeper understanding of underlying processes. Lastly, the online data collection method may have influenced response accuracy due to factors such as lack of supervision, participant distraction during completion, or difficulties in clarifying doubts in real-time.

The findings of this study have important practical implications in the field of occupational health. They highlight the need to implement comprehensive strategies addressing both the prevention of occupational burnout and the strengthening of communication skills among employees. Demonstrating a significant relationship between the two variables underscores the importance of promoting healthy work environments that encourage effective expression, active listening, and emotional management as means to reduce job-related exhaustion.

#### Conclusions

This study concludes that there is a significant relationship between occupational burnout and communication skills among employees of a private company, both overall and across each of the specific dimensions. Future research could focus on deepening the understanding of the relationship between work-related stress levels and specific communication skills, such as active listening and emotional expression, in various sectors of the private and public markets. In addition, it would be relevant to explore the effectiveness of interventions aimed at developing communication competencies to enhance overall occupational health. Another interesting line of research could be to compare the effects of occupational burnout across different demographic profiles, such as age, gender, or length of service, and how these factors influence the ability to manage difficult workplace situations.

#### Recommendations

Private sector organizations should implement training programs in communication skills, such as active listening and assertive communication, to reduce occupational burnout and strengthen employees' ability to manage stress, thereby ensuring their occupational health. The integration of workshops and interactive dynamics can improve interpersonal interaction and conflict resolution, which in turn can increase job satisfaction. Additionally, future research should analyze individual factors such as gender, age, and length of employment through longitudinal studies and diverse samples to develop more effective and context-specific intervention strategies.

## REFERENCES

- Fallahi A, Einolahzadeh K, Zareii khiyavi R, Mohammadi S. Investigating the Effect of Communication Skills Training on Job Burnout of Healthcare Workers in Sanandaj Comprehensive Health Centers. J Health Res Commun. [Internet]. 2023 [cited 2024 Dec 1];9(3):29-38. Available from: https://jhc.mazums. ac.ir/article-1-881-en.html
- Ratzon A, Farhi M, Ratzon N, Adini B. Resilience at Work, Burnout, Secondary Trauma, and Compassion Satisfaction of Social Workers Amidst the COVID-19 Pandemic. Int. J. Environ. Res. Public Health [Internet]. 2022 [cited 2024 Dec 2];19(9):5500. doi: 10.3390/ijerph19095500
- González-Rico P, Guerrero-Barona E, Chambel MJ, Guerrero-Molina M. Well-Being at Work: Burnout and Engagement Profiles of University Workers. Int. J. Environ. Res. Public Health

[Internet]. 2022 [cited 2024 Dec 2]; 19(23):15436. https://doi. org/10.3390/ijerph192315436

- Quigley D, Slaughter M, Qureshi N, Gidengil C, Hays R. Associations of pediatric nurse burnout with involvement in quality improvement. Journal of Pediatric Nursing [Internet]. 2023 [cited 2025 Mar 26];70:e9-e16. https://doi.org/10.1016/j. pedn.2022.11.001
- Khan M, Mitchel N, Assifi M, Chung M, Wright P. Surgeon Burnout and Usage of Personal Communication Devices: Examining the Technology "Empowerment/Enslavement Paradox". Journal of Surgical Research [Internet]. 2023 [cited 2025 Mar 26];285:205-210. https://doi.org/10.1016/j. jss.2022.12.023
- Burner L, Spadaro K. Self-Care Skills to Prevent Burnout: A Pilot Study Embedding Mindfulness in an Undergraduate Nursing Course. Journal of Holistic Nursing [Internet]. 2022 [cited 2025 Mar 26];41(3):265-274. doi: 10.1177/08980101221117367
- Siccos A, Vargas V. Síndrome de burnout y la comunicación de los trabajadores de la red de servicios de salud Cusco sur, 2023 [Internet]. Cusco: Universidad Andina del Cusco; 2023 cited 2025 Mar 25]. Available from: https://hdl.handle. net/20.500.12557/5888
- Rodríguez L. La comunicación interna y Síndrome de Burnout en el personal asistencial de un Centro de Salud de Lambayeque, 2023 [Internet]. Lambayeque: Universidad César Vallejo; 2023 [cited 2025 Mar 25]. Available from: https://hdl. handle.net/20.500.12692/147247
- Requena J, Rivera Y. El burnout y su relación con la comunicación organizacional en la caja municipal de ahorro y crédito Huancayo S.A.C. Sede Tarma [Internet]. Huancayo: Universidad Nacional del Centro del Perú; 2023 [cited 2025 Mar 26]. Available from: https://repositorio.uncp.edu.pe/ handle/20.500.12894/10383
- Araujo M. Clima institucional y Síndrome de Burnout en personal del Centro Materno Infantil Virgen del Carmen, Chorrillos, Lima [Internet]. Lima: Universidad Nacional de Educación; 2023 [cited 2025 Mar 26]. Available from: https:// repositorio.une.edu.pe/handle/20.500.14039/9522
- Guardian ME. Clima laboral y su relación con el síndrome de burnout en trabajadores de una empresa privada de Lima Sur [Internet]. Lima: Universidad Autónoma del Perú; 2025 [cited 2025 Mar 26]. Available from: https://hdl.handle. net/20.500.13067/3629
- Aybar A. Síndrome de Burnout y habilidades sociales en personal atencional de un establecimiento de salud de Lima Sur, 2019 [Internet]. Lima: Universidad Nacional Federico Villarreal; 2024 [cited 2025 Mar 26]. Available from: https:// hdl.handle.net/20.500.13084/9583
- Rodrigues A, Francisco M, Oliveira ÍM, Leite Â, Lopes S. Conflict Management Strategies as Moderators of Burnout in the Context of Emotional Labor. Societies [Internet]. 2025 [cited 2025 Mar 25];15(3):63. https://doi.org/10.3390/soc15030063
- Chen W, Zhou S, Zheng W, Wu S. Investigating the Relationship between Job Burnout and Job Satisfaction among Chinese Generalist Teachers in Rural Primary Schools: A Serial Mediation Model. Int J Environ Res Public Health [Internet]. 2022 [cited 2024 Dec 2];19(21):14427. doi: 10.3390/ijerph192114427
- Lehdonvirta V, Oksanen A, Räsänen P, Blank G. Social Media, Web, and Panel Surveys: Using Non-Probability Samples in Social and Policy Research. Policy & Internet [Internet]. 2021 [cited 2024 Dec 4];13:134-155. https://doi.org/10.1002/poi3.238
- Uribe-Prado J. Estudio confirmatorio de la escala mexicana de desgaste ocupacional (EMEDO). Un instrumento de burnout para mexicanos. Revista Interamericana de Psicología Ocupacional [Internet]. 2007 [cited 2024 Dec

4];26:7-21. Available from: https://dialnet.unirioja.es/servlet/ articulo?codigo=8654501

- 17. Merino-Soto C. Aiken's V Coefficient: Differences in Content Validity Judgments. MHSalud [Internet]. 2023 [cited 2024 Dec 2];20(1):23-32. http://dx.doi.org/10.15359/mhs.20-1.3
- Leal-Costa C, Tirado S, Ramos-Morcillo A, Díaz J, Ruzafa M, van-der-Hofstadt C. Validación de la Escala sobre Habilidades de Comunicación en profesionales de Enfermería. Anales Sis San Navarra [Internet]. 2019 [cited 2024 Dec 4]; 42(3): 291-301. https://dx.doi.org/10.23938/assn.0745
- Rovetta A. Raiders of the Lost Correlation: A Guide on Using Pearson and Spearman Coefficients to Detect Hidden Correlations in Medical Sciences. Cureus [Internet]. 2020 [cited 2024 Dec 5];12(11):e11794. 10.7759/cureus.11794
- Al'Ararah K, Çağlar D, Aljuhmani HY. Mitigating Job Burnout in Jordanian Public Healthcare: The Interplay between Ethical Leadership, Organizational Climate, and Role Overload. Behavioral Sciences [Internet]. 2024 [cited 2024 Dec 6];14(6):490. https://doi.org/10.3390/bs14060490
- Wang Y, Xia Q, Yue H, Teng W. Chinese Rural Kindergarten Teachers' Work–Family Conflict and Their Turnover Intention: The Role of Emotional Exhaustion and Professional Identity. Behav Sci. [Internet]. 2024 [cited 2024 Dec 6];14(7):597. https:// doi.org/10.3390/bs14070597
- Zavgorodnii I, Thielmann B, Litovchenko O, Zabashta V, Kapustnyk V, Schwarze R, et al. Emergency Services During the SARS-CoV-2 Pandemic: A Gender Comparison of Burnout Risk and Personality Traits in the Kharkiv City Sample. Healthcare [Internet]. 2024 [cited 2024 Dec 6];12(23):2356. https://doi. org/10.3390/healthcare12232356
- Cao B, Hassan NC, Omar MK. The Impact of Social Support on Burnout among Lecturers: A Systematic Literature Review. Behav Sci. [Internet]. 2024 [cited 2024 Dec 7];14(8):727. https:// doi.org/10.3390/bs14080727
- 24. Santiago-Torner C. Creativity and Emotional Exhaustion in Virtual Work Environments: The Ambiguous Role of Work Autonomy. Eur J Investig Health Psychol Educ. [Internet]. 2024 [cited 2024 Dec 7];14(7):2087-2100. https://doi.org/10.3390/ ejihpe14070139
- Chan CKY, Wong PWC. The Evaluation of a Mindful Coaching Programme to Reduce Burnout in Social Workers in Hong Kong—A Pilot Study. Behav Sci [Internet]. 2024 [cited 2024 Dec 7];14(10):915. https://doi.org/10.3390/bs14100915
- Moustafa MA, Elrayah M, Aljoghaiman A, Hasanein AM, Ali MAS. How Does Sustainable Organizational Support Affect Job Burnout in the Hospitality Sector? The Mediating Role of Psychological Capital. Sustainability [Internet]. 2024 [cited 2024 Dec 8];16(2):840. https://doi.org/10.3390/su16020840
- Negucioiu M, Buduru S, Ghiz S, Kui A, Şoicu S, Buduru R, Sava S. Prevalence and Management of Burnout Among Dental Professionals Before, During, and After the COVID-19 Pandemic: A Systematic Review. Healthcare [Internet]. 2024 [cited 2024 Dec 8];12(23):2366. https://doi.org/10.3390/ healthcare12232366
- Fredes-Collarte D, Olivares-Faúndez V, Sánchez-García JC, Peralta Montecinos J. Work Satisfaction and Its Relationship with Burnout and Its Consequences, Using a Structural Model, in Air Cabin Crew Members. Sustainability [Internet]. 2024 [cited 2024 Dec 9];16(22):9619. https://doi.org/10.3390/ su16229619
- Santiago-Torner C, Corral-Marfil J-A, Tarrats-Pons E. The Relationship Between Ethical Leadership and Emotional Exhaustion in a Virtual Work Environment: A Moderated Mediation Model. Systems [Internet]. 2024 [cited 2024 Dec 9];12(11):454. https://doi.org/10.3390/systems12110454

- Liu X, Chen Z, Sun M. The Influence of Mission Valence on Faculty's Voice Behavior: The Role of Thriving at Work and Servant Leadership. Behav Sci. [Internet]. 2024 [cited 2024 Dec 10];14(12):1214. https://doi.org/10.3390/bs14121214
- Sanchis-Giménez L, Tamarit A, Prado-Gascó VJ, Sánchez-Pujalte L, Díaz-Rodríguez L. Psychosocial Risks in Non-University Teachers: A Comparative Study between Spain and Mexico on Their Occupational Health. Sustainability [Internet]. 2024 [cited 2024 Dec 12];16(16):6814. https://doi.org/10.3390/ su16166814
- 32. Kilova K, Stoyanova R, Harizanova S, Baltov M. Burnout and Satisfaction with Work–Life Balance among General Practitioners in Bulgaria during the COVID-19 Pandemic. Healthcare [Internet]. 2024 [cited 2024 Dec 12];12(10):987. https://doi.org/10.3390/healthcare12100987
- 33. Yikilmaz I, Surucu L, Maslakci A, Dalmis AB, Toros E. Exploring the Relationship between Surface Acting, Job Stress, and Emotional Exhaustion in Health Professionals: The Moderating Role of LMX. Behav Sci. [Internet]. 2024 [cited 2024 Dec 19];14(8):637. https://doi.org/10.3390/bs14080637

**Funding sources** This research was self-funded.

**Conflict of interest statement** The author declares no conflicts of interest.

## **APPENDICES**

#### Appendix 1. Occupational Burnout Scale

	Strongly disagree	Disagree	Agree	Strongl agree
Dimension: Exhaustion				
1. I wake up in the morning without ease and lack energy to start a new workday				
2. My body demands more hours of rest				
3. It is difficult for me to get up in the mornings to go to work				
4. I feel that one of these days my mind will explode from so much work pressure				
5. I feel mentally exhausted to the point that I cannot concentrate on my work				
6. My hours of rest are not enough to regain the energy I expend at work				
7. I feel that I cannot recover the energy I use at work				
8. When I get home after work, all I want is to rest				
9. The situations I face at work cause me stress				
Dimension: Depersonalization				
10. Providing good service to users at work is not important to me				
11. What I like the least about my job is the interaction with users				
12. At work, everyone seems like strangers, so I'm not interested in interacting with them				
13. It is very difficult for me to be polite to users at work				
14. I have found that people respect me more if I treat them poorly				
15. I find it hard to communicate with users at work				
16. I find it difficult to understand the problems of users at work				
Dimension: Dissatisfaction				
17. Every day I wake up and think I should look for another job where I can be more effective				
18. I feel that my job performance would improve if I had a different kind of job				
19. I feel that my skills and knowledge are wasted in my current job				
20. My work activities no longer seem important to me				
21. I feel that my job is so monotonous that I no longer enjoy it				
22. Even though I do my job well, I do it out of obligation				
23. Even when I put in effort, I don't feel satisfied with my work				
24. It's been a long time since I've done my job with passion				
25. My work is so uninteresting that I find it difficult to do it well				
ppendix 2. Communication Skills Scale				
	Strongly disagree	Disagree	Agree	Strong agree

#### **Dimension: Empathy**

- 1. I explore the emotions of the people around me
- 2. When someone talks to me, I show interest through body language (nodding, eye contact, smiling, etc.)
- 3. I listen to people without prejudice, regardless of their physical appearance, manners, or way of speaking
- 4. I dedicate time to listen to and try to understand people's needs
- 5. I try to understand people's feelings

#### **Dimension: Informative Communication**

- 6. I provide information to people (when it is within my responsibilities) about what concerns them
- 7. When giving information, I use pauses to allow the person to process what I'm saying
- 8. When I give information, I do so in understandable terms
- 9. I believe people have the right to receive truthful information
- 10. I make sure people have understood the information provided
- 11. I find it easy to ask people for information

#### Dimension: Respect

- 12. I respect people's right to express themselves freely
- 13. I respect people's autonomy and freedom
- 14. I feel that I respect people's needs

#### **Dimension: Social Skills**

- 15. I clearly express my opinions and desires
- 16. When someone does something I disapprove of, I express my disagreement or discomfort
- 17. When interacting with others, I express my comments in a clear and assertive way
- 18. I find it easy to make requests to people