Burnout in Times of Crisis: Sociodemographic and Work-related Profile of Burnout, during an Extreme Situation

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Abstract Burnout affects the individuals' health (physical and mental) being a major threat to public health. Moreover, in a world marked by COVID-19, individuals are faced with numerous work, social and economic challenges. However, the influence of COVID-19 on burnout is something that, given the subject's richness, lacks detailed and clear studies in Portugal. In this study, we aim to investigate the burnout of Portuguese workers during COVID-19, according to their sociodemographic and occupational characteristics. 295 workers participated in this cross-sectional study, answering the Oldenburg Burnout Inventory (OLBI) and a sociodemographic and occupational characteristics questionnaire. Data were analyzed using the t-test, Mann-Whitney, one-way ANOVA, and Kruskal-Wallis tests. The data show statistically significant differences

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between some sociodemographic and occupational data. Sociodemographic factors influence burnout such as gender, age, geographical area, marital status, number of children, and academic qualifications. Similarly, occupational factors such as working remotely or not during COVID-19, the economic or social organization's nature, working hours, public or private organization, and salary affect burnout. We discuss these results and propose clues for future research. With this study, we can outline intervention strategies to mitigate burnout and promote well-being and quality of life for individuals at work.

Keywords Burnout; Workers; Sociodemographic factors; Work-related factors; Oldenburg Burnout Inventory (OLBI)

1. Introduction

Due to their increasing rate of change, jobs are continuously becoming more demanding and complex (Eurofound, 2018; Ribeiro et al., 2022), which increases the workers' stress due to their efforts to adapt to such changes (Allgood et al., 2024; Mohammed et al., 2022; Pinto et al., 2024). When reaching extreme levels, stress can lead to burnout syndrome (Sinval et al., 2019), considered "as resulting from chronic workplace stress that has not been successfully managed" (World Health Organization, 2019).

Although burnout is not considered a psychiatric disease by the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2023), it has nevertheless been acknowledged as one of the current biggest threats to productivity and work health in large corporations, due to its effects on both mental and physical health (World Health Organization, 2019). The International Statistical Classification of Diseases and Related Health Problems (11th revision; World Health Organization, 2022) defines burnout as a "syndrome resulting from chronic workplace stress that has not been successfully managed" though only as a residual factor that may affect health status, and "is not in itself a current illness or injury". This "occupational phenomenon" (World Health Organization, 2019) is associated with a considerable risk of adverse physical and

psychological health consequences, such as cardiovascular risk factors and disease (including hypertension), depressive disorders (von Känel et al., 2020), allostatic load, structural and functional brain changes, systemic inflammation, immunosuppression, and eventually premature death (Bayes et al., 2021).

Burnout is characterized by exhaustion, disengagement, and lack of professional efficacy or personal accomplishment (Demerouti et al., 2003; Maslach & Jackson, 1981; Maslach & Leiter, 2017; Sinval et al., 2019). Exhaustion is the most evident manifestation of burnout, referring to feeling overwhelmed and depleted of emotional and physical resources (Maslach & Leiter, 2017). Disengagement refers to an emotional disconnection (indifferent or cynical attitude to work demands) and cognitive detachment from work, possibly for coping with high workloads (Maslach & Leiter, 2017). Due to these symptoms, burnout results in decreased performance, inhibition of creativity and innovation, absenteeism, work-related accidents (Bakker et al., 2014; Sinval et al., 2019), with burnout being transversal to any profession because its trigger stressors may be present in any workplace (Maslach & Leiter, 2017).

COVID-19 pandemic was the worst global health crisis in decades (Pereira et al., 2021). Pandemics are an example of societal emergency situations (United Nations & World Bank Group, 2023; World Health Organization, 2024), from which there are different types, and share the defining characteristic of being a time of uncertainty for individuals about: (1) their own survival, (2) the survival of their relatives, friends, professional allies (e.g., coworkers, supervisors), and (3) the preservation of their workplace.

The stress caused by the presence of these severe uncertainties in people's lives, during the COVID-19 pandemic was worsened by situational factors such as public health/governmental measures that imposed social isolation (e.g., remote work; restrictive social isolation; elderly people restricted to nursing homes; lockdowns/curfews), which made people lose their usual social support (Gabriel & Aguinis, 2022; Jácome et al., 2021).

To face the impact of the pandemic on mental health, the number of Psychology articles about burnout increased exponentially during this period (Carvalho et al., 2023). Organizations worldwide were abruptly demanded to change the way they function, adopt new safety procedures, reinvent themselves, and opt to transition to remote work or layoff (Gabriel & Aguinis, 2022). Ultimately, this led to the suspension of most face-to-face interactions in the workplace (Jácome et al., 2021), having an enormous impact on individuals' mental health, financial role, and their sense of belonging — an inherent human condition (Leiter, 2021). With the shift to remote work, many companies have even reevaluated their workforce needs, leading to downsizing and restructuring (e.g., transitioning to

online sales and services; developing new delivery channels; developing new products/services to meet evolving customer needs; Gabriel & Aguinis, 2022).

It is crucial that societies have the knowledge of which groups of the working population are more prone to develop burnout (currently one of the biggest threats to work health and productivity in large corporations), in order to be able to create effective and adapted intervention programs for these groups. This knowledge may be especially important during extreme situations such as pandemics, natural disasters, and wars. It is also crucial to investigate if the groups more susceptible to develop burnout are the same in normal-living situations versus extreme situations, in order to adapt the contents and targets of the intervention programs.

However, it is often impossible to investigate public health matters during the time that extreme situations are occurring. To tackle this question, we chose to investigate burnout during the COVID-19 pandemic, because this extreme situation, contrary to most cases, allowed to investigate public health matters (in our case, burnout) during the time that it was still occurring. Consequently, we performed an investigation of the burnout reaction of individuals during this pandemic, in which we aimed to obtain a demographic and work-related profile of the individuals more susceptible to develop burnout in a population. Therefore, with this study, we intended to provide the knowledge of which population groups (defined through their values in demographic and work-related variables) that may be more susceptible to develop burnout during situations of public emergency, and enable the creation of preventive programs to act upon vulnerable groups beforehand. We believe that this contribution may be crucial for future interventions that aim to protect the public physical and mental health in the work context.

2. Materials and Methods

2.1. Sample

295 Portuguese workers (178 female) were recruited with a non-probability convenience sampling method, and participated voluntarily in our study. Our exclusion criterion was not fulfilling one of the following inclusion criteria: be-

ing 18 or older; being professionally active in Portugal; having a computer/smartphone/tablet and internet connection; and being fluent in Portuguese. The sample's mean age was 39.22 years old (*SD* = 14.47), mostly with higher education (*N* = 172; 58.30%). The majority of participants lived in the center of the country (*N* = 159; 53.90%), was single (*N* = 138; 46.80%), had no children (*N* = 131; 44.40%), and worked in the private sector (*N* = 201; 68.10%) and economic enterprise (*N* = 187; 63.40%). Regarding working conditions, 36.60% earned more than 1501 euros per month (*N* = 108), 87.50% worked full-time (*N* = 258), 43.10% had an open-ended contract (*N* = 127), 33.90% worked in a company with less than 50 employees (*N* = 100), 66.10% had no leadership role (*N* = 195), and 54.20% (*N* = 160) worked remotely during COVID-19 (Table 1).

Table 1. Descriptive Statistics - Sociodemographic (*N* = 295)

	M	***SD***	***N***	***%***
Gender				
Female			178	60.30
Male			117	39.70
Age (years)	39.22	14.47		
18-24			48	16.30
25-64			232	78.60
>65			15	5.10
Geographical area				
North			61	20.70
Center			159	53.90
Lisbon			33	11.20
Alentejo			23	7.80
Algarve			19	6.40
Marital status				
Single			138	46.80
Married			83	28.10
Divorced			57	19.30
Widowed			17	5.80
Number of children				
0			131	44.40
1			65	22.00
2			48	16.30
3			42	14.20

≥ 4	9	3.10
Salary		
≤635€	16	5.40
635-900€	53	18.00
901-1100€	31	10.50
1101-1300€	30	10.20
1301-1500€	57	19.30
>1501€	108	36.60
Working time		
Full-time	258	87.50
Part-time	27	12.50
Contract type		
Green receipts	20	6.80
Fixed-term	65	22.00
Other	83	28.10
Organization size (no. of workers)		
<10	52	17.60
11-50	100	33.90
51-250	83	28.10
≥250	60	20.30
Leadership role		
Yes	100	33.90
No	195	66.10
Academic qualifications		
4th grade	4	1.40
6thgrade	2	0.70
9th grade	13	4.40
12th grade	104	35.30
Higher education	172	58.30
Organization nature		
Economic	187	63.40
Social	81	27.50
Other	27	9.20
Organization type		
Public	92	31.20
Private	201	68.10
Other	2	0.70

Remote work during COVID-19		
Yes	160	54.20
No	135	45.80

2.2. Measures

We used a self-report scale, the Oldenburg Burnout Inventory (OLBI; Demerouti et al., 2003), translated, adapted, and validated to Portuguese (Sinval et al., 2019), which measures exhaustion (8 items) and disengagement (7 items) through employees' perception. Each item is answered on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

We also used a sociodemographic (gender; age; geographical area; marital status; number of children; academic qualifications) and occupational (organization size; salary; organization nature and type; contract type; working time; leadership role; and remote work during COVID-19) questionnaire.

2.3. Procedures

2.3.1. Data collection

We created an online form to collect data on LimeSurvey. We recruited participants by disseminating the form on the researchers' social networks. We complied with all ethical procedures for human research, according to the Declaration of Helsinki currently in use. The University of Coimbra's Ethics and Research Deontology Committee approved the study (code number: CEDI/FPCEUC:69/7). After participants gave their informed consent, they started answering the items.

2.3.2. Data analysis

We used IBM SPSS Statistics (IBM Corp., 2021) for all data analyses: t-test, Mann-Whitney, one-way ANOVA, and Kruskal-Wallis. To characterize the sample, we used descriptive statistics (frequencies, dispersion and central tendency measures). Although OLBI presents good internal consistency through

Cronbach's alpha (Sinval et al., 2018), we retested it. The instrument presented excellent internal consistency (Cronbach, 1951), both in the two burnout dimensions ($\alpha_{disengagement}$ = .90; $\alpha_{exhaustion}$ = .91) and the full-scale (α = .95).

Regarding the t-test for independent samples, we intended to verify whether there were differences in burnout by gender, remote work during COVID-19, and organization nature. Fulfilling the test's underlying assumptions (normality and homogeneity of variances), we used this test (Field, 2009; Howell, 2011; Marôco, 2014). Nevertheless, the working time, leadership role, and organization type variables did not comply with the homogeneity variance criteria, and, therefore, the equivalent non-parametric Mann-Whitney test was conducted.

Considering the multiple response options in the remaining sociodemographic and professional items (age, geographical area, marital status, number of children, and academic qualifications), we used one-way ANOVA (Field, 2009; Howell, 2011; Marôco, 2014). However, since contract type and organization size did not comply with the homogeneity variance criteria, we used the Kruskal-Wallis non-parametric test to analyze these variables.

3. Results

The t-test results (Table 2) presented statistically significant differences, in both burnout dimensions and on the full-scale, for gender (higher burnout levels amongst females), working remotely during COVID-19 (individuals who worked remotely at some point during COVID-19 reported higher burnout levels), and organization's nature (individuals working in social organizations presented higher burnout levels).

Table 2. Differences in burnout (t-student)

		Disengagement					Exhaustion					Burnout full-scale				
	N	*M*	*SD*	*t*	*df*	*p*	*M*	*SD*	*t*	*df*	*p*	*M*	*SD*	*t*	*df*	*p*
Gender				7.801	293	<.001			8.658	293	<.001			8.641	293	<.001
Female	178	2.67	.748				3.23	.785				2.95	.733			
Male	117	1.97	.778				2.45	.713				2.21	.706			
Remote work during COVID-19				2.647	293	.009			4.391	293	<.001			3.661	293	<.001
Yes	160	2.51	.831				3.11	.844				2.81	.808			
No	135	2.25	.819				2.69	.796				2.47	.772			

Organization nature				-3.894	266	<.001			-6.490	266	<.001			-5.400	266 <.001
Economic	187	2.22	.824				2.66	.797				2.44	.774		
Social	81	2.64	.753				3.40	.751				2.99	.729		

The Mann-Whitney test results (Table 3) showed that working time (full-time or part-time) and organization type (public or private sector) affect both burnout dimensions and full-scale. The Kruskal-Wallis test results (Table 3) revealed that the contract type and the organization size also impact both burnout dimensions and full-scale.

Table 3. Differences in burnout: a) Mann-Whitney; b) Kruskal-Wallis

a)	**Disengagement**			**Exhaustion**			**Burnout full-scale**		
	U	*z*	*p*	*U*	*z*	*p*	*U*	*z*	*p*
Working time	2517.000	-4.657	<.001	2321.000	-5.061	<.001	2353.000	-4.990	<.001
Leadership role	8814.00	-1.352	.176	8989.000	-1.099	.272	9673.000	-.111	.912
Organization type	5948.500	-4.907	<.001	4628.500	-6.875	<.001	5218.500	-5.987	<.001
b)	**Disengagement**			**Exhaustion**			**Burnout full-scale**		
	H	*df*	*p*	*H*	*df*	*p*	*H*	*df*	*p*
Type of contract	41.698	3	<.001	59.026	3	<.001	50.872	3	<.001
Organization size	13.823	3	.003	28.736	3	<.001	20.493	3	<.001

The one-way ANOVA results (Tables 4 and 5) presented significant differences in age, geographical area, marital status, number of children, and academic qualifications, in full-scale burnout and its dimensions. Individuals between 25 and 64 years old showed the highest burnout levels. The Central area showed higher burnout levels comparatively to the Northern area. Married and divorced individuals presented higher burnout levels than single ones. Individuals with no children reported lower burnout levels than those with one to three children. Individuals with higher education tended to experience more burnout. Individuals whose monthly salaries were 1301 euros or higher showed more burnout and exhaustion.

Table 4. Differences in burnout (one-way ANOVA)

	Disengagement		**Exhaustion**		**Burnout full-scale**	
	F	*p*	*F*	*p*	*F*	*p*
Age	4.400	.013	19.210	<.001	10.801	<.001

Geographical area	3.979	.004	5.321	<.001	5.007	<.001
Marital status	4.736	.003	18.549	<.001	11.106	<.001
Number of children	4.317	.002	13.529	<.001	8.662	<.001
Salary	2.146	.060	11.262	<.001	5.755	<.001
Academic qualifications	8.892	<.001	15.601	<.001	13.027	<.001

Table 5. The mean difference in multiple comparisons (one-way ANOVA)

		Disengagement		**Exhaustion**		**Burnout full-scale**	
		Mean difference	*p*	*Mean difference*	*p*	*Mean difference*	*p*
Age							
18-24	25-64	-.333	.030	-.778	<.001	-.555	<.001
18-24	≥65	.055	.973	-.460	.128	-.203	.656
25-64	≥65	.388	.182	.317	.297	.353	.210
Geographical area							
North	Center	-.355	.034	-.462	.002	-.409	.006
North	Lisbon	.044	.999	-.056	.998	-.006	1.000
North	Alentejo	.103	.986	.031	1.000	.067	.997
North	Algarve	-.055	.999	-.101	990	-.78	.996
Center	Lisbon	.399	.083	.406	.077	.402	.060
Center	Alentejo	.458	.091	.493	.059	.475	.055
Center	Algarve	.300	.555	.361	.372	.331	.416
Lisbon	Alentejo	.059	.999	.087	.995	.073	.997
Lisbon	Algarve	-.099	.994	-.045	1.000	-.072	.998
Alentejo	Algarve	-.158	.999	-.132	.986	-.145	.976
Marital status							
Single	Married	-.346	.013	-.700	<.001	-.523	<.001
Single	Divorced	-.398	.012	-.694	<.001	-.546	<.001
Single	Widowed	-.136	.916	-.429	.142	-.283	.481
Married	Divorced	-.052	.982	.006	1.000	-.023	.998
Married	Widowed	.210	.771	.270	.564	.240	.645
Divorced	Widowed	.262	.653	.264	.612	.263	.604
Number of children							
0	1	-.204	.469	-.433	.003	-.318	.052
0	2	-.528	.001	-.761	<.001	-.644	<.001
0	3	-.354	.106	-.802	<.001	-.578	<.001

0	≥4	-.063	.999	-.281	.835	-.172	.967
1	2	-.324	.228	-.328	.183	-.326	.173
1	3	-.150	.885	-.369	.124	-.260	.432
1	≥4	.141	.989	.152	.983	.146	.984
2	3	.174	.851	-.041	.999	.066	.994
2	≥4	.465	.517	.480	.445	.472	.441
3	≥4	.271	.867	.520	.370	.406	.604
Salary							
≤635€	635-900€	-.128	.994	-.170	.974	-.149	.985
≤635€	901-1100€	-.096	.999	-.387	.593	-.242	.914
≤635€	1101-1300€	-.085	.999	-.448	.436	-.266	.878
≤635€	1301-1500€	-.493	.286	-.910	<.001	-.701	.020
≤635€	≥1501€	-.327	.680	-.927	<.001	-.627	.033
635-900€	901-1100€	.031	1.000	-.217	.822	-.093	.995
635-900€	1101-1300€	.042	1.000	-.278	.628	-.118	.986
635-900€	1301-1500€	-.365	.190	-.740	<.001	-.553	.003
635-900€	≥1501€	-.199	.705	-.757	<.001	-.478	.004
901-1100€	1101-1300€	.011	1.000	-.061	1.000	-.025	1.000
901-1100€	1301-1500€	-.396	.265	-.523	.035	-.459	.089
901-1100€	≥1501€	-.230	.747	-.540	.010	-.385	.149
1101-1300€	1301-1500€	-.408	.247	-.462	.095	-.434	.133
1101-1300€	≥1501€	-.241	.717	-.480	.037	-.360	.219
1301-1500€	≥1501€	.166	.822	-.017	1.000	.074	.992
Academic qualifications							
4th grade	6th grade	-.607	.902	-.821	.736	-.714	.806
4th grade	9th grade	-.140	.998	.063	1.000	-.038	1.000
4th grade	12th grade	-.353	.906	-.125	.998	-.239	.971
4th grade	Higher education	-.867	.197	-.820	.225	-.843	.173
6th grade	9th grade	.467	.937	.885	.560	.676	.758
6th grade	12th grade	.254	.992	.696	.715	.475	.901
6th grade	Higher education	-.260	.991	.002	1.000	-.129	.999
9th grade	12th grade	-.213	.892	-.188	.922	-.201	.893
9th grade	Higher education	-.727	.014	-.883	<.001	-.805	.002
12th grade	Higher education	-.514	<.001	-.695	<.001	-.604	<.001

4. Discussion

We characterized burnout in a sample of Portuguese workers, according to their sociodemographic and occupational characteristics. We identified variables that can exert an important effect on burnout, which constitutes a substantial input for research in this field. Our results are largely consistent with previous studies (e.g., Almeida et al., 2020; Duarte et al., 2020; Jácome et al., 2021). Not all these studies used the same measuring instruments (e.g., Maslach Burnout Inventory, Copenhagen Burnout Inventory), underlying models, and sample types (e.g., different occupations and cultures), but, nonetheless, they all measured the main aspects of burnout (Eurofound, 2018).

Individuals living in the center of Portugal manifested more burnout than individuals living in the north. This result is contrary to the study of Almeida et al. (2020), where higher burnout levels were observed for subjects living in the north of Portugal. This discrepancy can be explained by our sample which was mostly collected in the center of the country (N= 159, 53.90%).

Consistent with previous studies (Almeida et al., 2020; Duarte et al., 2020; Jácome et al., 2021; Maslach & Jackson, 1981), we found that women tend to experience more burnout than men. This result has been explained by the expected role of women in society, who have an increased dual role between professional and home life (e.g., daily home duties; children's support; taking care of their parents and/or parents-in-law) in comparison with men (Demerouti & Adaloudis, 2024; Duarte et al., 2020; Maslach & Leiter, 2017), that was also linked to their higher exhaustion scores (Sinval et al., 2019).

Consistent with the results of Almeida et al. (2020), individuals aged 25-64 years presented more burnout than those aged 18-24 years. The causes for this pattern of results in this demographic variable were previously related to a work-related variable, namely individuals in their early careers tend to experience more burnout than those with an established path (Maslach & Jackson, 1981). However, it is important to note that this work-related variable may have a different association with age depending on the education level, since there are often individuals with higher education that only start their careers from 25 years and over. On the other hand, individuals aged 25-64 often have challenging family responsibilities (e.g., marriage, children, older relatives), having to juggle them with their daily work duties (Ren et al., 2024).

Consistent with the results of Duarte et al. (2020), we found that married and divorced individuals manifested more burnout than singles. Duarte et al. (2020) considered that burnout may be higher in married individuals due to professional and marital demands. Accordingly, married individuals are required to balance daily these personal responsibilities with their work duties. This appears

to be especially true for married individuals with one, two or three children (Allgood et al., 2024; Ren et al., 2024), who presented higher burnout and exhaustion levels. Duarte et al. (2020) observed the same results, and explained them with the fact that individuals with children under 12 years old present have increased daily duties (e.g., even as teachers when helping their children with school tasks; children can be sick and require additional care from their parents; school subjects are increasingly demanding and parents sometimes struggle to help their children in this matter) that may contribute to their stress (and, consequently, burnout) and exhaustion levels.

Consistent with previous studies (Abdelhafiz et al., 2020; Maslach & Jackson, 1981; Pereira et al., 2021; Pinto et al., 2024), we found that individuals with higher education presented higher burnout levels. These results have been related to individuals with higher education occupying jobs with higher income, which present increased responsibility, complexity, risk, performance demands, deadlines, and after-hours — work/job characteristics that are associated with higher levels of stress (Bakker et al., 2014; Kramer & Kramer, 2020; Maslach & Jackson, 1981). Previously, this relation between burnout and monthly income has not been totally conclusive due to mixed results in previous research (Almeida et al., 2020; Duarte et al., 2020; Mohammed et al., 2022; Pereira et al., 2021). However, in our study, we observed a clear higher level of burnout in individuals with higher salaries (1301 euros and above), who presented higher levels of exhaustion and/or overall burnout, confirming that higher salaries and academic qualifications are associated with higher levels of burnout. It is worth adding that burnout can also be originated by combining high job demands (e.g., emotional demands, high job pressure, poor working environment, elevated workloads), and low job resources (e.g., salary, job security, role clarity, autonomy, support by peers and supervisors, decision-making participation) (Bakker et al., 2014; Gabriel & Aguinis, 2022).

Individuals who worked remotely, at least at some point during COVID-19, presented higher levels of burnout. Nevertheless, Almeida et al. (2020) obtained results opposite to ours, and this may be due to these authors having measured the burnout levels during the initial stage of the pandemic, when the fear of a virus with unknown consequences made people who worked in person fear being contaminated. However, in the later stages of the pandemic, remote work took its toll on the mental health of remote workers, due to an interplay of various conditions: confinement to home; loneliness; the need of separating work and personal time; having to quickly learn how to deal with this new way of working; difficulty in communicating and collaborating; and lack of motivation (Allgood et al., 2024; Hoffman et al., 2020; Kramer & Kramer, 2020; Pereira et al., 2021).

Our study investigated the burnout reaction of individuals to a time of uncertainty about the main aspects of their own lives and the lives of those closer to them, as it was the case during the COVID-19 pandemic. We obtained a demographic and work-related profile of the individuals in a population that are more susceptible to develop burnout during extreme situations such as a pandemic. Our study provides the knowledge of which population groups (defined through their values in demographic and work-related variables) may be more susceptible to "break" (i.e., develop burnout) in times of public calamity, which is the knowledge required for societies to be able to act upon these groups beforehand.

This knowledge enables the creation of preventive measures for intervening in these groups, when a long-term emergency situation begins in a society/population, in order to keep the maximum number of its individuals executing their roles efficiently and productively in the pursuit of overcoming the current emergency situation, and maintaining the mental health of its individuals. This demographic and work-related profile may even be translatable to other types of emergency situations, such as natural disasters and wars.

The main strength of our study lies in its scope, analyzing burnout according to sociodemographic and occupational characteristics during the COVID-19 pandemic, in Portuguese workers. However, we acknowledge some limitations in our study, due to practical implementation aspects: the size of our sample does not allow us to directly generalize the results to the whole population; our study was cross-sectional, lacking longitudinal measures; and our study did not identify the occupations with the most burnout, and compare occupational groups.

5. Conclusions

Our comprehensive analysis emphasizes the compelling connection between sociodemographic and work-related variables, which together play a crucial role in triggering the debilitating burnout phenomenon. This linkage highlights the intricate interplay within an individual's background, workplace environment, and their susceptibility to burnout, affirming the need for a multi-faceted approach to address this pressing issue. In light of these findings, it becomes evident that immediate and effective action is essential. Governments bear a significant responsibility in safeguarding the well-being of their workforce and, by extension, their society's overall productivity and health. It is imperative for policymakers to not only acknowledge these research results but also to proactively design and implement scientific-based interventions to mitigate the detrimental

effects of burnout. These measures should encompass a spectrum of interventions, ranging from improved workplace regulations and support systems to promoting mental health awareness and resilience-building programs. By addressing the sociodemographic and work-related factors identified in our analysis, governments can proactively reduce burnout and foster a more productive, healthier, and happier workforce, during both normal and emergency times. Ultimately, this proactive approach is an investment in their citizens' well-being and a strategic move towards building a more resilient and competitive society in the long term.

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