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Risk factors and psychosocial resources in Mexican service sector companies

Factores de riesgo y recursos psicosociales en empresas mexicanas del sector servicios

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Abstract

The aim of the study was to assess psychosocial factors, in terms of job demands and resources, present on mexican companies of service sector. An exploratory-descriptive cross-sectional study was carried out. A total of 5.063 workers belonging to 32 organizations that were part of Empresas Más Felices Ranking participated. Results for the total sample indicate optimal levels of mental workload, violence and equity, relationships with colleagues and organizational justice; as well as critical values in double presence, lack of certainty about the future, autonomy and information. There were found statistically significant differences across sex and the fact of having or not people or staff in charge. Added to this, multiple correspondence analysis allowed establishing relationships between sex, generation, demands and labour resources. Strengths, limitations and practical implications of the study carried out are pointed out, and lines of future research are suggested.

JEL Code: C40, D21, I31
Keywords: psychosocial factors; job demands; job resources; service organizations

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Resumen

El objetivo del estudio fue relevar los factores psicosociales, en términos de demandas y recursos laborales, presentes en organizaciones de servicios de México. Se realizó un estudio exploratorio-descriptivo de corte transversal. Participaron un total de 5063 trabajadores pertenecientes a 32 organizaciones que formaron parte del Ranking Empresas Más Felices. Los resultados indican que para la muestra total se destacan niveles óptimos de carga mental, violencia y equidad, relación con los colegas y justicia organizacional; así como valores críticos en doble presencia, falta de certeza sobre el futuro, autonomía e información. Se hallaron algunas diferencias estadísticamente significativas para sexo, personas a cargo en el hogar y personal a cargo en el trabajo. Sumado a ello, análisis de correspondencia múltiple permitieron establecer relaciones entre sexo, generación, demandas y recursos laborales. Se señalan fortalezas, limitaciones e implicancias prácticas del estudio realizado, y se sugieren líneas de investigación futura.

Código JEL: C40, D21, I31
Palabras clave: factores psicosociales; demandas laborales; recursos laborales; organizaciones de servicios

Introduction

During the last five decades, psychosocial factors related to well-being or discomfort in organizations have been a recurrent issue for organizational behavior scholars. Questions such as what motivates people and increases their satisfaction and what aspects negatively influence such variables have received diverse answers from researchers. In this regard, one of the proposals that has obtained the greatest academic consensus is the Job Demands-Resources (JD-R) model created by Bakker and Demerouti (2007). Its popularity is perhaps because it is a generalizable, flexible, and comprehensive model that can be applied to different organizations (Garí Pérez & Martín Andrés, 2021). Indeed, to date, so many meta-analyses have been carried out on the model (Crawford, Lépine, & Rich, 2010; Lesener, Gusy, & Wolter, 2019; Mazzetti, Robledo, Vignoli, Topa, Guglielmi, Schaufeli, 2019; Nahrgang, Morgeson, & Hofmann, 2011) that it has evolved into a theory.

JD-R theory provides insight into and predicts various organizationally relevant outcomes, ranging from motivation and performance to job commitment and satisfaction (Bakker & de Vries, 2021). Built on the conceptual foundation provided by work design and work stress theories, this model and theory bring together both research traditions to explain how job characteristics have direct, indirect, and interactional effects on the psychosocial health of workers, especially on their levels of engagement and burnout (Garí Pérez & Martín Andrés, 2021).

The main premise on which the JD-R model is based is that work conditions can affect psychosocial health. The two fundamental elements refer to job demands and resources (Bakker & Demerouti, 2017; Bakker & de Vries, 2021). Demands represent the physical, psychological, social, or

organizational aspects of work that entail the worker's sustained efforts, with associated costs to their health and well-being. Resources, meanwhile, refer to all those aspects of work (physical, psychological, social, or organizational) that either help to cope with the demands and buffer their harmful potential or stimulate the worker's development, enhancing their motivation and promoting their well-being (Salessi, 2020). Further development of the model includes personal resources, considered as positive self-evaluations that relate to the ability to control and influence the environment. The authors consider that personal resources can mobilize work resources and vice versa, generating an upward-spiraling effect (Bakker & Demerouti, 2017).

Both demands and resources are analyzed at the micro or task level, meso or social level, and macro or intra-organizational level. To this end, the first level considers the characteristics of the activity carried out by the person. The meso level analyzes the social environment in its three aspects: relations with colleagues, team leaders, and superiors, and relations with organizational authorities, clients, users, or stakeholders. Meanwhile, the last level of analysis considers aspects such as the changes required of organizations and workers that imply an effort to adapt to perform at competitive levels (Bakker & Demerouti, 2013 Demerouti & Bakker, 2017).

The second premise of the model states that demands and resources give rise to two distinct processes, one of a motivational nature and the other of a negative nature. Regarding the former, high job and personal resources would stimulate a motivational process from which positive consequences are derived. Meanwhile, high job demands would generate tension that, sustained over time, would gradually erode people's health and well-being (Bao, Liu, Ma, Feng, & He, 2022). Nevertheless, in this model job demands are not conceived as negative stimuli per se. Some studies have even found that positive consequences can be obtained depending on the type of demand (Gargi & Jesse, 2021; Kern, Heissler, & Zapf, 2021). It is, therefore, necessary to distinguish between two types of demands.

On the one hand, threatening demands comprise all those negatively valued by the worker and have a high potential to severely damage health. Conversely, challenging demands comprise those highly valued by the subject, which can promote favorable emotions and states, opportunities for development, and feelings of self-fulfillment. Thus, the motivational process that derives from high resources would be positively increased in the presence of challenging demands (Li, He, & Sun, 2020).

Thus, the JD-R model is ideal for studying organizational practices and resources. In particular, analyzing threatening demands, understood as psychosocial risk factors, is becoming increasingly prevalent in Latin American organizational research. Indeed, recent systematic reviews focused on educational organizations (Monroy-Castillo & Juárez-García, 2019; Ródio Trevisan, Cruz, Dalagasperina, Ariño, & Steil, 2022) highlight that workload emerges as one of the main risk factors among university professors. Among health workers, meanwhile, task overload and interference between work and personal

spheres constitute the greatest psychosocial risks (Uribe-Prado, 2020). Concerning public management, it has been reported that workload and work rate, work-family conflict, and interpersonal problems are the riskiest psychosocial characteristics (Hernández-Gracia & Carrión-García, 2021).

In parallel, the review carried out by Salamanca, Pérez, Infante, and Olarte (2019) of 40 empirical studies conducted in various Latin American countries (Argentina, Uruguay, Colombia, Peru, Mexico, Venezuela, and Chile) and on various occupational samples concluded that psychosocial risk factors are strongly associated with harmful outcomes not only for workers but also for organizations, increasing levels of absenteeism, staff turnover, and workplace accidents. With particular regard to the Mexican context, recent evidence indicates that the country occupies the first place in work stress, surpassing China and the United States (Santoyo Telles, Echerri Garcés, & Figueroa Hernández, 2022). The most common demands are those linked to the workload and work rate, physical strain, workplace harassment, work-family conflict, and organizational fairness (Juárez, 2018).

Although the survey of psychosocial risk factors is well represented in the literature, this is not true of protective factors, i.e., the job resources present in Mexican organizations. In order to facilitate occupational well-being, it is not enough to reduce risk factors; promoting job resources is a key component to becoming a positive organization. For the theoretical postulates of the HERO model (Healthy and Resilient Organization; Salanova, Llorens, Cifre, & Martinez, 2012), healthy and resilient organizations are those that manage work processes in such a way that their employees experience high levels of well-being, develop positive attitudes and behaviors and achieve quality results.

The organizational resources and practices that the company invests are a crucial element in developing "heroic" organizations. According to Acosta, Cruz-Ortiz, Salanova, and Llorens (2015), healthy practices are deployed at three levels: (a) task level (e.g., redesign and job crafting measures to increase autonomy); (b) social level (e.g., resources such as social support and positive leadership styles); and (c) organizational level (e.g., work-family reconciliation measures). Available empirical evidence (Redelinghuys, Rothmann, & Botha, 2019; Lupano Perugini & Castro Solano, 2016; Salanova, Llorens, & Martínez, 2016; Salanova, Martínez, & Llorens, 2014) demonstrates that the perception of positive organizational measures and resources is associated with favorable psychological states, organizationally desirable attitudes and behaviors, and more efficient performances.

Considering the impact of the psychosocial factors that shape the work environment on workers' health, exploratory-descriptive studies designed to survey organizational demands and resources represent a meaningful contribution to any intervention initiative. Against this background, the present study examined the job demands and resources perceived by workers in Mexican organizations in the service category. Secondarily, the research was designed to investigate possible differences in such psychosocial factors in light of certain sociodemographic characteristics suggested by the literature (Anthun &

Innstrand, 2016; Lavoie-Tremblay, Trépanier, Fernet, & Bonneville-Roussy, 2014; Van den Broeck, Vander Elst, Baillien, Sercu, Schouteden, De Witte, & Godderis, 2017), such as gender, staff leadership, having family members who are children or adult dependents, and belonging to a certain generational cohort, following the classic classification of Baby Boomers, Generation X, Generation Y, and Generation Z (Zúñiga Ortega, Aguado García, Barroso Rodríguez, & de Miguel Calvo, 2019).

Method

Design

A descriptive-comparative study was carried out with quantitative logic and a cross-sectional time frame.

Participants

A total of 5 063 workers from 32 organizations in Mexico (12 small, 10 medium, and 10 large) participated in this study. Table 1 shows the participation data by company. The average proportion of respondents per organization was 77%. They belonged to different areas of the service sector: insurance (28.12%), logistics and distribution (18.75%), financial (15.62%), supplies provider (12.5%), consulting (12.5%), basic services provider (6.25%), and health (6.25%).

Table 1
Data on workers and responses from participating companies

	Total employees	Company size	Total responses	Percentage of responses
1	505	BIG	314	62.18
2	91	MEDIUM	87	95.60
3	759	BIG	490	64.56
4	77	MEDIUM	67	87.01
5	69	MEDIUM	67	97.10
6	1595	BIG	706	44.26
7	915	BIG	888	97.05
8	47	SMALL	47	100
9	507	BIG	340	67.06
10	44	SMALL	32	72.73
11	28	SMALL	28	100
12	91	MEDIUM	76	83.52
13	27	SMALL	27	100
14	225	MEDIUM	38	16.89
15	137	MEDIUM	98	71.53

16	30	SMALL	30	100
17	13	SMALL	11	84.62
18	346	BIG	163	47.11
19	20	SMALL	20	100
20	34	SMALL	10	29.41
21	62	MEDIUM	62	100
22	62	MEDIUM	62	100
23	208	MEDIUM	160	76.92
24	34	SMALL	17	50
25	29	SMALL	29	100
26	50	SMALL	45	90
27	348	BIG	224	64.37
28	250	MEDIUM	180	72
29	506	BIG	322	63.64
30	295	BIG	178	60.34
31	272	BIG	197	72.43
32	48	SMALL	48	100
		Total	5063	77.20

Source: created by the authors

The participants' sociodemographic characteristics indicated that 54.9% were male (45.1% female), and the mean age was 38.34 years (SD= 10.73). In terms of educational level, 24% of the sample had completed high school, 6.9% had a tertiary or technical degree, 63% had an undergraduate degree, and 6.1% had a graduate degree and an average length of service of more than 6 years. Regarding marital status, 50.8% were single, 46.8% were married or cohabitating, and the remaining 2.4% were separated or widowed. On the other hand, 49.5% had dependent children or family members. In terms of employment, the average length of service was greater than 6 years, and 31.6% held supervisory or managerial positions in charge of personnel.

Instruments

Participants completed an electronic form containing information on the objective and instructions for responding; informed consent; a section on sociodemographic characteristics to characterize the sample under study and establish comparisons between groups; and the 60 items that comprise the Organizational Happiness Inventory (OHI®). The authors of this manuscript have designed this instrument to measure a generic set of job demands and resources. This inventory is composed of two major scales: (a) Organizational Demands Scale, composed of 31 items that assess eight demands (rate and load; mental load; emotional load; violence and fairness; task changes; role conflict; double burden; lack of certainty about the future) and; (b) Organizational Resources Scale, composed of 29 items that assess eight

resources (information; communication; communication; participation; relationship with colleagues; leadership; organizational fairness; flexible work; autonomy). All items are presented on a 5-point Likert-type scale, ranging from 1 (never) to 5 (always).

Psychometric analyses performed on the sample under study showed evidence of adequate validity and reliability of the scores obtained with this instrument. Accordingly, the confirmatory factor analysis indicated that the reflective and oblique measurement model with two correlated factors, their respective items as observable indicators, and their corresponding measurement errors presented adequate adjustment indices (CMIN/DF = 2.64; GFI= .91; CFI= .92; RMSEA= .04). In turn, both the demands and resources scales and their respective subscales presented adequate reliability and discriminant validity indices, as evidenced by the values corresponding to the ordinal alpha coefficients, CR (Composite Reliability) and AVE (Average Variance Extracted) reported in Table 2.

Table 2
Evidence of reliability and validity of the Job Demands Scale, the Job Resources Scale, and their respective subscales

SCALES AND SUBSCALES	Ordinal alpha	RC	AVE
Demands	.71	.70	.58
Rate and load (P&L)	.75	.78	.54
Mental load (ML)	.63	.63	.53
Emotional load (EL)	.72	.72	.63
Violence and equity (V&E)	.75	.75	.65
Task changes (TC)	.67	.68	.59
Role conflict (RC)	.71	.76	.53
Double burden (DB)	.70	.72	.63
Lack of certainty about the future (LCF)	.73	.75	.66
Resources	.75	.72	.63
Information (INF)	.89	.89	.68
Communication (C)	.82	.71	.60
Participation (P)	.83	.72	.62
Relationship with colleagues (RwC)	.88	.88	.65
Leadership (L)	.91	.94	.58
Organizational fairness (OF)	.81	.71	.60
Flexible work (FW)	.79	.79	.54
Autonomy (A)	.71	.71	.50

Source: created by the authors

Procedure

The data were collected within the international ranking Empresas Más Felices®. This ranking is an initiative of Live 13.5, a Mexican consulting firm specializing in organizational happiness processes with more than 10 years of experience in the category. The contest seeks to recognize companies that promote well-being as a strategic value for their organizations and has been held annually since 2020. Participation is voluntary and open to companies from Spanish-speaking countries of any industry, size, and annual turnover. Organizations must pay a registration fee to participate and designate a person in charge of the evaluation process. At this stage, they are given access to the Ranking platform to provide a series of organizational data such as name, location, invoicing, number of employees, e-mail addresses, etcetera. The evaluation process begins once the actual uploading of the data is corroborated.

The evaluation process of the contest is independent of the consulting firm and consists of four phases involving third parties. First, employees must answer the IFO® through a link they receive in their work e-mail automatically generated from the Empresas Más Felices® platform. Before accessing the survey, they must accept the terms of the informed consent (as expressed in the following section). Then, the responsible person must upload the initiatives carried out by the organization in favor of the well-being of its workers along with supporting evidence (photos, videos, results of satisfaction surveys, etcetera). On the other hand, the person who occupies the position of Executive Director must send a Pitch through an audiovisual resource where they state the reasons for considering their organization as a happy company. Finally, the jury (known as Hero Hunters) makes the final evaluation of the process, considering the results of the three previous instances. At the end of this step, all organizations receive a detailed diagnosis generated from applying the IFO® and the jury's assessment.

This study considers the organizations that participated in the 2022 edition of the Ranking. Therefore, the data analyzed were collected during the second half of 2021.

Ethical considerations

Throughout the analysis of the results, all the ethical precautions related to research with human subjects established by the American Psychological Association (2017) were considered. The participants gave their consent after reading the informed consent form. Thus, it was only possible to continue with the survey after reading and accepting the terms of the consent form. This document explained the research objectives, informed the participants of their rights, and provided contact information for the study director so that anyone interested in communicating and answering questions could do so. They were also informed of the voluntary nature of their participation and the absence of consequences if they withdrew from the

study at any time during the process. Additionally, they were informed in writing that during the data collection and analysis processes and in future publications of results the anonymity of the participants and the confidentiality of the information collected would be safeguarded.

Data analysis

To meet the research objectives, the 33rd and 66th percentiles were calculated for each variable analyzed to establish a parameterization of the results in three categories: critical, moderate, and optimal. The frequencies of the demands and resources assessed according to each of these three categories were then obtained. Next, the linkage between the variables was calculated from bivariate correlations using Pearson's r coefficient. Subsequently, comparisons of the scores obtained as a function of the selected sociodemographic variables were established by calculating the Chi^2 statistic. Finally, to better understand the link between some variables under study, multiple correspondence analyses were performed considering gender, generation, and job demands and resources. The data were processed and analyzed using the SPSS package (version 23).

Results and discussion

Table 3 shows the mean and standard deviation (SD) for the variables analyzed. In addition, the 33rd and 66th percentiles were calculated for the total sample. These enable the introduction of a tripartite division of the raw scores obtained on the scales. For the interpretation, it is proposed that, in the case of the demands, the scores below the first cut-off point be considered "optimal," those between the calculated percentiles "moderate," and those above the second cut-off point "critical." This configuration responds to the postulations of the JD-R model (Bakker & Demerouti, 2017), which argues that as job demands increase, psychosocial vulnerability increases. For the case of job resources, the interpretation of the scores would be inverse in that psychosocial risk would be more likely in the face of lower resources. In other words, a low level of job resources translates into a lower capacity to cope with demands (Bakker & Demerouti, 2013).

Table 3
Descriptive indices by dimension for the total sample (n=5063)

	Dimension	Mean	SD	33rd percentile	66rd percentile
Demands	R&L	3.08	.85	2.89	3.40
	ML	4.19	.65	4.00	4.50
	EL	2.50	.86	2.00	2.75
	V&E	1.81	.68	1.50	2.00
	TC	2.81	.53	2.66	3.00
	RC	2.31	.75	2.00	2.60
	DB	2.35	.88	2.00	2.66
	LFC	2.94	1.10	2.33	3.33
Resources	INF			4.00	4.50
		4.10	.77		
	C	4.21	.71	4.00	4.66
	P	3.98	.81	3.66	4.33
	RwC	4.42	.65	4.25	4.63
	L	4.29	.75	4.00	4.80
	OF	3.95	.83	3.66	4.33
	FW	4.24	.67	4.00	4.75
	A	4.02	.77	4.00	4.33

Source: created by the authors

Once the parameterization of the demands and resources was obtained, the frequency of each of them was analyzed according to the established cut-off points. This information is systematized in Table 4.

Table 4
Absolute and percentage frequency of the results by demands and resources (n=5063)

	Dimension	Optimal	Moderate	Critical	Total
Demands	R&L	2127 (42.0%)	1338 (26.4%)	1598 (31.6%)	5063
	ML	2270 (44.8%)	1255 (24.8%)	1538 (30.4%)	5063
	EL	1770 (35.0%)	1575 (31.1%)	1718 (33.9%)	5063
	V&E	2281 (45.1%)	1311 (25.9%)	1471 (29.0%)	5063
	TC	1447 (28.6%)	2513 (49.6%)	1103 (21.8%)	5063
	RC	2082 (41.1%)	1472 (29.1%)	1509 (29.8%)	5063
	DB	2268 (44.8%)	658 (13.0%)	2137 (42.2%)	5063
	LFC	1321 (26.1%)	1582 (31.2%)	2160 (42.7%)	5063
	Dimension	Critical	Moderate	Optimal	Total
Resources	INF				5063
		2498 (49.3%)	1040 (20.5%)	1525 (30.2%)	
	C	2269 (44.8%)	802 (15.8%)	1992 (39.4%)	5063
	P	1209 (23.9%)	1726 (34.1%)	2128 (42.0%)	5063
	RwC	2060 (40.7%)	498 (9.8%)	2505 (49.5%)	5063
	L	1778 (35.1%)	1841 (36.4%)	1444 (28.5%)	5063
	OF	1319 (26.0%)	1569 (31.0%)	2175 (43.0%)	5063
	FW	2012 (39.7%)	1924 (38.0%)	1127 (22.3%)	5063
	A	2887 (57.0%)	-	2179 (43.0%)	5063

Source: created by the authors

As shown in Table 4, the demands that presented critical values were a double burden and lack of certainty about the future. A recent review (Menéndez-Espina *et al*., 2019) pointed out that the work modes adopted during the pandemic increased work-family conflict. Regarding the latter, it has been highlighted that job insecurity is a concept that tends to vary depending on the countries and periods analyzed (Antunes et al., 2023). Accordingly, at certain times (such as the one analyzed) when unemployment rates increase, a greater fear of job loss can be observed. Overall, these results highlight the importance of social support at work and home to cope with these demands.

Concerning job resources, critical values were observed in autonomy, information, and communication, while relations with colleagues and organizational fairness were those that exhibited the highest frequency of optimal scores. This finding can be interpreted in light of the collectivist values that predominate in Latin American countries, where people tend to define themselves more in terms of their ties within the group than by their personal characteristics, and the sense of community is valued (Hofstede et al., 2010).

Significant associations were obtained in all cases regarding the interrelations between the dimensions assessed. Pearson's r coefficients are reported in Table 5.

Table 5
Bivariate correlations between demands and valued resources (n=5063)

	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. P&L	.40	.59	.18	.32	.44	.30	.32	-.23	-.20	-.18	-.15	-.23	-.29	-.19	-.24
2. ML	-	.24	-.11	.11	.11	.04	.20	-.05	-.11	-.04	-.12	-.05	,00	-.07	.01
3. EL		-	.30	.40	.56	.41	.40	-.32	-.32	-.31	-.29	-.34	-,38	-.29	-.31
4. V&E			-	.19	.35	.10	.19	-.60	-.61	-.54	-.55	-.62	-,65	-.55	-.45
5. TC				-	.34¿4	.20	.24	-.25	-.24	-.22	-.18	-.27	-,27	-.22	-.24
6. RC					-	.31	.48	-.44	-.42	-.40	-.38	-.45	-,41	-.38	-.35
7. DB						-	.19	-.07	-.09	-.04	-.09	-.07	-,08	-.06	-.04
8. LCF							-	-.25	-.23	-.27	-.20	-.27	-,25	-.25	-.24
9. INF								-	.73	.67	.58	.78	.74	.62	.56
10. C									-	.65	.56	.73	.72	.62	.55
11. P										-	.55	.68	.67	.59	.64
12. RwC											-	.64	.55	.53	.43
13. L												-	.71	.62	.57
14. OF													-	.62	.58
15. FW														-	.58
16. A															-

Note: all correlations were significant at < .01. Source: created by the authors

The analysis shows that the demands obtained positive and significant correlations among themselves, as was also the case within the resources. Additionally, work rate and workload were strongly related to mental, emotional, and role conflict. Resources such as information and communication were found to be closely related to leadership and organizational fairness. Likewise, all demands correlate negatively and significantly with job resources. Particularly noteworthy is the inverse relation between demands such as violence and equity, on the one hand, and role conflict, on the other hand, with communication resources (information and communication) and management resources (leadership and organizational fairness). The associations found here are in line with the postulations of the JD-R model and theory (Bakker & Demeroutti, 2017; Bakker & de Vries, 2021), which anticipates significant linkages between demands and resources, as well as the interplay between both categories.

Regarding comparisons of the scores obtained for the psychosocial demands and resources evaluated according to sociodemographic aspects, it should be noted that some statistically significant differences were found for gender, dependents at home, and dependents at work. These results are reported in Tables 6, 7, and 8.

Table 6
Comparison of the percentage frequency of results according to gender

	Gender	Optimal	Moderate	Critical	Chi^2	Sig.
Rate and load	M	40.5%	24.1%	35.3%	43.20	.00
	F	43.8%	29.2%	27.0%		
Mental load	M	43.2%	24.9%	32.0%	8.81	.01
	F	46.8%	24.7%	28.5%		
Emotional load	M	35.4%	29.8%	34.8%	5.12	ns
	F	34.4%	32.7%	32.9%		
Violence and equity	M	48.6%	27.0%	24.4%	65.12	.00
	F	40.8%	25.9%	29.1%		
Task changes	M	30.3%	47.5%	22.2%	12.51	.00
	F	26.5%	52.2%	21.3%		
Role conflict	M	41.6%	28.8%	29.6%	0.58	ns
	F	40.5%	29.4%	30.0%		
Double burden	M	46.9%	14.6%	38.5%	39.33	.00
	F	42.3%	11.0%	46.8%		
Lack of certainty about the future	M	26.5%	30.8%	42.7%	0.82	ns
	F	26.1%	31.2%	42.7%		
	Gender	Critical	Moderate	Optimal	Chi^2	Sig.
Information	M	46.6%	22.2%	31.2%	19.82	.00
	F	52.7%	18.6%	28.8%		
Communication	M	42.7%	16.0%	41.3%	12.28	.00
	F	47.4%	15.6%	37.0%		
Participation	M	23.1%	32.7%	44.2%	11.81	.00
	F	24.9%	35.7%	39.4%		
Relationship with colleagues	M	38.5%	9.5%	52.0%	15.38	.00

	F	43.3%	10.2%	46.5%		
Leadership	M	33.5%	36.0%	30.5%	13.06	.00
	F	37.1%	36.8%	26.1%		
Organizational fairness	M	24.5%	30.4%	45.1%	12.83	.00
	F	27.9%	31.7%	40.4%		
Flexible work	M	37.6%	38.0%	24.4%	19.71	.00
	F	42.3%	38.0%	19.7%		
Autonomy	M	55.3%	-	44.7%	6.58	.01
	F	58.9%	-	41.1%		

Note: M= Male, F= Female, ns= not significant
Source: created by the authors

Regarding comparisons based on the employee's gender, differences were found in five of the eight demands and all of the job resources evaluated. Women obtained a higher percentage of critical scores in violence and equity and double burden. Concerning abusive behaviors at work, it has been indicated that the prevalence of high levels of sexism in society has caused women to be subjected to discrimination and violence. Additionally, there is a significant gap in the gender division of domestic work (Gartzia et al., 2019). For women, the need to reconcile the demands of both domains is greater due to their involvement in domestic and care tasks (Antunes et al., 2023). Therefore, they report higher levels of family distractions, which increases the level of stress and decreases work performance (Kumar et al., 2021)

On the other hand, males showed higher demands in terms of rate and load, and mental load. These findings can be explained in light of the gender division of labor and gender stereotypes, on which the assignment of tasks or work roles associated with physical strength, prolonged effort, and long periods is based (Gartzia et al., 2019).

Table 7
Comparison of the percentage frequency of the results according to the presence of dependents

	PIC	Optimal	Moderate	Critical	Chi^2	Sig.
Rate and load	Yes	33.8%	23.5%	42.8%	292.44	.00
	No	50.1%	29.3%	20.6%		
Mental Load	Yes	40.7%	25.1%	34.2%	43.44	.00
	No	48.9%	24.5%	26.6%		
Emotional load	Yes	28.6%	29.9%	41.5%	141.71	.00
	No	41.1%	32.3%	26.6%		
Violence and equity	Yes	36.8%	25.8%	37.5%	196.09	.00
	No	53.1%	26.0%	20.8%		
Task changes	Yes	24.1%	50.1%	25.8%	70.41	.00
	No	32.9%	49.2%	17.9%		
Role conflict	Yes	36.6%	27.6%	35.8%	86.58	
	No	45.5%	30.5%	24.0%		
Double burden	Yes	40.4%	11.5%	48.2%	71.87	.00

	No	49.1%	14.5%	36.4%		
Lack of certainty about the future	Yes	22.4%	31.2%	46.4%	41.96	
	No	29.7%	31.3%	39.0%		
	Gender	Critical	Moderate	Optimal	Chi^2	Sig.
Information	Yes	55.0%	19.8%	25.2%	73.70	.00
	No	43.8%	21.3%	34.9%		
Communication	Yes	49.0%	16.1%	34.9%	43.77	
	No	40.8%	15.6%	43.7%		
Participation	Yes	28.1%	34.9%	37.0%	67.83	.00
	No	19.7%	33.3%	46.9%		
Relationship with colleagues	Yes	46.5%	10.4%	43.1%	83.40	.00
	No	35.0%	9.2%	55.7%		
Leadership	Yes	42.1%	35.6%	22.3%	136.31	.00
	No	28.3%	37.1%	34.6%		
Organizational fairness	Yes	32.0%	31.1%	36.9%	109.57	.00
	No	20.2%	30.9%	48.9%		
Flexible work	Yes	44.4%	37.9%	17.8%	71.47	.00
	No	35.2%	38.1%	26.6%		
Autonomy	Yes	61.8%	-	38.2%	46.37	.00
	No	52.3%	-	47.7%		

Source: created by the authors; Note: PIC = Person in charge, ns = not significant

As seen in Table 7, all the psychosocial factors evaluated showed statistically significant differences regarding the presence of dependents in the home. The analyses show that among workers with dependents, there are higher critical scores in work rate and workload, violence and equity, and double burden. Concerning job resources, the greatest differences were found in relationship with colleagues, leadership, and organizational fairness. In other words, those workers who had dependents at home perceived the need to respond to work and family demands simultaneously. It is worth noting that the conflict between family and work roles, as well as the absence of support, represented by the perception of less leadership and organizational fairness, could eventually result in professional burnout as a consequence of the decrease in individual resources (Abdelaziz et al., 2016; Staines, 1980).

Table 8 presents the results of the differences calculated for the dependent workers variable.

Table 8
Comparison of the percentage frequency of results according to the presence of dependents

	WIC	Optimal	Moderate	Critical	Chi^2	Sig.
Rate and load	Yes	37.5%	25.2%	37.2%	36.20	.00
	No	44.1%	27.0%	28.9%		
Mental load	Yes	41.8%	26.2%	32.0%	8.08	.01
	No	46.2%	24.1%	29.6%		
Emotional load	Yes	31.4%	31.0%	37.6%	17.99	.00
	No	36.6%	31.1%	32.2%		
Violence and equity	Yes	46.3%	26.9%	26.8%	5.82	ns
	No	44.5%	25.4%	30.1%		
Task changes	Yes	28.3%	49.7%	22.0%	0.41	ns
	No	28.7%	49.6%	21.7%		
Role conflict	Yes	45.4%	29.5%	25.0%	28.42	.00
	No	39.1%	28.9%	32.0%		
Double burden	Yes	40.8%	13.6%	45.7%	15.56	.00
	No	46.6%	12.7%	40.6%		
Lack of certainty about the future	Yes	30.7%	31.5%	37.9%	31.54	.00
	No	24.0%	31.1%	44.9%		
	Gender	Critical	Moderate	Optimal	Chi^2	Sig.
Information	Yes	49.1%	20.1%	30.8%	2.67	ns
	No	49.9%	21.4%	28.7%		
Communication	Yes	43.3%	17.1%	39.7%	3.45	ns
	No	45.6%	15.3%	39.2%		
Participation	Yes	19.6%	34.9%	45.5%	24.91	.00
	No	25.9%	33.7%	40.4%		
Relationship with colleagues	Yes	38.9%	10.0%	51.1%	3.10	ns
	No	41.5%	9.8%	48.7%		
Leadership	Yes	33.4%	39.1%	27.5%	7.68	.02
	No	35.9%	35.1%	29.0%		
Organizational fairness	Yes	26.6%	32.4%	41.0%	3.96	ns
	No	25.8%	30.3%	43.9%		
Flexible work	Yes	33.9%	43.8%	22.3%	40.59	.00
	No	42.4%	35.3%	22.2%		
Autonomy	Yes	55.0%	-	45.0%	3.80	ns
	No	57.9%	-	42.1%		

Note: WIC= worker in charge, ns= not significant
Source: created by the authors

Inspection of Table 8 indicates that those who occupy hierarchical positions presented higher critical percentages in the demands rate and load, mental load, emotional load, and double burden. Previous studies (Persson et al., 2018; Renier et al., 2022) have indicated that managers exhibit high demands and work intensity, a product of the responsibility involved in achieving organizational objectives and the management of workers. Meanwhile, those who were not in charge of personnel showed more critical indices regarding lack of certainty about the future and role conflict. Regarding resources, these workers obtained higher critical leadership and flexible work levels. Accordingly, role

stressors (conflict, ambiguity, and role continuity) can be associated with a lack of job autonomy (Guo et al., 2023), as in this study, where 57% of the sample obtained critical values for this resource.

Finally, the results corresponding to the multiple correspondence analysis considering gender, the generation to which the study participants belonged, job demands, and resources are presented. Figure 1 shows the results regarding job demands. As can be seen, it indicates the presence of two differentiated dimensions. Dimension 1 presented adequate values (Cronbach's alpha = .91; eigenvalue = 8.43; inertia = .21) and groups Generation X males and Baby Boomers with optimal scores on almost all dimensions, except for mental load. Meanwhile, dimension 2 (Alpha = .81; eigenvalue = 4.76; inertia = .16) linked Generation Z females with moderate scores on all but mental load, which was optimal.

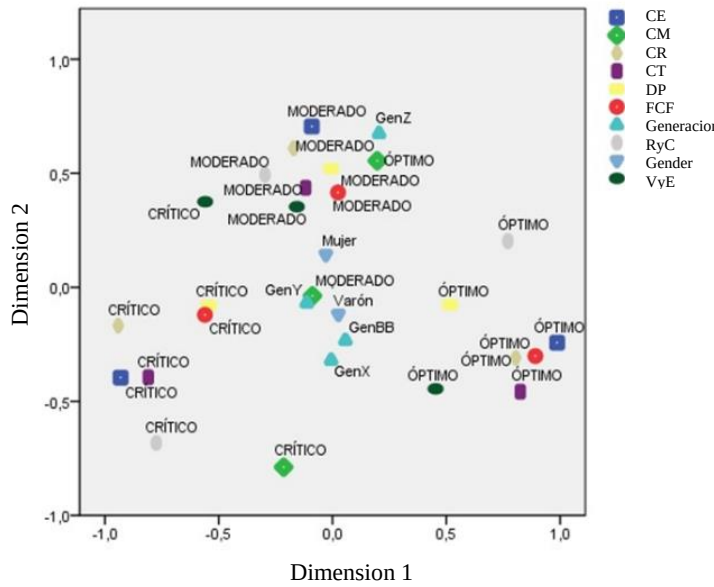

Figure 1. Multiple correspondence analysis graph considering gender, generation, and job demand

Figure 2 shows the results related to job resources. Once again, two dimensions are identified. Dimension 1 (Cronbach's alpha = .96; eigenvalue = 15.21; inertia = .50) enables linking in quadrant 1 Generation X males with optimal scores in all the job resources evaluated, while quadrant 2 placed Generation Y females with critical values in their job resources. Dimension 2 (Alpha = .85; eigenvalue = 5.69; inertia = .19) linked Generation Z males and females with moderate scores on all resources except for autonomy (since it did not obtain any moderate scores). These results reinforce the hypothesis that

older employees would be less vulnerable to psychosocial risks because, over time, they have been able to develop job-related and personal resources (problem- and emotion-based coping strategies) to cope with demands (Ghezzi et al., 2020)

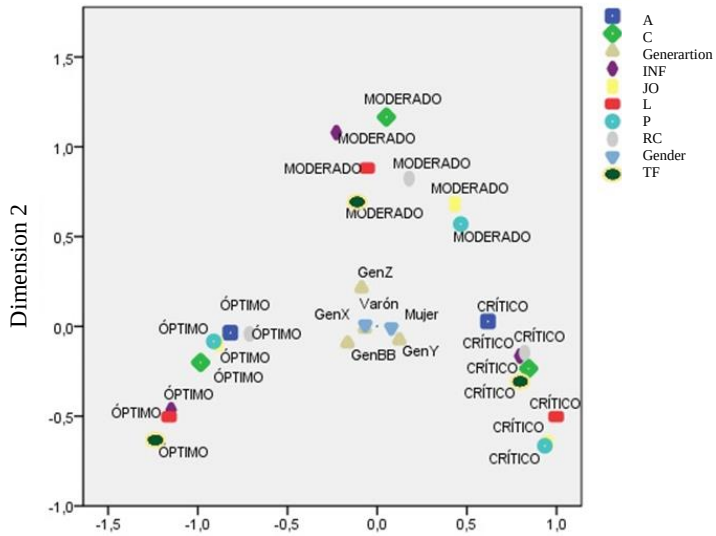

Figure 2. Multiple correspondence analysis graph considering the categories of gender, generation, and job resources

Conclusions

This study aimed to examine the psychosocial factors, in terms of job demands and resources, present in a sample of Mexican service organizations. Complementarily, possible differences in demands and resources were analyzed in light of certain sociodemographic characteristics based on certain empirical evidence (Anthun & Innstrand, 2016; Lavoie-Tremblay et al., 2014; Van den Broeck et al., 2017), which illustrates the relevance of exploring the role of aspects such as the gender of employees, generational cohort, and responsibility for other people or employees.

The results indicate that a higher percentage of optimal levels were found in almost all job demands in the analyzed sample. This provides empirical evidence that confirms the positive organizational policies and measures such organizations apply to reduce the impact of job demands (Salanova et al., 2012; 2014; 2016). Meanwhile, the lack of certainty about the future stood out as the demand with the highest number of critical results. Most likely, the socio-health context in which the data

collection took place had some influence on the results. Regarding resources, the data indicate that the highest percentages of optimal results in the service companies analyzed are related to positive interpersonal relations and the perception of fairness within the organizations. On the other hand, the most critical aspects are the lack of autonomy and information management.

The sociodemographic variables analyzed established some differences of interest. Males showed a higher level in the demands rate and load and mental load, while females obtained a higher percentage of critical scores in violence and equity and double burden. This seems to indicate that, despite the progress made in terms of equality, the gender division of labor and gender stereotypes mark dissimilar psychosocial risks (Cifré & Vera, 2019). This information could be a promising area for further research.

On the other hand, those workers who had dependents at home and work perceived more demands and fewer psychosocial resources, with greater mental load, double burden, lack of certainty about the future, and less leadership and organizational fairness. Regarding generational differences, the results show that older people had lower demand levels and higher job resources.

Similarly to all empirical research, this study has a series of weaknesses and strengths. Regarding the former, the descriptive design of the study does not permit the establishment of causal relations between the variables studied. Its cross-sectional nature could be considered a weakness, so future research could employ longitudinal designs to establish the variation over time of the phenomena. The convenience criterion that led to the sample selection of companies does not permit the results to be generalized to all organizations. To this end, future studies could consider the selection of companies while maintaining representativeness according to the categories and sizes. Finally, the self-descriptive nature of the instrument used could be susceptible to the trend of participants to show an improved self-image.

Among the strengths of the research, the number of participants can be highlighted, given that it is not common to find studies of this type that work with such large samples. Secondly, this is the first research to survey job resources in the context of service organizations, thereby complementing the available literature on psychosocial risk factors in the Mexican workplace. Thus, the present study is a starting point for other research to continue delving into job demands and resources in organizations in other fields and cultural contexts. To this end, one of the possible lines of future research could be the development of cross-cultural studies to analyze the impact of national cultural values on the configuration of job demands and resources.

The main practical implications of the research are that the results obtained could be useful for managers, leaders, or people involved in human resources management. The findings invite reflection on implementing labor policies to meet each group's specific needs, as shown by the sociodemographic analyses presented here. By focusing on primary prevention, the assessment and management of

psychosocial risks would make it possible to avoid or reduce possible negative consequences, both for workers' occupational well-being and organizational performance. In the same way, promoting psychosocial resources will not only lead to the moderation of the negative impact of the demands but also make it possible to maintain and generate new psychosocial resources in a spiral of increasing positivity (Hobfoll, 1989). From this point of view, optimizing psychosocial and organizational health levels can lead to resilient organizations and healthy workers (Salanova et al., 2012; 2014; 2016).

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