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Prevalence of Burnout Syndrome in Mexican Employees in Mexico City

Prevalencia del Síndrome de Desgaste Ocupacional (Burnout) en empleados mexicanos en la Ciudad de México

Emmanuel Martínez-Mejía [a], Fabiola Itzel Villa George [b], José I. Martínez-Guerrero [c]

Abstract:

The burnout syndrome has been recognized as a global public health problem by the WHO (ICD-11, 2018). The aim of this research is to describe the characteristics and prevalence of burnout in Mexican employees and its relationship with sociodemographic, labor, and organizational variables. The research was carried out in two studies. In study 1, 476 workers participated, evidence of validity and reliability of the MBI-GS was found. In study 2, 1110 workers participated, descriptive and parametric analyzes were performed to find out the characteristics and prevalence of Burnout in the sample of participating workers. The prevalence of Burnout in the sample studied is 15.9%, to this result it is necessary to consider 34.8% of the workers who are "In Danger", so it can be pointed out that 50.7% have a high probability of suffering high damage to their physical, mental and social health. Groups identified with the highest percentage in Phase 4 "Burned" were Centennials (32.4%), Private Sector workers (18.1%) and Operating level workers (17.4%). This research provides relevant data of Burnout in Mexico, about scores, severity levels, prevalence, some relevant sociodemographic and occupational characteristics, in such a way that we point out that Burnout imply an occupational public health problem.

Keywords:

Burnout, Psychosocial Risk, Validity, Prevalence, Occupational Health

Resumen:

El síndrome de desgaste ocupacional o burnout ha sido reconocido como un problema de salud pública a nivel mundial por la OMS. El objetivo de esta investigación es describir las características y prevalencia del Burnout en empleados mexicanos y su relación con variables sociodemográficas, laborales y organizacionales. La investigación se realizó en dos estudios. En el estudio 1, participaron 476 trabajadores, en el que se encontró evidencia de validez y confiabilidad del MBI-GS. En el estudio 2, participaron 1110 trabajadores, se realizaron análisis descriptivos y paramétricos para conocer las características y prevalencia del Burnout en la muestra de trabajadores participantes. La prevalencia del Burnout en la muestra estudiada es del 15.9%, a este resultado es necesario considerar al 34.8% de trabajadores que se encuentra “En Peligro”, por lo que se puede señalar que un 50.7% tiene una alta probabilidad de estar sufriendo daños graves a su salud, tanto física, mental como social. Los grupos que se identificaron con un mayor porcentaje en la Fase 4 “Quemados” fueron los Centennials (32.4%), los trabajadores de la Iniciativa Privada (18.1%) y los trabajadores del nivel Operativo (17.4%). Esta investigación proporciona datos relevantes del Burnout en México, sobre los puntajes, los niveles de gravedad, la prevalencia, algunas características sociodemográficas y laborales relevantes, de tal forma que señalamos que el Burnout significa un problema de salud pública laboral.

Palabras Clave:

Burnout, Riesgos Psicosociales, Validez, Prevalencia. Salud Ocupacional

[a] Corresponding author, National Autonomous University of Mexico, https://orcid.org/0000-0002-4095-359X, Email: emmanuel.martinez.mejia@comunidad.unam.mx

[b] National Autonomous University of Mexico, https://orcid.org/0000-0002-9081-3640, Email: villageorge@gmail.com

[b] National Autonomous University of Mexico, https://orcid.org/0000-0002-3328-7760, Email: josemarg@unam.mx

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INTRODUCTION

Burnout is a syndrome that has been recognized and studied since the 1970s and continues in force (Freudenberger, 1974; Leiter & Maslach, 2017; Maslach, 1976; Maslach & Pines, 1977; Schaufeli, Leiter, & Maslach, 2009). This syndrome refers to a prolonged response to chronic stressors at a personal and relational level at work, determined from three dimensions identified as exhaustion, depersonalization/cynicism and low personal achievement / low professional self-efficacy (Maslach, Schaufeli, & Leiter, 2001). As decades go by, its relevance has been confirmed by having a large body of knowledge, both theoretical and empirical, that it is a phenomenon present in any labor condition and that the consequences at the individual, organizational and social level, in general, can mean high costs and disadvantages. Therefore, in recent years, the need has arisen for various organizations to work to improve job quality and contribute to the wellbeing of their workers.

Regarding its consolidation in terms of public health, in May 2019, the World Health Organization (WHO) (ICD-11) incorporated Burnout to the international classification of diseases (QD85), specifically in the section of problems related with employment or unemployment, leaving the task of advance the research for its proper approach, from now to 2022. In this classification, Burnout was described as "a syndrome resulting from chronic stress at work that was not managed successfully", characterized by three components: an exhaustion feeling, cynicism or negative feelings related to work, and reduced professional efficiency, as it is addressed by various researchers in the world (Leiter & Maslach 2017; Salanova, 2006; Schaufeli, Maslach, & Marek, 2017). It is important to mention that at an international level, Burnout has been studied from different perspectives: Clinic (Freudenberger, & Richelson, 1920; Pines 1993), Psychosocial (Buunk & Schauffeli, 1993; Cherniss, 1993; Maslach & Jackson, 1986), and Sociocultural (Gil-Monte, 2005; Moreno-Jiménez, Garrosa, Benevides-Pereira, & Gálvez 2003).

Burnout investigation in Mexico

Historically, working conditions in Mexico have not been favorable, and although the right for a dignified and decent work is contemplated in the Mexican Constitution, the Federal Labor Law (LFT) and the Federal Regulation on Safety and Health at Work (RFSST) where employers are obliged to have working conditions that prevent risks for the safety and health of workers, including psychosocial risks. However, this aspect related to the psychological health of the worker had been ambiguous until relatively recently (RFSST, 2014). The most recent is the publication of NOM-035-STPS-2018 Psychosocial risk factors at work-Identification, analysis and prevention, which specifies obligations for both employers and workers on specifications to be met, among the which points to Burnout as a negative effect on the health of workers that needs to be specifically evaluated when required. This does not exclude the need to diagnose and prevent psychosocial risks in order to eradicate them and promote a healthy work environment.

The experience in the study of Burnout in Mexico is recent; we can identify it around 25 years ago (Pines & Guendelman, 1995), and it has been studied mainly in health professionals and teachers, with a limited methodology. That represents an important reason to continue increasing the empirical evidence that describes the prevalence, and that validates tools that allow us to approach to this syndrome (Juárez, Idrovo, Camacho, & Placencia, 2014).

Burnout measuring instruments

The evaluation of psychological variables represents a necessary task, considered as an empirical approach that constitutes the basis of theoretical explanatory models of the phenomenons (Muñiz, 1998). Notwithstanding this consideration in Burnout's study, the different instruments for evaluating the syndrome allow for the feedback and evolution of the concept (Schaufeli, Leiter, & Maslach, 2009).

The self-application questionnaire is the most widely used method to estimate Burnout, and different instruments have been developed that respond to different conceptualizations of the syndrome but that generally coincide in evaluating the perception of physical and emotional exhaustion, as well as in the distancing response towards users.

Even though various questionnaires have been used for detection and evaluation of this syndrome in other countries, in Mexico, the experience recognizes the Maslach Burnout Inventory (MBI) as the most widely used, in up to 90% of the research generated on this topic (Juárez-García, Idrovo, & Camacho-Ávila, 2014; Schaufeli, Leiter, & Maslach, 2009). The MBI has three versions, for health and human services professionals, for students, and the general population (Maslach & Jackson, 1986; Maslach, Jackson, & Leiter, 1997).

It is necessary to mention that Uribe (2010) developed the Occupational Wear Scale (EDO, for its initials in Spanish), which consists of 110 items to measure both the three factors of Burnout and psychosomatic factors, this instrument is validated and standardized for the Mexican population using a sample of 2,225 subjects. Each instrument has a differentiated utility. Because the EDO is a long instrument, it can present practical complications for professionals labor and organizational. However, it has the advantage of measuring psychosomatic factors in the same application that gives a basic knowledge of the impact of Burnout on the participant's health. For their part, the MBI versions, being short, have practical advantages, especially when it comes to applications for medium or large organizations. On the other hand, the versions of the MBI, it is short, have practical advantages, especially when it comes to applications to medium or large organizations.

As it is a syndrome that can seriously affect the health of workers, it is necessary to continue its research to get to know it better, to have valid and reliable instruments to identify vulnerable groups, and to test effective first, second, and third-

level interventions (WHO, 2010; WHO, 2018). Another important aspect regarding public occupational health prevention policies in Mexico is the startup of the NOM-035-STPS-2018 Psychosocial risk factors at work, in which Burnout is identified as one of the adverse effects of the presence of high levels of psychosocial risk factors, which indicates that it is necessary to carry out specific evaluations with quantitative, qualitative or mixed studies.

Based on the previous approach, the objective of this study is to describe the characteristics, parameters, and prevalence of Burnout using the MBI-GS in employees of Mexico City (CDMX) and its relationship with sociodemographic, labor and organizational variables.

METHOD

A cross-sectional, descriptive, and correlational quantitative investigation was carried out to know the characteristics of Burnout syndrome in a sample of Mexican workers from organizations in Mexico City (CDMX). Two studies were carried out to achieve the objective. Study 1 shows evidence of the validity and reliability of the MBI-GS (AERA, 2014; Maslach & Schaufeli, 1996; Salanova, Schaufeli, Llorens, Peiró, & Grau; 2000). In study 2, descriptive and parametric analyzes were performed to show Burnout's characteristics in a sample of Mexican workers who participated in this research (Helorza, 2008; Leiter & Maslach, 1988; Uribe, 2007).

An intentional convenience sampling was carried out of Mexican workers in Mexico City, both from private initiative organizations and government institutions for both studies. In study 1, 476 Mexican workers participated, with an average age of 34.73 years (SD = 10.38), women (40.1%) and men (59.9%), both private initiative organizations (IP=60.5%) and government (G=39.5%), and with an average age of 7.51 years. Study 2 involved 1110 Mexican workers, with an average age of 37.20 years (SD=11), women (47.1%), and men (52.5%), both from IP organizations (71.6%) and from G (27.4%), and with an average age of 8.44 years.

The 15-item version in Spanish reported by Salanova, Schaufeli, Llorens, Peiró, and Grau (2000) of the Maslach Burnout Inventory General Survey (Maslach, Jackson, & Leiter, 1997) was used. That evaluates three factors: Emotional Exhaustion, Cynicism, and Self-efficacy. With a response scale of 7 points ranging from 0, which means "never" to 6, which means "every day." The emotional exhaustion (AE) subscale comprises five items (e.g., "I am emotionally exhausted by my work"), The cynicism subscale (C) comprises four items (e.g., "I have become more cynical about the usefulness of my work"). The professional efficacy subscale (Ef) comprises six items (e.g., "I can effectively solve the problems that arise in my work").

Study 1. Two types of analysis were performed: a) correlations and b) Confirmatory Factor Analysis (CFA) to test three measurement models, the first of 3 Factors, the second Unidimensional, and the third of Emotional Exhaustion. The SPSS 25 and AMOS 19 programs were used for these analyzes.

Study 2. Three different analyzes were conducted: a) descriptive statistics, b) PATH analysis to test the Burnout development relationship model, and c) correlation analysis and group comparison of sociodemographic and labor variables to find out the characteristics of the Burnout in Mexican workers. The SPSS 25 and AMOS 19 programs were used for these analyzes.

results

RESULTS

Study 1.

Validity and reliability of the MBI-GS measurement model.

Salanova, Schaufeli, Llorens, Peiró, and Grau (2000), tested different measurement models of the adaptation to Spanish of the MBI-GS with confirmatory factor analysis (CFA), the unidimensional model with 16 items, a model with three factors with 16 items and a model with three factors (revised) with 15 items; their results indicated that the model with the best fit was the revised one.

Although the three-dimensional concept of Burnout is the most widely used (Maslach et al., 2001), the dimensions have been discussed (Schaufeli, Maslach, & Marek, 2017; Schaufeli & Taris, 2005). Exhaustion and cynicism are considered by several authors to be the central dimensions of Burnout (Green, Walkey, & Taylor, 1991; Halbesleben & Demerouti, 2005). However, regarding cynicism, Schaufeli and Salanova (2013) have conceptualized it as a particular form of mental distancing from work, differentiating it from depersonalization and have considered it relevant to take them into account in a model that includes them. The theory of demands and labor resources in an integrative effort of Burnout considers emotional exhaustion the leading indicator of Burnout (Demerouti, Bakker, & Xanthopoulou, 2019).

Due to these antecedents, in this study, different measurement models of the Spanish adaptation of the MBI-GS were tested (Salanova, Schaufeli, Llorens, Peiró, & Grau, 2000), a three-factor model, a unidimensional model, and a model only with the factor of emotional exhaustion. The three-factor model showed acceptable goodness of fit indices, although they could be improved, while the unidimensional model showed no adjustment (Hu & Bentler, 1995; Jöreskog & Moustaki, 2001; Lévy &Varela, 2006) (Table 1).

The three-factor model showed acceptable goodness of fit indices, although they could be improved. While the Emotional Exhaustion model does not show an adequate

Table 1

Comparison of goodness-of-fit indexes of test measurement models in the sample of Mexican workers.

Models	Ji²	p	Ji²/gl	GFI	AGFI	NFI	CFI	IFI	RMR	RMSEA
3 Factors	333.737	.000	3.836	.915	.883	.893	.918	.919	.147	.077
One-dimensional	1510.381	.000	16.598	.604	.478	.517	.531	.533	.400	.181
Exhaustion	78.280	.000	15.656	.937	.810	.939	.942	.942	.136	.176

N=476

global adjustment, however, it can be said that some of the indices show acceptable levels; the unidimensional model showed no adjustment (Hu & Bentler, 1995; Jöreskog & Moustaki, 2001; Lévy & Varela, 2006) (Table 2).

In all three factors, significant correlations were identified between the Burnout factors and Cronbach's Alpha internal consistency indices suitable for each of the factors (Table 2). In contrast to the unidimensional model that did not show adequate goodness-of-fit indexes and an overall internal consistency index of the 15 items of 0.684.

Table 2

Correlations between the factors of the MBI-GS.

	m	SD	Alpha	EX	C	SE
EX	1.74	1.45	0.880	1	.470**	-.183**
C	1.08	1.21	0.750	.470**	1	-.438**
SE	4.88	1.05	0.825	-.183**	-.438**	1

Note: EX: Emotional Exhaustion; C: Cynicism; SE: Self-efficacy. N = 476.
** Significant correlation to 0.01 (bilateral).

Study 2.

Descriptive and parametric analysis of the Burnout characteristics

Descriptive analyzes were performed to have the necessary minimum parameters, such as measures of central tendency and dispersion, so Burnout's characteristics and factors can be known in the sample studied (Helorza, 2008) (Table 3). Percentiles are shown (Table 4) as an additional parameter for the identification and classification of the scores of cases in which the MBI-GS is applied (Maslach & Schaufeli, 1996; Salanova, Schaufeli, Llorens, Peiró, & Grau, 2000) in other particular groups or organizations. The three factors were integrated to evaluate the Burnout. A series of analyzes were carried out to support the result of the identification of the prevalence of Burnout: 1) to test the model of Leiter and Maslach (1988) on the sequence of Burnout development; 2) carry out the adaptation of a table of values combinations (Uribe, 2007) to identify the level of Burnout in each participant; and 3) identify the prevalence of Burnout in the sample studied.

First, the Burnout development sequence model (Leiter & Maslach, 1988) was tested with a PATH model (Figure 1). The model showed adequate goodness of fit indices (Lévy & Varela, 2006) (Table 5) and a statistically significant sequence of relations, where Emotional Exhaustion has a positive relation with Cynicism (b = .43). The Cynicism has an inverse relation with Self-efficacy (b = -. 27), relations that show the same meaning as the results of the Leiter and Maslach model (1988, p.304), as observed in Figure 1. Emotional Exhaustion increases the probability of developing Cynicism, and this, in turn, the probability of a decrease in Self-efficacy in Mexican workers.

Table 3

Measures of central tendency and dispersion of Burnout factors

Factors	Mean	Median	SD	Variance
Emotional Exhaustion	1.8023	1.4	1.44568	2.09
Cynicism	1.707	1.5	1.25178	1.567
Self-efficacy	4.5173	4.6667	0.96108	0.924

N=1110

Table 4

Percentiles for each of the Burnout factors as an approximation to determine severity levels.

Level	Percentile	EX	C	SE
Low	5	0.000	0.000	2.6667
	10	0.000	0.000	3.3333
Medium	25	0.6	1	4
	50	1.4	1.5	4.6667
	75	2.8	2.5	5
High	90	4	3.25	5.6667
	95	4.6	4.25	6

Note: N = 1110 Mexican workers. The cut-off points for the levels were established based on Tukey's Hinges. The 50th percentile corresponding to the sample median is indicated in bold, so that 50% of the sample scored below and the other 50% obtained higher scores.

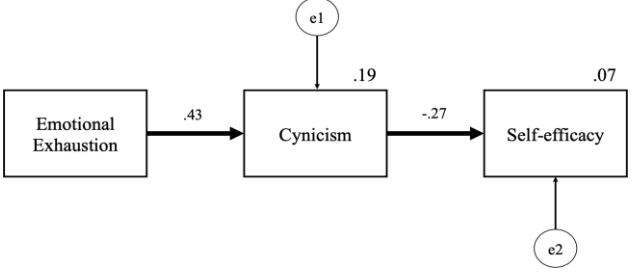

Figure 1. Specified PATH model in Mexican workers to test the

development model of Leiter and Maslach's Burnout (1988). N = 1110.

Table 5

Goodness of fit indices of the specified PATH model of the Burnout development sequence.

Ji²	P	Ji²/g.l.	GFI	AGFI	CFI	NFI	TLI	RMR	RMSEA
1.080	0.299	1.080	.999	.996	1	.997	.999	.015	.008

N=1110

Secondly, the Burnout development model proposed by Leiter and Maslach (1988) and adapted for its classification by Uribe (2007) was used. Based on this model, the mean of each factor was calculated to establish two groups: 1) from zero to the mean it was considered "low"; and 2) from the mean to the highest value, it was considered "high". The resulting table and the assigned values allow participants to be classified correctly in each phase of the model (Table 6). In this way, based on this approach, the evaluation of Burnout is reiterated as High Emotional Exhaustion, High Cynicism, and Low Self-efficacy (Phase 4).

Table 6

Process of the Leiter and Maslach (1988) model of the Burnout process in a table of combinations of high and low values.

Factor/Stage /Values	Phase 1 Healthy	Phase 2 Developing	Phase 3 Danger	Phase 4 Burned
Emotional Exhaustion	Low 1	Low 1	High 3	High 3
Cynicism	Low 1	High 2	Low 1	High 2
Self-efficacy	High 1	High 1	High 1	Low 2
Sum	3	4	5 / 6	7

Note: Adapted for the factors of the MBI-GS from Uribe (2007).

Third, based on this classification of the workers participating in each of the phases, it can be identified that the prevalence of Burnout in the sample studied is 15.9% (Table 7, Figure 2); however, when also considering 34.8% of those "In Danger," together they add up to 50.7%, which implies that half of the workers in this sample have a high probability of presenting severe damage to their physical, mental and social health.

When we compared the extreme groups to show the characteristics of the Burnout between the Healthy (Phase 1) and the Burned (Phase 4), Figure 3 shows the significant differences, with Student's t-test, which were found between the two phases in the three factors: Emotional Exhaustion (t=-30,766, p<0.01), Cynicism (t=-27.2, p<0.01), and Self-efficacy (t=24,556, p<0.01).

Regarding the sociodemographic variables, it can be pointed out that the groups with the highest percentages in Phase 4 (Burned), who could point them out as vulnerable, are the Centennials (32.4%), the workers of the Private Initiative (18.1%) and the Workers at the Operational level (17.4%) (Table 8). While the groups with the highest percentages in Phase 1 (Healthy) are the Middle Managers (46.7%) and Management Executives (40.6%), as well as those of the Baby Boomer generation (45.5%).

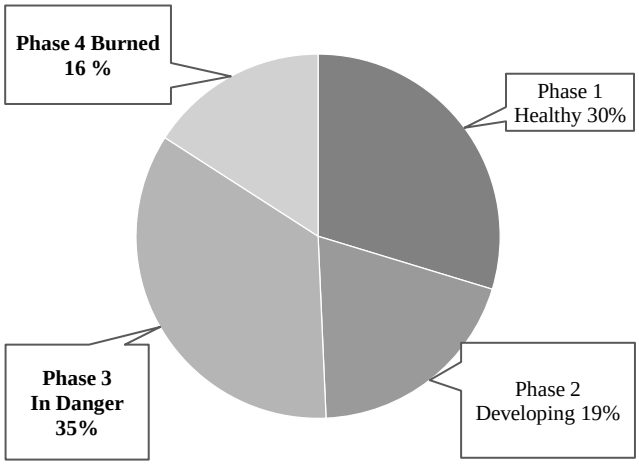

Figure 2. Burnout prevalence in the total of Mexican workers in the sample studied. Considering Phase 3 and 4 it is 50.7% with a high probability of damage in their health.

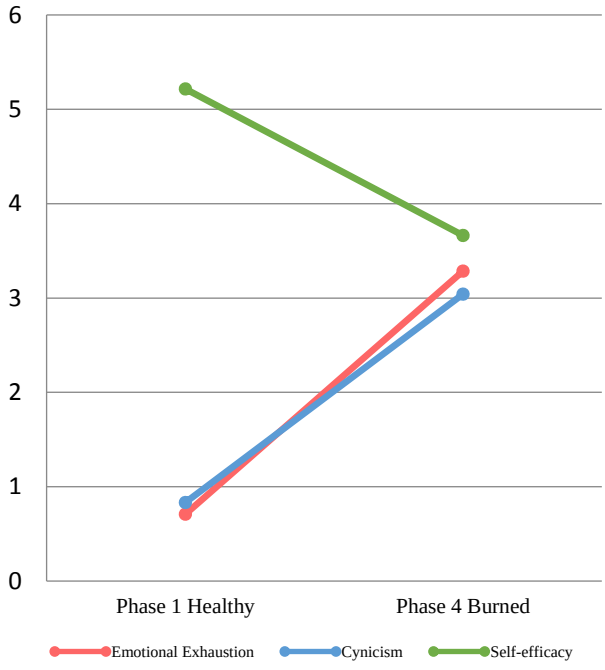

Figure 3. Burnout factor score differences between the Healthy vs. Burned phases. Means by factor of the total sample: Exhaustion=1.8023, Cynicism=1.707, and Self-efficacy=4.5173.

On the other hand, parametric analyzes were performed to determine the relationship between the factors with sociodemographics, labor, and organizational variables, as well as to compare the behavior of the Burnout factors between interest groups. Significant correlations were found between the Burnout factors. Years of working were a more significant variable than age and labor seniority (Table 8). To carry out parametric analysis of comparison, various sociodemographic variables were taken into account between the groups. Only the results of those that showed significant differences in at least some of the Burnout factors are presented.

The workers who reported the condition of not having a partner obtained the lowest average score in Emotional Exhaustion and the highest in Cynicism, which indicates that it is a risk factor (Table 9). Workers with a secondary level showed the highest average score in Emotional Exhaustion and Cynicism, while workers with a postgraduate degree showed the highest average score for Self-efficacy (Table 10).

Carrying out analyzes by generations has become relevant not only for marketing or social studies, but also for labor studies (Parry and Urwin, 2011; McGorry and McGorry, 2017). The age ranges to define the generations in this study were: a) Baby Boomers, born between 1943-1960; b) Generation X, born between 1961-1981; c) Millennials, born between 1982-1997; and d) Centennials, born between 1998-2015. The age range of the participants in this study is from 18 to 69 years. Significant differences between generations were identified in the three Burnout factors (Table 12). Emotional exhaustion and Cynicism are highest in Centennials, while Baby Boomers are considered the most self-effective (Table 11).

Various labor and organizational variables were also taken into account to perform parametric comparative analyzes between the groups that make them up. Only the results of those that showed significant differences in at least some of the Burnout factors are presented.

Private initiative workers presented the highest average scores in Emotional Exhaustion, Cynicism and Self-efficacy (Table 12).

The workers with the highest scores in Emotional Exhaustion are those of the Managerial-Managerial level, although the score of the middle Managers was also above the total average; the workers with the highest Cynicism scores are the operatives; and those that presented the highest scores in Self-efficacy are those of the Managerial-Management level, although the score of the Middle Managers was also above the total mean (Table 13).

DISCUSSION AND CONCLUSION

One of the objectives of this study was to provide evidence of the validity and reliability of the MBI-GS measurement model in a sample of Mexican workers. The results confirmed that the model that best fits is the one that has an internal structure of 3 interrelated factors proposed by Maslach, Jackson, and Leiter (1997). All three factors had acceptable Cronbach Alpha consistency coefficients of at least acceptable 0.70 for research (Aaron and Aaron, 2003; Prieto & Delgado, 2010; Meneses et al., 2013). These results coincide with results found in other samples (Juárez-García, Merino, Fernández, Flores, et al. 2020).

This research provides benchmarks on scores, severity levels, Burnout prevalence, identification of vulnerable groups, as well as some of the sociodemographic and employment characteristics in a sample of 1,110 Mexican workers, for comparison with other studies in Mexico, in different sectors, geographical areas, sizes of work centers, among others.

The prevalence of Burnout in the sample studied is 15.9%, which indicates that 16 out of every 100 workers are Burned. In addition to how worrying this result may be, it is necessary to consider the 34.8% of workers who are "In Danger" Therefore, if we add them together, it can be pointed out that 50.7% have a high probability of suffering severe damage to their health, both physically, mentally and socially (Moreno-Jiménez, 2011). In such a way that we can infer that this Burnout can mean an occupational public health problem.

With the elements provided by this research, it is contributed that both professionals and researchers of occupational health in organizations have a valid, reliable instrument and parameters to identify Burnout cases when using this Spanish version of the MBI-GS (Maslach, Jackson & Leiter, 1997; Salanova, Schaufeli, Llorens, Peiró, & Grau, 2000). It can be used as a short instrument to make decisions about the relevance of carrying out specific in-depth evaluations when necessary. That is not in opposition to the use of other instruments that evaluate this syndrome in greater depth. They could have a mixed approach as indicated by NOM-035-STPS-2018, for example, with a nested derivative exploratory design of several phases (Martínez-Mejía & Cruz, 2019).

Based on the variables considered in this investigation, some characteristics of healthy and burned workers are identified. Some characteristics of healthy workers include Middle Management and General-Managers, as well as those of the Baby Boomer generation. Some characteristics of burned workers include Centennials, working in the Private Initiative, and being part of the Operational level. Based on these results, organizations are recommended to consider these characteristics and identify those particular to their population. That in order to carry out both preventive and control actions in a differentiated way.

From occupational health psychology, with a positive psychology approach (Luthans & Youssef-Morgan, 2017;

Table 7

Burnout prevalence in the total of Mexican workers in the sample studied and in relation to sociodemographic and labor variables.

	Phase 1 Healthy	**Phase 2 Developing**	**Phase 3 In Danger**	**Phase 4 Burned**	**N**
Total	29.7%	19.6%	34.8%	15.9%	1110
Men	31.6%	17.8%	35.3%	15.3%	583
Women	27.7%	21.8%	33.8%	16.6%	523
Without couple	25%	20%	38.7%	16.3%	545
With couple	34.3%	19%	31.6%	15.1%	548
Centennials	13.5%	12.2%	41.9%	32.4%	74
Millennials	28.5%	20.8%	34.8%	15.9%	523
Generation X	32.9%	20.5%	33.9%	12.6%	419
Baby Boomers	45.5%	12.1%	30.3%	12.1%	33
Private initiative	26.5%	20.3%	35.1%	18.1%	795
Government	38.2%	18.1%	34.5%	9.2%	304
General Management	40.6%	7.5%	43.4%	8.5%	106
Middle Management	46.7%	6.6%	34.2%	12.5%	152
Operative	25.4%	23.5%	33.8%	17.4%	852

Table 8

Correlations between Burnout factors and socio-labor variables.

	Emotional Exhaustion	**Cynicism**	**Self-efficacy**	**Age**	**Years of Working**	**Antiquity**
Emotional Exhaustion	1	.434**	-.091**	-.074*	.079**	-0.007
Cynicism	.434**	1	-.271**	-0.029	-.280**	0.019
Self-efficacy	-.091**	-.271**	1	.078*	.297**	0.047
Age	-.074*	-0.029	.078*	1	.209**	.645**
Years of Working	.079**	-.280**	.297**	.209**	1	.179**
Antiquity	-0.007	0.019	0.047	.645**	.179**	1

Note: N = 1110. ** Significant correlation to 0.01 (bilateral). * Significant correlation at 0.05 (bilateral).

Table 9

Comparison of groups with Student's t-test between workers with partner and without partner.

	Couple	**N**	**M**	**SD**	**t**	**Sig.**
Emotional Exhaustion	Without couple	545	1.9152	1.45175	2.32	0.021
	With couple	548	1.7124	1.43884		
Cynicism	Without couple	545	1.828	1.3071	3.115	0.002
	With couple	548	1.5917	1.19764		
Self-efficacy	Without couple	545	4.4939	0.94636	-0.971	0.332
	With couple	548	4.5505	0.98014		

Note: Averages by factor of the total sample: Exhaustion = 1.8023, Cynicism = 1.707 and Self-efficacy = 4.5173.

Table 10
ANOVA between school levels in each factor of the Burnout.

	Scholarship	N	M	SD	F	Sig.
Emotional Exhaustion	Elementary School	14	1.7714	1.6804	1.241	0.292
	Secondary School	129	2.0636	1.65944		
	High School	369	1.7604	1.45836		
	College	446	1.7722	1.39209		
	Postgraduate	138	1.742	1.33043		
Cynicism	Elementary School	14	1.6786	1.40202	4.362	0.002
	Secondary School	129	2.0116	1.41278		
	High School	369	1.8022	1.2364		
	College	446	1.5947	1.23189		
	Postgraduate	138	1.4946	1.14164		
Self-efficacy	Elementary School	14	4.0476	0.79105	18.355	0.000
	Secondary School	129	4.2235	1.13355		
	High School	369	4.3044	1.04463		
	College	446	4.6805	0.83628		
	Postgraduate	138	4.907	0.67363		

Note: Averages by factor of the total sample: Exhaustion = 1.8023, Cynicism = 1.707 and Self-efficacy = 4.5173

Table 11
ANOVA between generations in each factor of the Burnout.

	Generations	N	M	SD	F	Sig.
Emotional Exhaustion	Centennials	74	2.1757	1.3278	2.92	0.033
	Millennials	523	1.8497	1.4321		
	Generation X	419	1.6816	1.4784		
	Baby Boomers	33	1.6424	1.6307		
Cynicism	Centennials	74	2.1554	1.3362	4.06	0.007
	Millennials	523	1.6563	1.2281		
	Generation X	419	1.676	1.2352		
	Baby Boomers	33	1.9545	1.1717		
Self-efficacy	Centennials	74	4.1014	0.9838	5.68	0.001
	Millennials	523	4.5341	0.9502		
	Generation X	419	4.5465	0.9619		
	Baby Boomers	33	4.7677	0.6639		

Note: Averages by factor of the total sample: Exhaustion = 1.8023, Cynicism = 1.707 and Self-efficacy = 4.5173.

Table 12
Comparison of groups with Student's t test between type of organization.

	Organization	N	M	SD	t	Sig.
Emotional exhaustion	Private initiative	795	1.8073	1.43574	0.375	0.708
	Government	304	1.7704	1.46692		
Cynicism	Private initiative	795	1.8138	1.22697	4.674	0.000
	Government	304	1.4202	1.25716		
Self-efficacy	Private initiative	795	4.4055	0.9861	-6.862	0.000
	Government	304	4.8109	0.83027		

Note: Averages by factor of the total sample: Exhaustion=1.8023, Cynicism=1.707 and Self-efficacy= 4.5173.

Table 13
ANOVA between the hierarchical levels in each factor of the Burnout.

	Hierarchical level	N	Media	DT	F	Sig.
Emotional Exhaustion	Executive-Management	106	2.1509	1.3886	5.628	0.004
	Middle Management	152	1.9908	1.5418		
	Operative	852	1.7254	1.427		
Cynicism	Executive-Management	106	1.158	1.1471	39.018	0.000
	Middle Management	152	1.1003	1.4441		
	Operative	852	1.8835	1.1726		
Self-efficacy	Executive-Management	106	5.022	0.8341	46.404	0.000
	Middle Management	152	4.989	0.9		
	Operative	852	4.3703	0.9386		

Note: Averages by factor of the total sample: Exhaustion=1.8023, Cynicism=1.707 and Self-efficacy=4.5173.

Salanova, Martínez & Llorens, 2014), a practical aspect for organizations is that the results of this study provide evidence of the importance to consider, evaluate and enhance the efficacy beliefs of the collaborators. Self-efficacy has been defined as "beliefs in one's abilities to organize and execute the courses of action required to handle future situations" (Bandura, 1999, p. 20). In this sense, work self-efficacy allows to improve psychosocial wellbeing and, as a consequence, decrease Burnout and increase work performance since people with high levels of self-efficacy tend to interpret the demands and problems of the environment as challenges and not as threats, since they feel capable of overcoming them (Salanova, Lorente, & Vera, 2009). It is also relevant to point out that self-efficacy can be both a cause and a consequence of psychological bonding, which supports the idea of the existence of positive or ascending spirals: that is, beliefs in one's skills and resources to do the job well, positively influence in the psychological connection, which in turn will influence the consolidation of these beliefs in their efficacy (Llorens, Schaufeli, Bakker, & Salanova, 2007; Salanova, Grau, Martínez, Cifre, Llorens, & García, 2004).

REFERENCES

American Educational Research Association, American Psychological Association National Council on Measurement in Education. (2014). *Standards for Educational and Psychological Testing*. Washington, D.C.: AERA.

Aron, A., & Aron, E.N. (2003). Making sense of advanced statistical procedures in research articles. *Statistics for Psychology*, 599-637.

Bandura, A. (1999). *Autoeficacia: Cómo afrontamos los cambios de la sociedad actual*. España: Desdeé de Brouwer.

Buunk, B.P., y Schaufeli, W.B. (1993). Burnout: a perspective from social comparison theory. En W.B. Schaufeli, C. Maslach y T. Marek (eds). *Professional Burnout: Recent developments in theory and research* (pp. 53-69). London: Taylor and Francis.

Cherniss, C., (1993) The role of proffesional self-efficacy in the etiology of Burnout. In T.M. y C.M. W.B. Schaufelli (Ed), *Proffesional Burnout. Recent developments in Theory and research* (pp.135-148). Washington: Hemisphere.

Freudenberger, H.J. & Richelson, G. (1980). *Burn-out: how to beat the high cost of success*. Nueva York: Bantam Books.

Gil-Monte, P.R. & Moreno-Jimenez, B. (2005). *El síndrome de quemarse por el trabajo (Burnout). Una enfermedad laboral en la sociedad del bienestar.* Madrid: Pirámide, 36-37.

Hu, L. & Bentler, P.M. (1995). Evaluating model fit. In R. H. Hoyle (Ed.). *Structural Equation modeling: concepts, issues and applications* (pp. 76-99). Thousand Oaks: Sage Publications.

Jöreskog, K.G. & Moustaki, I. (2001). Factor analysis of ordinal variables: A comparison of three approaches. *Multivariate Behavioral Research, 36*(3), 347-387. doi https://doi.org/10.1207/S15327906347-387

Juárez, A., Idrovo, A. J., Camacho, A., & Placencia,O. (2014). Síndrome de Burnout en población mexicana: Una revisión sistemática. *Salud Mental. 37*(2),159-176.

Juárez, A., Merino, C., Fernández, A., Flores, C., Carabollo, M., & Camacho, C. (2020). Validación transcultural y funcionamiento diferencial del MBI-GS en docentes de tres países latinoamericanos. *Avances en Psicología Latinoamericana. 38*(1) 135-156. doi http://dx.doi.org/10.12804/revistas.urosario.edu.co/apl/a.6621

Leiter, M. P., & Maslach, C. (1988). The impact of interpersonal environment on burnout and organizational commitment. *Journal of organizational behavior, 9*(4), 297-308.

Leiter, M., & Maslach, C. (2017). Burnout and engagement: Contributions to a new vision. *Burnout Research, 5*, 55─57. doi http://dx.doi.org/10.1016/j.burn.2017.04.003

Levy-Mangin, J. P., y Varela, J. (2006). *Modelización con estructuras de covarianzas en ciencias sociales. Temas esenciales, avanzados y aportaciones especiales*. España: Netbiblo

Ley Federal del Trabajo, Diario Oficial de la Federación. Diario Oficial de la Federación 02-07-2019. Ciudad de México, SEGOB.

Llorens, S., Schaufeli, W., Bakker, A., & Salanova, M. (2007). Does a positive gain spiral of resources, efficacy beliefs and engagement exist?. *Computers in human behavior, 23*(1), 825-841.

Luthans, F., & Youssef-Morgan, C. M. (2017). Psychological capital: An evidence-based positive approach. Annual *Review of Organizational Psychology and Organizational Behavior, 4*, 339-366.

Martínez-Mejía, E, (2016). Relaciones de intercambio en las organizaciones y riesgos psicosociales: Un estudio sobre la relación del contrato psicológico y el burnout (desgaste ocupacional) en una muestra de empleados mexicanos. En F. Uribe (Editor), *Psicología del Trabajo: Un entorno de factores psicosociales saludables para la productividad* (pp. 129-138). México: Manual Moderno

Martínez-Mejía, E. & Cruz, A. F. (2019). Utilidad de los métodos mixtos para el diagnóstico de la violencia laboral (mobbing) en México. *Revista Electrónica de Psicología de la FES Zaragoza-UNAM, 9*(17), 13-18.

Maslach, C. (1976). Burned-out. *Human Behavior,* 5(9), 16-22.

Maslach, C., Jackson, S. E. & Leiter, M. (1997). *Maslach Burnout Inventory. Test Manual* (3rd ed.; 1st ed. 1981; 2nd. ed. 1986). Palo Alto, CA: Consulting Psychologists Press.

Maslach, C., Jackson, S. E. (1986). *Maslach Burnout Inventory* (2a ed). Palo Alto, CA: Consulting Psychologists Press.

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual review of psychology, 52*(1), 397-422.

McGorry, S. Y., & McGorry, M. R. (2017). *Who are the Centennials: Marketing Implications of Social Media Use and Preferences*. https://digitalcommons.kennesaw.edu/cgi/viewcontent.cgi?article=1194&context=ama_proceedings

Meneses, J., Barrios, M., Bonillo, A., Cosculluela, A., Lozano, L., Turbany, J., & Valero, S. (2013). *Psicometría*. Barcelona: Editorial UOC.

Moreno-Jiménez, B. (2011). Factores y riesgos laborales psicosociales: conceptualización, historia y cambios actuales. *Medicina y Seguridad del trabajo, 57*, 4-19.

Moreno-Jiménez, B., Garrosa., E, Benavides-Pereira, A., y Gálvez, M. (2003). Estudios transculturales del Burnout: Estudios transculturales Brasil-España. *Revista Colombiana de Psicología, 12* 9-18.

Muñiz, J. (1998). La medición de lo psicológico. *Psicothema, 10*(1), 1-21.

NOM-035-STPS-2018. Factores de riesgo psicosocial en el trabajo-Identificación, análisis y prevención. Diario Oficial de la Federación 23-10-2018. Ciudad de México, SEGOB.

Organización Mundial de la Salud (2018). *Clasificación Internacional de Enfermedades: Estandarización mundial de la información de diagnóstico en el ámbito de la salud*. 11ª edición. https://icd.who.int/es

Organización Mundial de la salud. (2010). *Entornos laborales saludables: fundamentos y modelo de la OMS: contextualización, prácticas y literatura de apoyo*. Ginebra: OMS https://apps.who.int/iris/handle/10665/44466

Parry, E., & Urwin, P. (2011). Generational differences in work values: A review of theory and evidence. *International journal of management reviews. 13*(1),79-96. doi http://dx.doi.org/10.1111/j.1468-2370.2010.00285.x

Pines, A., & Guendelman, S. (1995). Exploring the relevance of burnout to Mexican blue-collar women. *Journal of Vocational Behavior, 47*(1), 1-20. doi http://dx.doi.org/10.1006/jvbe.1995.1026

Pines, A.M. (1993) Burnout: An existencial perspective. En W.B. Schaufeli, C., Maslach & T. Marek (eds) Proffesional *Burnout: Recent developments in theory and research* (pp.33-51). London: Taylor and Francis

Pérez-Tejeda, H. (2008). *Estadística para las ciencias sociales, del comportamiento y de la salud.* 3ª. Edición. México: Cengage Learning.

Prieto, G., & Delgado, A. R. (2010). Fiabilidad y validez. *Papeles del psicólogo, 31*(1), 67-74.

Reglamento Federal de Seguridad y Salud en el Trabajo, Diario Oficial de la Federación 14-11-2014. Ciudad de México, SEGOB.

Salanova, M. (2006). Medida y evaluación del Burnout: Nuevas perspectivas. En P. Gil-Monte, M. Salanova, J. Aragón, & W. Schaufeli (Eds.), *El síndrome de quemarse por el trabajo en Servicios Sociales* (pp. 27─43). Valencia: Diputación de Valencia.

Salanova, M., Grau, R., Martínez, I. M., Cifre, E., Llorens, S., & García-Renedo, M. (2004). *Nuevos Horizontes en la investigación sobre Autoeficacia* [New horizons in research on self-efficacy]. Castellón, Spain: Publicacions de la Universitat Jaume I.

Salanova, M., Lorente Prieto, L., & Vera Perea, M. (2009). Cuando creer es poder: el papel de la autoeficacia en la mejora de la salud ocupacional. *Gestión Práctica de Riesgos Laborales, 62*, 12-16.

Salanova, M., Martínez, I. M., & Llorens, S. (2014). Una mirada más "positiva" a la salud ocupacional desde la Psicología Organizacional Positiva en tiempos de crisis: Aportaciones desde el Equipo de Investigación WoNT. *Papeles del Psicólogo, 35*(1), 22-30.

Schaufeli, W. B., Leiter, M. P., & Maslach, C. (2009). Burnout: 35 years of research and practice. *Career Development International, 14*(3), 204-220. doi http://dx.doi.org/10.1108/13620430910966406

Schaufeli, W., Maslach, C., & Marek, T. (Eds.) (2017). *Professional Burnout: Recent developments in theory and research* (2nd Ed). Washington, DC: Taylor & Francis.

Uribe, J. F. (2007). Estudio confirmatorio de la escala mexicana de desgaste Ocupacional (EMEDO): Un instrumento de Burnout para mexicanos. *Revista Interamericana de Psicología Ocupacional, 26*(1), 7-21.