



# The prevalence of occupational burnout in the government auditors of Mexico, a gender perspective

## *Prevalencia de Burnout en auditores gubernamentales de México, perspectiva de género*

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### Abstract

Government auditors in Mexico have tiring workloads that, beyond the physical and emotional exhaustion, predispose them to psychosocial problems such as Occupational Burnout, among others. Nevertheless, burnout has not been thoroughly studied for this profession as it has been done with others (especially those that pertain to the education and health sectors), and even less so from the approach differentiated by the gender variable. The quantitative study of a non-generalizable nature entailed the implementation of the Maslach Burnout Inventory-General Survey (MBI-GS) to 557 auditors in the federal and sub-national areas. It is an instrument based on the tridimensional model by Maslach and Jackson, which considers emotional exhaustion, feelings of cynicism and detachment from work, and the sensation of professional inefficiency and a lack of achievement. Specialized literature in this matter has demonstrated that it is not just a contingent phenomenon. Through the U Mann-Whitney method, the hypothesis  $H_0$  that was presented stating that the distributions of burnout between men and women are equal is contrasted. It is concluded that for government auditors, the burnout syndrome is more prevalent in women than in men.

*JEL codes:* J29, M49

*Keywords:* Burnout; Gender; Auditors; Maslach burnout inventory

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## **Resumen**

Los auditores gubernamentales en México enfrentan agotadoras cargas de trabajo que los predispone a ocasionarles problemas psicosociales como es el Síndrome de Quemarse por el Trabajo (SQT-Burnout), entre otros. No obstante para esta profesión, el burnout no ha sido estudiado con profundidad como lo ha sido para algunas otras (especialmente aquellas que pertenecen al sector educativo y de la salud) y aún menos desde la perspectiva diferenciada por la variable género. El estudio cuantitativo con carácter no generalizable implicó aplicar el Maslach Burnout Inventory-General Survey (MBI-GS) a 557 auditores del ámbito federal y subnacional, la literatura especializada ha demostrado que no se trata únicamente de un fenómeno contingente. Para contrastar la hipótesis planteada Ho: las distribuciones de burnout entre hombres y mujeres son iguales, fue a través del método U de Mann-Whitney. Se concluye que en los auditores gubernamentales es mayor el burnout en las mujeres que en los hombres.

*Código JEL:* J29; M49

*Palabras clave:* Burnout; Género; Auditor; Inventario de burnout de maslach

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## **Introduction**

Globalization has brought along a new social situation regarding the orientation of the worker within the work context. De la Garza (2013) outlines some problems such as the quality of the work, the occupation, salaries, structural policies, the activity of the actors that intervene in the process, and the manner in which these take place in the work field, translating into the deterioration of life and working conditions, causing bigger conflicts in the workers. Even under the adverse conditions of the abovementioned work field, the workers that possess a wage and low remuneration employment try to keep their job at any cost. For this reason, we have suggested the expansion of the concepts used in the study of work, production, control and work relations (De la Garza and Campillo, 1998). Presently, the work on the convergence with the client or the user, that is, those who have to do with the services, with the “face to face” between the client and the supplier, should be of interest (Sánchez, 2012).

In this context, the work conditions of the current environment have caused the emergence of problems and psychosocial factors that affect individuals and organizations; said characteristics of the labor market contribute to the increase of stress in the workers of the 21st century (Schwartzmann, 2004). In relation to this, Shirom (2009, p. 52) states that workers “experience a greater job insecurity, demand of excessive working hours, the need for continuous retraining (...) change in information technologies, and a lack of clarity of the

line that divides work from home life”, aspects that, for the case of Mexico, are replicated in the work and personal life areas, creating phenomena such as occupational burnout, among other problems and psychosocial risks.

Burnout is a combination of two English words, burn and out, giving the idea of professionally burning until reaching exhaustion. We can find in the literature at least 17 denominations in Spanish to describe the phenomenon (Gil-Monte, 2003), recommending the use of “syndrome of being burned by work”; however, there is a lack of consensus for its use, with the English term burnout being prevalent. In the Spanish specialized literature, we can find the term burnout for different terminologies, as the syndrome of being burnt out (an approximation to the translation of the English term), the syndrome of burning, professional exhaustion and psychic burnout, which are equivalent terms. Balseiro (2010) argues that the burnout syndrome is a specific type of work stress suffered by those who, in their attempts to adapt and meet an excess of work demands and pressure, make an effort in an intense and sustained manner in time, along with a demand and tension that cause important risks of disease and that negatively affect the performance and quality of the service. In this manner, the syndrome supposes the loss of the excitement for one’s job (Gil-Monte, 2002a; Moriana and Herruzo, 2004; Ordenes, 2004; Aranda, 2006). This syndrome occurs as a result of chronic work stress with symptoms that range from physical, mental and even emotional exhaustion, to conflicting interpersonal relations (Preciado, Salas, Vázquez and Franco, 2010). In the organizational field, the phenomenon resides in a high work mobility and a decrease of performance, causing great social and economic costs for the organization (Shirom, 2003; Volpp and Grande, 2003).

The presence of burnout syndrome has been confirmed in service areas with activities that entail establishing contact with customers, users or some sort of interrelation with other people (Peinado and Garcés, 1998; Gil-Monte, 2002a; Moriana and Herruzo, 2004; Ordenes, 2004; Aranda, 2006; Calabrese, 2006; Gil-Monte, 2006b). In the public sector, one of the areas that evidences the existence of burnout is the field of government auditing, largely due to its working characteristics that entail strenuous workloads (Zaldúa, Koloditzky and Lodiue, 2000; Martín, Campos, Jiménez-Beatty and Martínez, 2007). Similarly, Gil-Monte and Peiró (1997) and Gil-Monte (2003), departing from their research, ratify that the ambiguity of the position (associated with the expected results) is a predictor of personal realization at work, the conflict of the position (realization of incompatible tasks) leads to emotional exhaustion. Moreover, the overload of the position (demands without sufficient time to carry them out) is associated to the burnout syndrome. The foregoing is also supported by authors such as Sarros and Sarros (1992), Burke and Greenglass (1995), and Shirom (2009). Likewise, Guillén and Santamaría (2012) associate burnout with the amount of work hours, finding a correlation with the emotional exhaustion of the worker. In the same manner, Sefert, Jayaratne and Chess (1991) indicate that the lack of rewards, both financial and social, are predictors for depersonalization. The above is

associated with the role of the auditor, who is a professional with high qualifications and who is subject, due to the sensitivity of their task, to a high level of responsibility, which they have to carry out in very short periods of time, taking into consideration that in certain cases the audits in question deal with complex issues, representative samples and an enormous number of documents in the search for specific results that are not always obtained. The documentary evidence reports that the phenomenon is more prevalent in women (Maslach, Jackson and Leiter, 1996; Cámara and Cuesta 2005; Boydak, 2009), although the relation between gender and burnout is not always clear, is ambiguous, and has inconsistent results (Guillén and Guil, 2000; Guerrero and Rubio, 2005; Caro-Hernández, 2006; Purvanova and Muros, 2010). The research method used in this study was based on the *Maslach Burnout Inventory-General Survey MBI-GS* model, which is the most used in international literature (Caro-Hernández, 2006; Oramas, González and Vergara, 2007). The research hypothesis presented consisted in contrasting, through the U Mann-Whitney statistic, whether the burnout distributions between men and women are equal.

### **Quantitative burnout models: Maslach Burnout Inventory**

From an etiological approach, burnout is considered a multi-causal and highly complex process caused by work environments where there is a prevalence of work overload, lack of incentives and promotion mechanisms, excessive bureaucratization, frequent change of shifts and schedules, constant rotation in the roles and positions, unfair salaries and constant strategies for the reduction of costs and personnel (Bermann, 1990; Martínez and Guerra, 1998; Zaldúa *et al.*, 2000; Martín *et al.*, 2007). From the perspective of psychology, burnout is dissociated from fatigue and is associated with the emotional and cognitive demotivation of the subject caused by the loss of interests that were important to them at one point (Moreno and Peñacoba, 1999); it is the perception of discrepancies between the efforts that the subject makes and what the subject achieves (Farber, 1983), which causes psychophysiological alterations in addition to negatively affecting the organizations where they work (Gil-Monte and Peiró, 1997; Gil-Monte, 2006; Gil-Monte, Núñez-Román and Selva-Santoyo, 2006).

From a psychosocial perspective, burnout is considered a process that results from chronic work stress, referring to differences such as the way the symptomatic level is established and its possible intervention. It is under these premises that the models by Golembiewski, Munzenrider and Carter (1983), Price and Murphy (1984), Burke (1987), Leiter and Maslach (1988), and Lee and Ashforth (1993) are mainly established. There are also comprehensive models that refer to variables aimed towards the understanding of the etiology of the syndrome through the background and effect of the phenomenon, some examples are the studies by Harrison (1983), Cox, Kuk and Leiter (1993), Hobfoll and

Freedy (1993), Winnubst (1993), Da Silva, Lima and Pacheco (2015).

According to Quiceno and Vinaccia (2007), the development models for occupational burnout can be divided into comprehensive models, that is, models that are elaborated from the ego social cognitive theory, the social exchange theory, the organizational theory, and the process models (which consider the tridimensional MBI-HSS model, the Edelwich-Brodsky model, the Price-Murphy model, and the Gil-Monte model). This last one having recently gained notoriety (initially in Spain and then at an international level) at the same time as the Occupational Burnout Assessment Questionnaire (CESQT for its acronym in Spanish), an instrument that proposes 20 items grouped into 4 dimensions (psychic burnout, indolence, guilt, and enthusiasm); other instruments that are attempting to present new assessment perspectives that surpass the conceptual and psychometric limitations of the MBI are the Copenhagen Burnout Inventory-CBI (Kristensen, Borritz, Villadsen and Christensen, 2005) and the Oldenburg Burnout Inventory-OLBI (Halbesleben and Demerouti, 2005).

Despite all indications, the tridimensional model by Maslach and Jackson and their instrument, the Maslach Burnout Inventory (MBI), is the most utilized to quantify burnout, (Oramas *et al.*, 2007) same which has been legitimized in Spanish by Gil-Monte (2002b) and validated in Spain by Gil-Monte and Peiró (1999), while in Chile it was validated by Buzzetti-Bravo (2005). This model has three official versions, the result of a theoretical re-elaboration of the construct due to the ambiguity of its factors when applying it to different professions (Leiter, Clark and Durup, 1994; Auné, Abal and Attores, 2015; Salessi and Omar, 2016): 1. The MBI Human Services Survey (HSS) of 1981, focused on human service areas, with 22 reagents; 2. The MBI Educators Survey (ES) oriented towards the education sector, with 22 reagents (Maslach and Schaufeli, 1993); and 3. The MBI General Survey (GS) of 1996 used for non-caring professions, with 16 reagents (Maslach, Jackson and Leiter, 1996), in which burnout is redefined as a crisis relating to the job itself (Maslach *et al.*, 1996; Oramas *et al.*, 2007) which is quantified through three scales:

- Emotional exhaustion: the feeling of exhaustion, the feeling of being drained at the end of the day, tiredness, and fatigue are assessed, as well as the emotional tension, which is manifested in the lack of energy to do work.
- Cynicism: reflects the behavior of indifference, devaluation, and distancing from work and the value and meaning of it. It is manifested in the loss of interest in work, enthusiasm, and questioning the value of the work done.
- Professional efficiency: relates to the expectations the person has and their profession. It is expressed in the beliefs of the subject concerning their work capacity, their efficient contributions in work organization, having done things that are of true value and their professional fulfillment.

Although it is true that MBI is the instrument with more acceptance in the field for the measurement of occupational burnout with respect to the psychometric characteristics, the

problems derived from the use of population criteria as cut-off points for the syndrome, or the low internal consistency of the cynicism dimension in non-English samples, have been pointed out. Furthermore, authors such as Faúndez and Gil-Monte (2009) have shown different weaknesses in the instrument, which calls into question the viability of its application in different contexts (Juárez-García, Idrovo, Camacho-Ávila and Placencia-Reyes, 2014). For their part, Moreno, Trujillo, Rivas and Lámbarry (2014), carry out a study on identity, use and application of the MBI in Mexico, mainly in Higher Education Institutions, confirming the wide acceptance and popularity of the instrument.

### **Burnout and its divergence in gender: the research in the public sector of Mexico**

Since 1985, Maslach and Jackson (1985) indicated that the study on the differences of burnout in men and women are very small or nonexistent and that, consequently, gender is a factor that explains a small part of its prevalence and variance. Despite this, the authors evidence a slightly higher intensity of emotional exhaustion in women and a higher intensity of low professional fulfillment in men. The explanation for this is attributed to gender conditioning (Oramas *et al.*, 2007). In this regard, Reygadas (2004) establishes that there are still asymmetries and inequalities in current gender relation in multiple scenarios. Despite the above, the author expresses that women have gained a greater participation in all spheres of economic, political and social life, but until now, the main positions of power and privilege are still occupied by men. As we ascend in the scale of importance of these positions, female participation decreases. This is illustrated in the political structure, where it is possible to observe in instances such as the market, the governments and companies, that these are characterized by exploitation, corruption, and asymmetrical relations (Arnold and Spedding, 2005).

From the perspective of different occupational groups, it can be observed, for example, that in the education sector, the female gender is the one with a higher prevalence of the syndrome (Martínez and Salanova, 2003; Salanova, Llorens and García-Renedo, 2003); whereas with police officers (men and women) there are no significant differences in the levels of burnout (McCarty, Solomon-Zhao and Garland, 2007). In a sample of low-skilled immigrant workers in Spain (that lack or show a low level of specialized training to carry a certain activity or job), it was found that there is no difference between men and women and their level of burnout (Moreno-Jiménez, Ríos-Rodríguez, Canto-Ortíz, San Martín-García and Perles-Nova, 2010). This is interesting if we consider that their incursion in the employment market has happened under precarious conditions, in temporary jobs and with low wages.

For Purvanova and Muros (2010) the literature reported to know the divergence in burnout between men and women shows inconsistent results. To achieve greater clarity, they carried out a meta-analysis in 180 studies, among the main results of which, it was found that women

had higher levels of emotional exhaustion than men, while men had a higher level of depersonalization than women. Although the differences are minimal, another revealing result is that the differences of gender are greater in the United States with regard to those reported in the European Union. For this reason, the relation between gender and burnout is not always clear; it is ambiguous and has inconsistent results that depend on the sector and the context of the study. When asked the question: who are more burned out by their work, men or women? Malach-Pines (2005) responds that the answer lies in the culture, profession, job, and other tensions found, as well as the measure used to evaluate the level of burnout.

In the case of Mexico, a systematic review on burnout carried out by Juárez-García *et al.* (2014) confirms that the most used instrument in Mexico is the Maslach Burnout Inventory, identified in 90% of the 64 studies that were analyzed; however, only 10 of these studies showed that the demographic variables associated to the syndrome and which are most frequently indicated are gender and seniority. Four studies that use the MBI stand out in this context, but none of them are oriented towards the field of government auditing, neither do they analyze the relation between burnout and gender. One of these was applied to 875 traffic officers by Aranda, Pando, Salazar, Torres and Aldrete (2009), who conclude that these workers have an inadequate support system, which largely causes burnout, with serious and eventual repercussions to their health. Another was applied to 29 directives of the Comisión Federal de Electricidad by Cabrera, Ruiz, González, Vega and Valadez (2009), who do not report a prevalence of the syndrome, concluding that the personnel with specific responsibilities tends to become frustrated when perceiving that they give more than what they receive, translating into emotional exhaustion.

For his part, Valdez (2009) when studying 1,391 prison workers, reported a prevalence of burnout of 4.10% and concluded that it is low. Finally, Aranda, Rendon and Ramoc (2011) studied 466 electrical train workers, obtaining a prevalence of 39.40%, concluding that the most prevalent subscale in burnout is the lack of fulfillment, with 28.3% of the total, in addition to a significant association between the emotional exhaustion of the worker with a perception of illness.

### **Organization of the sector and work conditions of the government auditor in Mexico**

Since 1980, the importance of the activity performed by auditors has notably increased (Power, 1997). Today, it is virtually improbable to find a government area or sector that is not audited. In Mexico, society has high expectations concerning the work done by auditors, by attributing to them a strategic role to combat corruption, detect and/or eliminate it (Munro, 2004; Kahn, 2006). However, this idea is far from reality, as the job of auditors entails investigating, consulting, revising, verifying, collecting and evaluating institutional information



to assess the degree of compliance in the activities and attributions, and their adherence to the regulatory framework (Arellano and Coronilla, 2012). On the other hand, the work of auditors is questioned on a daily basis as there is the belief that they are co-opted by corruption when they do not detect or denounce the great financial scandals in a country (DeFond and Francis, 2005), not forgetting that their results are subject to scrutiny when there are comments of possible conflicts of interest (Moore, Tetlock, Tanlu and Bazerman, 2006) and that their activity can be inherently biased, hindering their job and their decisions (Bazerman, Loewenstein and Moore, 2002). Moreover, the international rules and regulations for auditing (Prather-Kinsey, 2006) that are applied in Mexico, imply a constant and specialized training for their use. Therefore, as can be observed, it is an activity that entails a permanent social pressure with high expectations regarding its scope and results. In this regard, it is necessary to take into consideration that the changes in work and organizations (work overload and long and intense work days) affect the quality of the work life of the subject, as is established by Bagtasos (2011).

Mexico has a long-standing tradition in matters of government auditing, as there are audit, accountability, internal control, and inspection entities throughout the entire public sector. In the executive power, for example, there is the Secretariat of the Civil Service and the more than 200 Internal Control Entities of the dependencies and entities of the Federal Public Administration. In the Legislative Power there is the Supreme Audit of the Federation, an internal comptroller in the Chamber of Deputies and an internal comptroller in the Senate. For the particular case of the personnel in the federal field that carry out activities related to the audit, Paradinas (2009) indicates that in the Secretariat of the Civil Service there are 2,400 workers that, in addition to the employees of the Internal Control Entities, result in approximately 12,000 within the Federal Public Administration, carrying out work that is direct and indirectly related to auditing.

For its part, approximately 3 thousand structure workers and service provider professionals work at the Supreme Audit of the Federation. In the Judicial Power there is the Comptroller of the Supreme Court of Justice of the Nation, the Comptroller of the Judicial Power of the Federation (led by the Federal Judiciary Council), the Internal Comptroller of the Electoral Tribunal of the Federal Judiciary, the Internal Comptroller of the Collegiate Circuit Courts, and internal comptrollers in the Autonomous Entities.

At a local level, we find the Offices of the Comptroller (or their equivalent) in each state and the Local Supreme Audit Institutions. According to the Centro Universitario de Ciencias Económico Administrativas of the Universidad de Guadalajara, and the Instituto Mexicano de la Competitividad CUCEA-IMC (cited in Figueroa and Palacios, 2015) there are 4,268 auditors in the 32 states with a national average of 133 auditors per State. At the municipal level, the determination of the number of auditors or employees related to this activity is



complex, which derives from the great diversity that exists between the municipalities of Mexico. Suffice to say, there are syndicate and/or comptrollers in the town halls that carry out similar functions to those of an auditor (Ugalde, 2002).

## **Materials and methods**

The study was cross-sectional and non-generalizable, and implied the application of the MBI-GS to the government auditors selected through an express request, done via an email with the following text:

The “Occupational Burnout Assessment Questionnaire” has the objective of finding the level of burnout that is prevalent in your work area. Dear auditor, below we present some affirmations regarding your activity and other consequences derived from this relation for you as a professional and as a person. Please think on the frequency in which you have these ideas or have these feelings, taking into considering the scale below (...). To respond, please circle the alternative (the number) that better fits your situation.

This information is confidential and will only be used for research purposes, therefore, the veracity of your answers is important.

The initial sample comprised the application of the instrument to 557 auditors from the public sector in Mexico (socio-demographic variables Table 1) from July 27th to August 2nd, 2016. A sampling based on quotes with auditors at the sub-national level (Local Supreme Audit Institutions “EFSL” and of the Comptrollers of the States “C” of the 32 states) was carried out, with an end result of 426 state public servants and 131 auditors at the federal level (Tables A1 and A2, annexed); of these, 42 questionnaires were deemed not valid as there were no responses, the sample error was of 3.86%, and level of confidence at an interval was of 95%,  $z=1.96$ ;  $p=q=0.5$ . From the application of the semi-structured questionnaire, 515 were valid, of which 295 were answered by men (57.3%) and 220 by women (42.7%), 88.35 % of the auditors has a Bachelor degree as their highest level of education, 82.1% (423) are between the ages of 18 and 45 years, although with an average seniority close to 4 years, and work approximately 51 hours a week.

Table 1

Characterization of the sample

Socio-demographic variables		Number	%
Gender	Female	220	47.72
	Male	295	57.28
Age	18-25	68	13.20
	26-35	231	44.85
	36-45	124	24.08
	46-60	75	14.56
	61 or more	17	3.31
Number of children	No children	299	58.06
	1 child	83	16.12
	More than 1 child	133	25.82
Level of education	Elementary (Primary, Secondary)	3	0.58
	Intermediate (High School, Preparatory)	9	1.75
	Bachelor's degree	455	88.35
	Postgraduate degree	48	9.32
Seniority in their current place of work	1 year or less	174	33.79
	2 to 4 years	136	26.41
	More than 4 years	205	39.8

Source: Own elaboration.

## Measuring scale

The Maslach Burnout Inventory-General Survey (MBI-GS) was utilized in its Spanish adaptation of 16 items done by Moreno-Jiménez et al. (2001), distributed into three subscales: emotional exhaustion (5 items), cynicism (5 items), and professional efficiency (6 items). In the judgment of the experts, the transcript of the items was validated in order to make the process clear for auditors and preserving the essence of the original scale. Each item was assessed with a 7-point Likert Scale, in which they indicate the frequency with which they have experienced the situation described—from 0 (never) to 6 (every day)—redacted as affirmations, with the exception of the professional efficiency dimension, which was assessed inversely for each item from: -6 (every day) to 0 (never). For this reason, the minimum value of the measurement scale of burnout is -36, since the real effect of the professional efficiency dimension subtracts from the prevalence of burnout (it is negative); whereas the maximum value is of 60 (result from the sum of

the emotional exhaustion and cynicism dimensions, given that professional efficiency will present a value of zero). In light of this, three levels were considered: low for scores from 1 to 7, medium between 8 and 12, and high for those above 16. Concerning the reliability values of the MBI-GS, the initial pretest resulted in a general Cronbach's Alpha coefficient of 0.901 (high reliability in the measurement), while for the subscales it is of 0.85 for professional efficiency, 0.83 for emotional exhaustion, and 0.74 for cynicism.

An exploratory factor analysis of main components with Varimax rotation was done with the data obtained. The Kaiser-Meyer-Olkin coefficient obtained had a value of 0.903 and a Chi-squared Bartlett's sphericity test had a value of 4649.461; g.l. 120;  $p < 0.000$ . The aim was to identify those items that were not adhered to their dimension (Hair, Black, Babin, Anderson and Tatham, 1998; Lámbarry, Rivas and Trujillo, 2013) and the degree of dimensionality of their respective factor loads (Table 2). Each of the subscales presented a good degree of unidimensionality, with factor loads that surpass values above 0.4 (Landeró and González, 2009). Three main components were derived from this, which explain 65.13% of the burnout variance, confirming the multidimensionality (emotional exhaustion, cynicism, and professional efficiency) of the construct comprised by 16 items.

Emotional exhaustion and cynicism are positively and significantly correlated with burnout, both with a value of 0.880; they are also the dimensions that have a higher impact on the determination of burnout by presenting standardized coefficients of 0.519 and 0.406, respectively. Furthermore, they explain 57.7% of the variance of the syndrome. The opposite occurs for the professional efficiency dimension, which negatively and significantly correlates with burnout through a coefficient of -0.542 and a standardized coefficient of -0.302 (Table 2). Jointly, the three dimensions explain 65.13% of the variance of burnout.

Concerning the indicators with a greater influence on burnout, we have: *I feel drained at the end of the work day* (A2) with a coefficient of 0.128; *I only want to do my job and not be bothered by anyone* (C3) with 0.126; and *working all day is truly stressful for me* (A4) with 0.125. On the other hand, the one with the least influence is: *I doubt the value of my work* (C5) with 0.088. In this sense, the item *I feel fulfilled when I do my job* (EP4) is the one that most negatively impacts the syndrome, with -0.077, followed by *I have done a lot of things that are worthwhile in my job* (EP5) with -0.076.

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<sup>1</sup> It is worth noting that the MBI-GS instrument was applied under the original proposal of its authors, so the wording of the items was done as affirmations; however, the professional efficiency dimension as is considered in the instrument has a negative effect on burnout.

<sup>2</sup> There is no standardization, and measurement errors have been pointed out concerning the cut-off points with relation to the burnout measurement scale, as indicated by different researches (Faúndez and Gil-Monte, 2009; Schaufeli, Leiter and Maslach, 2009; Fernández and Merino, 2014). The ones indicated were used for this study.

Table 2

## Exploratory factor analysis

Component	Item	Statement (Item)	Factor load	Explained Variance (accumulated %)	Own value	Cronbach's alpha	Pearson's correlation coefficient	Beta Standardized coefficient
Emotional Exhaustion	A1	I feel emotionally exhausted by my work.	0.823	41.393	6.623	0.83	0.880	0.519
	A2	I feel drained at the end of the work day.	0.850					
	A3	I feel fatigued when waking up in the morning and at the prospect of spending another day at work.	0.811					
	A4	Working all day is truly stressful for me.	0.801					
	A5	I feel burned out by work.	0.695					
Cynicism	C1	Since I started my job, I have been gradually losing interest in my work.	0.709	57.752	2.618	0.74	0.880	0.406
	C2	I have been losing enthusiasm in my work.	0.672					
	C3	I only want to do my job and not be bothered by anyone.	0.591					
	C4	I have become more cynical concerning whether my work is worth something.	0.806					
	C5	I doubt the value of my work.	0.732					
Professional efficiency	EP1	I am capable of efficiently solving the problems that might arise at work.	0.684	65.139	1.182	0.85	-0.542	-0.302
	EP2	I feel like I am efficiently contributing to the activity of my organization.	0.749					
	EP3	In my opinion, I am very good at my job.	0.772					
	EP4	I feel fulfilled when I do my job.	0.626					
	EP5	I have done many things that are worthwhile at my job.	0.676					
	EP6	I am sure that I am efficient in the realization of tasks at my job.	0.818					

Source: Own elaboration from IBM SPSS Statistics 22.

## Results

There is a total of 79 (15%) Mexican government auditors with burnout; of these, 39% are men and 40% are women. Despite the fact that 436 (85%) auditors do not yet show any signs of the syndrome, there is evidence of the presence of burnout in Mexican auditors. From those suffering from burnout, 40.5% of them are at a low level, 29.1% at an intermediate level, and 30.4% at a high level of burnout.

Regarding the incidence of burnout with respect to gender, 3.1% of the total auditors, which is the highest percentage in the metrics of the syndrome, both for men and women, obtained a low level, followed by 2.3% with high levels of the syndrome, also for both genders (Table 3). However, with a mean of -13.79 being greater for women than for men, the greater degree of incidence can be inferred on this gender (Table 4).

Table 3

Cross tabulation: gender vs. burnout level and subscale level

	Level B (% of the table) Scale: -36 to 24				Level AE (% of the table) Subscale: 0 to 30			
	Al	Ba	Me	No	Al	Ba	Me	No
Values	Higher than 16	1-7	8-15	Higher than 0	Higher than 19	10-14	15-19	Lower than 10
Man	2.3	3.1	2.1	49.7	11.3	7.8	8.0	30.3
Woman	2.3	3.1	2.3	35.0	9.7	9.1	7.4	16.5

Nivel C (% de la tabla) Sub-escala: 0 a 30				Nivel EP (% de la tabla) Sub-escala: 0 a -36			
Al	Ba	Me	No	Al	Ba	Me	No
Mayor que 19	10-14	15-19	Menor que 10	Mayor que -12	-18 a -23	-12 a -17	Menor que -23
2.3	4.9	3.1	47.0	0.6	1.4	0.4	55.0
2.3	4.9	3.5	32.0	0.4	1.0	0.8	40.6

Note: B: burnout. AE: emotional exhaustion. C: cynicism. EP: professional efficiency; remember that the values of this scale, due to the design of the MBI-GS model, subtract from the prevalence of burnout (it is negative).

Al: high. Ba: low. Me: medium. No: Does not exist.

Source: Own elaboration.

Table 4

Statistics: burnout, subscales, and indicators

(Sub) scales	Burnout		Subscale: Emotional exhaustion		Subscale: Cynicism		Subscale: Professional efficiency	
	Man	Woman	Man	Woman	Man	Woman	Man	Woman
Gender	Man	Woman	Man	Woman	Man	Woman	Man	Woman
Mean	-17.93	-13.79	10.50	12.75	4.88	6.06	-33.31	-32.60
Standard Deviation	15.34	15.66	8.06	7.96	6.16	6.52	-4.60	-4.82
Variance	235.341	245.152	65.026	63	38	43	21	23
Minimum	-36	-36	0	0	0	0	-1	-6
Maximum	59	32	30	30	30	27	-36	-36
Pearson Correlation	Na*		0.870	0.888	0.871	0.889	-0.642	-0.579
Standardized Coefficients	Na*		0.526	0.508	0.402	0.416	-0.300	-0.308
Indicators:	Burnout		Subscale: Emotional exhaustion		Subscale: Cynicism		Subscale: Professional efficiency	
	Man	Woman	Man	Woman	Man	Woman	Man	Woman
Gender	Man	Woman	Man	Woman	Man	Woman	Man	Woman
Beta standardized coefficients	A5:	A2:	A2:	A2:	C3:	C3:	EP4:	EP1:
	0.794**	0.122**	0.250**	0.241**	0.329**	0.289**	0.271**	0.249**
	EP5:	EP4:	A5:	A5:	C1:	C4:	EP1:	EP6:
	-0.562***	-0.073***	0.212***	0.224***	0.219***	0.211***	0.200***	0.190***

Note: Na\* non-applicable

\*\* Coefficient with the highest incidence.

\*\*\* Coefficient with the lowest incidence.

Source: Own elaboration.

Concerning the Beta standardized coefficients of the multiple linear regression, the subscales impact the syndrome in a very similar manner with very approximate values, regardless of the gender of the auditor; emotional exhaustion impacts to greater extent, and professional efficiency to a lesser extent, a trend that can also be seen in the percentage of variance explained by each subscale (Table 2). At an indicator level, A2: *I feel drained at the end of the work day*, is the one with the greater impact with a standardized coefficient of 0.122 for women, whereas for men it is indicator C3: *I only want to do my job and not be bothered by anyone*, with a standardized value of 0.132; although these two indicators are the ones that best determine the presence of burnout for both genders.

In the subscale of emotional exhaustion, both genders concentrated the highest percentage at a high level; men with 11.3% and women with 9.7%. Despite this, it is the female gender that presents the mean value of 12.75, surpassing that of men (10.5). In both, indicator A2:

*I feel drained at the end of the work day*, determines approximately 25% of their emotional exhaustion. While in the cynicism subscale, the percentage of 4.9% is the same for both men and women, which is at a medium level every time that the mean of the female gender of 6.06 is greater with respect to the male gender of 4.88. Indicator C3: *I only want to do my job and not be bothered by anyone*, for both gender, determines around 30% of their attitudes of cynicism. Finally, it is in the high level of the professional efficiency subscale where the higher percentages for both genders lie; notably, the male gender surpasses the female gender at 55% to 40.6%, respectively. Nevertheless, the mean value of 33.31% in men is slightly higher than in women at 32.6%. Indicator EP4: *I feel fulfilled when I do my job*, is the one with the most influence when determining professional efficiency for men, whereas it is indicator EP1: *I am capable of efficiently solving the problems that might arise at work*, in the case of women. Both indicators determine approximately 25% of professional efficiency.

Concerning the normality test, the distribution presented a Kolmogorov Smirnov coefficient of 0.119, significant at 0.01 (0.000) for men, while it was of 0.096, significant at 0.01 (0.000) for women; thus, the alternate hypothesis that states that burnout in population differs from a normal distribution both for men and for women is accepted. Based on this, to contrast hypothesis Ho: the distributions of burnout between men and women are equal, the U Mann-Whitney test was selected, and the result was significant at 0.01 (0.001). Therefore, we accept hypothesis Ha: the distributions of burnout between men and women differ. In this manner, we conclude that there is a difference between the burnout and the gender variable. The average range for the 295 men was of 239.3, while for the 220 women it was of 283.08, which confirms that burnout tends to be more prevalent in women than in men. Nevertheless, regarding the level of burnout that prevails in female and male auditors, it is low (1-7). It is the trend observed in the dimensions of emotional exhaustion and cynicism, unlike professional efficiency, where high levels of burnout are seen, but which are negatively correlated.

## Discussion and conclusions

A first impression of this study concerning the MBI and more specifically the dimension of professional efficiency, is its perplexing negative interpretation by assessing it jointly with the other two dimensions: cynicism and emotional exhaustion, which positively impact the metrics of burnout. Therefore, professional efficiency must be presented with a syntax of its items in a negative manner and with this, avoid a fragmented analysis of each dimension or the interpretation of a negative scale for the assessment of burnout.

Concerning other studies, we have the case of Colombia with a sample of 872 public accountants from 86 cities, 54.8% of whom presented high levels of burnout (Loaiza and Peña, 2013). In the United States, with 1,681 auditors, accountants and consultants in tax matters, it



was found that they presented emotional exhaustion at similar levels, but that it was women who reported the lowest level of professional efficiency, whereas men are the ones that present higher levels of depersonalization/cynicism (Jones III, Guthrie and Iyer, 2012; Guthrie and Jones III, 2012). When comparing accountants to other professional collectives, Fogarty, Singh, Rhoads and Moore (2000) found that the mean values reported for emotional exhaustion are greater to the ones presented by teachers and nurses; for depersonalization, the values are similar to those of medical residents; and professional efficiency is lower in relation to lawyers. Mexican women auditors are the gender with appreciably the highest levels of this syndrome, which can be observed with a slight difference when compared to the mean value that barely surpasses that of men. This supports the results obtained by Maslach, Jackson and Leiter (1996), Cámara and Cuesta (2005) and Boydak (2009) in their studies. Concerning the dimensions of emotional exhaustion and cynicism, it is auditor women who present the greater mean values with respect to men, although both present low levels of burnout. Despite this, it indicates that women auditors perceive a greater emotional exhaustion and cynicism than men, coinciding with the explanations of gender conditioning by Oramas *et al.* (2007).

It is in the professional efficiency dimension where the average burnout value in men auditors marginally surpasses that of women, which translates into this gender perceiving a greater professional fulfillment, supporting the results obtained by Purvanova and Muros (2010). In general terms, this is the dimension that presents the higher mean with respect to the other two; and due to its elevated negative correlation coefficient, it acts as a mitigating factor to the burnout syndrome, offsetting the effect of the other two that have smaller positive correlation coefficients, to the point that it maintains low levels of burnout in workers.

Derived from the above, one conclusion of this study is the prevalence of burnout in Mexican auditors, attributable to three main components that explain 65.13% of the burnout variance, confirming the multidimensionality (emotional exhaustion, cynicism, and professional efficiency) of the construct.

A second conclusion of this study is that there is a difference between burnout and the gender variable, and it is confirmed that it tends to be greater in women than in men.

One topic that remains to be studied in this collective of government auditors is the impact of chronological and sociodemographic variables on burnout syndrome, such as the work load that can become extenuating with an average of 51 hours per week (although some auditors reported up to 70 work hours and short deadlines with relation to the number of documents to be revised), their seniority at work (which in this case was of 4 years) derived from a high rotation rate, and their age and marital status. Moreover, there is the need for further research concerning occupational groups that are prone to be affected by different psychosocial risks, even more so in the Mexican public sector, in addition to considering other measurement instruments such as the Occupational

Burnout Assessment Questionnaire (CESQT) by Gil-Monte or the Mexican Scale of Occupational Burnout (EMEDO for its acronym in Spanish) by Uribe-Prado, and thus make it possible to contrast results considering the gender variable.

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## Annexes

Table A1

Sampling based on the fees of the federal level

Ejecutivo	Legislativo	Judicial	Mujeres	Hombres
53	36	0	62	27

Source: Own elaboration.

Table A2

Sampling based on EFSL and C

	Local Supreme Audit Institution (EFSL)	Internal Audits of the States	Women	Men
Aguascalientes	4	0	1	3
Baja California	9	6	7	8
Baja California Sur	3	0	0	3
Campeche	2	5	3	4
Chiapas	7	8	6	9
Chihuahua	15	0	12	3
Ciudad de México	12	11	7	16
Coahuila	6	3	3	6
Colima	5	4	8	1
Durango	0	7	5	2
Estado de México	14	8	9	13
Guanajuato	0	17	5	12
Guerrero	6	5	4	7
Hidalgo	9	4	6	7
Jalisco	5	6	8	3
Michoacán	8	6	4	10
Morelos	7	2	3	6
Nayarit	4	11	6	9
Nuevo León	5	13	6	12
Oaxaca	9	8	4	13
Puebla	0	7	0	7
Querétaro	11	5	10	6
Quintana Roo	17	3	5	15
San Luis Potosí	7	5	2	9
Sinaloa	9	4	6	7
Sonora	15	0	3	12
Tabasco	11	0	4	8
Tamaulipas	3	5	2	6
Tlaxcala	7	11	2	16
Veracruz	13	12	8	17
Yucatán	6	8	4	10
Zacatecas	8	5	5	8
Total	239	187	158	268

Source: Own elaboration.