

**Study of psychosocial risk factors in companies in Cd. Obregón, Son. Mexico****Estudio de factores de riesgos psicosociales en empresas de Cd. Obregón, Son. México**

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**Abstract**

The study of organizational and psychosocial aspects and their relationship with occupational health is not new, although it has acquired importance and recognition in recent years (Houdmont and Leka 2010; Näswall, Hellgren, Sverke, 2008). The objective of the study was to determine the level of exposure to severe traumatic events and psychosocial risks in local workers. The methodology is based on (Herrera, Medina, & Naranjo, 2010) and the Prevention Technical Note 702 (INSST, 2005). As a result, it was obtained that medium-sized companies present a low risk level with 43.48% and 39.13% medium risk, on the other hand, large-sized companies obtained mostly low risk with 30.51% and medium risk with 25.42%. Of the people surveyed, 14.29% present severe traumatic factors and require clinical evaluation (8.99% men and 5.29% women). The conclusion of the study is that the size of the company does not have a direct influence and that the factors with the greatest influence and highest level of risk in both cases are related to the workload and the organization of time to carry out the work.

**Psychosocial, Safety, Health****Resumen**

El estudio de los aspectos organizacionales y psicosociales y su relación con la salud laboral, no es nuevo, aunque sí la importancia y reconocimiento que ha adquirido en los últimos años (Houdmont y Leka 2010; Näswall, Hellgren, Sverke, 2008). El objetivo del estudio fue determinar el nivel de exposición a acontecimientos traumáticos severos y riesgos psicosociales en trabajadores de la localidad. La metodología se sustenta en (Herrera, Medina, & Naranjo, 2010) y (INSST, 2005). Como resultado, se obtuvo que las empresas de tamaño mediano presentan un nivel de riesgo bajo con 43.48% y 39.13% de riesgo medio, por otro lado, las empresas de tamaño grande obtuvieron riesgo mayormente bajo con 30.51% y riesgo medio con 25.42%. De las personas encuestadas, el 14.29% presentan factores traumáticos severos y requieren de valoración clínica (8.99% hombres y 5.29% mujeres). La conclusión del estudio es que el tamaño de la empresa no influye directamente y que los factores de mayor influencia y mayor nivel de riesgo en ambos casos, se relacionan a la carga de trabajo y la organización del tiempo para realizar el trabajo.

**Psicosociales, Seguridad, Salud**

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## Introduction

Psychosocial risks and work-related stress are among the most challenging issues in the field of occupational safety and health; they significantly affect the health of individuals, organisations and national economies (European Agency for Safety and Health at Work, 2021).

According to the International Labour Organisation (ILO, 2013), psychosocial risk factors are those characteristics of working conditions that affect people's health, these risk factors continue to remain invisible or secondarily in the interests of employers, even to the workers concerned. These risk factors are present in all workplaces and in all sectors of activity, although they may appear with greater incidence and frequency in certain activities.

Psychosocial risks, unlike psychosocial factors, are not organisational conditions but facts, situations or states of the organism with a high probability of damaging the health of workers in a significant way. The important elements of this concept are: the probability and the severity of their consequences. The probability/harm ratio of psychosocial risks is a function of the double gradation of the value of the probability and the severity of its consequences, which means that the psychosocial risk can range from trivial to serious or intolerable (Patlán, 2019).

The same author states that stress is the most important psychosocial risk and acts as a general response to psychosocial risk factors, as it is a pattern of emotional, cognitive, physiological and behavioural reactions to certain harmful aspects of work content, organisation and environment.

According to Sodexo Benefits and Incentives Mexico (2019), productivity losses related to psychosocial risk factors are estimated at up to 16 billion pesos per year. For this reason, it detailed some figures regarding these ailments originating in the work environment:

- 75% of Mexican employees suffer from work-related stress.

- A worker misses up to 25 days of work per year when suffering from depression, 20 days if suffering from panic attacks or anxiety and 14 days if suffering from post-traumatic stress.

- It impacts 7.3% of payroll costs and 20% per year in lost productivity.

In addition, he noted that the National Institute of Geography and Statistics (INEGI) estimates that 58.1% of commuting to work lasts from 30 minutes to two hours, which generates fatigue and stress in people.

As a consequence of major changes in organisations and current globalisation processes, exposure to psychosocial risks has become more frequent and intense, making it convenient and necessary to identify, evaluate and control them in order to avoid the associated risks to health and safety at work.

According to the Ministry of Labour and Social Welfare (STPS) as of November 2021, cited by (Greentology, 2022), in Mexico there were more than 25,200 workplace accidents in companies, detailing that around 16 billion pesos are lost due to emotional disorders related to workplace accidents, anxiety and stress.

According to (México, uno de los países con más fatiga por estrés laboral, n.d.), 75% of Mexicans suffer from fatigue due to work-related stress, surpassing countries with the world's leading economies, such as China (73%) or the United States (59%). Approximately 65% of the population of the Mexican Region is part of the labour force, and the average worker spends about two-thirds of his or her life at work. Work is not only a source of income, but also a fundamental element of health, status, social relations and life opportunities.

The working environment has evolved over the last few decades, moving away from the traditional organisation characterised by operational tasks, line work, centralised decision-making, as today's market competition requires organised, dynamic and high quality companies that can easily adapt to a changing and demanding environment. Today, mental effort is required in tasks that traditionally required muscular strength. The pace of work has been increasing, because better results have to be achieved with fewer workers. And technological innovation is a determining factor in the socio-economic evolution of our society, and of business competitiveness. (Mansilla, 2010).

Thus, today's working conditions demand high levels of attention and concentration, responsibility, work overload, long or disorderly working hours and shifts, which makes psychosocial and economic risks a reality in today's world of work (Sánchez, 2006).

Moreno and Báez (2012) define psychosocial risks at work as work situations that have a high probability of seriously damaging the health of workers, physically, socially or mentally. Psychosocial risks at work are situations that usually have a significant and serious impact on health. While psychosocial risk factors are usually factors with different levels of probability of causing harm of all kinds, psychosocial risks have a high probability of generating mainly serious consequences.

Derived from the above context, the aim of the present study was to determine the level of exposure to severe traumatic events and psychosocial risks in local workers in order to promote a favourable organisational environment in workplaces.

The study is of utmost relevance as it aims to find out the situation of local workers with regard to their working environment and its comfort. Companies should be concerned because it is their workers who make it possible for the company to function and produce correctly.

### Description of the method

The methodology used is based on (Herrera, Medina, & Naranjo, 2010) and (INSST, 2005). The stages were as follows: (1) Research approach: It consisted of determining the type of research according to the facts to be studied in a descriptive way. (2) Methodology, techniques and instruments to be applied, being the methodology and instrument for data collection. (3) Planning and carrying out the fieldwork: It consisted of obtaining the data through the application of the instrument recommended by the Mexican Official Standard NOM-035-STPS-2018 Psychosocial Risk Factors at Work: Identification, analysis and prevention. (4) Analysis of the results: At this stage, the data was processed to determine the level of exposure to severe traumatic events and psychosocial risks in local workers.

### Results

The results are presented below in order of importance. To determine the level of exposure to severe traumatic events and psychosocial risks. A total of 187 workers in Ciudad Obregón, Sonora, were evaluated, based on the provisions of the Mexican Official Standard NOM-035-STPS-2018 Psychosocial Risk Factors at Work: Identification, Analysis and Prevention. Severe traumatic events identified by gender are presented below.

Gender	Have severe traumatic events	Medical assessment required
Female	33.33%	5.29%
Male	52.38%	8.99%

**Table 1** Severe traumatic events by gender  
*Source: Own elaboration*

Table 1 shows the proportion of people surveyed who have suffered some type of severe traumatic event, with only 14.28% of the total requiring clinical assessment, 8.99% being men and 5.29% women.

With respect to the relationship between gender and the type of work in the companies, the information presented in table 2 is as follows.

Gender	Business activity	Quantity Individual	Total Number of Individuals Assessed
Female	Service	25% (3)	12
	Manufacturing	41.66% (5)	
	Trade	33.33% (4)	
Male	Service	54.54% (6)	11
	Manufacturing	36.36% (4)	
	Trade	9.09% (1)	

**Table 2** Relationship of gender and type of company with psychosocial risk factors  
*Source: Own elaboration*

Table 2 shows that 25% of the female gender works in the Service sector, 41.66% in Manufacturing and 33.33% in the Commerce sector; while on the other hand, 54.54% work in the Service sector, 36.36% in Manufacturing and only 9.09% in the Commerce sector. The size of the company where the individuals under study work is shown below:

Gender	Company Size	Quantity Individual
Female	Medium (16 to 50 Employees)	10
	Large (50 to more employees)	2
Male	Medium (16 to 50 employees)	10
	Large (50 to more employees)	1

**Table 3** Relationship of gender and company size with psychosocial risk factors

Source: Own elaboration

Table 3 indicates that female and male individuals work more in medium-sized companies (10 and 10, respectively), i.e. organisations with a number of employees in the range of 16 to 50.

The findings regarding the level of psychosocial risk by gender are presented in table 4.:

Gender	Psychosocial Risk Level	Cantidad individual
Female	Very High	1
	High	0
	Medium	5
	Low	5
	None	1
Male	Very High	0
	High	1
	Medium	4
	Low	5
	None	1

**Table 4** Relationship between gender and level of psychosocial risk

Source: Own elaboration

Table 4 shows that the psychosocial risk in both genders is similar, except for very high and high risk, respectively. The following table relates the type of company and the level of psychosocial risk that occurred in each of them.

Business activity	Psychosocial Risk Level	Quantity Individua
Service	Very High	1
	High	1
	Medium	3
	Low	4
	Nil	0
Manufacturing	Very High	0
	High	0
	Medium	3
	Low	4
	Nil	2
Trade	Very High	0
	High	0
	Medium	3
	Low	2
	Nil	0

**Table 5** Relationship between the type of company and the level of psychosocial risk

Source: Own elaboration

Table 5 shows that the level of psychosocial risk is medium in commerce and manufacturing companies, and low in service companies. The level of risk according to the size of the company where the individuals under study work is presented below.

Company size	Psychosocial Risk Level	Individual quantity
Medium	Very High	1
	High	1
	Medium	8
	Low	9
	None	1
Large	Very High	0
	High	0
	Medium	1
	Low	1
	Nil	1

**Table 6** Relationship between company size and level of psychosocial risk

Source: Own elaboration

Table 6 shows that the level of psychosocial risk is mostly found in medium-sized companies.

## Conclusions

The results allow us to conclude that a medium and low risk level is present in 41% of the individuals in both cases of female individuals, on the other hand, with 36% in the medium level and 45% in the low risk level on the part of male individuals.

Likewise, medium-sized companies obtained mostly low risk level with 43.48% of the total sample, and 39.13% medium risk, on the other hand, large-sized companies obtained mostly low risk with 30.51% and medium risk with 25.42% of the total sample.

In the results of the different risk factors of the organisations classified as medium and large, it was determined that size is not directly influential, as they remained proportional to the sample size of their respective classification.

On the other hand, it was determined that the factors with the greatest influence and the highest level of risk in both cases were those related to the activity itself, and the work time involved, i.e. the workload, the organisation of the time in which the work is carried out, etc.

The factors to be taken into account in both cases were those related to the activity itself and the work time involved, i.e. the workload, the organisation of the time in which the work is carried out. The factors to be taken into account as the most risky for their employees, and to be solved, in order to have a healthier and more productive environment, became evident.

When evaluating the companies in the locality of Ciudad Obregón, Sonora, it was concluded that most organisations generally focus only on physical risk factors, and although psychosocial risks are not left aside, they are not taken into account or perhaps put in the background. However, psychosocial risks are an important part, as they can affect the worker in a way that can have repercussions on his or her health.

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