

## **Psychosocial Risk Factors and Burnout Syndrome**

Dra. Ma Del Refugio López Palomar (CU de los Valles, Universidad de Guadalajara, México)<sup>1</sup>, Dra. Sara Adriana García Cueva (1), Dr. Manuel Pando Moreno (2) CUCS, Universidad de Guadalajara, México. Mtra. Adriana Rodríguez López (1), Mtra. Sandra Zavala Contreras (1)  
*Corresponding Author: Dra. Ma Del Refugio López Palomar*

---

**Abstract:** Several studies on psychosocial risk factors have shown their relationship with the Burnout Syndrome. The present study used an observational, cross-sectional and descriptive design. The participants were the members of the Economically Active Population (EAP) of Colombia. The sample was integrated by 359 workers from diverse occupations and professions. The main objective was to identify psychosocial factors perceived as negative and their association with the Burnout Syndrome. The applied instruments were the Inventory General Survey (MBI-GS), (Maslach, Jackson and Leiter 1996) – on its new version – and the scale of Psychosocial Factors at the Workplace (Silva, 2006).

**Results:** The prevalence of psychosocial factors perceived as negative were: work demands with 32.6%, followed by the job role and career development with 8.91%. Regarding Burnout Syndrome, it was lack of personal achievements with 27.58%. The greatest association between psychosocial factors and the three dimensions of Burnout was the Social Interaction and Organizational Aspects dimension; respectively for Emotional Exhaustion EE  $p = .000$ , OR = 3.179 (1.974 - 5.120); Cynicism C  $p = .000$  OR = 2,828, (1,614 - 4,957); and lack of Professional Competency PC  $p = .000$  OR = 2.578 (1.608 - 4.132).

**Conclusion:** The psychosocial factors perceived negatively and associated with the Burnout Syndrome, were the following: predictive of Emotional Exhaustion were the workplace conditions, work demands, work role and career development; as well as social interaction and organizational aspects. For Cynicism: the content and characteristics of the task, the social interaction and organizational aspects; and the performance compensation. The two predictive psychosocial factors for the low Professional Competency turned out to be the social interaction and the organizational aspects as well as remuneration and performance. Out of the seven psychosocial factors studied, only the workload was not associated with the presence of Burnout.

**Keywords:** Psychosocial factors, Burnout Syndrome, workers of different professions and occupations.

---

Date of Submission: 26-07-2019

Date of Acceptance: 12-08-2019

---

### **I. INTRODUCTION**

The dynamics imposed by the technological revolution, the current complexity and the globalization of markets in the capitalist system, presents new challenges to organizations by impacting health in the broad sense: human, financial, environmental, etc. Demanding a change that aligns various business policies and strategies that allow the production of goods and services under the philosophy of socially responsible business (Porter, M. & Kramer, R. 2006, ILO 2017). In this sense, and considering health and safety at the workplace as a fundamental human right and a labor law, it is necessary to carry out punctual actions in order to achieve the long-awaited human right "health"; defined by the World Health Organization WHO as a state of complete physical, mental and social well-being, and not only as the absence of diseases or illnesses (WHO 2017). This concept, applied to the field of labor, is concerned with the search for the highest possible welfare at the workplace (WHO 2017). However, day by day, the loss of this complete welfare state is increasing, as shown by the figures issued by the ILO International Labor Organization, which points out:

*According to the most recent ILO estimates, 2.78 million workers die each year from work-related injuries and illnesses. About 2.4 million (86.3 percent) of these deaths are caused by work-related illnesses, while just over 380,000 (13.7 percent) are the result of work accidents (ILO 2018).*

---

<sup>1</sup>(1) CU de los Valles, Universidad de Guadalajara, México, (2) CUCS, Universidad de Guadalajara, México.

In 2014, the WHO reported that 8% of the global rate of depressive disorders are related to occupational risks, this percentage only represents the accidents and diseases that occur in formal workplaces, nonetheless, there's a higher problem since this figure represents only a small part of what happens in the sphere of labor (WHO 2014). Also, in 2019, this organization noted many factors that affect the mental health of workers, for example: inefficient practices of communication and management, limited participation in decision-making, prolonged or inflexible work schedules and lack of team cohesion; associated with psychological bullying and harassment which have been pointed as the main causes of work-related stress and other mental health problems (WHO 2019).

People spend approximately one third of their lives in the workplace, therefore the conditions of employment and work environment have considerable effects on health. Favorable working conditions can provide protection and social status, personal development, and protection against physical and psychosocial risks. They can also improve social relationships and self-esteem of employees with positive effects on their health. However, when these conditions are unfavorable, they can affect the welfare state of people in a negative way, becoming physical, ergonomic, and psychosocial risk factors visible in occupational accidents and occupational diseases, showing a close relationship between health and work (WHO 2018). The social and material conditions in which work is performed can affect the welfare state of people in a negative way. The most frequent health damages are – according to empirical evidence reported – occupational accidents. Despite of this, psychosocial factors can be lethal, but the empirical evidence reported is lower.

The psychosocial factors studied in this document are those perceived as psychosocial risks that refer to conditions in work environments, directly related with the organization, the perception, the work content and the performance of the task that affect the wellbeing and physical and psychological health (ILO / WHO, 1984 and ISTAS 2005), which are real threats to a worker's health; generating pathologies such as chronic work stress or Burnout Syndrome, that Maslach and Jackson (1996) defined as a set of symptoms divided into three dimensions: a) EE Emotional Exhaustion, defined as fatigue that can manifest itself mentally and physically, with an emotional feeling of not being able to give more of himself to others; b) Cynicism C, characterized as a set of feelings, attitudes and negative responses developed by a person in order to remain distant and cold towards other people; mainly addressed to the recipients of their own work with harmful implications for the person and the organization itself; and c) lack of Professional Competency PC, which is characterized by a painful disillusionment of the meaning about the own life and personal achievements; disappointment with work, feelings of failure and low self-esteem are usually its components (Gil-Monte, 2005).

The study of psychosocial factors and their relationship with Burnout transcends borders and economies. It is not exclusive of care professionals as previously considered (Aranda, López, and Barraza 2013; Juárez, Idrovo and Plascencia 2014; López, García, and Pando 2014, Aldrete, Navarro, González, Contreras and Pérez 2015, Jiménez, Caicedo, Joven y Pulido 2015, Alzate and Parra 2016, Bedoya, 2016, Kärkkäinen, Saaranen, Hiltunen, Ryyänänen, Räsänen 2017, Salvagioni et al., 2017; Demerouti, Veldhuis, Coombes & Hunter 2018, Pando, Calderón, Aranda and Elizalde 2018, Talavera, Moreno, García and García, 2018, Moukarzel, 2019). His study, prevention and care, involves several actors: government, NGOs, business, workers and researchers who contribute from their fields to achieve health at work concentrated on turning it into a source of health (Schaufeli, Salanova, González-Roma and Bakker 2002a). The present study aims to identify the psychosocial factors perceived as negative and their association with Burnout in workers of different professions and occupations, in order to provide empirical evidence on the subject, as well as contributing to the call made by the ILO in commemoration of the World Day of Occupational Safety and Health for 2017, for improving the capacity to collect and use reliable data on Occupational Health and Safety at Work (ILO 2017).

## II. MATERIALS AND METHODS

An observational, descriptive cross-sectional and correlational study with a non-experimental design was carried out in a non-representative sample of Colombia's Economically Active Population (EAP) to determine the prevalence of psychosocial risk factors and its association with the Burnout Syndrome. A total of 359 workers were randomly selected (non-probabilistic sample) who had at least one year of seniority and were subordinated employees. The subjects were informed about the objectives of the study, stating their consent to participate. A survey was applied to the personnel of various occupations, like general workers, clerks, sanitary teachers, etc. making sure not to repeat more than five times the same occupation.

**Three instruments were used:** questionnaire of personal and labor data. This included questions such as age, gender, marital status, scholarship, work shift, activity performed, seniority in the company and position, days of the week worked, overtime worked and load of working hours. To measure the exposure to psychosocial factors at the workplace, the scale of Psychosocial Factors in the Work was applied (Silva, 2006). This instrument includes 46 items and 7 dimensions: conditions of the workplace (9), workload (5), content and characteristics of the task (7), work demands (7), career development (6), social interaction and organizational

aspects (9) and remuneration of the performance (3), the Cronbach's alpha of questionnaire and its factors, amounted to 0.9. Likert scale of 5 degrees, consists of the following scores: 0 (never), 1 (almost never), 2 (sometimes), 3 (almost always) and 4 (always). The grading is done directly by adding the scores retrieved in each dimension, obtaining a result that can fall into one of the three levels of risk (high, medium or low); the second instrument was the Maslach Burnout Inventory-General Survey scale (MBI-GS), (Maslach, Jackson and Leiter 1996), on its translated and validated version of the original, composed by 22 items to evaluate its three dimensions: EE Emotional Exhaustion, which explores 9 questions, CCynicism, which is formed by 5 items; lack of Professional Competency PC, composed by 8 items. On Likert scale, the items are added according to the dimension, determining the level as appropriate: low, medium and high. The instrument presents acceptable values for a Cronbach alpha  $\alpha = .90$  for Exhaustion or emotional exhaustion,  $\alpha = .79$  for Cynicism and  $\alpha = .71$  lack of Professional Competency. Its main function is to measure the professional Burnout (Gil-Monte and Peiró 1997).

For the data analysis, non-parametric tests were used, applying the statistical package of MS Excel and SPSS in order to calculate the prevalence of psychosocial factors and Burnout Syndrome, by frequencies and percentages. The association between the categorical variables was obtained by means of the Odds Ratio test (OR) with a 95% of confidence interval, that is, significant p values  $< 0.05$ .

**Ethical considerations:** The study was carried in compliance with the code of conduct of the American Psychological Association (2010). All participants were previously informed about the purpose and method of study as well as the confidentiality and privacy of the data. In that sense, they expressed their willingness to participate.

### III. RESULTS

In Table 1, the sociodemographic variable data is presented: 359 participants integrated the studied population. The predominant age was between 15 and 38 years old, representing 67.10%, followed by 39 to 48, with 21.40% of the population. From 49 years onwards, with 11.50%. Regarding gender: 53.2% corresponded to the feminine and 46.8% to the masculine. The marital status of the population reflects 34.8% married, 32.9% single, followed by 23.4% on cohabiting and the remaining 9% are widowed, divorced or separated from their partners. On the level of education, low level predominated with 65.7%, ranging from 1 to 12 years of study, followed by 21.7% for those who have completed 22 years, meaning they have university studies. In range of 12 and 14 Years of studies accounted for 7%, and only 5% of the surveyed population reported having postgraduate studies. (Table 1).

| Sociodemographic data |                      |           |              |
|-----------------------|----------------------|-----------|--------------|
|                       | Rank                 | Frequency | Percentage % |
| Age                   | < 38                 | 241       | 67.10        |
|                       | 39 - 48              | 77        | 21.40        |
|                       | 49 +                 | 41        | 11.50        |
| Gender                | Female               | 190       | 53.2         |
|                       | Male                 | 169       | 46.8         |
| Marital status        | Married              | 125       | 34.8         |
|                       | Single               | 118       | 32.9         |
|                       | Widower              | 6         | 1.7          |
|                       | Divorced             | 2         | .6           |
|                       | Separated            | 24        | 6.7          |
|                       | Cohabiting           | 84        | 23.4         |
| Education level       | Basic 1 – 12<br>Ages | 236       | 65.7         |
|                       | High 13 - 14<br>Ages | 27        | 7.0          |
|                       | Higher 22<br>Ages    | 78        | 21.7         |
|                       | Postgraduate<br>Ages | 18        | 5.0          |
|                       | 24 or more years     |           |              |
|                       |                      |           |              |

**Table 1.** Characteristics of social variables.

The working variables are concentrated in Table 2. It was found that 96.7% of the surveyed population worked in companies whose activity corresponds to the services sector, and only 3.3% were laboring in companies dedicated to production. The list of job positions in which the subjects of this study worked was very

diverse so that only the most prevalent subjects are presented, standing out with 16% the position of assistant, followed by those who performed various tasks 9.5%. With the 8.6% were assigned to the general workers and with the same percentage those who hold coordination positions. Very close was the secretary position of with 7%. Regarding years working for the company, high turnover is identified, since 48.7% reported an seniority between 1 month to 4 years. The range of 5 to 10 years was 28.4%, 18% between 11 and 20 years, while 3.3% have seniority between 21 to 30 years in the same company and only 1.1% have more than 31 years of seniority (Table 2).

| <b>Labor data</b>                               |                |           |            |
|---|----------------|-----------|------------|
|   |                | Frequency | Percentage |
| <b>Sector to which the companies correspond</b> | Services       | 347       | 96.7%      |
|   | Production     | 12        | 3.3%       |
| <b>Job positions</b>                            | Secretary      | 25        | 7.0        |
|   | Assistant      | 58        | 16.0       |
|   | Coordination   | 31        | 8.6        |
|   | Operator       | 31        | 8.6        |
|   | Various Trades | 34        | 9.5        |
| <b>Years working in the company</b>             | 0 a 4          | 175       | 48.7       |
|   | 5 a 10         | 102       | 28.4       |
|   | 11 a 20        | 66        | 18.4       |
|   | 21 a 30        | 12        | 3.3        |
|   | 31 a 40        | 4         | 1.1        |

**Table 2.** Characteristics of labor variables.

The analysis of general exposure to psychosocial factors (high, medium or low), revealed a prevalence for high of 9.19%. On the other hand, 49.22% are in the middle level; and the remaining 41.58% with low exposure. This last percentage draws attention, evidencing that the surveyed workers do not perceive exposure to psychosocial risk factors, and even more, they consider the conditions of the work environment as adequate. It is important to highlight that out of the 7 different types of psychosocial factors studied, the worst conditions found were the 32.6% on labor demands (Table 3).

| <b>Dimensions of Psychosocial Factors</b>     | <b>Prevalence of Psychosocial Factors</b> |             |                  |              |                  |              |
|---|---|-------------|------------------|--------------|------------------|--------------|
|   | <b>High</b>                               |             | <b>Median</b>    |              | <b>Low</b>       |              |
|   | <b>Frequency</b>                          | <b>%</b>    | <b>Frequency</b> | <b>%</b>     | <b>Frequency</b> | <b>%</b>     |
| Conditions of the workplace                   | 16  | 4.46        | 168              | 46.8         | 175              | 48.75        |
| Workload                                      | 11  | 3.06        | 207              | 57.66        | 141              | 39.28        |
| Content and characteristics of the task       | 19  | 5.29        | 220              | 61.28        | 120              | 33.43        |
| Labor demands                                 | 117                                       | 32.6        | 205              | 57.1         | 37               | 10.3         |
| Job role and career development               | 32  | 8.91        | 215              | 59.89        | 112              | 31.2         |
| Social interaction and organizational aspects | 6   | 1.67        | 96               | 26.74        | 257              | 71.59        |
| Performance compensation                      | 30  | 8.36        | 126              | 35.1         | 203              | 56.54        |
| <b>Total</b>                                  | <b>231</b>                                | <b>9.19</b> | <b>1237</b>      | <b>49.22</b> | <b>1045</b>      | <b>41.58</b> |

**Table 3.** Prevalence of psychosocial factors.

Table 4 shows the prevalence of burnout syndrome by dimension. The greatest presence is recorded in the lack of Personal Achievements PA with 27.58%, followed by EE Emotional Exhaustion with 16.71% and 6.96% for CCynicism. The mean prevalence was found in EE Emotional Exhaustion with 25.91%. PC lack of Professional Competency 17.25% and CCynicism 10.58%; while the low prevalence is located in CCynicism with 82.45%; EE Emotional Exhaustion 57.39% and 54.87% corresponds to PC lack of Professional Competency. The dimension with the highest prevalence of Burnout is the PC, lack of Professional Competency, with 27.58%.

| <b>Dimensions of burnout syndrome</b> | <b>Prevalence of Burnout</b> |          |                  |          |                  |          |
|---------------------------------------|------------------------------|----------|------------------|----------|------------------|----------|
|                                       | <b>High</b>                  |          | <b>Median</b>    |          | <b>Low</b>       |          |
|                                       | <b>Frequency</b>             | <b>%</b> | <b>Frequency</b> | <b>%</b> | <b>Frequency</b> | <b>%</b> |
| EE Emotional                          | 60                           | 16.71    | 93               | 25.91    | 206              | 57.39    |

|                                   |    |       |    |       |     |       |
|-----------------------------------|----|-------|----|-------|-----|-------|
| Exhaustion                        |    |       |    |       |     |       |
| PClack of Professional Competency | 99 | 27.58 | 63 | 17.55 | 197 | 54.87 |
| C Cynicism                        | 25 | 6.96  | 38 | 10.58 | 296 | 82.45 |

**Table 4.** Prevalence of Burnout.

Table 5 presents the relation between sociodemographic-labor variables, burnout and psychosocial risk factors. The gender presented an association with workplace conditions (p = 0.042), characteristics of the task (p = 0.026), career development (p = 0.017), social interaction and organizational aspects (p = 0.024), plus performance compensation (p = 0.000). On the other hand, age was related to workplace conditions (p = 0.010), social interaction and organizational aspects (p = 0.032), which in turn were associated with low PA Personal Achievement; marital status was related to workplace conditions (p = 0.017), with the content and characteristics of the task (p = 0.045), job role (p = 0.003), social interaction (p = 0.029) and performance compensation (0.035). Sub-scale of Burnout Emotional Exhaustion; the education level was associated to Content and characteristics of the task (p = 0.006) and labor demands (p = 0.001). The years working for the company was linked with the content and characteristics of the task (p = 0.017), in turn with the social interaction (p = 0.000), resulting a risk factor in EE Emotional Exhaustion (p = 0.007) and PC lack of Professional Competency. The variable: years working in the same position, also connects to content and characteristics of the task (p = 0.013), social interaction and organizational aspects (p = 0.023), similar to the previous variables presents relation with EE Emotional Exhaustion (p = 0.002) and PA lack of Professional Competency (p = 0.045). The shift turned out to be the labor variable that showed the greater relation to the psychosocial factors and to the Burnout (p = 0.000) with the Conditions of the workplace, (p = 0.035) and the Content and characteristics of the task, (p = 0.000) Social interaction and organizational aspects, (p = 0.000). In performance compensation, significant association is presented in the three dimensions of the Burnout EE Emotional Exhaustion (p = 0.001), CCynicism (p = 0.000) and with PC lack of Professional Competency (p = 0.004). Finally, the variable overtime worked at week, showed strong association with Workplace Conditions (p = 0.000), Workload (p = 0.000), Social Interaction and Organizational Aspects, (p = 0.000), as well as to the Burnout on the EE dimension Emotional Exhaustion (p = 0.001).

| Sociodemographic and labor variables | Psychosocial factors        |          |   |               |                                 |   |                          | Burnout                 |           |                                    |
|--------------------------------------|-----------------------------|----------|---|---------------|---------------------------------|---|--------------------------|-------------------------|-----------|------------------------------------|
|                                      | Conditions of the workplace | Workload | Content and characteristics of the task | Labor demands | Job role and career development | Social interaction and organizational aspects | Performance compensation | EE Emotional Exhaustion | CCynicism | PC Lack of Professional Competency |
| Gender                               | 0.042                       |          | 0.026                                   |               | 0.017                           | 0.024   | 0.000                    |                         |           |                                    |
| Age                                  | 0.010                       |          |   |               |                                 | 0.032   |                          |                         |           | 0.013                              |
| Marital status                       | 0.017                       |          | 0.045                                   |               | 0.003                           | 0.029   | 0.035                    | 0.007                   |           |                                    |
| Education level                      |                             |          | 0.006                                   | 0.001         |                                 |   |                          |                         |           |                                    |
| Years working in the company         |                             |          | 0.017                                   |               |                                 | 0.000   |                          | 0.007                   |           | 0.001                              |
| Years working in the same position   |                             |          | 0.013                                   |               |                                 | 0.023   |                          | 0.002                   |           | 0.045                              |
| Shift                                | 0.000                       |          | 0.035                                   |               |                                 | 0.000   | 0.000                    | 0.001                   | 0.000     | 0.004                              |
| Hours of the working day             |                             |          |   | 0.010         | 0.020                           | 0.000   | 0.000                    |                         |           |                                    |
| Overtime worked at week              | 0.000                       | 0.000    |   |               |                                 | 0.000   |                          | 0.028                   |           |                                    |

**Table 5.** Correlation of sociodemographic and labor variables, psychosocial risk factors and Burnout.

The psychosocial factors perceived as negative or risk factors associated with the presence of the burnout syndrome are presented in Table 6. It was found a greater relationship and risk when social interaction and organizational aspects are inadequate in relation to the three dimensions of Burnout, the EE Emotional Exhaustion: OR = 3.179, 1.974 - 5.120, p = .000; C Cynicism OR = 2.828, 1.614 - 4.975, p = .000; and PC lack of Professional Competency OR = 2,587, 1,608 - 4,132, p = .000. On the other hand, the job role presented a significant association with the EE Emotional Exhaustion: OR = 3.074, 1.873 - 5.043, p = .000. High labor demands are perceived to impact the EE Emotional Exhaustion: OR = 2.970, 1.317 - 6.695, p = .006. The psychosocial factor performance Compensation was associated with CCynicism OR = 2,489, 1,421-4,349, p = .001; and with PC lack of Professional Competency OR = 1.787, 1.179- 2.723, p = .007. The sub-scale Content

and characteristics of the task was related to C Cynicism OR = 2,441, 1,247 - 4,780, p = .008. Finally, the Conditions of the workplace were associated with EE Emotional Exhaustion OR = 2.153, 1.404 - 3.301, p = .000. The results show the relevance of psychosocial factors in the workplace, and the impact on worker's health. EE Emotional Exhaustion was related to four of the seven sub scales of psychosocial factors: Social interaction and organizational aspects OR = 3,179; job role and career development OR = 3.074; Labor demands OR = 2,970; and Conditions of the workplace OR = 2.153, followed by Cynicism that was related to three sub scales: Social interaction and organizational aspects OR = 2.828; Performance compensation OR = 2,489; and Content and characteristics of the task OR = 2.441; whereas the lack of Professional Competencyit's associated to Social interaction and organizational aspects OR = 2.578 plus Performance compensation OR = 1.787. Out the results obtained above, it is inferred that the psychosocial factors with the greatest association to the Burnout were the social interaction and organizational aspects, as well as the performance compensation.

| Psychosocial Factors and Burnout Syndrome     |                            |                 |  |
|---|----------------------------|-----------------|--|
| Psychosocial Factors                          | EE<br>Emotional Exhaustion | CCynicism       | PLack of<br>Professional<br>Competency |
| Conditions of the workplace                   | p= .000                    |                 |  |
|   | OR= 2.153                  | *               | *                                      |
|   | (1.404 - 3.301)            |                 |  |
| Workload                                      | *                          | *               | *                                      |
| Content and characteristics of the task       |                            | P= .008         |  |
|   | *                          | OR= 2.441       | *                                      |
|   |                            | (1.247 - 4.780) |  |
| Labor demands                                 | p= .006                    |                 |  |
|   | OR= 2.970                  | *               | *                                      |
|   | (1.317 - 6.695)            |                 |  |
| Job role and career development               | p= .000                    |                 |  |
|   | OR= 3.074                  | *               | *                                      |
|   | (1.873 - 5.043)            |                 |  |
| Social interaction and organizational aspects | p= .000                    | p= .000         | p= .000                                |
|   | OR= 3.179                  | OR= 2.828       | OR= 2.578                              |
|   | (1.974 - 5.120)            | (1.614 - 4.957) | (1.608 - 4.132)                        |
| Performance compensation                      |                            | p= .001         | p= .007                                |
|   | *                          | OR= 2.489       | OR= 1.787                              |
|   |                            | (1.421 - 4.349) | (1.170 - 2.723)                        |

**Table 6** Psychosocial risk factors associated with burnout syndrome \* No statistical significance

#### IV. DISCUSSION

This study aimed to identify the psychosocial factors perceived as negative and their association with the Burnout Syndrome. It was demonstrated that six of the seven psychosocial factors are a risk factor for the three dimensions of Burnout when they are negatively associated with Exhaustion and Cynicism, similarly although, it is positively associated with the low Professional Competency and only the workload factor does not hold this association. There is a strong connection between the psychosocial factor called social interaction and organizational aspects in eight of the nine social and demographic variables, as well as with the three dimensions of Burnout: Emotional Exhaustion EE p = .000, OR = 3.179 (1.974 - 5.120); Cynicism C p = .000 OR = 2,828, (1,614 - 4,957) and low Professional Competency PC p = .000 OR = 2.578 (1.608 - 4.132). On the other hand, the Emotional Exhaustion was negatively associated with: conditions of the workplace, labor demands, job role and career development and the social interaction and organizational aspects. Cynicism was negatively associated with the next dimensions: content and characteristics of the task; social interaction and organizational aspects, and performance compensation. The low Professional Competency was positively associated to social interaction and organizational aspects, the same with performance compensation. These findings are similar to those reported by Castañeda and García (2010) who reported a negative correlation between the sub scales emotional exhaustion and cynicism and positive between the professional competencies at work with the presence of the syndrome. That study was conducted in the population of Mexican doctors. In another way, Patlán (2013) carried out a study with personnel of a health institute in Mexico to determine the effect of Burnout and the overload in the quality of life at work. Their results reported two dimensions of Burnout positively associated to the work-family conflict, emotional exhaustion ( $\beta = 0.662$ , p = 0.000) and achievement dissatisfaction ( $\beta = 0.429$ , p = 0.000); and negatively with the two factors of Quality of Life at Work: job satisfaction ( $\beta = -0.131$ , p = 0.000) and the CTF ( $\beta = 0.629$ , p = 0.000). In the case of Aranda, López and Barraza (2013), where psychosocial factors and burnout syndrome in workers of the mass transformation industry in Tepic, Mexico, were examined; finding several variables as a risk factor; specifically in the area of the work system with emotional exhaustion. In both this and our study, emotional exhaustion is present; whereas

the study carried out by Uribe, et al. (2014) in public servants in the justice system in Mexico City, showed that 38.7% of the population studied, present psychosocial risks at work, which translates in a high probability of diseases caused by the response to chronic stress, hence Burnout is the best variable to predict psychosomatic disorders in terms of psychosocial factors at work.

A study coordinated by López, et al. (2014), focused on workers from different professions and / or occupations of Lima, Peru; reports greatest risk and association between the psychosocial factors: work demands and Workplace Conditions at Cynicism, respectively OR = 6,979 and OR = 3,602. The Workload, the Content and characteristics of the task, with low professional competency OR = 5,896 and OR = 4,517. The above differs from our findings. Aldrete, et al. (2015) conducted a study in the nursing population of a third-level health care unit in Mexico, evidencing a relationship of emotional exhaustion  $p < 0.05$  with six of the seven psychosocial factors evaluated, presenting greater risk when perceived poor social interaction (OR 5.85 95% CI 2.46 to 14.05  $p = 0.000$ ). The professional competency, behaved as a risk factor by showing that there is not good personal development (OR 2.37 95% CI 1.08-5.24  $P = 0.0174$ ), confirming the relationship between psychosocial factors and Burnout syndrome. These findings are closely aligned with those of our study; meanwhile Jiménez, et al. (2015) reported the relationship of psychosocial risk factors with the presence of burnout syndrome in workers of a company dedicated to recreation and educational entertainment for children in Bogotá D.C. The variables of leadership, work overload and the feeling of low retribution in exchange for their work effort are those perceived as harmful at high and very high levels, associated with the presence of the burnout syndrome. These results partially resemble those of our study. Preciado, et al. (2016), carried out a cross-sectional analytical study in a sample of 144 dentists in the city of Guadalajara, Mexico, reporting that 24% of the participants showed a high level of emotional exhaustion and cynicism with indifferent treatment to users 27%, accompanied by low self-achievement in 69% of the participants. The previous prevalence differ with what was reported in this study.

Betancourt and Plaza (2017) carried out a qualitative research in psychology professionals, who stated that the negative psychosocial factors were: the quantitative overload related to the multiple tasks that must be developed, which implies maintaining an elevated work rate, followed by the low clarity of function and activities; emotional demands, inadequate leadership that interferes with work environment. The type of contract referred to as instability and dissatisfaction. It is striking that the extended work shift, carried out without recognition or remuneration, is not perceived negatively, while the teamwork factor turned out to be positive. In 2017, Gómez et al. carried out a systematic review to understand the risk factors and burnout levels in primary care nurses, identifying that high emotional exhaustion is the main dimension of affected burnout in primary care nursing. On the other hand, on the dimensions of cynicism and personal achievement, there is heterogeneity of results. The previous presents similarities because the dimension of emotional exhaustion is high; statistically the most significant because of its association with four of the seven factors studied; again, the incidence of the emotional exhaustion dimension is evident. In another systematic review carried out by Jodas, et al. (2017), it was identified that emotional exhaustion was a significant predictor of the following physical consequences: hypercholesterolemia, type 2 diabetes, coronary heart disease, hospitalization for cardiovascular disorders, musculoskeletal pain, changes in pain experiences, prolonged fatigue, headaches, gastrointestinal problems, respiratory problems, serious injuries and mortality under the age of 45 years. The psychological effects were: insomnia, depressive symptoms, use of psychotropic and antidepressant medications, hospitalization for mental disorders, and psychological symptoms of ill health. This study offers empirical evidence of the damage that comes to trigger emotional exhaustion in physical and mental health. Bedoya (2017) led a study to determine the prevalence of Burnout syndrome in workers of a Colombian public hospital, finding the involvement in six workers (10.5%), who presented high levels of emotional exhaustion. The study concludes by stating that the medical service confirms the existence of psycho-occupational risks that can generate negative effects on the worker; whereas Kärkkäinen, et al. (2017) when carrying out a systematic review, identified the following associations between psychosocial and personal factors with exhaustion: improved communication (positive association), under control at work (negative association) and factors related to the individual; male sex (positive association), covert coping (negative association), excessive commitment to work (positive association) and factors related to exhaustion; undamaged sleep (positive association), duration of sick leave of more than 6 months (negative association) and low due to part-time illness (positive association).

In 2018 Demerouti, et al., conducted a population study of airline pilots to identify the presence of Burnout and psychosocial factors related to happiness and performance in simulated training. It was shown that 40% of participating pilots experience a high emotional exhaustion; work demands were detrimental to the performance of the simulator because they make the pilots more exhausted and less able to do their job, while the labor resources had a favorable effect because they reduced feelings of disconnection and increased the creativity of work. On the other hand, exhaustion was negatively related to happiness with life of the pilots. The study made by Talavera, et al. (2018) in a sample of police officers, reported the perception of psychosocial risk factors with the highest scores indicating adverse perception in the cognitive and rewards factors. In the same

way, although with lower scores than the previous ones, they perceive a scarce control and little organizational support. The biggest affectation was in the dimension of emotional exhaustion. From another perspective, Pando, Calderón, Aranda and Elizalde (2018) in their study of workers in the hotel industry, report that psychosocial factors with the most negative values were the "labor demands", with 79.9% of people exposed and the "workload" high, with 70.4% of people exposed. Regarding Burnout Syndrome, 65.8% of the subjects evaluated presented "Lack of personal and work achievements", 34.2% "Emotional exhaustion" and 18.1% "Cynicism". All psychosocial factors at work studied, except for "labor demands", showed to be a risk factor for any of the dimensions of Burnout syndrome. As in our study, the psychosocial factor "Social Interaction and Organizational Aspects", appeared as one with the greatest risk of exhaustion, despite the fact that it represented the lowest prevalence in the sample in both studies.

Finally, in 2019, Moukarzel and colleagues carried out a cross-sectional study at the Timone de Marseille and Lapeyronie University Hospitals in Montpellier, France, in which they determined and evaluated the factors associated with the depletion of ED emergency personnel, finding a very high score for emotional exhaustion in 34.6% of the staff; meeting the criteria for exhaustion, accompanied by high cynicism and low sense of professional competency; highlighting that the desire to leave the emergency department was strongly associated with higher EE and PD and lower BP scores ( $p < 0.001$ ), in addition to the fact that seventeen percent of ED professionals wanted to leave emergency work, this without differentiating between occupational categories.

In the aforementioned, the presence of emotional exhaustion is identified in 15 studies including the present one, and with it the relevance of its study; remembering that when talking about emotional exhaustion we refer to the person's response to work and that combines emotional, physical and mental fatigue with lack of enthusiasm and feelings of incompetence that affect the different spheres of life and not only the work, generating at the same time, several illnesses at the psychological, physical, social and labor (Jodas, et al., 2017). Regarding the negative relationship, there were three studies in which coincidence was found on emotional exhaustion and cynicism, as well as positive relationship with the lack professional competency. In relation to the psychosocial factor of social interaction and organizational aspects, that in our study has a greater association with Burnout, three studies were identified that are similar.

It is recognized, as the main limitation of the study, the transversal design that imposes temporal limitations coupled with the lack of generalization of the findings; However, it could be determined that the predictive factors of Burnout are: the inadequate conditions of the workplace, the content and characteristics of the task, work demands, the work role and career development, social interaction and organizational aspects; as well as performance compensation.

## **V. CONCLUSIONS**

The results of our study confirmed that the Burnout is not exclusive of professions or welfare activities as it was believed centuries ago. From the seven different types of psychosocial factors studied, six were perceived as psychosocial risk factors. On the other hand, the findings lead us to reflect on the role played by economic entities in the management and organization of productive activities, since the worst conditions found were the labor demands; however, the inadequate social interaction and organizational aspects is the psychosocial factor that maintained a negative association with eight of the nine socio-demographic and labor variables. In the same sense, that psychosocial factor was located within dimensions like Emotional Exhaustion and Cynicism, while positively with the lack Professional Competency. With the above, their association is evidenced and, in turn, the objective stated is fulfilled.

In the light of the findings, it is concluded that the inadequate conditions of the workplace, the work demands, the work role and career development, as well as the social interaction and organizational aspects, are predictive factors of emotional exhaustion. The content and characteristics of the task, social interaction and organizational aspects; as well as performance compensation of cynicism; whereas the last two factors mentioned are predictive factors of the professional competency; the relationship found is explained from Maslach's (1986) social approach, which places Burnout as a process that develops through the interactions that occur between the characteristics of the work environment in which the person performs and their personal characteristics. It is inferred that the organizational context in various Colombian economic units present latent risks to the mental health of the workers, for which it is suggested to carry out different strategies such as those proposed by the WHO (2017) with the participation of the main stakeholders through of interventions tending to mitigate (corrective measure) the perceived risk factor, which is more controllable by the organization, through simple and concrete actions for the improvement of physical and psychosocial conditions in the workplace. On the other hand, the relevance of job analysis is highlighted in order to identify the burden and complexity of the task, the activities that are routine and monotonous that impede the creativity of the worker, in order to establish policies aimed at diversification and rotation of jobs that contain these characteristics. The above can also provide objective elements to the salary compensation system. Likewise, the organization must promote clear



and open communication between the different levels of the organization, encouraging feedback to the worker's performance in order to let him know to what extent it covers or not, the requirements of the position. On a preventive manner, the evaluation of psychosocial risk factors that leads to the timely detection of occupational diseases such as burnout is recommended, remembering that prevention can be expensive, but it is even more the loss of health and life.

## REFERENCE

- [1]. Aldrete M., Navarro C. González R., Contreras M., Pérez J., (2015). Factores Psicosociales y Síndrome de Burnout en Personal de Enfermería de una Unidad de Tercer Nivel de Atención a la Salud. *CiencTrab. Ene-Abr*; 15 [52]: 32-36
- [2]. Alzate, D.L., Parra, V. (2016) Factores Psicosociales, estrés y Síndrome de Burnout en el Colegio San Luis Gonzaga de la ciudad Manizales. Tesis. Recuperado de: [http://ridum.umanizales.edu.co:8080/xmlui/bitstream/handle/6789/2945/ALZATE\\_DAISSY\\_2016.pdf?sequence=1&isAllowed=y](http://ridum.umanizales.edu.co:8080/xmlui/bitstream/handle/6789/2945/ALZATE_DAISSY_2016.pdf?sequence=1&isAllowed=y)
- [3]. Aranda, C., López, J.L. y Barraza, J.H. (2013) Factores psicosociales y síndrome de burnout en trabajadores de la industria de la transformación de la masa, Tepic, México, *Rev. Col Psiquiatr*; 42(2):167-172.
- [4]. Asociación Americana de Psicología (2010) *Ethical Principles of Psychologist and Code of Conduct*. Estados Unidos de América.
- [5]. Bedoya, E.A. (2017) Prevalencia del síndrome de burnout en trabajadores de un hospital público colombiano. *MEDISAN* 2017;21(11):3172. Recuperado de: [http://scielo.sld.cu/scielo.php?script=sci\\_arttext&pid=S1029-30192017001100005](http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S1029-30192017001100005)
- [6]. Betancourt, V.M. y Plaza, O.M. (2017) Tesis: factores psicosociales de riesgo intralaboral en psicólogos de instituciones operadoras para el restablecimiento de derechos de niños, niñas y adolescentes. Pontificia universidad javeriana Facultad de humanidades y ciencias sociales. Maestría en psicología de la salud. Santiago de Cali, mayo 2017. Recuperado de: [http://vitela.javerianacali.edu.co/bitstream/handle/11522/8373/Factores\\_psicologia\\_riesgo.pdf?sequence=1&isAllowed=y](http://vitela.javerianacali.edu.co/bitstream/handle/11522/8373/Factores_psicologia_riesgo.pdf?sequence=1&isAllowed=y)
- [7]. Demerouti, E., Veldhuis, W., Coombes, C., & Hunter, R. (2018) (Accepted/In press). Burnout among pilots: psychosocial factors related to happiness and performance at simulator training. *Ergonomics*, 1-13. DOI: 10.1080/00140139.2018.1464667 Access to Document DOI 10.1080/00140139.2018.1464667
- [8]. Gil-Monte P.R., Peiró J.M. (1997) *Desgaste Psíquico en el Trabajo: El Síndrome de Quemarse*. Madrid: Síntesis.
- [9]. Gil-Monte, P. (2005) El síndrome de quemarse por el trabajo (síndrome de burnout): aportaciones teóricas para su explicación y recomendaciones para intervención. *Revista Psicología Científica.com*, 3(5). Recuperado de: [http://www.psicologiacientifica.com/bv/psicologia-78-1-el-sindrome-de-quemarse-por-el-trabajo-\(sindrome-de-burnout\).html](http://www.psicologiacientifica.com/bv/psicologia-78-1-el-sindrome-de-quemarse-por-el-trabajo-(sindrome-de-burnout).html)
- [10]. Instituto Sindical de Trabajo, Ambiente y Salud ISTAS (2005). *Organización del Trabajo, Salud y Riesgos Psicosociales. Guía del delegado y delegada de prevención*. Paralelo Edición. Barcelona. España. Recuperado el 06 de febrero 2018 en: <http://www.istas.ccoo.es/descargas/guia%20de%20sensibilizacion%20def.pdf>
- [11]. Jiménez, E., Caicedo, S., Joven, R.E., Pulido, J.A., (2015) Factores de riesgo psicosocial y síndrome de burnout en trabajadores de una empresa dedicada a la recreación y el entretenimiento educativo infantil en la ciudad de Bogotá D.C. *rev.univ.ind.santander.salud* 2015; 47(1): 47-60.
- [12]. Juárez, A., Idrovo, A., Plasencia, O. (2014) Síndrome de burnout en población mexicana: Una revisión sistemática. *Salud Mental* 2014; 37:159-176
- [13]. Kärkkäinen, R. Saaranen, T. Hiltunen, S. Ryyänänen, O.P. & Räsänen, K. (2017) *Occupational Medicine*, Volume 67, Issue 6, 1 August 2017, Pages 461–468, <https://doi.org/10.1093/occmed/kqx093>. Published: 03 August 2017
- [14]. López, M.R., García S.A., Pando, M. (2014) Factores de Riesgo Psicosocial y Burnout en Población Económicamente Activa de Lima, Perú. 164/169 | [www.cienciaytrabajo.cl](http://www.cienciaytrabajo.cl) | AÑO 16 | NÚMERO 51 | SEPTIEMBRE / DICIEMBRE 2014 | *Ciencia & Trabajo*
- [15]. Maslach, C. Jackson, S.E. y Leiter, M. P. (1996) *Maslach Burnout Inventory*. Third Edition. Palo Alto, CA: Consulting Psychologist Press.
- [16]. Maslach C., Jackson S.E., Leiter M., (1996) *Maslach Burnout Inventory*. 3rd Ed, Palo Alto: Consulting Psychologist Press. (PDF) *Christina Maslach, comprendiendo el burnout*. recovered from: [https://www.researchgate.net/publication/311611859\\_Christina\\_Maslach\\_comprendiendo\\_el\\_burnout](https://www.researchgate.net/publication/311611859_Christina_Maslach_comprendiendo_el_burnout)
- [17]. Moukarzel, A., Michelet, P. Durand, A.C. Sebbane, M. Bourgeois, S. Markarian, T.1 Bompard, C. & Gentile, S. (2019) Burnout Syndrome among Emergency Department Staff: Prevalence and Associated Factors. *Hindawi BioMed Research International* Volume 2019, Article ID 6462472, 10 pages <https://doi.org/10.1155/2019/6462472>.

- [18]. Organización Internacional del Trabajo OIT/OMS (1984) “Factores psicosociales en el trabajo: naturaleza, incidencia y prevención”. Informe del Comité Mixto OIT/OMS sobre medicina del trabajo, Ginebra, Suiza.
- [19]. Organización Internacional del Trabajo OIT (2017) Objetivos de Desarrollo Sostenible: Manual de referencia Sindical sobre la Agenda 2030 para el Desarrollo Sostenible. Recuperado de: [https://www.ilo.org/wcmsp5/groups/public/---ed\\_dialogue/---actrav/documents/publication/wcms\\_569914.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---actrav/documents/publication/wcms_569914.pdf)
- [20]. Organización Internacional de Trabajo OIT (2018). Informe anual sobre Seguridad e higiene en el trabajo. Recuperado de: <https://www.ilo.org/global/topics/safety-and-health-at-work/lang--es/index.htm>
- [21]. Organización Mundial de la Salud (OMS) (2014) Protección de la salud de los trabajadores, nota descriptiva. Recuperado de: [https://www.who.int/mental\\_health/evidence/atlas/executive\\_summary\\_es.pdf?ua=1](https://www.who.int/mental_health/evidence/atlas/executive_summary_es.pdf?ua=1)
- [22]. Organización Mundial de la Salud (OMS) (2017) Protección de la salud de los trabajadores, nota descriptiva. Recuperado de: <https://www.who.int/es/news-room/fact-sheets/detail/protecting-workers'-health>
- [23]. Organización Mundial de la Salud (OMS) (2018). ¿Cómo define la OMS LA SALUD?, nota descriptiva. Recuperado de: <https://www.who.int/about/who-we-are/frequently-asked-questions>
- [24]. Organización Mundial de la Salud (OMS) (2019). La salud mental en el lugar de trabajo: orientaciones a nivel mundial. Recuperado el 05 de abril de 2019 en: <https://www.who.int/es/news-room/commentaries/detail/mental-health-in-the-workplace>
- [25]. Pando, M., Calderon, J. L., Aranda, C. y Elizalde, T.F. (2018) “Psychosocial Factors And Burnout Syndrome In Hospitality Workers.” IOSR Journal of Business and Management (IOSR-JBM) 20.9 (2018): 70-75. DOI: 10.9790/487X-2009017075.
- [26]. Porter, M. & Kramer, R. (2006): “Strategy & Society. The link between competitive advantage and Corporate Social Responsibility”, Harvard Business Review, 1-15
- [27]. Preciado, M.L., Pozos, E., Plascencia, A.R., Colunga, C. (2016) C. (2016). The Association of Psychosocial Risk Factors with the Burnout Syndrome in Dentists in Guadalajara, Jalisco Mexico. *Advances in Applied Sociology*, 6, 81-89. <http://dx.doi.org/10.4236/aasoci.2016.63008>.
- [28]. Salvagioni, D.A.J., Melanda, F.N., Mesas, A.E., González, A.D., Gabani, F.L. & Andrade, S.M.D. (2017) Physical, psychological and occupational consequences of job burnout: A systematic review of prospective studies. *PLoS ONE* 12(10): e0185781. <https://doi.org/10.1371/journal.pone.0185781>
- [29]. Silva, B.N. (2006) Factores psicosociales y desgaste profesional en académicos del Centro Universitario de Biológicas Agropecuarias. Tesis de Doctorado en Ciencias de la Salud en el Trabajo. Universidad de Guadalajara, Jalisco, México.
- [30]. Schaufeli, Salanova, González-Romá y Bakker (2002a) *The measurement of Engagement and burnout and; A confirmative analytic approach*. *Journal of Happiness Studies*, 3, pp: 71-92.
- [31]. Talavera, B., Moreno, L., García, M., García, Y. (2018) Psychosocial Risk Factors, Burnout and Hardy Personality as Variables Associated With Mental Health in Police Officers. *Front. Psychol.* 9:1478. <https://org.doi:10.3389/fpsyg.2018.01478>

IOSR Journal Of Humanities And Social Science (IOSR-JHSS) is UGC approved Journal with Sl. No. 5070, Journal no. 49323.

Dra. Ma Del Refugio López Palomar. " Psychosocial Risk Factors and Burnout Syndrome." IOSR Journal of Humanities and Social Science (IOSR-JHSS). vol. 24 no. 08, 2019, pp. 63-72.