

## **Implementation of the Occupational Health and Safety Committee and its impact on the Safety Climate of the Workers of the Universidad Alas Peruanas Branch Piura, Period 2018 – 2019**

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### **Abstract**

*Occupational health and safety have now become fundamental elements in the development of work in any company, whether in the public or private sphere; and, the establishment of standards in this area, their implementation and monitoring have been strengthened in our country at the same time as in the rest of the world.*

*In Peru, we have the general framework, through Law No. 29783, Law on Safety and Health at Work and its Regulation D.S. No. 005-2012-TR, regulated by the Ministry of Labor and Employment Promotion (MTPE), as well as by the Ministry of Health, these being suprasectoral organizations in the prevention of risks in the field of safety and health at work.*

*In the case of Universidad Alas Peruanas, it has the respective internal regulations on occupational health and safety (OSH), as well as the establishment of the OSH committee, which operates following the guidelines established by national standards.*

*The main purpose of this research is to determine the most relevant characteristics of the scientific production published in high-impact journals indexed in the Scopus database, as well as the theoretical definitions of occupational health and safety during the period 2018-2019.*

**Keywords:** *Safety, Occupational Health, Safety Climate.*

### **1. Introduction**

Occupational health and safety is framed in the prevention of possible injuries and illnesses that may be caused in the workplace and has as its main objective the continuous improvement of the physical and psychological safety conditions of workers.

In this regard, according to the definition of the World Health Organization (WHO), occupational health is "a multidisciplinary activity that promotes and protects the health of workers. This discipline seeks to control accidents and diseases by reducing risk conditions."

For its part, the International Labour Organization (ILO) considers that "... The anticipation, recognition, assessment and control of hazards arising in or arising out of the workplace that could jeopardize the health and well-being of workers are the fundamental principles of the process governing risk assessment and management."

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Therefore, it is the obligation of companies to improve the safety and health of their employees through specific actions to prevent occupational risks that may affect their quality of life.

In Peru, as indicated above, the Ministry of Labour and Employment Promotion (MTPE) is the state entity that oversees and controls this activity, article 2 of which Law No. 29783 establishes as its scope of application "... to all economic and service sectors; includes all employers and workers under the labor regime of the private sector throughout the national territory, workers and officials of the public sector, workers of the Armed Forces and the National Police of Peru, and self-employed workers".

In the case of the Alas Peruanas University, there is an updated internal regulation of occupational health and safety (OSH), approved by the central OSH committee, and which has been in force since March 2018. At the same time, an OSH committee has been implemented in each branch, which in our research will represent one of the study variables.

This research takes place in the context of the licensing process in which the University is immersed and in the development of a greater emphasis that the Ministry of Labor has been applying to enforce these health and safety standards, carrying out continuous supervision in this regard.

In accordance with the provisions of the OSH law and as an objective of providing feedback on prevention actions on safety issues, what the University seeks is to know if the workers as a whole (Teachers and Administrators) have really become aware of the importance of compliance with this standard, which should be reflected in a better climate of occupational safety. It has been observed that on many occasions when the subsidiary's OSH committee supervises the different areas, executes the safety talks and organizes the drills (such as earthquakes, fires, work accidents, etc.), there are workers who react with apathy, indifference, ignorance and even consider it a waste of time. Therefore, it is more likely that there will be risks of accidents and occupational diseases, which have a negative impact on the efficiency and productivity of workers, seriously affecting the normal development of the academic and administrative activities of the University.

In this sense, we must reflect and act immediately to reverse this situation, otherwise, the problems that affect the University in terms of security would be aggravated. For this reason, this research aims to analyze and verify whether the implementation of the OSH committee has a significant influence on the safety climate of workers, asking the main question: What is the impact of the implementation of the occupational safety and health committee on the safety climate of the workers of the Universidad Alas Peruanas Piura branch, 2018-2019 period?, whether effective or ineffective, in the latter case, to propose adjustments to correct them.

## **2. Objectives**

### **2.1 General objective**

To analyze, from a bibliometric and bibliographic perspective, the preparation and publication of research papers in high-impact journals indexed in the Scopus database on the variables Occupational Health and Safety during the period 2018-2019.

## **3. Methodology**

This article is carried out through a research with a mixed orientation that combines the quantitative and qualitative method.

On the one hand, a quantitative analysis of the information selected in Scopus is carried out under a bibliometric approach of the scientific production corresponding to the study of the variables Occupational Health and Safety. On the other hand, examples of some research works published in the area of study mentioned above are analyzed from a qualitative perspective, based on a bibliographic approach that allows describing the position of different authors on the proposed topic. It is important to note that the entire search was carried out through Scopus, managing to establish the parameters referenced in Figure 1.

### 3.1. Methodological design

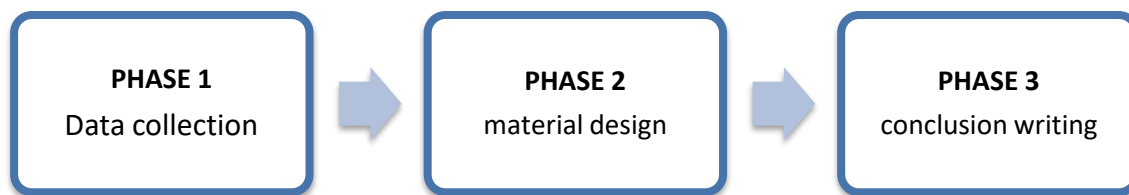


Figure 1. Methodological design

Source: Authors' own creation

#### 3.1.1 Phase 1: Data collection

Data collection was carried out from the Search tool on the Scopus website, where 182 publications were obtained from the following filters:

TITLE-ABS-KEY ( safety, AND health AND AT AND work ) AND PUBYEAR > 2017 AND PUBYEAR < 2020 AND ( LIMIT-TO ( AFFILCOUNTRY , "Brazil" ) OR LIMIT-TO ( AFFILCOUNTRY , "Colombia" ) OR LIMIT-TO ( AFFILCOUNTRY , "Mexico" ) OR LIMIT-TO ( AFFILCOUNTRY , "Chile" ) OR LIMIT-TO ( AFFILCOUNTRY , "Ecuador" ) OR LIMIT-TO ( AFFILCOUNTRY , "Argentina" ) OR LIMIT-TO ( AFFILCOUNTRY , "Cuba" ) OR LIMIT-TO ( AFFILCOUNTRY , "Venezuela" ) OR LIMIT-TO ( AFFILCOUNTRY , "Peru" ) OR LIMIT-TO ( AFFILCOUNTRY , "Guatemala" ) OR LIMIT-TO ( AFFILCOUNTRY , "Puerto Rico" ) OR LIMIT-TO ( AFFILCOUNTRY , "El Salvador" ) OR LIMIT-TO ( AFFILCOUNTRY , "Nicaragua" ) OR LIMIT-TO ( AFFILCOUNTRY , "Dominican Republic" ) OR LIMIT-TO ( AFFILCOUNTRY , "Costa Rica" )

- Limited to the period 2018-2019.
- Limited to Latin American countries.
- Without distinction of area of knowledge.
- No distinction of type of publication.

#### 3.1.2 Phase 2: Construction of analytical material

The information collected in Scopus during the previous phase is organized and then classified by graphs, figures and tables as follows:

- Country of origin of the publication.
- Area of knowledge.
- Type of publication.

### 3.1.3 Phase 3: Drafting of conclusions and outcome document

In this phase, the results of the previous results are analysed, resulting in the determination of conclusions and, consequently, the obtaining of the final document.

## 4. Results

### 4.1 Theoretical or scientific basis

#### 4.1.1 Occupational safety and health

Occupational Health and Safety are terms that have gained prominence in recent years in the world - Peru being no exception - related to labor activities and the fundamental rights of workers within a company. The International Labour Organization (ILO) defines it as a discipline that deals with the prevention of work-related injuries and diseases, and the protection and promotion of workers' health. It aims to improve working conditions and environment. Occupational health entails the promotion and maintenance of the highest standard of physical and mental health and well-being of workers in all occupations.

The application of safety actions is the sole responsibility of the employer and OSH management has a systemic approach, to ensure that there is an adequate level of prevention and evaluation that allows for timely and continuous improvement.

#### 4.1.2 Occupational Safety and Health Law in Peru

In Peru, occupational safety and health is currently regulated by Act No. 29783, the Occupational Safety and Health Act, as amended; as well as Supreme Decree No. 005-2012-TR, Regulations of the Law on Occupational Safety and Health and its amendments. Its structure consists of VII titles, 123 articles, 01 final supplementary provision and 14 transitional supplementary provisions.

This law, as indicated in the document, aims to promote a culture of occupational risk prevention, based on the observation of the duty of prevention of workers, the role and participation of employees and their union companies, through which through dialogue they ensure safety and compliance with regulations in this area.

The structure of this law is made up of the following main components:

#### National Policy on Occupational Safety and Health

Its general objective is to promote a harmonious, coherent and comprehensive regulatory framework on occupational safety and health, adapted to the protection needs of all workers (Supreme Decree No. 002-2013-TR, Pg.6).

#### National Occupational Safety and Health System

It is an administrative process established, with the participation of employers' and workers' organizations, in order to ensure the protection of all workers in the field of occupational safety and health. It is made up of the following bodies:

- (a) The National Council for Occupational Safety and Health.
- (b) Regional occupational safety and health councils.

#### Occupational Health and Safety Management System

According to the United Nations Community (CAN), it is defined as a "set of interrelated or interactive elements that aim to establish a policy and objectives of safety and health at work, and the mechanisms and actions necessary to achieve these objectives, being closely related to the concept of corporate social responsibility, in order to raise awareness about the offer of good working conditions to workers, thus improving their quality of life, as well as promoting the competitiveness of companies in the market".

The elements of the Occupational Health and Safety Management System (OH&Sms), according to Law 29783 and in accordance with the guidelines of the International Labor Organization (ILO), are the following:

- OH&S policy.
- Organization of the OH&Ss.
- Planning and Implementation of the OH&S System.
- Evaluation of the OH&Ss.

These guidelines, published by the ILO in 2001, are practical recommendations made for use by those responsible for the management of occupational safety and health in enterprises, which is based on a management model based on the cycle: Planning-Execution-Verification-Action.

Below, and as a complement, is a summary of the regulations on occupational safety and health in Peru until 2019:

- Law No. 29783, Law on Occupational Safety and Health.
- Law No. 30222, Law amending Law No. 29783, Law on Occupational Safety and Health.
- Supreme Decree No. 005-2012-TR. Regulations of Law No. 29783. Law on Occupational Safety and Health approved by Supreme Decree No. 005-2012-TR.
- Supreme Decree No. 006-2014-TR. They amend the Regulations of Law No. 29783. Law on Occupational Safety and Health, approved by Supreme Decree No. 005-2012-TR.
- Supreme Decree No. 012-2014-TR approving the Single Registry of Information on Occupational Accidents, Hazardous Incidents and Occupational Diseases and amending Article 110 of the Regulations of the Law on Occupational Safety and Health.
- Supreme Decree No. 016-2016-TR. They amend the Regulations of Law No. 29783, Law on Occupational Safety and Health, approved by Supreme Decree No. 005-2012-TR.

#### 4.1.3 Universidad Alas Peruanas

Universidad Alas Peruanas, hereinafter "The UAP", according to the executive summary of the OSH internal regulations, is a legal entity under private law, which provides educational services at a higher level, in accordance with the provisions of University Law No. 30220 and its regulations.

This house of studies enjoys governmental, academic, administrative, economic and regulatory autonomy within the framework of the Political Constitution of Peru and the laws in force. The UAP is dedicated to study, scientific and technological research, cultural production and dissemination; as well as the training of highly specialized professionals and academics who respond to the country's requirements.

Currently, UAP has several facilities in Lima (headquarters) and nineteen (19) branches throughout Peru.

#### 4.1.4 Occupational Safety and Health Committee

In the first place, we must understand a Committee as a group of people who are elected to carry out a specific task, with delegated authority and functions on behalf of a collective. Thus, by extension, an Occupational Safety and Health Committee "is a bipartite and equal body made up of representatives of the employer and the workers, with the powers and obligations provided for by national legislation and practice, aimed at regular and periodic consultation of the employer's actions in the field of risk prevention" (OSH Act No. 29783, MTPE of Peru, p. 88, 2017).

It is bipartite, because it is made up of the representatives of the employer and the workers, and parity because it has an equal number of representatives.

A committee is understood as a collegiate body, without legal personality or its own administration, constituted internally in the organization and on a rotating basis.

In accordance with the provisions of the Ministry of Labour and Employment Promotion (MTPE) of Peru, the objectives of the OSH committee are to: Promote health and safety at work, advise and monitor compliance with the provisions of the Internal Regulations on Safety and Health at Work and national regulations; favoring labor well-being and supporting employer development.

The following are the functions of an OSH Committee, according to Law No. 29783, which will also be used later to determine the dimensions and indicators of the independent variable:

- (a) To be familiar with the documents and reports relating to working conditions that are necessary for the performance of their duties, as well as those arising from the activity of the occupational safety and health service.
- b) Approve the employer's Internal Health and Safety Regulations.
- (c) Approve the Annual Occupational Safety and Health Programme.
- d) To know and approve the Annual Programming of the Occupational Safety and Health Service.
- (e) Participate in the preparation, approval, implementation and evaluation of policies, plans and programmes for the promotion of occupational safety and health and the prevention of occupational accidents and diseases.
- (f) Approve the annual plan for the training of workers on occupational safety and health.
- (g) Ensure that all new workers receive adequate training, instruction and guidance on risk prevention.
- (h) Monitoring compliance with legislation, internal standards and technical specifications related to safety and health in the workplace; as well as the Internal Regulations on Occupational Health and Safety.
- (i) Ensure that workers are aware of regulations, instructions, technical work specifications, notices and other written or graphic materials relating to the prevention of hazards in the workplace.
- j) Promote the commitment, collaboration and active participation of all workers in the prevention of occupational risks, through effective communication, the participation of workers in the solution of safety problems, induction, training, training, competitions, drills, among others.
- k) Carry out periodic inspections in administrative areas, operational areas, facilities, machinery and equipment, in order to reinforce preventive management.
- (l) To consider the circumstances and investigate the causes of all incidents, accidents and occupational diseases occurring in the workplace, and to issue recommendations to prevent their recurrence.
- (m) To verify compliance with and effectiveness of its recommendations in order to avoid the recurrence of accidents and the occurrence of occupational diseases.
- (n) To make appropriate recommendations for the improvement of working conditions and environment, to ensure that the measures taken are carried out and to review their efficiency.

(o) Analysing and issuing reports on statistics on incidents, accidents and occupational diseases occurring in the workplace, the recording and evaluation of which must be constantly updated by the employer's occupational safety and health unit.

(p) Collaborate with medical and first-aid services.

(q) Supervise occupational safety and health services and provide assistance and advice to employers and workers.

r) Report the following information to the employer's highest authority:

r.1) The fatal accident or dangerous incident, immediately.

r.2) Investigation of each fatal accident and corrective action taken within ten (10) days of occurrence.

r.3) Quarterly statistics on occupational accidents, incidents and diseases. r.4) The quarterly activities of the Occupational Safety and Health Committee.

(s) To keep in the Minute Book the control of compliance with the agreements.

(t) To meet monthly on a regular basis to analyze and evaluate progress on the objectives established in the annual program, and on an extraordinary basis to analyze accidents that are serious or when circumstances so require.

4.1.5 Occupational Health and Safety Committee at the Universidad Alas Peruanas and the Piura branch.

At the Universidad Alas Peruanas, as already indicated, there is a central OSH committee at the main headquarters and committees in each branch, located in the different regions of the country; among them, that of the Piura region. The central committee is the governing body where the guidelines and normative documents of the OSH Management System for the entire University are generated, whose most important documents are:

- OSH policy.
- Approval of OSH objectives.
- Approval of OSH internal regulations.
- Approval of the annual OSH plan.
- Approval of the OSH training program.
- Approval of the training program of the OSH committee.

As for the OSH Committee of the Piura subsidiary, it was installed in March 2018 and currently (December 2019) is made up of six (06) employer representatives and six (06) workers' representatives, three incumbents and three alternates in both cases; A president, a secretary and a member are appointed.

As a subsidiary committee, or subcommittee proper, it does not perform all the functions established in Law No. 29783, a function reserved to the Central Committee, having a more operational task.

## 4.2 Literature review

### 4.2.1 Distribution of scientific production by country of origin

Figure 2 shows how the scientific production is distributed according to the country of origin of the publication.

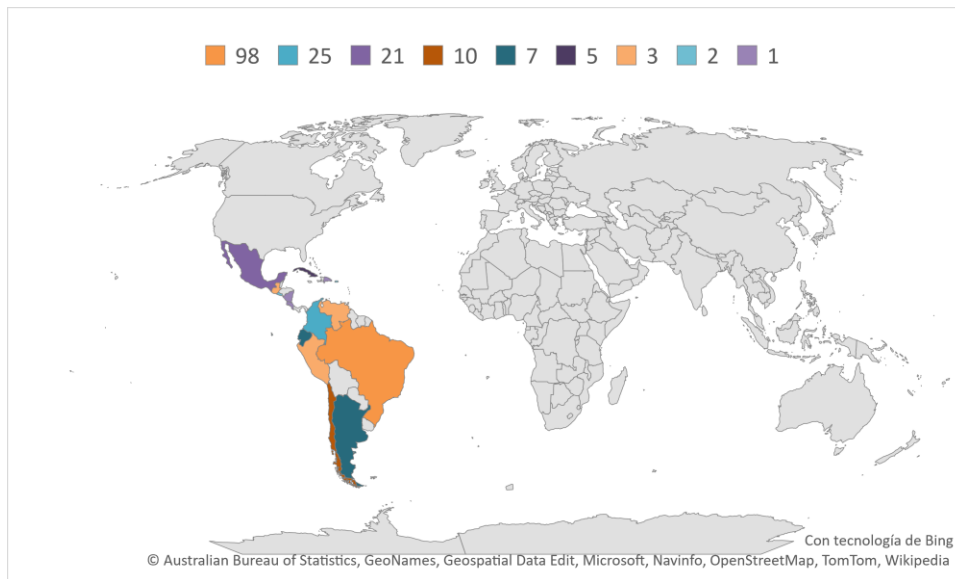


Figure 2. Distribution of scientific production by country of origin.

Source: Authors' own elaboration (2023); based on data provided by Scopus.

The spatial delimitation of this document allows us to analyze the data provided by institutions of Latin American origin, so it was possible to affirm that Brazil, with 98 documents registered in Scopus, was the country in that region with the highest number of publications indexed in the aforementioned platform, followed by Colombia and Mexico with 25 and 21 publications respectively. related to the study of Occupational Safety and Health. Peruvian institutions managed to register 3 publications during the 2018-2019 period.

#### 4.2.2 Distribution of scientific production by area of knowledge

Figure 3 shows the distribution of the elaboration of scientific publications based on the area of knowledge through which the different research methodologies are implemented.



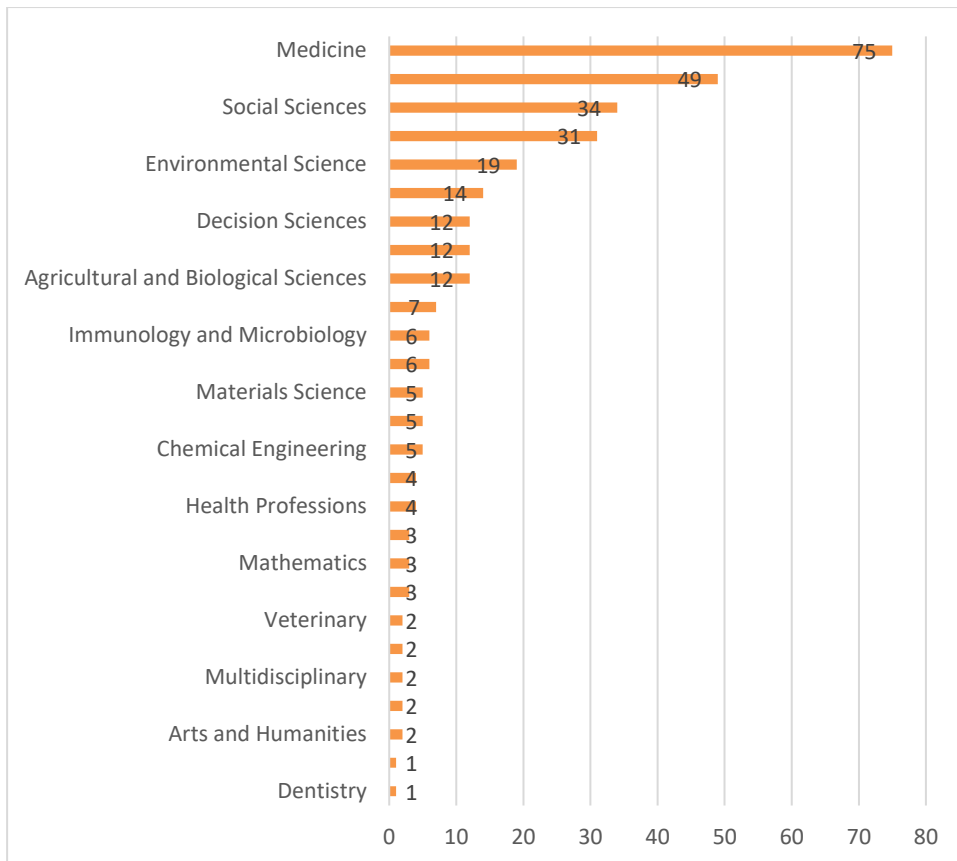


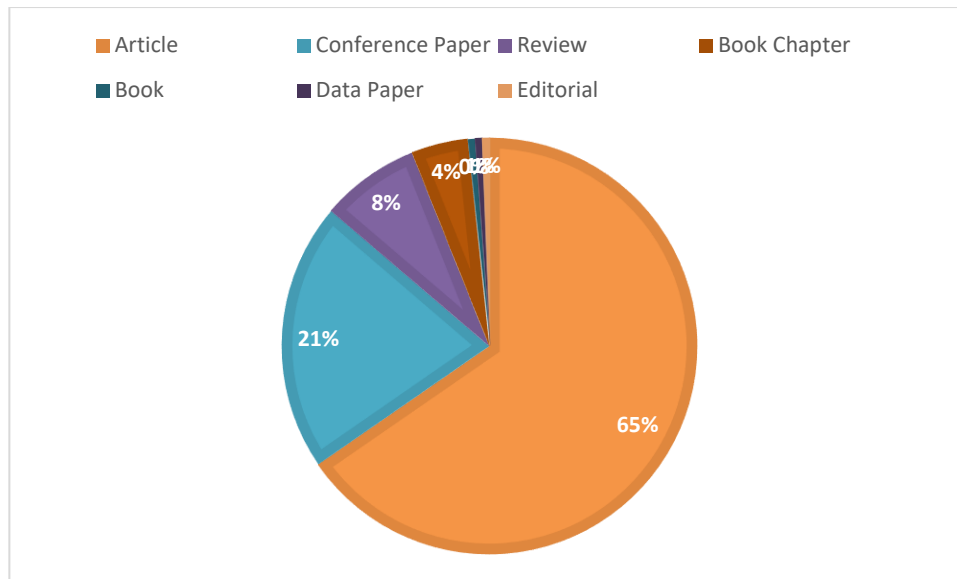
Figure 3. Distribution of scientific production by area of knowledge.

Source: Authors' own elaboration (2023); based on data provided by Scopus.

Medicine was the area of knowledge with the greatest influence in the execution of research projects related to Occupational Health and Safety, registering a total of 75 publications that analyze their contents, implications, risks and effects of situations that expose workers to diseases derived from the exercise of their functions. followed by Engineering with a total of 49 publications and Social Sciences with 34 documents indexed in Scopus. It is important to mention that the same published document may contain theories derived from different areas of knowledge, obeying the interdisciplinarity in this subject that impacts general themes of various areas.

#### 4.2.3 Distribution of scientific production by type of publications

In the following graph, you will see the distribution of the bibliographic finding according to the type of publication made by each of the authors found in Scopus.



65% of the total scientific production indexed in Scopus corresponds to Journal Articles, followed by Conference Articles with 21%. The Reviews were also contemplated by the authors and are represented with 8% of the total publications reported in Scopus, referring to the study of Occupational Safety and Health during the period 2018-2019 by Latin American institutions.

## 5. Conclusions

According to the literature and research reviewed, it is not possible to establish a "standard" measure on the dimensions of Safety Climate; This is due to the differences between companies or organizations, either by the sector to which they are dedicated, the size of their facilities, the number of workers and the types of risks to which they are exposed in their tasks. For this reason, some important ones will be highlighted and from there the dimensions that will be used in our research will be determined, according to the required need.

First of all, we must mention Zohar, D. (1980), who was the one who introduced the first safety climate measure in practice, by carrying it out in a sample of 20 Israeli companies in the chemical, food processing, textile and steel industries, in companies with high and low accident rates. The purpose was to describe a particular type of organizational climate, security in industrial organizations, and to examine its consequences based on the literature on organizational climate and organizational safety practices. The dimensional structure consisted of eight perceptual factors:

1. Importance of training programs.
2. Management attitudes towards safety.
3. Effects of safe conduct on promotion.
4. Level of risk in the workplace.
5. Effects of the pace of work on safety.
6. Status of the security officer.
7. Effects of safe behavior on social status.
- 8th Status of the Security Committee.

Brown and Holmes (1986) obtained, from the testing of the Zohar model by means of confirmatory techniques of factor structure analysis, a model with three dimensions:

- I. Management's concern for the well-being of employees.
- II. Management activity to respond to this concern.
- III. Employee Physical Risk

On the other hand, Meliá, J. and Sesé, A. (1999), who in their research collected dimensions of the climate universally shared by the different types of organizations and developed a general questionnaire, considered the following dimensions, in response to the perceptions of workers about the safety climate of their companies:

- I. Company Security Structures.
- II. Company Security Policy.
- III. Specific actions in occupational health and safety.

In the case of Glendon and Staton (2000), they established the following dimensions of the security climate:

- Communication and support.
- Adequacy of procedures.
- Working pressure.
- Personal protective equipment.
- Safety standards.
- Relations.

Therefore, it is important to highlight that the study of the variables considered for the execution of this article is of great importance and by knowing details of the characteristics in their volumes of publications made in high-impact journals, it is possible to determine the need to carry out more in-depth research on causes and effects of diseases considered work-related. and that this information constitutes raw material in the development of policies that lead to the assurance of the well-being of workers in their companies.

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