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RINOE Journal-Labor and Demographic economics

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Support the international scientific community in its written production Science, Technology and Innovation in the Field of Social Sciences, in Subdisciplines of Demographic economics: Demographic trends and forecasts, Marriage, Marital dissolution, Family structure, Fertility, Family planning, Child care, Children, Youth, Economics of the elderly, Economics of minorities and races, Economics of gender, Value of life, Foregone income; Time allocation, Work behavior, Employment determination and creation: Labor force and employment, Size, and Structure, Time allocation and labor supply, Employment determination, Demand for labor, Self-employment, Human capital, Skills, Occupational choice, Labor productivity, Retirement, Retirement policies, Safety, Accidents, Industrial health, Job satisfaction, Related public policy; Wages, Compensation, and Labor costs: Wage level and structure, Wage differentials by skill, Training, Occupation, etc., Nonwage labor costs and benefits, Private pensions, Compensation packages, Payment methods; Particular labor markets: Contracts: Specific human capital, Matching models, Efficiency wage models, and Internal labor markets, Monopsony, Segmented labor markets, Agricultural labor markets, Professional labor markets and Occupations firm behavior, Public sector labor markets, Particular labor markets; Labor-Management relations, Trade unions, and Collective bargaining: Trade unions, Dispute resolution, Labor-Management relations, Industrial jurisprudence, Producer cooperatives, Labor managed firms; Mobility, Unemployment, and Vacancies: Geographic labor mobility, Immigrant workers, Occupational and intergenerational mobility, Turnover, Vacancies, Layoffs, Unemployment, Unemployment insurance, Severance Pay, Plant closings; Discrimination; Labor standards: National and International; Working conditions, Labor force composition, Workers' Rights.

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Presentation of Content

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Job satisfaction of workers in a flower organization: a case study at the company "La flor de Catemaco"**Satisfacción laboral de los trabajadores de una organización florícola: estudio de caso en la empresa "La flor de Catemaco"**

VELÁZQUEZ-SERNA, José Ángel†* & MONTES DE OCA-ESTRADA, Anabel Regina

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Abstract

Job satisfaction in flower organizations has been poorly addressed, although it is of great relevance for productivity management. The purpose of this research is to estimate the determinants of job satisfaction of the employees of the company "La Flor de Catemaco", a flower company, specialized in the production and marketing of natural flowers and ornamental foliage, located in Villa Guerrero, State of Mexico. The empirical evidence from the parameters obtained in this study suggests that the determining variables of job satisfaction are: Seniority in the position, motivation regarding the work being performed, recognition of the tasks performed and satisfaction with respect to the job. salary received. The study is temporarily circumscribed in 2018, using information from a survey applied to 20 workers, which is processed by methodological requirements using a logistic econometric model.

Job satisfaction, Logit model, Flower organization**Resumen**

La satisfacción laboral en organizaciones florícolas ha sido poco abordada, aunque es de gran relevancia para la administración de la productividad. El propósito de esta investigación es estimar los determinantes de la satisfacción laboral de los empleados de la empresa "La Flor de Catemaco", empresa florícola, especializada en la producción y comercialización de flores naturales y follaje ornamental, ubicada en Villa Guerrero, Estado de México. La evidencia empírica a partir de los parámetros obtenidos en este estudio, sugiere que las variables determinantes de la satisfacción laboral son: La antigüedad en el puesto, la motivación respecto al trabajo que se realiza, el reconocimiento de las tareas realizadas y la satisfacción respecto al salario percibido. El estudio se circunscribe temporalmente en el año 2018, utilizando información proveniente de una encuesta aplicada a 20 trabajadores, que es procesada por los requerimientos metodológicos por medio de un modelo econométrico logístico.

Satisfacción laboral, Modelo logit, Organización florícola

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Introduction

From the psychosocial perspective, job satisfaction is considered as that set of favorable and unfavorable feelings through which workers perceive their employment. It should be noted that human beings, especially in industrialized societies, spend an average of a third of their time doing work activities, where work represents the most intense individual activity, temporarily the most extensive in the physical-cognitive and emotionally demanding aspects, and influential in personal life (Garmendia and Parra, 1993).

In this direction, job satisfaction is a convenient objective in the labor policy of business management, so this requires some indicator for evaluation, that is, knowing the satisfaction of employees is useful to understand the direction that is must provide in an organization.

On the other hand, it is suggested that a symptom of a malfunctioning organization is low employee satisfaction, due to the fact that they affect aspects such as absenteeism, turnover, unemployment, performance, stress, among others. A high job satisfaction favors the result of positive achievements and increases the productivity of the organization.

In this sense, this study aims to analyze the determining factors of job satisfaction of the employees of the company "La Flor de Catemaco."

It is a floricultural company, dedicated to the production and commercialization of natural flowers and ornamental foliage, located at 55 Lucitania Street, in the community of Islote, Villa Guerrero, State of Mexico. It has a total of 23 workers, of which three of them cover administrative and financial functions. In addition, it is a transnational company that exports weekly to Texas, USA. The study is limited temporarily to 2018, using information from a survey applied to 20 workers, which will be processed by the methodological requirements through a logistic econometric model.

This through an instrument made up of 43 items, with Likert-type scale responses, which also collects information on demographic variables such as gender, age, seniority, among others.

Literature review

Despite the fact that job satisfaction has been one of the most studied variables in the field of organizational behavior, there is no consensus around its definition and some theorists even consider that this concept is free from theory or that it does not even exist a comprehensive doctrine regarding job satisfaction (Seashore, 1974).

Job satisfaction has been considered from a wide variety of approaches and disciplines, and has been defined in numerous studies. Hoppock (1935) offers the first published definition of the term, regarding it as "a combination of psychological and physiological environmental circumstances that cause the individual to consider that they are satisfied with their work." According to Locke (1984), job satisfaction is made up of several dimensions, among which are the tasks to be carried out, salary, promotion possibilities and the relationship with colleagues.

Robbins (1994) considers that job satisfaction refers to the general attitude that the person adopts with respect to their work. Authors such as Mumford (1976), Holland (1985) or Michalos (1986) think of job satisfaction as the level of adjustment that the subject experiences between their needs, their expectations and the benefits that work offers them. Regarding empirical studies, the analysis of the causes that originate job satisfaction or dissatisfaction¹ has become an area of social interest among researchers. The antecedent behind this care is that satisfied workers are more productive and stay longer in the organization. Rehman and Zanzi (1995) found that job satisfaction is not influenced by the same variables in all industries, hence the need to focus on jobs that pay special attention to the primary sector to reach relevant conclusions.

¹ This dissatisfaction, when it is very high, is related to low organizational efficiency, which can also be expressed through lack of loyalty, neglect, aggression or withdrawal due to the frustration felt by the employee (Flores, 1992).

Although, there is no unanimity on its definition or a single explanatory model, the various conceptualizations coincide in pointing out that job satisfaction is an attitude towards work experiences. Edwards et al., (2008) consider it an evaluative judgment that includes both affective and cognitive components, derived from the degree of pleasure that work produces.

For their part, Morris and Venkatesh (2010) define it as an emotional response resulting from the congruence between the position and the employee's personal values. Yukl (2008) considers it "the positive feeling that a subject experiences due to the fact of doing a job that interests them, in an environment that allows them to be at ease, within the scope of a company or organization that is attractive to them and for the that receives a series of compensations according to their expectations" (p. 257).

The influence of individual characteristics of employees on their levels of job satisfaction has been widely analyzed in the literature, observing differential, even controversial, links with gender, marital status, seniority and age.

Regarding the latter, the research conducted by Ng and Feldman (2010) concludes that there are statistically significant positive relationships between the age and attitudes of workers. In this direction, various studies indicate that levels of job satisfaction increase with age (Hildebrandt and Eom, 2011; Khalid et al., 2011; Rahman et al., 2010), so that employees over 50 years of age show a significantly higher satisfaction compared to younger ones.

Regarding gender, some studies coincide in pointing out that women seem to be more satisfied with their work than men (Alonso, 2008; Ghazi and Maringe, 2011; Mahmood, Nudrat, Asdaque, Nawaz, and Haider, 2011; Sauza-Poza, A. and Sauza-Poza, 2007).

In relation to marital status, the evidence indicates lower levels of job satisfaction among divorced workers (Pakivathy and Phua, 2011) compared to married or married workers (Paris and Omar, 2008).

With regard to seniority, there is a consensus that, among administrative, manufacturing and company employees in general, those most satisfied with their work are those who have had the longest service in the job (Omar, 2010a).

Recent empirical evidence shows that productivity and job performance are closely related to employee satisfaction (Rahman and Waheed, 2011), and that when it increases, positive attitudes towards the organization and towards oneself develop (Li and Hung, 2009). The review carried out by Mueller, Hattrup and Hausmann (2009) shows that the study of job satisfaction has gone through different stages. Initially, efforts focused on defining and making the nature of the construct explicit.

Subsequently, suitable instruments were developed to measure it. At present, the interest is in unraveling its antecedents and possible consequences. In this regard, there seems to be a greater consensus on the effects of job satisfaction / dissatisfaction than on its antecedents or determinants. In this sense, subjective well-being, organizational commitment and extra-paper behaviors are the variables most frequently cited as consequences of job satisfaction; while, intentions to resign, frequent job changes and participation in union activities are the variables most linked to dissatisfaction at work (Omar, 2011).

Regarding the background, some explanatory variables have been identified, such as having a motivating and challenging job, performing tasks under favorable conditions, being surrounded by supportive colleagues and supervisors, and having a fair reward system.

However, in addition to these traditional variables, in recent years it has been postulated that others could occupy relevant positions as potential predictors of satisfaction² (Whitman, van Rooy & Viswesvaran, 2010).

² Such is the case of psychological capital (Luthans, Avey, Avolio and Peterson, 2010), emotional intelligence (Salovey, Mayer, Caruso and Yoo, 2009), the possibility of expressing emotions during work (Dieffendorff, Erickson, Grandey and Dahling, 2011), and organizational cynicism (Dean, Brandes and Dharwadkar, 1998), although to date there are no empirical studies that have focused on the analysis of its predictive role.

There are also other factors that affect satisfaction and that are not part of the work atmosphere, but that also influence job satisfaction. For example, age, health, seniority, emotional stability, socio-economic condition, free time and recreational activities practiced, family relationships and other outlets, social affiliations, etc. The same happens with personal motivations and aspirations, as well as with their fulfillment (Shultz, 1990).

On the other hand, most of the investigations have been developed with samples of North American, European or Asian subjects, who experience a sociocultural reality markedly different from that of Latin America. Faced with this panorama, the study of this problem in our country will not only cover a vacancy area in the field of social-organizational psychology, but will also contribute to a better understanding of the interplay between personal, dispositional and contextual variables.

In relation to this study, it begins with an introduction, a literature review is carried out, the econometric methodology is proposed to estimate the general model of the determinants of job satisfaction, the specification of the logistic model is carried out, the analysis and the implications of the logistic model and finally the conclusions are presented.

Methodology. Logistic regression

This research comprises a descriptive analysis of the main socioeconomic variables that influence job satisfaction and a quantitative analysis, for which a Binomial Logit econometric model was used, for which the parameters were calculated through maximum likelihood regressions.

To analyze the information through a logit econometric model, it is necessary to estimate models for discrete dependent variables, that is, the probability of an affirmative or negative answer must be estimated that will take binary values (affirmative (yes) = 1, negative (no) = 0) for the dependent variable, given some other parameters (independent variables). The most widely used models from an econometric context are logit models and probit models³.

The logistic regression models the probability of $Y = 1$ as a cumulative distribution function of the standard logistic, evaluated in:

$$Z = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \dots + \beta_n X_n, \quad (1)$$

Under the probability that the dependent variable is one, it is true:

$$\Pr(Y=1/X) = F(\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \dots + \beta_n X_n), \quad (2)$$

Where F is the logistic distribution function, which is defined as follows:

$$F(Z) = \frac{1}{1 + e^{-Z}} \quad (3)$$

In equation (3), the expression Z was previously defined in equation (1). The betas are the parameters to be estimated (see, Pyndick et al., 1998).

Specification of the econometric model

The function that explains the job satisfaction of the workers of the company La Flor de Catemaco S.A. de C.V. is represented as follows:

$$P(SI) = \beta_0 + \beta_1 \text{age} + \beta_2 \text{t_company} + \beta_3 \text{motivation} + \beta_4 \text{recognition} + \beta_5 \text{salary} + \varepsilon \quad (4)$$

³ Technically, the probit model is characterized by measuring a normal cumulative distribution function, and it arises from considering an unobservable convenience index called I , which is based on a set of explanatory variables X , the model has the form $I_i = \beta_0 + \beta_1 X_1$, Statistically the index I is considered to have a threshold or critical value called I^* , such that if I exceeds I^* , then there will be satisfaction. Both I^* and I are unobservable, but if it is assumed that they are normally distributed with the same mean and variance, it is possible to estimate the (parameters) of the previous equation (see Gujarati, D., 2004).

Where:

P (SI) = a dichotomous dependent variable that represents the probability of answering YES = 1 or NO = 0 to the question:

"In general, I am satisfied with my company."

β_0 = Constant.

β_1 = Age of the worker.

β_2 = Time worked in the organization.

β_3 = Motivation regarding the work carried out in the company.

β_4 = Recognition of the tasks performed in the organization.

β_5 = Satisfaction with the salary received in the organization.

ϵ = Error term.

Results of the econometric model

A regression for the dependent variable P (si) was performed using a Logit binary choice model. The variables with the highest degree of significance are identified from this estimate, applying statistical tests and combining different variables. The least significant variables were eliminated. The estimation model is given as:

$$P(SI) = -0.1 - 0.1043 \text{ age} + 1.7733t_company + 0.02833\text{motivation} + 1.0429 \text{ recognition} + 0.5320 \text{ salary} + \epsilon \tag{5}$$

Implications of the logistic econometric model

The variable that has the most influence on positive job satisfaction is motivation. As this is higher the worker is more satisfied with his work. This direct relationship is statistically significant in 5%.

Age has a negative influence on job satisfaction, older people are less likely to be satisfied with their work compared to younger people. However, this direct relationship is not statistically significant. The time worked in the company has a positive association with job satisfaction, as the worker has more seniority in the company, he is happier. However, this direct relationship is not statistically significant.

The recognition of the tasks carried out presents a positive association with job satisfaction, as the worker has greater recognition by the company, he is more satisfied.

Salary has a positive influence on job satisfaction, as the salary has a higher percentage of family income, the worker is more likely to be satisfied, since most of the family income depends on that salary.

Variable	Definition	Units / scale	Expected sign
Age	Worker's age	Numeric	Negative
Tcompany	Time worked in the organization	Less than two years	Positive
Motivation	Motivation regarding the work carried out in the company	Between two and nine years	Positive negative
Recognition	Recognition of the tasks performed in the organization	More than nine years	Positive
Salary	Satisfaction with the salary received in the organization	Strongly disagree	Positive negative
ϵ	Error term		β

Table 1 Variables of the econometric model

Source: Own elaboration

Variable	Coefficient	Standard error	Standard coefficient / error	P[z >z]
Constant	- 0.09908*	- 26.9956	-0.00	0.997
Age	-0.1043	-0.4778	-0.22	0.827
T_company	1.7733	2.1789	0.81	0.42
Motivation	0.02883*	1.8359	0.02	0.988
Recognition	1.0429	2.0412	0.51	0.61
Salary	0.5320	1.1904	0.45	0.655
Mc Faden's pseudo R2	0.52			
Chi 2 (5) of the logistic regression	6.73			
Maximum likelihood	-3.14			
Number of observations	20			
* Statistically significant at 5%				

Table 2 Estimated parameters of the model

Source: Own elaboration with output data from the STATA program

Conclusions

Job satisfaction is the attitude or set of attitudes developed by people towards their work situation, attitudes that can refer to work in general or to specific facets of it (Mirás, S., Villoria, E., Álvarez, J., Cotobal, F. and González, L., 2017). For this reason, when conducting the research in the floricultural company "La Flor de Catemaco", based on the logistics model, some determinants of job satisfaction were found with respect to the activities carried out by the company's workers, including:

Age. The employees are in an age range of 25 to 65 years; of which 18 of them are generally satisfied with the work activities they carry out, especially workers between 45 and 54 years of age. Which suggests that they are adults who have already gone through other work activities, and that they can make a personal comparison with other companies, resulting in a favorable job satisfaction towards which they currently collaborate.

On the other hand, with respect to the determinant Time in the company, the employees who have been working for this flower company for more than 9 years are fully satisfied, in addition to the fact that it is significant that at least 16 people have been at least more than two years, of which 15 are satisfied, also including the other 3 that do not meet this period, however, they agree with their work.

Likewise, the Motivation indicates that the workers of "La Flor de Catemaco" agree and totally agree with regard to feeling motivated by the type of work they do, this may be because the municipality's main activity is floriculture, And it is an area in which people know well about their work, so, even if they were not working in this company, they have the skills that they can play in any other. However, they have decided to stay in this floricultural company because they feel comfortable and motivated with what they do and with the pleasant work environment they have found.

In the same way, the Recognition is perceived by 16 employees who are satisfied with their work, where they consider that the employers adequately recognize the activities they carry out during their working hours, and although there is no extra incentive for it, the word of gratitude or having done their job well is a cause of satisfaction for them.

Finally, with respect to the determinant Salary obtained with the logistic model, job satisfaction refers to a lower number, since only 14 of them are satisfied, of which 10 agree and 4 totally agree. The other two disagree, one strongly disagree, and two no response. This could be because the salary ranges between \$ 850 and \$ 1000 a week in the operating personnel, according to the length of time they have in the company, which does not reach \$ 200 a day, so the workers express that they do not It's enough; However, they also mention that in other companies the salary is even lower, ranging between \$ 130 and \$ 150 pesos a day, so they prefer to work at "La Flor de Catemaco."

In conclusion, the determinants of Job Satisfaction found with the logistic model are age, time in the company, motivation, recognition and salary, and although each of them still has its limitations, they make workers who They are currently working in flower production activities, are satisfied and perceive in a favorable way their work in the company in general, favoring productivity.

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Job hazard analysis in the killing area of a federal inspection slaughterhouse**Análisis de riesgos de trabajo en área de sacrificio de un rastro tipo inspección federal**

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Abstract

This research deals with occupational safety and health and its scope includes the conditions in which the worker must perform his tasks, the hazards to which the worker is exposed, their prevention and control. The study object is the killing area of a TIF slaughterhouse which handles the problem of reducing the number of accidents that jeopardizes the integrity of workers. The objective was to reduce the risk of the worker reflected in the number of accidents. The procedure was to Identify risks and threats in the work area, Analyze risks at work stations. Risk assessment and proposal development. The results show the risks present in the killing area in which the use of PPE is a common and most critical cause, an in-depth analysis reveals that the problem is common to the other areas, of a total of 326 incidents killing has a value of 49 and 89% of these incidents have a high probability of causing temporary loss of working capacity impacting directly to the risk premium, only 11% could cause permanent partial disability. Finally, after carrying out an inspection program, the partial result in number of accidents at the end of this research was 4 compared to the previous year with 10.

Risk, Meat industry, Safety and occupational health

Resumen

Esta investigación versa sobre la seguridad y salud en el trabajo y su ámbito incluye las condiciones en las que el trabajador debe desempeñar sus tareas, los riesgos a los que el trabajador está expuesto, su prevención y control. El objeto de estudio es el área de Sacrificio de un rastro TIF en el cual se aborda el problema de reducir la cantidad de accidentes que pone en riesgo la integridad de los trabajadores. Se fijó como objetivo reducir el riesgo del trabajador reflejado en la cantidad de accidentes. El procedimiento fue identificar riesgos y amenazas en el área de trabajo, Analizar riesgos en estaciones de trabajo. Evaluación del riesgo y Desarrollo de propuestas. Los resultados muestran los riesgos presentes en el área de Sacrificio en los cuales el uso de EPP es una causa común y la más crítica, un análisis en profundidad revela que el problema es común a las demás áreas, de un total de 326 incidencias Sacrificio presenta un valor de 49 y el 89% de dichas incidencias tienen alta probabilidad de causar días de incapacidad impactando directamente a la prima de riesgo, solo un 11% podría causar incapacidad parcial permanente. Finalmente, después de realizado un programa de inspecciones el resultado parcial en número de accidentes al finalizar esta investigación fue de 4 comparado con el año anterior de 10.

Riesgo, Industria cárnica, Seguridad y Salud ocupacional

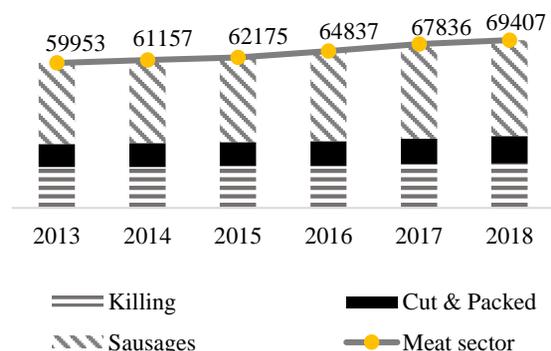
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Introduction

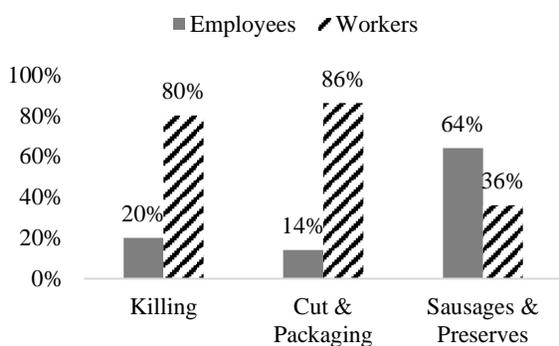
The meat sector of the food processing industry is engaged in the production of beef, poultry, pork and other edible animals through farming, fattening, processing and packaging activities. In Mexico, the states of Veracruz and Jalisco stand out in the national production of meat in beef and chicken, as well as the case of Jalisco and Sonora, which are leaders in pork (Haro, 2019).

According to data provided in Graphic 1 and 2 by the Mexican Meat Council (Bazán, 2018), the distribution of personnel working in the meat industry consists in 2018 with 18,339 in the killing area, 11,377 in cutting and packaging, 39,692 in sausages, making up a total of 69,407 in the meat sector.



Graphic 1 Personnel working in the meat sector

The percentage of distribution of personnel in the areas that make up the meat sector can be seen in Graphic 2.



Graphic 2 Percentage distribution of personnel in the meat sector in Mexico as of 2018

The number of accidents in the workplace of the meat industry is not as high as in others, the lack of training in prevention in workers is the main cause of accidents, hence these risks can be mitigated with appropriate measures within the Occupational Risk Prevention Plan (PREVEN SYSTEM, 2017).

The risk map in this meat sector includes risks of entrapment by machine, projections, cuts and blows, work in confined space, accidents by explosion, fire, electrical, chemical, biological, vibrations, Overexertion and physical load, thermal stress due to cold, noise, excessive workload (UGT, 2007).

Frequently, work accidents occur due to unsafe conditions that exist in equipment, machines, work tools and facilities, as well as the unsafe attitude or acts of workers when carrying out activities. Other causes of work accidents may be associated with dangerous conditions such as wrong work methods and work procedures, damage to equipment, machinery, work tools and facilities, incorrect placement of materials or products in work areas, machinery and tools in poor condition, facilities with poor maintenance, lack of order and cleanliness in work areas. (IMSS, 2017)

They can also be generated by unsafe acts such as causing risky situations that put people in danger by using the hands or other parts of the body in an inappropriate way, carrying out activities or operations without prior killing, operating equipment without authorization, cleaning, oiling or repair machinery when it is in motion, do not use personal protective equipment (IMSS, 2017).

The company in which this project is developed is a Federal Inspection Type (TIF) slaughterhouse, where pork is processed for national and international sale. The TIF slaughterhouse are facilities for the slaughter, processing and sanitary industrialization of beef, pork and poultry (FIRCO, 2016).

The production plant is divided into three areas: killing, Cutting and added value. And they manufacture six main cuts of which a variety of products are generated that are exported to Japan, these products generate most of the monetary income to the company. From these six cuts there are other secondary cuts which are sold in the national market. The description of the company's production process is shown below in a process diagram see Figure 1.

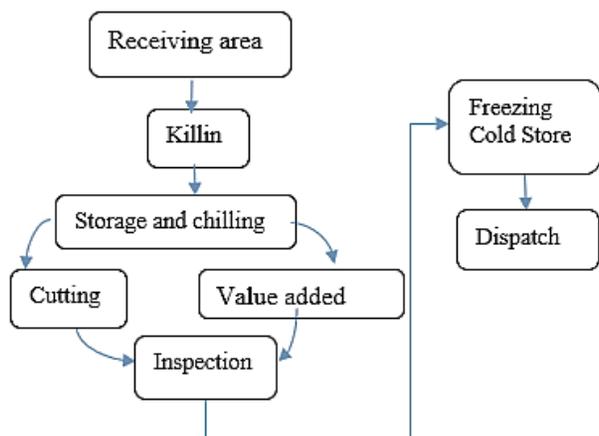


Figure 1 Process diagram of the company under study
 Source: Vázquez and López, (2013)

The process begins (Verdugo, 2014) with the arrival of the raw material to pens in trucks that bring approximately 200 pigs per truck, from here they are stored for a day and later they are taken to the slaughter room. Once in the slaughter area, the pig is bled to later pass to the processing of the carcass, this process lasts approximately 20 minutes. Carcass processing consists of shaving and gutting, then they are stored in refrigeration cabinets that are between 0 ° C to 4 ° C and are stored for 17 to 41 hours. Throughout the slaughter process there are quality stations where the pig is checked for disease and that quality standards are met. Once the pork carcasses reach temperature, they are called cold carcasses and are taken to the cutting room where the relevant cuts and details are made to generate by-products and export products.

Some cut products are the value-added raw material where other types of meat processes are carried out and the product is detailed depending on the client's specifications. Products from both areas are inspected to see that they meet the requirements and are packaged to be taken to the finished product warehouse and shipped.

This research deals with health and safety at work and its scope includes the conditions in which the worker must perform their tasks and the risks to which the worker is exposed, the ways to prevent it, the use of personal protective equipment and the fulfillment of the norms of this nature that establish the organisms that accredit to the trace and the company by itself. The monitoring indicators in the company's industrial safety department are shown in Table 1.

	2015	2016	2017	2018
Accidents per year	78	66	80	21
Days of disability per year	1694	1470	1286	Unknown
Permanent disability	0	0	0	0

Table 1 Historical values of industrial safety indicators in the company under study

As can be seen in Table 1, the number of accidents in 2017 is higher than in 2015 and slightly lower than in 2016. According to the company's safety officer, these indicators have increased since past years and no action has been taken to reduce its value.

The development of dangerous activities without protection leaves the workers exposed and potentiates labor affectations. Currently operations in the killing area are carried out without supervision, as a control measure to ensure the use of personal protective equipment and as a measure to prevent the occurrence of acts unsafe by employees.

The area under study is the killing area, which due to the nature of its operations is the most critical. The behavior of the safety and hygiene monitoring indicators in the Slaughter area is shown in Table 2.

	2015	2016	2017	2018
Accidents per year	20	30	10	4
Days of disability per year	151	110	49	18
Permanent disability	0	0	0	0

Table 2 Historical values of industrial safety indicators in the killing area

The number of work accidents in the killing area presents relevant values that impact on extra expenses for days of incapacity for work and increases in the annual risk premium. Therefore, the following problem arises:

“The number of accidents in the Killing area of the Federal Inspection Slaughterhouse puts the integrity of the workers and the continuity of operations in the company under study at risk”

Objective

Therefore the objective is expressed as.

Reduce the number of work accidents that endanger the integrity of workers in the Killing area of the Federal Inspection Slaughterhouse, through compliance with safety regulations.

Theoretical framework

Systems are necessary in organizations and one of these is for the application of safety and health standards. Unfortunately, the effort required by the administration to guarantee the operation of a health and safety prevention system is not always considered a priority when more urgent problems arise (Pain, 2018). Despite all the progress, we still kill people at work. According to recent estimates published by the International Labor Organization (ILO, 2019), 2.78 million workers die each year from occupational accidents and diseases (of which 2.4 million are related to diseases) and 374 million workers suffer non-fatal work accidents.

Frequently, only after an accident occurs, the investigating team returns to the safety instructions and finds to their relief that some control procedure has been violated, the leaders of the organization will feel relieved and the affected will have a summary of the case. It may seem a bit ironic, but it is not far from reality, the reflection is the organization has failed in its task of guaranteeing compliance with the security procedure (Asbury, 2018) and Pain (2018).

The Secretary of Labor and Social Welfare defines the danger as the characteristics or intrinsic properties of the agents or conditions present in the work environment. Its degree of danger is obtained by evaluating the potentiality of the effect that these characteristics or properties of the agents or conditions can generate or provoke, on the other hand, the work risk is represented by the correlation of the dangerousness of an agent or physical condition and the exposure of workers with the possibility of causing adverse effects on their health or life, or damaging the workplace. As an expression, the risk equals the danger from the worker's exposure. (STPS, 2009).

It is the employer's obligation to provide the means and facilities to establish safety and health measures at work for the prevention of accidents and occupational diseases. Also, among other attributions, it is a requirement for the employer to incorporate in the occupational health and safety program or in the list of preventive and corrective actions for occupational health and safety, actions and promotion programs for workers' health. and for the comprehensive prevention of addictions recommended or dictated by the competent authorities (STPS, 2009).

Hazard recognition is focused on identifying perceived, existing and potential hazards and / or consequences of exposure to hazards and a fundamental task of a hazard recognition system is to help management and employees to become aware of the hazards. operational hazards and associated risks. This knowledge is essential to ensure that hazards are controlled, reduced, or eliminated as they are identified (Roughton & Crutchfield, 2008).

In general terms, the process for systematic risk assessment and analysis includes the following activities (1) Conduct a workplace risk assessment (2) Prioritize the results of the risk assessment (3) Development of controls to solve problems risk-related (4) Recommend and implement controls (5) Follow-up of the results of implemented controls (Roughton & Crutchfield, 2008). The risks in a slaughter area are very frequent, as expressed by González, Casique and López (2015) in a study carried out in a slaughterhouse in the Guanajuato region, which confirms the fact that the causes of work accidents focus on poor safety and hygiene conditions by not having the necessary instruments and tools or by the existence of poor conditions, coupled with the lack of personal protective equipment and excessive workloads requiring physical effort, causing absenteeism and turnover of personal. Likewise, the most frequent damage to health detected consists of cuts, injuries and fractures caused by the use of sharp objects and handling of heavy loads.

Methodology to be developed

The selected Procedure is based on the Job Hazard Analysis (JHA) by Roughton & Crutchfield (2008) in which it describes how to evaluate possible risks, understand the consequences of the risk, and act to help identify, eliminate or control hazards. The following steps were used.

(1) Identify risks and threats in the work area. For this purpose, tours of the company's killing area were made and the personnel working there were interviewed to obtain information regarding risks. With the help of industrial safety formats provided by the company and based on the criteria of the NOM's applicable to the company and the area under study, observations were made, which consist of a list of the area risks classified by type and a risk map of the killing area. (2) Analyze risks at workstations. A process FMEA was carried out to identify the importance of risks and their causes. Then, an operation monitoring program was implemented in the main areas that cover the organization's processes, with the intention of understanding the nature of incidents and work accidents that occurred during a set period of time. (3) Risk assessment. Once the causes had been identified, the evaluation was made based on the risk matrix adapted from NOM-031-STPS-2011 (STPS, 2011) based on two probability criteria of Occurrence and Impact. The probability scale contemplates Remote, Isolated, Occasional, Recurrent and Frequent occurrence with values from 1 to 5 correspondingly. On the other hand, the impact was valued as Minor, Moderate, Critical, Fatal with values ranging from 1 to 4 correspondingly, and the assessment of the level of risk was Minimal in that which is managed through routine and / or process , Low that requires constant monitoring and detection plans, Medium that requires senior management attention and preventive plans, High requires immediate action and an action plan and Serious requires immediate attention in order to modify the security conditions; the safety instructions; personal protective equipment, or training. (4) Development of proposals. With the results obtained from the analysis and risk assessment, an action plan was carried out to prevent the recurrence of accidents and prevent work risks.

Results

The risks identified from the visual inspections in the killing area were graphically represented on a risk map, which is shown in Figure 2 below.

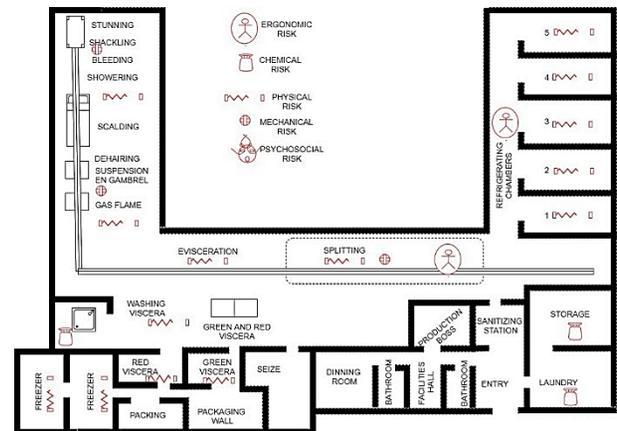


Figure 2 Risk map of the killing area

A detailed description of the risk factors identified in the risk map presented in Figure 2 is shown below.

Physical risk factors:

- Excessive noise in the killing room (above a constant 98 dB. Use of earplugs (leaving the use at the discretion of the worker).
- Temp. 40 ° C in summer. Use of fans from canal chambers (freezers) to killing area.
- Wet floor. The mandatory use of anti-slip sanitary boots is a policy.
- Steam pipes at 80 °C in walls and personnel flow areas. There is no control measure.
- Frozen soil in gutter chambers and freezers. Countermeasures are lacking.

Regarding Chemical Substances:

- Contact with organic matter, pork gastric juices and chlorinated water. Latex gloves and plastic sleeves are used to avoid contact (at the discretion of the worker).
- Use of acid to wash rolls. Latex gloves and plastic sleeves are used to avoid contact (at the discretion of the worker).

The Mechanical factors were:

- Work stations on elevated platforms without handrails. There is no countermeasure.
- Machinery in the room is continually failing. There is no countermeasure.
- Handling of sharp objects by most of the staff. Anti cut gloves are used (mandatory when using a knife).
- Danger of impact from pigs hanging in motion. Use of helmet (mandatory).

Regarding Ergonomic factors:

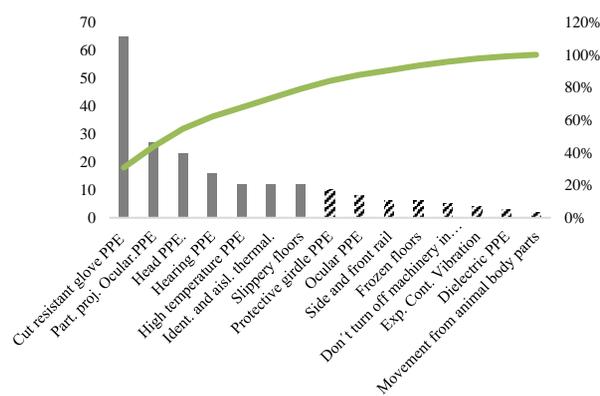
- Strong constant vibration in electric saw station. No countermeasures.
- Transfer of pigs by rails without motorization. Excessive exertion. Use of lumbar girdle.

Table 3 shows the following the risks identified through the process sequence (workstations) and the level indicator qualified of minimum, low, medium, high, and severe, corresponding to the colors blue, green, yellow, orange and red.

	BLUE	GREEN	YELLOW	ORANGE	RED
Knife handling with fast movements			1		
Knife handling with sudden movements	1	4	1	1	
Scrub hair over 30 °C exposure					1
Handling and continuous flame exposure					1
Entrapment by moving machinery			1		
Fall from elevated platforms (1 off events)			1		
Overexertion when moving more than 5 pigs on the rails			1		
Exp. from the eyes to projected particles			2		
Slips or falls			3		
Fall of raw material in high places		1			
Falling elastic pallets from elevated places		1			
Cutting with a knife when detaching the manure out		1			
Exposure of the eyes to chlorinated water and burned skin of the pig		1			
Exp. From the eyes to projected particles (organic matter)		1			
Eye exposure to chlorinated water and organic matter from pigs		1			
Exp. Of eyes to pressurized air, acid and hot water		1			
Handling of pointed hook and knife with men. Absent		1			
Uncomfortable position when transporting checked pallets		1			
Use of electric tools to knock out the pig		1			
Continuous vibration of the saw		1			
Excessive noise		4			
Impact by reflex movement of the pig when chopping		1			
Blood splatter in eyes		1			
Strikes by moving pig on conveyor belt		9			
TOTAL=46	11	20	11	4	0

Table 3 Causes of risk and priority level

The causes associated with the risks are those shown in Graphic 3. In which the left axis shows the accumulated evaluation of the risk priority number (RPN).

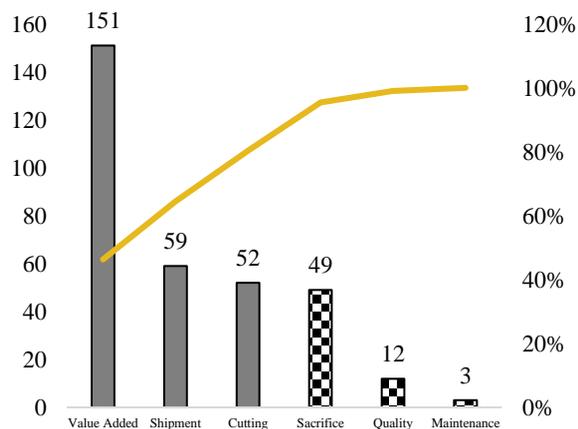


Graphic 3 Prioritization of causes of risk in the Killing area

It can be seen that the main causes of accidents are represented by the lack of Personal Protective Equipment (PPE) for Hands, Ocular, Head, Hearing, High.

Temperatures; also to the identification of thermal pipe insulation and slippery floors.

Because the main cause of the problem is the non-use of PPE, a general study was carried out to visualize incidents in the main areas of the organization, in which it is evident that the Value Added, Shipping, Killing and Cutting area present high level of incidents in the use of PPE see Graphic 4.



Graphic 4 Number of incidents by area in use of PPE

Out of a total of 326 Killing incidents, there is a value of 49. And 89% of these incidents have a high probability of causing days of disability, directly impacting the risk premium and only 11% could cause permanent partial disability, finally after it This inspection program the partial result in number of accidents at the end of this investigation was 4 compared to the previous year of 10.

Conclusions

Although it is important to continuously apply the Job Hazard Analysis, its systematization will reflect the degree of maturity that the organization has in the implementation of a risk prevention system.

Its application is recommended in situations where the risk is known due to records of injuries or disabilities, in tasks that involve serious injuries even when these are not yet present, in new tasks and in non-routine work and in modified or relocated processes.

Operating through a continuous verification program will allow the timely identification of unsafe acts and unsafe conditions, the promotion of the use of mandatory PPE in work areas during the execution of operations, as well as the establishment of a risk prevention policy that establishes the participation of employees in reporting hazards, the continuous self-assessment of the risk prevention system complemented with the audit to identify deficiencies at the level of the support areas in charge of identifying the level of skills and knowledge consistent with the job, such as Recruitment of personnel and Training, together all these actions will contribute to making the operation of the TIF Slaughterhouse more efficient, giving a timely response to the identified risks.

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Methodology for the detection of accidents in the company based on the Bird pyramid

Metodología para la detección de accidentes en la empresa con base en la pirámide de Bird

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Abstract

Accidents at work are a very important issue within companies, because they reflect losses not only economic or raw material, but can affect the lives of workers, therefore it is important to develop a Methodology for the detection of accidents that allows the control of accident investigations. To carry out this project, it was necessary to carry out three phases, the first of which was research, in which technical and regulatory information sources applicable to the program were reviewed. In the second stage, the accident investigation process was designed, in which variables such as: investigation time, communication time, personnel and accident investigation follow-up were considered. Finally, a pilot run was carried out to identify the areas of opportunity of the program and define the corrective actions. Through the detection, management and control of accidents, it is possible to decrease the accident rate, this methodology identifies the root cause of the problem and generates corrective or preventive actions to avoid repeating said accident.

Resumen

Los accidentes de trabajo son un tema muy importante dentro de las empresas, debido a que reflejan pérdidas no solo económicas o de materia prima, sino que pueden llegar a afectar la vida de los trabajadores, por ello importante desarrollar una metodología para la detección de accidentes que permita el control de las investigaciones de accidentes. Para realizar este proyecto fue necesario ejecutar tres fases, la primera de ellas la de investigación, en la cual se revisaron fuentes de información técnicas y normativas aplicables al programa. En la segunda etapa se diseñó el proceso de investigación de accidentes, en el cual se consideraron variables como: el tiempo de investigación, tiempo de la comunicación, personal y el seguimiento de investigación de los accidentes. Por último, se realizó una corrida piloto para identificar las áreas de oportunidad del programa y definir las acciones correctivas. A través de la detección el manejo y control de los accidentes, es posible disminuir la tasa de accidentes, esta metodología identifica la causa raíz del problema y genera acciones correctivas o preventivas para no repetir dicho accidente.

Methodology, Detection, Accidents

Metodología, Detección, Accidentes

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Introduction

Occupational accidents are organic injuries suffered by workers in their working hours, which are caused by unsafe acts and / or unsafe conditions within work facilities. In Mexico, during 2016, there were 516 thousand 734 work accidents and, on the way,, 12 thousand 622 people became ill due to the work they do at their jobs and one thousand 408 died while performing their work or as a result of it. (Prida, 2017).

The International Labor Organization estimates that every 15 seconds, a worker dies from work-related accidents or illnesses and 153 workers have an occupational accident. Every day 6,300 people die from work-related accidents or illnesses, this is more than 2 million deaths per year. (Prida, 2017). The cost of this daily adversity is enormous, and the economic burden of poor health and safety practices is estimated at four percent of global Gross Domestic Product each year.

Accident investigation is an analytical technique, which aims to discover the root cause of accidents and indicators of incidents that have occurred within the work facilities to obtain safe areas. From the knowledge of the causes, preventive and corrective measures are designed and applied to guarantee the non-repetition of the accident, for which the data and analysis of the accidents are a very important tool for the development of prevention policies and economic development. for the industry, also generating a decrease in accidents that are generated during working hours.

Problematic

The health, well-being and safety of workers and work are closely linked within this social sphere, since work is an important part of people's lives, and therefore what affects work will have a full impact on the worker health or safety. Work can have a negative impact on the health and safety of the worker when it is not carried out in safe conditions for the worker or in an unhealthy environment.

Objective

Develop the methodology for the prevention of accidents that allows the control of accident investigations for the company.

Justification

An accident investigation program enables the detection of unsafe conditions and unsafe acts in the workplace. Likewise, it continuously monitors the corrective and preventive actions that may be needed. On the other hand, this methodology makes it possible for the departments of the organization to be involved in order to identify the risks that can be generated by failures or omissions in the production processes or to verify the optimal safety conditions of the machinery or work facilities.

Methodology

The proposed accident investigation methodology was based on the Accidental Pyramid Theory, also known as the Bird's Pyramid, which was developed by Frank Bird Jr. and Frank Fernández, in which it indicates that, for every 600 incidents, there are 30 minor injuries, to occur 10 serious injuries which can present 1 tragic accident either due to the generation of days of incapacity for the worker or, in some cases, death. Based on this theory, three stages were proposed for the adaptation of the methodology.

In the first stage, investigation, a review of the information sources was carried out to define the applicable information of the accident investigation methodology, such as legal and regulatory framework, causes of accidents in the work areas and study of applicable processes for the study of accidents.

In the planning phase, the accident investigation procedure was integrated, which included the process of investigation times, upward communication times, investigation personnel, and a format was established for the accident investigation follow-up.

During execution, the information gathered from accident investigations was reviewed to determine the guidelines for the establishment of the methodology and program areas.

Results

To carry out the accident investigation, a methodology based on the Bird's Pyramid was developed, in order to determine the root cause of the accident and avoid its repetition.

To start with the methodology, the subtopic to be placed must be determined, such as: the nature of the incident, the immediate causes, the affected parts of the body, the systematic deficiencies, the absolute safety, the type of incident, the unsafe conditions, safe star and the sources of the incident. Each one is described below:

Nature of the Incident: It refers to the damage suffered by the worker; a cut, bump, including but not limited to: cut, scratch, puncture, splinter / Bruise, contusion, pinch, crush / Sprain, strain, pull, tear / Burn, freeze / Fracture, dislocation / amputation, electric shock / Difficulty breathing, bite, sting, paralysis / Sunstroke, exhaustion loss of consciousness / Dermatitis, absorption, ingestion, inhalation / Hearing loss / foreign body / Others).

Immediate Causes: It is the cause for which the incident was generated, in this section it refers to the unsafe act that contributed to the accident (No use of PPE / No blocking, non-compliance with the globally harmonized system (SGA) / No inspection / Individual use of tools / low influence of medications / hand placement / Overexertion / Mechanical parts, Lack of rotation of activities, inadequate approach, Poor performance of the activity, poor cleaning)

Parts of the body affected: Part or area of the body of the person affected in the accident. (head, face, neck, mouth, teeth, nose, eyes, ears / Upper extremities, clavicle, shoulder, arm, elbow / Hands, wrists, palms, fingers, nails / Trunk: chest, stomach, side, pelvis, ribs, groin / Internal organs: heart, lung, kidney, liver, pancreas, other internal injuries).

Systematic Deficiencies: Systematic deficiency which contributed to the accident. The systemic deficiency refers to the administrative process in which it has various reasons, for example, poor training, it is the system deficiencies which need to be reinforced or improved, even change. (Design and engineering / Inspection or maintenance / Change management / Policies / PPE / Selection, placement / Training or entertainment / Research / Performance management / Design work)

Security Absolutes: Violation of security absolutes, which contribute to the applicable security policy in the company (1. Refusing to apply a security padlock on equipment, violating established equipment securing procedures. 2. Removing, Disabling or Avoid any safety device 3. Refuse to follow the confined space work permit procedures when entering a confined space 4. Refuse to follow established procedures for fall protection from working at heights 5. Introduce any part of the body in moving equipment in violation of established procedures for safe operation 6. Operating a vehicle in an irresponsible, intimidating or threatening manner 7. Putting oneself or another person in serious danger).

Incident Type: Type of accident that was generated if the worker was hit by, trapped, or inhaled a certain chemical. (Struck by or against / caught in between / Repetitive motion / Slipping / Pushing / Pulling / Reaching / Lifting / Inhaling chemicals / Exposure to high temperatures)

Unsafe Conditions: Unsafe condition which contributed to the accident. (Defective materials / Defective equipment / Defective tools / Slippery surfaces / Poor ventilation / incorrect position)

Safe Star: Detected states and critical errors which identify worker states which contributed to the accident. (Haste / Frustration / Fatigue / Complacency) and those of critical error detected (Eyes not on the task / Mind Not on the task / Line of fire / Loss of balance-traction-grip)

Incident Sources: Incident source referring to machinery, tools and equipment. (Printing equipment / Cutting equipment / Gluing-sealing equipment / Forklifts, cranes, vehicles / Extrusion equipment / Chemicals / stairs steps / floors, walkways, ramps / Particles in the air / Doors, structures / Machine shop equipment / Storage equipment / waste equipment / contractors equipment / Falling objects / Electrical equipment / Cartoning machine / Office equipment / other machines)

A flow chart was created which will help the responses to be concise and contain everything necessary to find the root cause and determine preventive actions which will ensure the non-repetition or aggravation of the incident.

Likewise, a question guide was created for the use of the flow chart in order to see all the sides of the accident and do not leave without reviewing any variant for which the accident arose, in order to try to have accident-free areas.

For the second part of the accident investigation methodology, it is necessary to describe the injury and the first treatment that the worker was given, referring to the first aid that was given to the worker at the time of the accident. For this, it is necessary to identify the aspects that are listed below:

The injury and treatment will be placed as specifically as possible. Do not overdiagnose, do not say "sprain" if this was treated by a first helper and the only fact is that the ankle is twisted, clearly describe the injury of the casualty. Treatment: of the state as specifically as possible, only that of first aid provided by the work facilities. The doctor's statements must be attached to the original.

The investigator must verify compliance with BBP (Control Plan for Exposure to Bloodborne Pathogens at Work and Access to Medical and Employee Exposure Records). Name of the list of involved first responders and name of the list of medical providers, including facilities and physicians.

Subsequently, the incident should be described as concisely as possible, determining:

- Facts of the state that lead to the incident.
- Activity what the employee was doing.
- What happened.
- Statement of causal factors.

Regarding the immediate causes which contributed to the accident, these must be clearly and precisely described and must contain at least:

- Enumeration and explanation of all unsafe conditions
- Enumeration and explanation of all risk behaviors.

These should line up with the data on the front of the shape. All systematic causes found in the accident investigation should be listed. They must be clearly and precisely described and contain at least:

- Enumeration and explanation of behavior and unsafe condition that has existed as well as Systemic cause.

Using the 5 why methodology, which consists of describing specifically how the accident arose and asking why 5 times, the root cause of the accident can be determined. Afterwards, the corrective actions will be placed to prevent said accident from happening again, identifying the action, the person responsible for executing said action, the commitment date and the current date. It is worth mentioning that no action should last more than 15 open days and if it turns out, preventive measures must be granted to avoid the accident.

With regard to disciplinary action, these must be indicated according to what the organization defines. To do this, it is advisable to define a plan of disciplinary recommendations on safety, which must be given to all workers to sign upon entry to work. As part of the investigation evidence, photos of evidence of the accident, equipment, machine tools, etc. will be placed. who is involved in the accident.

Finally, the people who carried out the investigation need to sign the accident investigation and the fraud alert policy, this in case the operator and the company deliver different versions at the time of the accident.

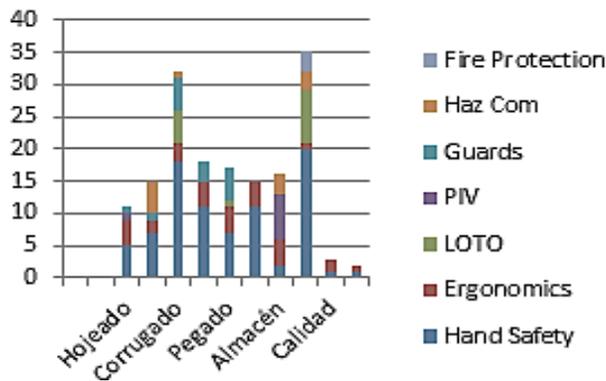
This format was created with the aim of carrying out a complete accident investigation which will not leave any, direction of the investigation or facts which may happen again said accident.

Once this methodology was proposed, a pilot test was carried out in the company to know the effectiveness in probable scenarios. For the purposes of this article, fictitious data was used to respect the company's confidentiality policy. The company has a database to record the accident investigation (See table 1). This matrix generates the statistics of the incidents, for example, the severity of the incidents, this information is used to integrate the pyramid of accidents and identify the level of risk in which the company is.

Date	Department	Type of Violation	Body Part Affected	Description of the incident
February	Warehouse	Railing hit / lack of arrangement	Abdomen	Edge in the warehouse door
March	Corrugated	Lack of PPE	Right arm	Roller burn
April	Warehouse	Absolute 6	Back	Column collision
April	Mtto	Lack of PPE	Pinkie	Cutting by placing guillotine knives
April	Glued	Unsafe condition	arms	Cuts on the arms
April	Corrugated	Lack of PPE	Right arm	Roller burn
May	Iobox (Ladder)	Unsafe condition	Back / hands / head	Rail missing on laminate stairs

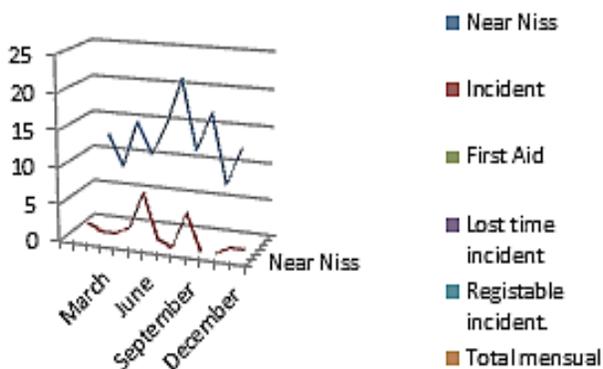
Table 1 Database for the recording of accident analysis
Source: Own elaboration

In this graph you can see how incidents and near-incidents accumulate during the year, which provides the information to know in which step of the accident pyramid.



Graphic Incidents / accidents by area
Source: Own elaboration

In addition to having the accumulated of all near-misses, incidents, first aid, downtime accidents or a recordable accident, the number of incidents by areas in which the focus area for the reduction of accidents can be determined.



Graphic 2 Incident / accident severity by area
Source: Own elaboration

Statistically, it can be observed that the highest risk area is maintenance and corrugated-sheet, and among the most recurrent concepts in accidents it is in the hands, which indicates that the safety system in hands is inefficient because they are identified various areas of opportunity for improvement to avoid generating incidents and not generating a major accident.

But it is not only necessary to carry out the accident investigation in concentrate, which determines areas of focus and reasons for the accidents, for which it is chosen to use the risk mitigation program in which it consists and based on our investigation in the which provides root causes of the accident and indicates that corrective or preventive actions should be generated which are to ensure the mitigation or elimination of said risk (See figure 1).



Figure 1 Corrective actions.
Source: Own elaboration

Based on the information we have with the accident investigation, the area of risk mitigation is briefly placed, the before and after are shown in which it allowed us to observe how the risk was mitigated or eliminated. This is done with the aim of preventing a near miss from being skipped and potentially causing a recordable accident. In addition to the application of the methodology, the active participation of the collaborators was essential, so training was developed to publicize the procedure, in addition to the strategic placement of dissemination material.

Finally, the pilot application was validated through the comparison of the indicators generated in previous years without methodology with respect to the results obtained.

Conclusions

The proposed objective was achieved, the accident investigation methodology proposal. Several accident investigation methodologies were used in order to do only one which would lead to the result of identifying the root cause of an accident and thus being able to mitigate all those dangers for the workers. Likewise, the importance of reporting work incidents and near-incidents was confirmed in order to detect risk areas which could generate an accident.

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Organizational culture in the human resource of a mexican hotel organization**La cultura organizacional en el recurso humano de una organización hotelera mexicana**

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Abstract

This document describes the organizational culture factor of the human resource that works in a Mexican hotel organization. The theoretical path was made from the inputs of Barney, Hill, Pérez Mayo, Gordon, Thévenet, Golden, Stoner, Serna, Koontz y Cooke y Lafferty; as a explanatory framework which distinguishes the importance of identifying through an inventory of organizational culture, as it builds and defines such organization, it's relations and it's processes. The methodology is empirical, descriptive and quantitative. The instrument used for the collection of data was the questionnaire generated by Cooke and Lafferty, called Inventory of Organizational Culture. This instrument allowed to identify the Organizational Culture starting from the methodological categorical criteria proposed by themselves, meaning, they measured the dimensions: realization, auto-update, humanistic-encouraging, affiliate, conventional, approval, dependent, of evasion, antagonistic, power, competitive and perfectionist; defined by the instrument.

Culture, organizational culture, hotel**Resumen**

La obsolescencia programada surgió de la necesidad de mantener una El artículo revisa la cultura organizacional del recurso humano que trabaja en una organización hotelera de México; la ruta teórica realizada es bajo la mirada de Barney, Hill, Pérez Mayo, Gordon, Thévenet, Golden, Stoner, Serna, Koontz y Cooke y Lafferty (1989) como marco explicativo que destaca la importancia de identificar a través de un inventario de cultura organizacional del cómo se construye y define dicha organización, sus relaciones y procesos. La metodología es empírica, descriptiva y cuantitativa. El instrumento utilizado para la recolección de datos fue el cuestionario generado por el Cooke y Lafferty, denominado Inventario de Cultura Organizacional. Este instrumento permitió identificar la cultura organizacional a partir de los criterios categoriales metodológicos propuestos por ellos mismos, es decir se midieron la dimensión: realización, auto-actualización, humanístico-alentador, afiliativo, convencional, aprobación, dependiente, de evasión, antagonístico, poder, competitivo y perfeccionista

Cultura, Cultura organizacional, Hotel

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Introduction

Studying culture in organizations has a high degree of importance within the organizational environment, due to the influence it has on the behavior of employees. Its diagnosis is fundamental. The existence of an adequate or optimal organizational culture has a positive impact on the performance of employees and the organization in general. Therefore, studying the culture in a public or private organization and whether it serves the decision making of the top management is decisive, to directly influence the service provided to the clients. In a hotel, strategies, policies, objectives, and goals should focus on customer service that is satisfactory. The most important point in any organization that is dedicated to lodging service, is to know just what kind of service culture it provides. In other words, the organizational culture is a set of beliefs, values and norms that are specific behavioral expectations imbued in the organization, which are not simply written down in a manual that must be known to improve. (Manucci, 2010).

Literature review

Amid the accumulation of research efforts deployed, trying to prove and specify the true relationship between organizations and the environment in which they operate, the concept of culture has been incessantly linked to the study of organizations. Trying to understand the relationship between organizational culture and performance, Barney (1986) describes organizational culture as a complex set of values, beliefs, assumptions, and symbols. It is considered an unusual competitive advantage by which the organization/company can be perceived in a totally different way with respect to its competitors, consequently generating a certain type of differentiation (Hill, 1988) with respect to its customers.

Having transferred the concept of culture to organizations, as a differentiating element of their internal life of how to face their own challenges in a diverse and complex environment of permanent change, his study becomes essential. This, from the point of view of trying to understand the impact that the organizational culture has had, in the achievement of the economic and social objectives of the organizations that, have built strong and successful cultures.

Pérez Mayo (2017) suggests that the peculiarity and specificity of human beings in organizations must be understood, and this leads to the study of culture within organizations.

Although there are many characteristics in the organizational culture, it is important to note that it is "based on beliefs that are internally oriented to how to manage and externally to how to compete" (Gordon, 1991). It means that the culture is transformed in a conscious or unconscious way, as a way to face the evident paradox of the organizations, to find a balance between their adaptation to the environment; in which they develop responding to its pressures and demands, and the need to maintain an internal cohesion of all its operation system (Thévenet, 1986).

The concept of organizational culture arises, because many authors try to know the organization in depth and not only superficially, hence the overpopulation of the concept. Golden (1992), defines organizational culture as "an interpretative, historically developed and socially maintained scheme that team members use to give meaning and structure their own actions and those of others", Stoner and other authors (1984), define organizational culture as "the set of important understandings as the norms, attitudes and beliefs shared by all members of the organization" (Stoner et al. 1996 in Nicolini & Parodi, 2015).

Serna (2003), points out that "each organization has its own culture, different from the others, which gives it its identity"; which affirms that "the culture of an institution is the way in which the organizations do things, how they establish properties and give importance to the different business tasks, besides including what is important for the company" (Rendón, 2004). Koontz (2007), refers to it as "general model of conduct, ideas and values shared by its members and inferred from what people say, what they do and what they think in an organizational environment" (González, 2012). Most authors agree that culture is shared and learned by all members of the organization.

The administrative literature on organizational culture emphasizes that: first, the organizational culture is associated in an important way with the result of the work; second, that the contents or particular characteristics of an organizational culture explain this association; and third, that a change in the result of the work can be achieved by changing the particular contents of the organizational culture (Aguilar Edwards, 2006, p. 3)

The organizational culture has been measured by instruments that bring together the main characteristics of the organization. One of them is Cooke and Lafferty's (1989) Organizational Culture Inventory, which has a fully human orientation, reflecting perceived support, cooperation, mutual respect, and consideration, as dimensions.

Cooke and Lafferty's model provides an image of the organization's culture, based on the norms of human resource behavior in organizations. It focuses on the behavioral patterns that members believe are necessary to fit and meet expectations within their organization. There are 12 types of behavioral patterns, which are organized in three general dimensions; they are distinguished between:

- Constructive culture: Its members are encouraged to interact with people and approach tasks in ways that help them meet their needs. It has 4 subgroups: Accomplishment, self-actualization, humanist-encouragement, and affiliation.
- Passive/Defensive Culture: Its members believe that they should interact with people in a way that does not endanger their own safety. It has 4 subgroups: approval, conventional, dependent and avoidance.
- Aggressive/Defensive Culture: Its members seek to approach the task in forceful ways to protect their status and safety. It has 4 subgroups: antagonistic, power, competitive and perfectionist.

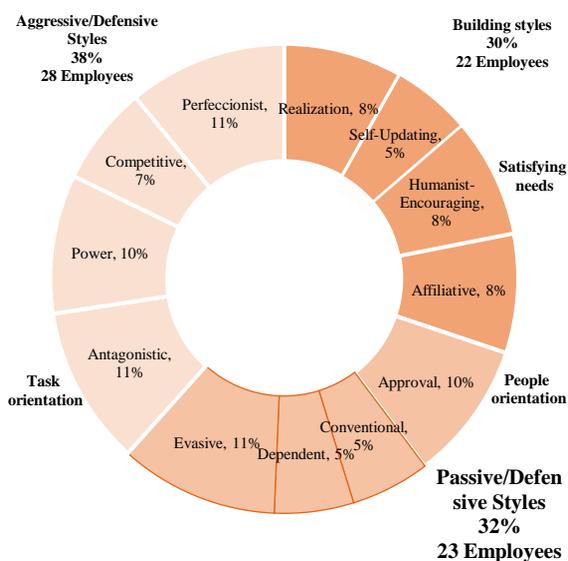
Cultures of building styles	Passive/Defensive Culture	Aggressive/Defensive Culture
<p>1. Culture of accomplishment or achievement: A culture of accomplishment style characterizes organizations that do things well and achieve their own goals. They work to achieve established objectives, explore alternatives before acting, take on challenging tasks, set moderately difficult goals, follow a standard of excellence, work for the sense of achievement, think about the future and a plan, take moderate risks, openly show enthusiasm and know the business.</p> <p>2. Self-Updating Culture: A culture of self-actualization is characterized by the value of creativity, quality over quantity, both the fulfillment of tasks and individual growth. Members of these organizations tend to enjoy their work, develop themselves, tend to be innovative, offer high quality products and/or services, and attract and develop outstanding employees. A culture of self-actualization is like the achievement and humanistic culture, the culture emphasizes personal growth and development.</p> <p>3. Humanist and encouraging culture: A humanist culture characterizes organizations for being participatory and person-centered. Members are expected to be supportive, helpful, and open in influencing their relationships with each other. A humanistic culture leads to effective organizational performance, providing growth and active participation of members who, in turn, report high satisfaction and commitment to the organizations. The Humanistic culture is related to the synergy and effectiveness of problem solving within the teams. Humanist cultures emphasize the development of the knowledge and skills of others.</p> <p>4. Affiliation culture: An affiliative culture characterizes organizations that place a high priority on positive interpersonal relationships. Members are expected to be friendly, open, and responsive to the satisfaction of their working group. An affiliative culture can improve organizational performance by promoting open communication, good cooperation, and effective coordination of activities. Members are loyal to their working group and feel that they "fit in" comfortably.</p>	<p>5. Approval culture: A culture of approval describes organizations that conflicts are avoided and interpersonal relationships are pleasant, at least superficially. Members feel that they must agree, must have the approval of the group, and be accepted by others. Although possibly, this type of working environment can limit the effectiveness of the organization by constructively minimizing "different" and expressing ideas and opinions. Approval cultures are the most susceptible to what has been called the "paradox" - where members reach consensus on decisions but lack any personal commitment.</p> <p>6. Conventional Culture: A conventional culture in organizations describes them as conservative, traditional and bureaucratically controlled. Members are expected to follow the rules and make a good impression. An overly conventional culture can interfere with effectiveness by suppressing innovation and preventing the organization from adapting to changes in its environment. Members of organizations with strong conventional norms report that they are expected to: not "make waves," avoid confrontation, make a "good impression," fit in, follow rules rather than ideas, tell people different things to avoid conflict, accept the "status quo," always follow policies and practices, put aside solutions that seem different or risky, and fit into the "mold".</p> <p>7. Dependent Culture: A dependent culture in organizations is hierarchically controlled and not participatory. Decision-making is centralized, with members of the organization being led to do only what they were told. -are and to clear decisions with superiors. Dependent cultures commonly emerge at lower levels of the organization in response to expectations and norms that may be operating at higher levels.</p> <p>8. Culture of evasion: A culture of avoidance characterizes organizations in which success is not rewarded, but mistakes are nevertheless punished. This system of not rewarding leads members to shift responsibility to others and to avoid any possibility of being blamed for a mistake. The survival of this type of organization is doubtful as members are not willing to make decisions, act or accept risks. Members of organizations with strong avoidance policies report that they are expected to: make "popular" decisions instead of what is necessary, have few opportunities, shift responsibility to others, put things off, manage a "low profile" when things get tough, never be to blame for problems, not get involved, wait for others to act first.</p>	<p>9. Antagonistic Culture: An antagonistic culture describes that in organizations confrontation predominates and negativism is rewarded. Members gain status and influence by being critical and therefore are empowered to oppose the ideas of others and to make safe decisions. Confrontational norms encourage norms to prevent members from becoming increasingly frustrated with the prevailing negativism. Members of organizations with strong antagonistic norms are expected to: point out shortcomings, remain independent and perfectly objective, oppose new ideas, be difficult to impress, seek error, oppose things indirectly, stay out of the situation and refuse to accept criticism.</p> <p>10. Culture of power: A culture of power is structured based on inherent authority. Members believe they will be rewarded for taking control of change and subordinates. Power-oriented organizations are less effective than there could be, subordinates resist this type of control, retain information and reduce their contributions to the minimum acceptable level.</p> <p>11. Competitive Culture: competitive culture is one in which winning is valued and members are rewarded. People in these organizations operate on a "win-lose" basis. It is an excessively competitive culture, can inhibit effectiveness by reducing cooperation and promoting unrealistic standards of performance.</p> <p>12. Perfectionist Culture: This type of culture values persistent perfectionism and hard work. Members feel they must avoid all mistakes, keep track of everything and work long hours to achieve strictly defined goals. Members of organizations with strong perfectionist norms are expected to: take personal care of every detail, work very hard, never make a mistake, set unrealistic goals, be precise even when unnecessary, stay on top of everyone, do things perfectly, work is more important than anything else, appear competent and independent and persist and resist.</p>

Table 1 Types of culture and their characteristics
Source: Elaborated from the reading of Organizational Culture Inventory (Cooke and Lafferty, 1989)

Description of the method

This research comprises a descriptive study with a quantitative approach. In this sense, "descriptive studies seek to specify the properties, characteristics and profiles of people, groups, communities, processes, objects or any other phenomenon that is subject to analysis", "in quantitative studies their purpose is to measure independently or jointly the variables that will allow evidence of the study of the phenomenon in particular and establish the relationships" (Hernández, 2014). The aim of this research is precisely to describe the dominant culture of an organization in Mexico. This information will make it possible to determine what aspects of its culture are. The Organizational Culture Inventory (OCI; Cooke & Lafferty, 1987) was used, which is a quantitative instrument by Cooke and Lafferty. The design of this research can be defined as non-experimental. "Non-experimental research is observing phenomena as they occur in their natural context, and then analyzing them" (Hernández, 2014). The data collection for this study was cross-sectional since the data collection was in a limited time. The sample to be considered for this study is 73 hotel employees, 100% of whom are employees.

Results



Graphic 1 Results of the application of the instrument
 Source: Prepared based on the application of the tool using the model by Cooke and Lafferty (2013, pp. 149-150), based on the graph resulting from the use of Human Synergistics International software

The results of the instrument applied are very similar to those of other investigations in Mexico, that is, not necessarily unfavorable, although the highest percentage is of aggressive/defensive style 38% (1 and 8 of the configuration of the measurement table of Cooke and Lafferty), which are of opposition, perfectionist, antagonistic styles, retain the information and reduce their contributions to the minimum acceptable level, besides being competitive, it is a real opportunity for organizational intervention. The hotel is a service company, where the most important thing is the guests and the service they receive, they cannot be the majority of workers of this style, but they must worry about giving a friendly service not so square or perfect. Being such a perfectionist can cause members to get lost in the shuffle and get lost in the details.

A proportional relationship is found with the styles of competition and performance or (achievement) where both styles tend to follow the activities. A point in favor of hotel organization is that competitiveness is moderate and that is motivating for hotel members as they focus on always being the best, which makes them seek to achieve good feedback from guests in order to access existing stimulus packages. Another finding is that we find a relationship between these three styles of culture: perfectionist, power and antagonistic. Similar results to those found by Velasco Ocampo in his thesis to obtain the Master's degree in Organization Administration (Velasco Ocampo, 2017).

The next two organizational culture styles, passive/defensive and constructivist, are almost the same percentage, which is the other half of the hotel's employees. Although the passive/defensive style is 1% more (32%), which does not say that they are evasive, dependent, conventional and approving, although they tend to be more evasive, this is not very good since they do not get involved in the hotel projects or pass the responsibility of the work to the most, they do not make decisions and this is bad since many times they must know how to make decisions at the moment with each guest.

Unfortunately, many of these cultural surrogates promote the norms for the defensive. And the behavior ultimately has negative effects on members and the organization. This style of culture disconnects evades, puts on the defensive the bad attribution of success and this highlights the importance of alignment. We find cultural disconnections in the same dimensions of analysis and this suggests that this organization needs to align its missions and objectives with shared values and assumptions, and then make appropriate changes or improvements in its systems, structures, technologies and member skills. On the other hand, finding approval style employees is very good, as they always look to be approved by others, which means they look for guests to accept them. There is a proportional relationship between approval and conventional organizational culture style since conventional ones are conservative, traditional, and bureaucratically controlled. Members are expected to follow the rules and make a good impression. The last style of organizational culture according to the results in percentage is the constructivist (30%), within this style are the: affiliative, humanist-encouraging, self-actualization and realization. In it we can see that there is a correlation between humanist-encouraging and affiliative because they tend to know how to listen to the needs of themselves, help others, take their time with customers, caring for them and at the same time have tact with customers, are friendly consider people as the most important, know how to have good relationships with others, this correlation is very good because in the hotel almost all employees have direct contact with guests always and the objective of the hotel is to achieve customer satisfaction.

Conclusions and recommendations

The organization must seek to increase the constructive style of its organizational culture to achieve the objectives since, according to the theory of Cooke and Lafferty is the best style for optimal performance in the organization. It is also necessary to lower the percentages of the aggressive/defensive and passive/defensive styles because it is a service organization.

The implementation of an intervention program is recommended to implement the constructive style because they are the ones that are more oriented to the human being and his relations, since in the hotel there is always direct contact with the guests and these are the main objective of the organization for the construction of the fidelity with the organization.

With this program of intervention of the organizational culture the percentage of passive/defensive style would be lowered since they do not like to get involved with the activities if they do not feel safe, protected or comfortable, this can cause that when there are changes in the procedures they get involved late this may not achieve the objectives or goals of those changes due to lack of time and because in the hotel sector it is very important that the employees are active and friendly to meet the different needs of each guest, which can help the guests leave satisfied with the service. Also impacting the program would be the percentage of the aggressive/defensive style that resulted in a very high percentage because they always seek to approach activities in an aggressive or antagonistic manner which is bad because they cannot attend guests in an aggressive manner. In the hotel the most important thing is the service towards the guests and as each guest is different, they cannot treat the guests in the same way they cannot be perfect. In the end, there are 3 styles of culture in the organization: Constructive culture, passive/defensive culture, and aggressive/defensive culture, more or less but coexist. Strategically managing a culture requires not only the clarification of visions and values, but also the identification of hints (and unanticipated consequences).

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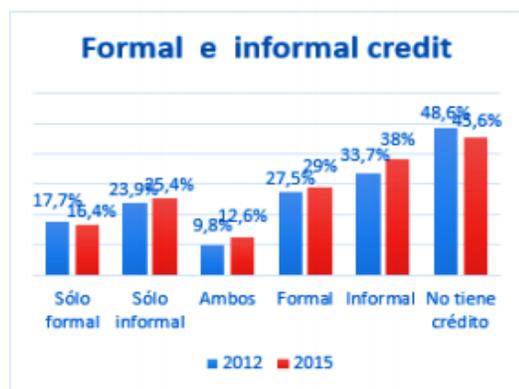
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