

# Healthy Organizations: A Competitiveness Strategy

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**Abstract**—This article is about the concept of Healthy Organizations –understanding it as the one which offers a high level of wellbeing to their employees, which positively impacts their productivity- as a strategy to increase organizational productiveness. In order to achieve this, an interdisciplinary research was proposed, involving concepts of engineering, management, psychology, work medicine and industrial security. In this research, 873 employees were surveyed in 11 manufacturing enterprises in Bogotá city, a statistical analysis was made, and the financial condition model was adapted and applied –including analytical hierarchization and the opinion of experts- to assign weights to the variables. It was found that in a 1 to 10 scale the Health level in such companies is 6.25 and it was not found any significant difference among office and production jobs.

**Index Terms**—analytical hierarchization, financial condition model, healthy organizations, productivity.

## I. INTRODUCTION

Worldwide Organizations are facing serious issues of absenteeism and staff turnover which impact in a direct way the productivity of national organizations and relay their growth. This situation is worse in manufacturing firms, which are told to expose employees to tougher work conditions in services organizations. For instance, In Colombia, from January to July on 2011, about 3'644.360 days were lost –approximately 10123 years- due to temporal inability of work accidents [1], and it is known that only about 4% of employees are likely to work in the same company for more than 10 years [2]; which encourage knowledge drain and a lack of continuity to accomplish the goals of the organization. In addition to this, it is said that a percentage of such disabilities is caused by employees with the only objective of avoiding work in dates which are close to bank holidays, such as Easter, Christmas and New Year's Eve [1].

In order to solve this problem, the concept of Healthy Organizations has been created, combining Quality of labor life and productivity in organizations [3]. This concept affirms that organizations should invest in wellbeing of their employees, because this wellbeing is reflected on productivity in organizations by reductions in absenteeism and staff turnover, and by allowing workers to have a higher level of commitment [4]. One of the main authors

of this topic is Marisa Salanova, director of WONT research group at Jaume I university in Spain. However, there are other noticeable contributions in this topic by Lawrence R Murphy; Jack and Suzy Welch; Gimeno; Hernández Fernaud, Díaz Cabrera, & Isla Díaz; Gómez; among others.

This research is an interdisciplinary Project which meets areas of Industrial Engineering, Management, Organizational Psychology and Medicine mainly. It pretends to develop a proposal so that manufacturing organizations of the region can increase their productivity through Healthy Organizations. This proposal is based on the statistical analysis and on the application of a model used to measure the financial condition in the enterprises. Such analysis were made in a sample of 873 employees in 11 companies of the region; in each company the human resources director applied a questionnaire where employees comprised all they do in order to keep their employees satisfied.

There is no significant difference in satisfaction between the labor positions studied, the average is 6.2 for companies.

## II. LITERATURE REVIEW

Reviewing the state of art about healthy organizations, a large amount of studies and articles were made about this topic, and it is remarkable to see that there is not a unique definition about that concept and the given definitions have certain particularities. For instance, Lawrence R. Murphy focused his concept in the importance of workplace design [5], whereas Marisa Salanova emphasizes psychological wellbeing of the employee. In the same way Jack and Suzy Welch focus on the effect that employee commitment has on cash flow [6] Regardless such differences, there is a common point that all authors highlight, which is that healthy organizations are characterized for giving considerable amounts of wellbeing to employees, which allows the company to grow and have extraordinary utilities. This convergence in all concepts has helped defining Healthy Organizations as those which give to their employees high levels of wellbeing, an ideal place of work, encourage health and security, and help their people to succeed, which make them be more productive, grow and adapt to a constantly changing environment.

When listing the characteristics that a Healthy Organizations should have, authors differ in some of them as

well, nevertheless there are some points in which they agree such as: Security and Healthy in the workplace, Fair treatment and non-discrimination, empowerment, communication and balance between family and work life. And when referring to measure levels of Health in Organizations, the main advances found are the ones proposed a model validated by Gimeno and his team [7], as well as the one developed by Smith and his team (1995), who used a recollection system in a big services enterprise focusing on five major factors [8]. Marisa Salanova developed a measurement system called WONT in 2005 as well, which is a methodology for the evaluation and prevention of psychological risk and uses RED (Resources, Emotions and Demands) questionnaire [4]. Literature about applications of Healthy Organizations in Colombian context was searched surprisingly no articles about that topic were found, however there are some articles about organizational culture and working environment which were written by Carlos Eduardo Méndez and Enrique Oligastri, researchers, who have defined some characteristics of working culture referring to the employer and the employee.

### III. METHODOLOGY

When the theoretical context was established, it was decided that the research should be focused on medium and big manufacturing companies in Bogota – due to the intensive amount of manpower that they employ, and the fact that they have the minimum structure where healthy organizations can be created-. Two phases in the research were set, the first one to measure the levels of health in the organizations through a mathematical model, and the one to develop an intervention proposal. This article will be discussing the first phase. A statistical sample criterion was used to limit the size of the sample, and later random probability, used to determine the incidence of illness in animal population, was applied to calculate the final company sample [8]. As a result, eleven companies were surveyed: nine medium and two big. In each company the same process was applied to determine the sample of employees that should be surveyed, giving as a result 873 employees in total. Companies were invited to participate in a randomly, out of a 100 companies list of chamber of commerce in Bogota.

Conducting questionnaires was the best option, as we are facing an exploratory research. Two questionnaires were designed, the first one to measure the perception of wellbeing to the employees and the second one to measure those activities that the company does in order to be healthy and to find out about the idea that leaders have about men, because this has an impact on collective conscience and the significance system shared by the members of the organizations [9]; which differentiates this research from other studies in which only the employee opinion is taken into account. The first questionnaire involves twenty questions and the second one implies thirteen, these questionnaires were designed to measure all the variables. The pilot was made on the first fifty employees, and the questionnaires were slightly changed.

Data analysis was mainly made using percentages, arithmetic mean, weighted average and standard deviation. To apply the financial condition model, the opinion of six experts was asked in a ten question interview, in order to determine the weight of each variable – this was made using analytical hierarchization -. The consulted experts include: A doctor, three OHPs, two psychologies, and a PhD in organizational management. These subjective opinions were transformed into objective ones by using the analytical hierarchization model [5].

### IV. RESULTS

The final analysis yielded statistics descriptive results of surveys one and two, weighing variables according to expert opinion, and the results of the Finance Condition model.

#### *A. Descriptive Statistical Analysis of Questionnaire Number One*

From the 873 workers surveyed, statistics show that 31 work in general services, 554 in manufacturing, 253 in Auxiliary and Administrative jobs, and 26 in Management. The variables measured are: Health and safety in employment, fair treatment and non-discrimination, Communication, Empowerment, Balance between work and family [10].

The most important results are: The most common diseases among Colombian workers are headache, accounting for 30.51%, followed by limb pain with 26.40% and 23.01% with Stress, although incidence levels vary depending on the charges, evidencing that the Manufacturing workers and General Services suffer more pain-related to limbs, back and head pain, and their levels of overweight are less than 4%; this result coincide with the another measures made before where stress and headache were the most common illnesses among workers. [11]. On the other hand, administrative and managerial positions show that the limb pain is less than 8% and levels of stress and headache rise to above 30%, compared to that for management positions which exceeds 45%. Regarding the level of employee satisfaction, perplexing results are observed since it a level of dissatisfaction or indifference of 50% was expected, and the results showed the opposite, higher satisfaction levels of 50% to all positions.

As for Fair treatment and non-discrimination variables, it was found that in Colombian companies, 62.57% of their employees say they have not been victims of discrimination, which is an important fact to create healthy organizations [12]. However, 20.67% of the employees have been discriminated for their labor position whilst 7.07% of the employees claim to have been discriminated against by the socioeconomic level. Both percentages show that the kind of discrimination which mostly affects to employees is related to socioeconomic level. On the other hand, in terms of wages, employees do not feel well paid, since they rated the salary they earn at 5.73 on a scale from 1 to 10. Additionally, with regard to a fair treatment, the questionnaire was rated at 5.22, On the contrary to what was expected, people of general services are more satisfied with their wages than managers of

organizations, and such managers feel that there is an unfair treatment to employees in the organization.

Regarding the Empowerment variable over 40% of employees perceive that they are taken into account when making decisions about how and when to do their work. However, it is observed that employees of general services declare to have similar freedom to that qualified by managers, with values of 7.26 for the former group and 7.58 for the latter one. In addition, most employees get new ideas to solve problems that arise in their work, but a 56.47% of the population feel they should consult with their boss for approval before implementing them. This shows that it is not given enough confidence to employees and it is necessary to improve this aspect.

Referring to Communication variable, it is found that the feedback mechanisms in companies in the region are not the most appropriate, because, 60% of employees consider these arrangements as average, poor or non-existent and that these are not focused on performance improvement. However, 69.2% of employees communicate their ideas, because they feel that they are being taken into account, whereas 27.71% do not communicate their opinions, as they feel they are not being considered.

The results of the "Balance Between Work and Family Life" variable, show that employees are satisfied with the time they must work, allowing them to devote sufficient time to their families, and they rated having enough free time on a ratio of 6.91 on a scale of 1 to 10. However, in depth studies are recommended to go into detail related to this question, how long is "enough" for people? How much time do they devote to their families? How much time they spend in urban transport?. Additionally 5.9, people think their families are satisfied with the time spent together, which means they have received complaints from their families for not devoting enough time to them or there is guilt for not doing so. An aggravating factor is that approximately 40% of the employees work more than 48 hours, an amount which is high and exceeds even labor laws of Colombia, which are set to 48 hours per week. Furthermore, it is unacceptable that some employees have to work between 83 and 90 hours per week, even when this represents only 1.95%, regardless the reason leading to this situation.

*B. Descriptive Statistical Analysis of Questionnaire Number Two*

A questionnaire was answered by each of the companies. The variables measured were: Opportunities for promotion and career growth, absenteeism, Social investment, Health and Safety in the organization, communication, Balance between work and family life and Organizational Health offered by the company. A 45.56% of companies recruit internally, giving their employees the option to upgrade and facilitate staff retention, also shows that 18.81% of the companies do not care about measuring levels of absenteeism, and the ones which do, do not have a standard method over valuation. The average number of absenteeism in companies studied is 9%. It is also observed that 45.45% of companies do not use profit sharing strategies to motivate their employees.

*C. Application of Finance Condition Model*

The Finance Condition model allows measuring in a single numerical value the level of health in the organizations studied [13], taking into account the following:

$$OH = \sum_{i=1}^5 v_i * p_i \tag{1}$$

where OH: Organizational health level,  $v_i$ : is the value for the i variable and  $p_i$ : is the weight for the i variable. This calculation is done for each labor position and then averaged to obtain the results of the questionnaire 1, the same procedure is done for Questionnaire 2, but in this last questionnaire there is not breakdown per work position, as it assesses the overall business and not the specific positions.

The results obtained are:

*Questionnaire 1*

TABLE I. PERCEPTION OF EMPLOYEES

Variables	Weighing	Qualification
Security and Healthy in the workplace	0,61	0,17
Fair treatment and non-discrimination	0,60	0,17
Empowerment	0,52	0,16
Communication	0,58	0,17
Balance between family and work life	0,65	0,16
Personal Relationships	0,65	0,16
Organizational Health perceived by workers		<b>0.59</b>

*Questionnaire 2*

TABLE II. ACTIVITIES THAT COMPANIES DO

Variables	Weighing	Qualification
Opportunities for promotion and career growth.	0,51	0,18
Absenteeism	0,65	0,17
Social investment	0,69	0,18
Health and Safety in the organization	0,63	0,17
Communication	0,78	0,16
Balance between work and family life	0,36	0,16
Organizational Health offered by the company		<b>0.62</b>

Finally, the average of the two the values, show: 0,605, which is very low to expect productivity from Human Factor. [5]

V. CONCLUSIONS

It can be concluded that the level of safety in organizations is very low and currently it does not allow companies to increase productivity due to human factor. However, with a proposal aimed at all variables and focusing this variable appropriately to each labor position. They can get results in productivity within 5 to 10 years; however it requires commitment and continuous support between companies and universities.

Employees are not being 100% productive because their health is affected due to their work, therefore decreasing productivity, impacting business and the country competitiveness in general. On average, every woman shows 1.9 illnesses, compared to men who accounted for 1.6. Also stress is predominant, because, along with one of its symptoms, headaches are common in 53.52% of employees.

To summarise, the main problems faced by Colombian organizations in order to be healthy are: discrimination, low wages, employees' methods of empowerment, inadequate feedback mechanisms and extended work schedules which hinder employee well-being for themselves and their families, as shown in section 4 of this article, which are characteristics that could be shared by different developing countries as they have various aspects in common.

Further researches into the matter would allow a deeper understanding, it is recommended to investigate in other economic sectors such as services, mercantile or mining industry, to check the behavior of the variables and the value of the health of this kind of organizations.

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