

Impact of Human Talent Selection Processes on the Reduction of Accidents in MSME Companies in the Manufacturing Sector

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Abstract

This article derived from an institutional research seeks to determine the incidence of the selection processes of human talent in the accident rates of MSME companies in the manufacturing sector of the city of Dosquebradas, Risaralda in the year 2020-2021 for which a questionnaire was applied to 150 companies in order to analyze the selection processes of human talent of MSME companies in the manufacturing sector of the city of Dosquebradas and was related to the accident rate of the sector according to the statistics of the observatory of safety and health at work, taking into account that it is one of the sectors with the highest accident rate in Colombia. The research technique used is descriptive and analytical. Based on the findings, it is established that the human talent selection processes affect the decrease in the accident rate of MSME companies in the manufacturing sector of the city of Dosquebradas in 2020.

Keywords: *selection of human talent, occupational accidents, skills, behavior, manufacturing.*

Introduction

The selection process of Human Talent is becoming increasingly important due to the need for organizations to have competent people to perform a certain position, however there is still little information as to how an adequate selection process can affect that focuses not only on the search for compliance with competencies of the position but also on safety competencies that allow the reduction of work accidents, Especially since those who finally make hiring decisions sometimes do not have the training to choose candidates with self-care skills, which can lead to an accident at work.

Given that occupational accidents constitute a latent risk for the organization due to its legal implications for the company and its representatives, taking into account the current Colombian legislation contained mainly in the Occupational Health and Safety Management System (Decree 1072 of 2015) of mandatory compliance for organizations, which establishes civil and criminal liability when there is fault or fraud, which can put the organization at risk. Permanence of the company by the economic sanctions added to the direct and indirect costs caused to the organization.

Taking into account the research article "Analysis of the causes and consequences of occupational accidents occurring in two construction projects". Taking into account the publication of the Spanish Ministry of Labour Incidence of human behaviour in occupational accidents, "Human behaviour participates directly in the vast majority of

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occupational accidents, estimating in many studies that it can be a decisive factor in at least 80% of occupational accidents” It is estimated that approximately 74% are the fault of the person involved in the incident. Unsafe acts cause nearly four times as many workplace accidents with disabling injuries compared to unsafe conditions caused by 24% according to the analysis conducted on these two construction projects. This is how what is sought with this research is to determine how the selection process of human talent affects the behavior of accidents in MSME companies in the manufacturing sector of the municipality of Dosquebradas in 2020.

In general, MSME companies in Colombia do not have defined selection processes due in large part to their family structure according to an Acopi report "about 62% of SMEs are family-owned, although 23% of these have independent management". This implies that in some MSMEs there is no defined human management department, assuming this role the owner of the company who in many cases does not have the adequate training to carry out the personnel hiring processes. The selection processes are omitted in many cases and hiring is carried out by recommendation and direct hiring with the simple review of the resume without contemplating a formal interview. Some, on the other hand, do have an area or a collaborator in charge of the human management process, but without much specialization in the subject and others have chosen to outsource the process. According to the ILO, occupational accidents and diseases in micro and small enterprises have a frequency 20% higher than medium-sized enterprises, and 40% higher than large companies (ILO, 2015)". Identifying the reasons influencing these statistics is a challenge considering their impact on the economy and the development of regions. This is how the problem that concerns us in this research has to do with accidents and their relationship with the appropriate personnel selection processes in this type of companies, MSMEs. Since occupational accidents occur mainly due to unsafe acts and these are defined as the actions incurred by the worker due to lack of care, or problematic overconfidence faced by MSMEs in the manufacturing sector of the Municipality of Dosquebradas. It is for all the above that the question arises to raise the research: ¿What is the incidence of the processes of selection of human talent against the decrease in accidents in MSME companies in the manufacturing sector of the city of Dosquebradas?

Literature Review

The selection process is nowadays a very important process for organizations since more and more collaborators are required to generate knowledge and / or achieve their strategic objectives. The execution of the processes associated with human management in organizations should be seen as an integrating element of the other processes and should be aimed at improving employee competencies according to the organizational culture and the different management styles (Báez, Zambrano & Márquez, 2018), in addition, it has been determined that variables such as training and compensation have statistical significance in the efficiency of the execution of projects (Rueda, Jiménez & Sánchez, 2015). This is how an adequate selection process will allow the organization to hire employees with the required skills before being hired and / or potentiate their capabilities in the company.

Despite the above, subjective aspects are still presented in the selection and hiring processes such as stereotypes that are activated by the sex and physical attractiveness of applicants (Solano & Smith, 2017), excessive control in the hiring decision by the owners of microenterprises (Báez et al., 2018), abuses through artifacts such as the polygraph, assessment center⁴ and even excessive delays in the selection process (Hernández, 2012), generating inconveniences and very risky administrative deficiencies in terms of Colombian labor legislation (Buitrago, Ramos, Serrano & Pérez, 2019) and in

terms of compliance with contractual obligations, of which those related to the Occupational Health and Safety Management System are part and will be treated in this research.

On the other hand, the General System of Occupational Risks (SGRL) in Colombia, presents four main actors that are usually in conflict: 1) The worker expects the employer, the Health Promotion Entity (EPS) or the Occupational Risk Administrator (ARL), to recognize the assistance and economic benefits derived from an illness or accident; 2) The employer intends to avoid the responsibility to recognize these benefits and seeks that the EPS or ARL do so; 3) The EPS intends to transfer these costs to the employer or to the ARLs by associating the event with the workplace; and finally, 4) ARLs seek to argue that the origin of the event is not related to work activity (Torres & Torres, 2017). Therefore, the determinant aspects in the health of workers must be studied rigorously to develop preventive strategies to the causes of occupational diseases and accidents (García, 1999)

Hypothesis: The selection processes of human talent that include safety competencies affect the decrease in accidents of MSME companies in the manufacturing sector of the city of Dosquebradas

Methodology

The present research was conducted under the mixed approach. In the quantitative approach, a cross-sectional study was carried out, with a sample selected at discretion under intentional probabilistic sampling, seeking representation of different types of MSME companies in the manufacturing sector of the city of Dosquebradas. In the qualitative approach, the analysis was carried out with 5 semi-structured interviews with those in charge of the human management area focused on obtaining truthful information; from a hermeneutical approach; seeking the understanding and understanding of the selection processes of each company. To establish the universe and the sample, the research "Characterization of the business park of the municipality of Dosquebradas" carried out by Jaime Flórez Bolaños and Armando Gil Ospina in 2016 there is a population of 6202 companies of which 3.89% are from the manufacturing industrial sector with a distribution as follows: Metalworking 1.39%, Manufacture of wood products 1.26%, Manufacture of textile products 1.24%. This corresponds to approximately 241 companies. For the calculation of the sample was based on a simple random sampling method was calculated for a population of 241 companies with a confidence level of 95% (Z) 1.96, a standard deviation (S) 4, a variance (S * S) 16.00, a precision (d) 0.45, obtaining a sample size (n) 135 and a sample adjusted to the loss (R = 10%) 150 companies. The research technique used for data analysis is descriptive and analytical.

Description of the results obtained:

To analyze the selection processes of human talent of MSME companies in the manufacturing sector of the city of Dosquebradas, Risaralda in 2020 a questionnaire was used with questions 9 closed questions of multiple selection and 14 questions with affirmations and a Likert scale of 1 to 5 (very low, low, medium, high, very high).

Table 1

Multiple choice claims:	Yes	No	Don't know
2. The company is considered as a family business:	51%	46%	3%
3. If the above answer was yes, please indicate whether the manager of the company is the owner or is a member of the family that owns the company:	72%	9%	19%
4. In your organization there have been incidents or accidents at work during the validity of 2020:	88%	9%	3%
5. In your organization there have been fatal work accidents in 2020:	2%	98%	0%

Note. Own elaboration

Table 2. Results of Likert scale affirmations from 1 to 5

What companies say:	Very Low	Low	Middle	High	Very high
1. According to your perception the accident rate in your company is:	32,6%	40%	11,6%	13,7%	2,1%
2. The selection process in the organization is structured.	20,2%	8,5%	33%	33%	5,3%
3. La selection is made taking into account resumes sent by family and friends.	12,6%	22,1%	33,7%	28,4%	3,2%
4. La selection is made taking into account resumes sent by other collaborators and acquaintances.	10,5%	9,5%	38,9%	32,6%	8,4%
5. There is in the organization Job Profile and Functions Manual	9,5%	10,5%	32,6%	43,2%	4,2%
6. The manual of functions contemplates the skills and competencies required for the position.	10,5%	11,6%	23,2%	37,9%	16,8%
7. Job profiles have considered training in fundamental knowledge that favours the prevention of accidents at work.	10,5%	10,5%	24,2%	37,9%	16,8%
8. It is always checked that the resume of the candidates fits the profile of the position.	9,5%	9,5%	16,8%	44,2%	20%
9. In the selection interview, to choose the candidates for each of the jobs in the organization, self-care skills are taken into account, understanding this as the care of their hygiene, food, clothing and health.	9,5%	9,5%	22,1%	41,1%	17,9%
10. An interview is conducted with the candidate in order to know the history of accidents.	12,6%	11,6%	24,2%	36,8%	14,7%
11. There are systems to detect SPA consumption	26,6%	29,8%	10,6%	23,4%	9,6%
12. La company has a strategic planning articulated to the reduction of accidents.	15,8%	12,6%	21,1%	37,9%	12,6%
13. In the selection process it is taken into account that the candidate has knowledge in accident prevention.	12,6%	14,7%	24,2%	36,8%	11,6%
14. In the selection process, it is taken into account that the candidate has a perception of risk.	12,6%	12,6%	23,2	36,8%	14,7%

Note. Own elaboration

Accident data year 2020 according to the observatory of safety and health at work.

The economic sectors with the highest rates were: Agriculture, livestock, hunting and forestry (13.5), Mining and quarrying (10.4), Manufacturing (6.8) and Construction (6.4).

Discussions:

Most of the companies under study (51%) are considered family businesses. Of the companies considered as family, in a high percentage (72%) the manager of the company is the owner or some member of the owner family. Highlighting the tendency to maintain control and decision-making within the family in this type of organizations. In most of the organizations analyzed (88%), there have been incidents or accidents at work during the year 2020. Fortunately, only a small percentage (2%) of organizations have reported fatal workplace accidents during 2020. Compared to the perception of the respondents, the results indicate that 32.6% of companies perceive that the accident rate in their organization is very low, while 40% consider it low. 11.6% see it as a medium level, 13.7% as high and only 2.1% consider it very high. When reviewing the reality of the sector, it is found that accidents in the manufacturing sector occupied the third place in occupational accidents according to the observatory of safety and health at work, as observed in figure 1 with a rate of work accidents in Colombia year 2020 of 4.4 work accidents per-100 workers.

There is evidence of a perception of low accident rate compared to the accident rate reported by companies, while 88% of organizations have experienced incidents or accidents at work, the perception of companies shows a much lower percentage, with 2.1%. This suggests that companies may be underestimating the severity and frequency of incidents occurring in their work environments.

Regarding the selection process, the data reveals that 33% of organizations consider the process to be structured, while the perception of companies shows a lower percentage, with 5.3% rating it as "Very High". This indicates that there may be a lack of awareness or objective evaluation by companies about the structure and effectiveness of their selection processes. Regarding security skills and competencies, there is a relatively balanced approach in the consideration of skills and competencies required for the position, with 37.9% rating it as "High" and 16.8% as "Very High". However, the perception of companies shows a lower importance assigned to this aspect, with lower percentages in the categories "High" and "Very High". This could indicate a gap in identifying and valuing the skills needed for jobs within companies.

Finally, with regard to accident prevention, the data indicate that there is a significant consideration of education and training in fundamental knowledge to prevent accidents at work. However, the perception of companies shows a relatively low valuation in this area, with lower percentages in the "High" and "Very High" categories. This can mean lack of focus or sufficient investment in education and training related to workplace accident prevention.

Conclusions

Most of the companies under study are considered family businesses, with a high percentage of the manager being a member of the owning family. MSMEs are an interesting object of study not only because of their economic impact in the region but also because of their high accident rates, a situation that even the ILO has elucidated in its reports. indicating that micro and small enterprises have a higher incidence of occupational accidents and diseases compared to medium and large companies.

Although the perception of companies about accidents is low, real data show that 88% of organizations have experienced incidents or accidents at work. This suggests that companies may be underestimating the severity and frequency of incidents in their work environments.

There is a need to improve selection processes in organizations, since the perception of companies shows a low level of structuring compared to data, since there is a gap in the identification and assessment of skills and competencies related to safety at work.

Finally, the need to implement selection processes that focus not only on key competencies for the job but also on competencies towards safety is evident.

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