Toward a Design of an Instrument for the Selection of Leadership in the Management Levels

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Abstract

The competitive world in which we live, demands to have competitive organizations that adapt to the rhythm of the changes in both, national and international levels. Due to it, is required to have highly prepared leaders mainly in the directive and managerial levels, because they are the ones who should head the administrative processes of the company. Largely, the success of organizations depends on having directive elements with leadership abilities.

Therefore the management function of human resources, by means of the personal selection process, should choose the suitable candidates, to occupy executive positions.

Considering there are scarce tests validated for our population in México, it is identified the necessity of designing a test to measure the main features that an executive should have in relation to the requirements of the position to be filled.

Keywords: instrument, leadership, psychometric methods, human resources, organizations.

Introduction

Contextual Framework

Organizations are social systems that exist to satisfy our necessities. No human being escapes from them. One is born, studies, works, has a good time, etc. inside them. People need of organizations and these need of people.

The concept of systems, results from a derived development of the search that man kind constantly carries out, to reach knowledge of itself and of the means that surround it.

The theory of systems, integrates the knowledge of several specialization fields, aiming that the system, as a whole, can be better understood.
By virtue that the present article's object of study, is conformed by the selection process of personnel in charge of the human resources department and the design of an instrument that supports this process to identify leadership, the importance of each one of these elements inside the organizations view as social systems or of human activity is approached.

Psychometrics had its origin at the end of the XIX century, with the creation of the first tests to detect mental delay. However, it wasn't until after the First World War and during the Second one that it had peak, because of the creation of selection tests for the military personnel (Anastasi, 1970).

After the end of the War, in the United States they continued applying and developing instruments for personnel selection in industry.

Nevertheless, from the intelligence tests Stanford-Binet, until the personality projection test and more recent the Cleaver, they have been created mainly in the United States of North America.

When checking the psychology schools libraries of the main Mexico universities, such as: The UNAM, THE IPN, THE IBERO-AMERICAN and THE ANÁHUAC UNIVERSITY, it can be sadly proven that they continue to apply the same tests from more than 60 years ago, to measure personality, intelligence, abilities, and aptitudes mainly. However, these tests provide isolated results according to what they measure, and don't provide direct information about the specific characteristics toward work behavior.

Although there are tests in software from private firms for sale, these foreign tests haven't been validated for our country.

Likewise, when carrying out interviews with human resources managers of different tourist companies, it was found that most use few Psychometric instruments and that they don't know neither new instruments nor any with validation for the Mexican population.

Justification

One of the tools that the human resources department uses to identify the required profile, is the psychometric test, such tests have not evolved in content nor in versatility ever since the Second World War. In addition to this, the great majority of those tests is of foreign origin, and those that are developed for the Mexican population are scarce. In these cases the private companies generally hire firms that design their tests exclusively for them.

The psychological test is a measurement instrument, a pattern that is applied in constant and systematic way to measure a behavior sample. As well as an school exam measures a sample of knowledge, basically, a test is a sample of a person's behavior, reason why some of them are more representative of the behavior than others (Schultz, 2000).

Based on the research antecedents and on the previously mentioned, the interest to design an instrument that supports the process of personnel's selection for the high directive of the companies in México, arises.
Objective

To design an instrument for personnel's selection that identifies features of leadership in the managerial levels and on the high direction of companies.

Development

Theoretical-conceptual Framework

Human being has discovered through history that isolated survival isn't possible, instead, continuous interaction with fellow men is needed. In the human interactions, both sides relate and support mutually to satisfy their primary and secondary necessities. Once the Industrial Revolution arose, the changes in people's lifestyle also did, so occurred the displacement from the fields and hand workshops, to the industries.

Series and mass production arose, which forced workers to coordinate their efforts, to achieve the objectives of these industries, by means of the work division and the scientific administration.

Therefore, administration's bosom is where the "organization" concept arose, applied to all company type where a coordination effort is required, to achieve mutual interest objectives.

This way, the modern organizations have the following characteristic:

" They arise inside an environment compound by society, the surrounding of a country and of the world.

" They satisfy different kinds of necessities of the society where they are created.

" The basic concept that underlies the organization idea, is the one of an efforts coordination whose objective is the mutual help.

" When coordinating the activities, their equitable distribution is required, in function of the specialty that supports each member. As previously mentioned this distribution is called: work division.

" The necessity of an authority hierarchy joins the activities coordination and the work division.

" The organization refers to "structure", this might be the most typical part of the elements that correspond to the administrative mechanics.

" The organization constitutes the final data of the static or mechanics aspect. It tells us in short, how and who will perform each function and activity. When the organization is
constituted, the administrative process of integrating, directing and controlling begins in order to achieve its objectives (Chiavenato, 1999).

"The organizations are systems because they conform with several elements that are related and affected among each other, they pursue a common objective, they are developed and interact in a context or environment.

Traditionally, the only characters recognized as participants of the organizations, were their proprietors, their administrators and their employees. However, the modern organization (includes diverse forms of organization: church, clubs, universities, hospitals, industrial and commercial companies) requires of a structured process in which the different interacting individuals don't only do so to achieve common objectives, but rather they influence the processes of decisions making in the organization. In this sense, the members of the organization are:

a) Managers and employees.
b) Suppliers (of prime matters, human resources, capital, credits, financing, etc.).
c) Consumers and users.
d) Government.
e) Society.
f) The world

As it can be observed, the organization is a type of social project, in which several resources are gathered to achieve certain objectives. Without resources these cannot be achieved. The resources are the means that organizations possess to carry out their tasks and to accomplish their goals; they are goods or services used in the execution of the organizational works. The inputs are necessary to elaborate the final product or the service given by the organization, as it happens in the tourist organizations.

In general, when speaking of resources, only money, equipment, materials and personnel come to mind. However, the human resources are extremely complex and diversified. Resources in general can be classified in five groups:

1) Physical or material
2) Financial
3) Human
4) Market
5) Administrative

All these resources, are required to get in the environment, they're also required to apply them inside the organization's system, to maintain them, to develop and control them so that the system is effective and efficient in the objectives achievement. Therefore, all of them are extremely important, however besides the fact that the organizations cannot exist without people, they are also the only alive resources able to process the other defenseless resources.
Considering that people, are the most valuable resource in the whole organization, because without them, the other resources could not be administered, is important to point out the techniques used in this area:

" Personnel recruitment
" Selection
" Integration
" Performance evaluation
" Training
" Human resources development

The selection of managerial personnel, is the process that opens the entrance door to people to work in the organization; it is the stage where the best element for the suitable position can be chosen or where problems can be "hired" as a consequence for not having chosen the best candidate.

The managerial personnel selection is important for three fundamental reasons:

First, the manager's performance will largely depend on the subordinates' performance. The employees that don't have the appropriate characteristics, won't act with efficiency and, therefore the manager's work will be affected. Reason why, the moment to reject inadequate people is before they have entered, not afterwards.

Second, an efficient election is important due to the cost that recruiting and hiring employees has.

Third, a good selection is important due to the legal implications of doing it in a negligent way (Dessler, 2000).

Considering as well that every organization was created to achieve objectives in an efficient and effective way, managers are the ones who hold the biggest responsibility for it, by means of the administrative process application with his/her personnel. They are who should plan, organize, build a work team, direct and control. All this by means of the personnel's coordination, based on his/her leadership competences.

For the above-mentioned, the manager with leadership is one of the key figures for the good operation of the organization, and why not to say it, to achieve its success.

Being the manager who directs and coordinates the subordinates, he/she has to possess a series of characteristic that favor the personnel's motivation in the performance of their functions. He/she should have leadership, commitment to the task as well as to people and mainly, should apply a contingencies approach to respond to the vertiginous world of changes that we face because of the globalization.
Currently, we cannot speak of high direction, if we can't count on executives with high formation in the directive and managerial levels (Helmut, 2003).

Direction is a process for the total operation of the organisms. Each one of these should have a function that is denominated high direction or management whose responsibility consists in: providing guidance and coordination, as well as to set the guidelines inside which the progress must be achieved based on decisions making.

Therefore, the organizations should identify certain basic characteristics of leadership in the candidates to hire them for their executive positions or to train and develop personnel's aptitudes that could ascend to those positions.

Methodology

The systems paradigm will be used for the development of the research. If divided in phases the investigation as part of a cybernetic process, we can locate the methodology of soft systems by Peter Checkland and the methodology of psychological tests construction by Frederick Brown (figure1), both in the development part or in the instrument design part.

Figure1. Investigation Cybernetic Model.
Source: Adapted from Tejeida & Badillo, 2003
With the model's support, we can observe that the development is simplified to two parts that are: analysis and design. In the analysis part, the problem is diagnosed and based on the results of the current situation, identifying the illness subsystems to assist them and to improve the results of the design.

The methodology of Checkland can be synthesized, as a process of seven analysis stages where applies the concept of human activity system is applied, as a mean of accomplishing so much to investigate the situation, as to taking actions to improve it.

The logical sequence represents the pattern of activities to follow and not necessarily in that sequence. Their application for the utility of all, and each and every one of their steps isn't restricted either, but rather these are adapted and their sequence according to the problem to solve.

In the design part Brown's methodology will be used, this one is a methodology that defines the development process of psychological tests. It uses as much the statistical reasoning as the logical one and balances the practical considerations with the theoretical ones. It centers its objective in developing a technically appropriate instrument, within the practical limitations (Brown, 1980, 20).

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**Figure 2. Methodology for the psychological tests elaboration.**

Source: Adapted from Brown, 1980.
Description of the Non Structured Problem

With the documental information analyzed until the moment in this research, we can establish a first vision on the elements that intervene for the conformation of the instrument.

Figure 3. Definition of the system

Analyzing the theory and existent concepts about leadership and with the support of the Checkland and Brown methodology, the conceptual model was conformed by 6 dimensions to be considered in the design of the leadership instrument such dimensions are: decisions making, communication, systemic vision, necessity to face new challenges, work groups building and creativity. These are key aptitudes in a good leader. Next the model is shown:
Figure 4. Conceptual Model of the leadership dimensions.

As it had already been mentioned, this article is a synthesis of a research work in process; in such work, the managerial levels of great tourism hotels in Mexico City, were established as the case of study. The measurement will be made in this sector once the instrument has been conformed.

For this reason and with foundation on the analyzed theoretical and contextual, as well as the proposed methodological frame, the following general hypothesis of investigation was defined:

Hg: The results of the instrument designed for identification of leadership, will be highly related to the results of the performance evaluation of the great tourism hotel managers of Mexico City.
For the confirmation of the investigation hypothesis the study variables will be defined and operated based on the relevant systems that arise from Checkland’s methodology and on the designed instrument based on Brown's methodology.

**Conclusions**

The combined use of a specialized methodology for the psychological tests development and a systemic methodology, offers an enlarged vision, which allows to have a better development in the design of the instrument. Prove of it, is the definition of the dimensions in the conceptual model.

The opposing dimensions are indispensable aptitudes that the personnel of managerial level inside the companies should have.

The final design of the instrument will be completed once the pertinent reagents have been built following Brown's methodology.

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**References**

Academy of Management Executive (2005) Book Reviews: And Dignity for All: Unlocking Greatness throug Value-Based Leadership.. Vol. 19 No. 1