

Organizational learning model (OLM) for small and medium-sized enterprises (SMEs): the manufacturing industry case in Chile and Colombia

Modelo de aprendizaje organizacional (MAO) para pequeñas y medianas empresas (PYMES): el caso de la industria manufacturera en Chile y Colombia

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ABSTRACT:

This article analyzes the OLM proposal aimed at identifying the main characteristics of individual behavior that facilitate learning in the SME manufacturing industry in Chile and Colombia. The multiple comparative case study applied between the two SMEs of the chemical sector according to the Theory of Action, shows more individual behaviors that facilitate learning in Chile than in Colombia. This study contributes to the characterization of learning to increase the generation of knowledge in the Latin American manufacturing industry.

Keywords: Organizational learning; Chemical industry; Organizational performance; Small and medium-sized enterprises.

RESUMEN:

Este artículo analiza la propuesta OLM dirigida a identificar las características principales del comportamiento individual que facilitan el aprendizaje en la industria manufacturera de las PYME en Chile y Colombia. El estudio de caso comparativo múltiple aplicado entre las dos PYME del sector químico de acuerdo con la Teoría de la Acción muestra más comportamientos individuales que facilitan el aprendizaje en Chile que en Colombia. Este estudio contribuye a la caracterización del aprendizaje para aumentar la generación de conocimiento en la industria manufacturera latinoamericana.

Palabras clave: Aprendizaje organizacional; Industria química; Desempeño organizacional; Pequeña y mediana empresa

1. Introduction

Theoretically, the OL context is a concept that began to develop with Taylor at the beginning of the century, being consolidated in the 60s and 70s. During the 80s and 90s it had a major development, generating multiple works, which denote its growing importance Martínez, (2001). The OL has been approached from different perspectives of study and theoretical foundations by authors such as Cyert & March (1963); Gardner (1963), Cangelosi & Dill (1965); Argyris & Schön, (1978); Fiol & Lyles (1985); Levitt & March (1988); Huber (1991); Senge (1990); Nonaka (1994); Nonaka & Takeuchi (1995); Nevis, DiBella & Gould (1995); Davenport & Thomas (1998), including the systemic deepening in the recent works of Senge (1990). However, there are very limited models that identify the characteristics of behavior through individual learning. This study proposes for identifying the characteristics of individual behavior the use of a model that seeks to understand OL as the link between two aspects; firstly in learning and organization, with learning being a biopsychosocial process through which the subject modifies his behavior and develops or acquires new forms of action (Palacios, 2000). Secondly, organization as a social group or system formed by people, tasks and administration, which interact to fulfill their objectives (Smircich, 1983); (Gómez, 2006) for create learning into the organizations. Consequently, OL is a joint process that implies changes in the knowledge and behavior of the individuals when adapting to the environment, having the capacity to transform it, and is related to the Theory of Action of Argyris and Schön (1978) regarding the change through the possibility of conceiving the individual as a being that determines its actions, performs them and then evaluates the relevant results. The limitation of the study were the number of companies and the selection bias for the ability to access more companies to apply it, taking into account that the cultural aspect of employer evaluation by employees is not a common activity and there is little or no formal evidence of their management.

The OL has created a progressive emphasis on the transformation of organizations by themselves, a key issue for their survival and growth (Leitch, Harrison, Burgoyne, & Blantern, 1996). The predominant paradigm in business environments privileges the learning and development of skills that can be observed, quantified and systematized, turning the human being into an entity that teaches and learns with a clear competitive advantage within organizations, even though the general OL theory continues to be built because of its multidisciplinary. In this way, information is generated at work by

addressing some empirical data of the characterization process of OL, using as a basis of analysis the Theory of Action of the model (Argyris & Schön, 1978); (Sánchez & Rojas, 2005) with the proposal of Cortes (2008) (2014) and Jimenez (2012). The application of this study was in manufacturing companies located in Chile into the Araucanía region and Colombia, in the Antioquia zone. Qualitative analysis was used to generate deeper knowledge about the characteristics of the OLM process while identifying the elements that report an internal improvement in the SMEs and contribute to their development in different cultural environments because according to the literature companies that learn they have better results and are more competitive into the markets.

1.1. The Theory of Action

OL is a field of both academic research and professional practice, whose origin can be traced back to the works of Cyert & March (1963), Cangelosi & Dill, (1965), Simon (1971) and Argyris & Schön (1978). When the theory of Organizational Learning is mentioned, researchers Chris Argyris and Donald Schön are necessarily cited due to their work Organizational Learning, that contributed with concepts such as learning the Simple or Unique Loop, and the Double or Complex Loop (Cortés & Pérez, 2008). Despite the growing conceptual literature on OL, there are few validated instruments to measure it and the existing ones arise from very different conceptual frameworks, according to the arguments of Garvin, cited in Castañeda & Fernández (2007). Therefore, it is necessary to emphasize that according to Garvin (1993) an organization that learns is an organization of experts in creating, acquiring and transferring knowledge, modifying their behavior to reflect new knowledge and points of view. Two aspects are identified in the analysis of the OL, the first one is the theoretical and the theory most used for its understanding is that of Argyris & Schon (1978), which later combines with the contribution of Reich (1984), mentioning the changes in the industrial production structure of the United States of America (USA), as well as those referring to the creation of business knowledge generation (Nonaka & Nonaka 1994; Garvin, 1993) addressing the construction of business organizations in the face of globalization. The second is the practice of how organizations learn from experience (Levitt & March 1988) or indirectly through leadership (García-Morales, Jiménez-Barrionuevo, & Gutiérrez-Gutiérrez, 2012). The Argyris and Schön model is based on the adaptation and transformation of the environment that were the basis for the construction of the analysis carried out by Jiménez (2012). In Model I (MI) or single or unique loop learning, the organization obtains information from the environment to make decisions of adaptive characteristics to it (Pérez & Cortés, 2007); in this cycle, it is not possible to generate competitive advantages, being understood as the model that inhibits learning. Single or unique loop learning contributes to an organization's knowledge and competencies but without altering its objectives, strategies or mental maps (Janson, Cecez-Kecmanovic †, & Zupančič ‡, 2007). It is an apprenticeship by reaction, mechanic, made of orders and obedience, respect for established structures and the commitment to maintain it in every decision that is made, therefore they do not question issues that could become potentially threatening, risky or tense (Cortés, 2014). According to Argyris, cited in Maya, Pérez, & Giraldo (2009) this learning, called Simple Loop, occurs when the members of the organization respond to changes in the internal and external environments of the organization by detecting errors and then correcting them, in order to stay within the central features of the theory in organizational use. The Single or Unique Loop refers to the fact that workers perform their activities monotonously (Jiménez, 2012) and argues that there are no changes, improvements, or optimization of processes. This can negatively affect the learning process of the employee because the activities are routine, without creativity and innovation. This type of learning is observed when the tasks are routine and repetitive; the individual behavior generates a result in an eminently linear dynamic.

Model II (MII) or Double Loop or Complex learning is the facilitator of learning, and it increases the learning mechanisms to move to a more strategic level. This learning is more difficult to achieve because it creates more meaningful learning which generates competitive advantages. The Learning responds to different levels according to the loop where they are and the intentionality associated to each one, an "inhibitor" of Organizational Learning will be (O-I) and a "support" will be (O-II) of Organizational Learning to achieve an organizational dialectic. If the situations demand non-programmable actions, learning must move to a higher level and assume behaviors that are described in the Double or Complex Loop Model (Cortés, 2014). The Double Loop Learning, unlike the Simple Loop, allows for changes in the processes, innovation, generation of new processes, therefore, this type of learning is more strategic than operational (Jiménez, 2012). Snell and Man Kuen Chak, cited in Georges, Romme & Van Witteloostuijn (1999), argue that this learning manifests itself as a process of transformation of changes in the knowledge base and competencies of the organization.

The Double or Complex Loop is the learning in an organization where the error detected leads to the evaluation of the foundations, structures, policies, values and organizational objectives to be modified. Furthermore, according to Cortés (2014), when the error is attributed to a design strategy, its solution will be given by the same regulatory variables of the original design -Simple Loop-, but if the error is diagnosed as a discrepancy, its solution implies the modification of these, as consequence of the behavior of the individual, group or organization and provides the bases of an innovative solution. Double-loop or complex learning is one of the success factors that lead to a deep change or a more real change, that is, it generates new behaviors and new ideas based on new underlying assumptions, values, beliefs and goals (Rachtham & Kantamara, 2014). For Argyris, cited by Maya et al. (2009), the organization should learn to learn and increase its learning potential continuously. Therefore, the highest level at which an organization can aspire is linked to the ability of learn to learn.

The theoretical basis of Argyris and Schön (1978) is based on the characteristics of OLM proposal in MI of organizational learning, with thoughts and actions leading to unrecognized inconsistencies and error processes. It allows the achievement of a type of learning such as changes in strategies and even rules of action, however, the presence of such a model tends to prevent and inhibit the achievement of a greater depth learning and persistence in humans, such as those related to changes of beliefs, principles and values (Sánchez & Rojas, 2005). Argyris and Schön, cited by Ricardo (2004), argue that when the actor behaves in his practice according to MI, he tends to act unilaterally towards other people and protectively towards himself. If successful, such behavior controls other people and closes the actor to his influence. Finally, model I inhibits effective learning because it promotes behaviors of the action that are incongruent with the thoughts of individuals (Cortés, 2014; Fornari et al, 2017). In addition, for Suñé, cited by Jiménez (2012), about this model describes the coherence between the attitudes and thoughts of people (adopted theories) with respect to their values and beliefs -exposed theory- in use which is expected to reduce the negative consequences of MI while increasing growth, development and effectiveness (Ricardo, 2004). Argyris and Schön cited by Cortés (2014) argue that MII also tries to satisfy regulatory variables, for this case it is defined that information has to be validated where the choice is free and informed, without information there is no choice: a choice is informed if it is based on relevant information, this means that the individual feels that he is responsible for his choices. The individual is committed to an action because it is intrinsically satisfying and is not, as in MI, committed because someone rewards or penalizes him for being committed. The strategies associated with MII involve sharing control and information with those individuals who have the competencies and who are relevant in the development and implementation of the action (Cardona, 2006). The strategies for action that are followed by individuals with the aim of satisfying the regulatory variables of MII, as described by Cortés (2014), are to design and manage the environment of bilateral tasks: control over any situation must be shared if all individuals experience free choice and internal commitment with the situation, and the protection of oneself or another must be made a joint operation. In this sense, according to Argyris, cited by Jiménez (2012), the challenge of M II (Vilorio, 2006) is to help the individual to transform their adopted theories into employed theories, encouraging them to learn new skills and new regulatory variables. From these two exposed models, the four main categories of the work carried out by Jiménez (2012) were selected, these categories are related to the learning in the organization and are deduced from the theoretical referents carried out in the work that mentions them (see Table 1).

Table 1
Relationship Deductive and Theoretical Referents with Questions.

N°	Main Categories	Concept	Theoretical Referents
I	Management Style	<p>The manager of an organization is defined as the person who achieves objectives through the work of other people. The manager has a management style that marks the relationships between management and subordinates.</p> <p>1.-How do you describe the relationship in terms of the communication you have with your boss? 2. - What are the methods used by your boss to achieve the objectives set by the company? 3. - What action does your boss take against his/her mistakes? In the instrument adapted to Chile, changes were made to questions 1 and 2 from the original Colombian proposal, respecting the contents but using other words to pose the questions.</p>	Simple, double loop learning. (Raineri, 2006)
II	Employee Participation in the Decision Processes of the Organization	<p>It is important within the learning process of an organization that employees feel heard, valued and taken into account. This category develops the perception of employees regarding their participation in decision-making, in the formulation of ideas and suggestions within the Company.</p> <p>4. - On what aspects of the company do you have to make decisions? .5. - In what ways can you participate in the decision processes of the company? 6. - Have you given any suggestions to the company? If so, which ones have been developed? Only question 6 was modified to make a double question.</p>	Simple, double loop learning. (Jiménez, 2012).
III	Stimuli and Sanctions	<p>The organizations develop incentive programs and sanctions, and achieving goals supposes an incentive (economic or non-economic) while an error in the process implies a sanction.</p> <p>7. - What incentive programs do the company have to reward its good management? 8. - What actions does the company take when an employee makes a mistake? 9. - What incentives does the company offer for the generation of innovative ideas and improvement?</p>	Simple, double loop learning. (Cortés, 2008).
IV	Employee's Management - Job Position	<p>It implies the management developed by the organization in the performance of the worker in his job position.</p> <p>10.-What kind of training has the company provided, for how long and how was this experience?</p>	Simple, double loop learning. (Jiménez, 2012).

Source: Own elaboration, 2019. Based on the theoretical review work of Argyris & Schön (1978), Raineri (2006), Cortés (2008) and Jiménez (2012).

1.2. General Overview of the Manufacturing Industry

Currently, manufacturing industries worldwide are considered as a potential indicator for economic development, with a positive side effect on societies, policies and cultures. In general, according to Rebolledo, Duque, Ángel, & Velasco (2013), industrial activity is understood as the result of productive operations dedicated to the transformation of raw materials into products for final or intermediate consumption.

According to ECLAC (2017), the manufacturing sector has continued to be one of the main sources of expansion of the world economy in recent decades, despite the advance of services, particularly in the digital economy. ONUDI (2016) affirms that the manufacturing sector has a key role in the long-term structural change. In particular, Rebolledo et al. (2013) maintain that it is a source that generates competitive advantages focused on innovation and technological development; the organization of productive processes; the adaptation of the consumptions to the new processes; and cultural conditioning with export orientation. They also generate differential effects on employment, wages, technological modernization, sustainability at different stages of development and usually from labor intensive activities to more capital and technology intensive activities. The manufacturing industry in Chile and Colombia are based on the classification of ISIC it covers the physical or chemical transformation of materials, substances or components into new products. In Chile there are 3,924 companies related to the manufacturing industry, Rev. 4 (INE, 2015). Colombia has 8,466 companies in this sector (DANE, 2017). The Chile total GDP of the country was 158,637 billion pesos of which 19,830.15 corresponds to the manufacturing industry during 2015 and representing 12.5% of the country's total GDP. In contrast Colombia showed a GDP of 855,432 billion pesos and 99.246 corresponds to the manufacturing industry representing 11.6 % of the GDP (DANE, 2018).

The Araucanía Region (IX) is located in the South of Chile, and is composed of two provinces: Malleco, made up of 12 communes, and Cautín with 20 communes. With regards to the industry in the region, according to INE (2015) there are 121 companies related to the manufacturing industry. Based on the classification of ISIC Rev.4 for the region, it represents the most important one as generator of economic growth. On the other hand,

Antioquia in Colombia is one of the 32 departments with 125 municipalities. In 2015 has 1,898 companies (Gobernación de Antioquia, 2016).

The reasons behind the importance of studying the knowledge management processes and the OL according to Teles, Alves, Giuliani, Oste, & Rueda (2010) and Garzón & Fischer (2010) are that organizational learning makes sense due to the creation and valuation of knowledge for economic development and productivity, with the promotion of organizational learning being strategic in the organizations, since human capital is a main source of differentiation.

2. Methodology

The methodological procedure adopted was according the research strategy a multiple case study, which is considered for exploratory studies, creation of hypotheses and theories or new areas of research (Yin, 1994). The external validity was through Multiple cases were selected for robustness the results (Voss, Tsirikrisis, & Frohlich, 2002). In relation to the selection of information and data collection procedures from primary and secondary literature sources on OL was done according to Hernandez et al., (2014), with the compilation and analysis of the relevant documentary material from secondary sources about the OL. It is rescued the analysis case using the proposed design of Cortés (2008) and Jiménez (2012) from the structure of a semi-structured in-depth interview according to Taylor & Bogdan (1992) that allows identifying the elements that measure the Personal or Individual Behavior variable within an organization, and the codification of the categories based on models MI and MII (Argyris & Schön, 1978) in the context of a manufacturing company of the chemical sector in Chile and Colombia. This description, analysis and identification of the OL process was carried out through the qualitative content analysis technique of verbatim transcription, identifying the learning model that predominates regarding the identification of behaviors that facilitate or inhibit individual learning (IL). The methodological design applied was research by explanatory approach. The deductive method was linked to reference the learning categories through the theory. When applying deductive logic, the Theory of Action is used, and central elements of variables and categories are used (Ruiz, 2012). In order to meet the objectives of the research, a design that describes and analyzes the representative aspects of the learning process of a company in the manufacturing sector was taken through the experiences, behaviors and words in the IL process in Chile and Colombia. The aim is to specify properties, characteristics and profiles of people, submitting them to an analysis (Hernández et al., 2010) in a transverse temporality to describe variables and analyze their current incidence and interrelation.

2.1. Participants and instruments

The manufacturing company in Chile studied had a total of 40 employees, in Colombia (there is not an exact number). The employees in Chile 27 of them are operatives and 13 are administrative staff. Regarding the role of the researchers, all data collection was performed by two researcher's one in Colombia and other in Chile. In Colombia was permitted the application only at selected employees. In Chile participated in the research four volunteer workers, two workers and two administrative staff. In Colombia were selected four people too. The piloting of the instrument to create the OLM was made through a deep semi-structured interview based on Creswell (2012) and Seidman (2006), originally carried out by Cortés (2008) and integrated and extended in Jiménez (2012), adapted and validated in Chile by two experts related to the business and educational areas. The application of the instrument was randomly and voluntarily collected, according to the characteristics of the organization and its environment and the different problems linked to time and cost issues. The interviews were recorder and transcribed for later analysis. At the beginning each interviewed lasted an average of 60 minutes – they were applied on different days per person – and during the second, there was a cost due to separating the work area, in this case the immersed problem of having been carried out outside the company during working hours is immediately perceived (so that the operators and/or administrators could respond without feeling distrust or emotional pressure). Jiménez (2012) also applied the instrument outside the company's facilities in Colombia, to guarantee the anonymity of the subject and the confidentiality of the information. Furthermore, as part of the technique, the instrument is not applied to the general managers in both countries because their role in the company. The interview in Chile was conducted in June 2018 in the target population of the research, located in the Cautín Province (BCN, 2018). The instrument was applied to voluntary subjects, feeding back the information with them, in a relaxed way. Subsequently, in the analysis and interpretation of data, content analysis was used following the steps proposed by Creswell (2012), the representative aspects of the OL process in the organization of the manufacturing sector in Colombia and Chile were studied, highlighting aspects of the characterization from individual learning (IL) (CEPAL, 2017). Regarding reliability, validity and generality, we used appropriate strategies according the recommendations, procedures and considerations of Yin (2010). The instrument for gathering information regarding the IL within the organization is composed of four subunits or categories described in Table 1, as reported by Jiménez (2012) and Cortés (2008) and based on the Argyris & Schön (1978) models. They consist of a total of 10 items, which can be generated from the theoretical literary information, with these categories having measures that go from the IL to its integration with the proposal OLM in the results see Table 1.

2.2. Procedures

The volunteers for the interviews were four people in Colombia and Chile, corresponding to two hierarchical levels in the organization; operational level (code 1) and administrative level (code 2). It is worth mentioning that other existing hierarchies can be identified, however, only the main characteristics were considered. The code will maintain the order described above throughout the investigation. The semi-structured interviews, on the other hand, are based on the guide of items or questions previously shown, and the interviewer is free to introduce additional questions to specify concepts or obtain more information on the desired topics (Hernández et al., 2010). This type of interview was used in order to understand to a deeper level the current status of the workers of the organization studied in relation to learning, in addition to the veracity of the information, confidentiality, as well as the anonymity of the interviewee. Each of the interviews was recorded outside the company in an audible file, for a better information management. Then it was transcribed into a Word document to facilitate the managing, reviewing and analysis of the data. Subsequently, the information was analyzed, and the behaviors described by the workers interviewed were identified, and the information is then related to the categories and the theory described in the research. Tables No. 2 and 3 are presented below, which allows us to identify and categorize each of the responses according to the content analysis through the verbatim technique, where it is selected according to the behavior response, identifying and registering the information in a Word document.

Table 2
Codes for Measuring the Behaviors of Model I.

Code	Behavior	Theoretical Concept.
1a	Strive to have unilateral control (emphasis on control and concentration of power).	- Simple, double or triple loop Learning. - Barriers to learning: Sweeten the truth (Van de Ven and Polley).
1b	Strive to demonstrate total knowledge about their activities. (Emphasis on arguing that you are always right).	- Simple, double or triple loop Learning. - Barriers to Learning: The myth of infallibility (Geranmayeh).
1c	Expression of negative feelings (Fear, disappointment, boredom, pressure, irritability).	- Simple, double or triple loop Learning. - Barriers to Learning: Organizational discomfort (Argyris). Illusion of taking charge (Senge).
1d	Considering the processes and routines followed as the only means to obtain results.	• -Barriers to Learning: Superstitious learning and competition traps (Geranmayeh and March and Leavitt).
1e	Adoption of own strategies in the exercise of tasks.	- Barriers to Learning: The illusion of learning with experience (Senge), The pathology of information (Probst and Buchel) and dilemma of learning (Lounamaa and March).

Source: Own elaboration, 2019. Based on a theoretical literature review (Jiménez, 2012 and Cortés, 2008).

The verbatim figure will support the analysis with the exact same words originally used by the interviewees (Oxford Dictionaries, 2018). Each verbatim will be set to a code to corroborate where the information comes from, this code will be described as follows: category, hierarchical level, question category and interviewee. The construction of the code to analyze the behavior of MI or MII is done taking into account two characters. The first one, of a numerical nature, indicates the model to which a behavior belongs. The second, of an alphabetic nature, corresponds to the defined and disaggregated behaviors as part of the categorization in each of the models; MI and M II (See Tables N ° 2 and N ° 3). These codes will be contrasted with the information obtained in the interviews and with the deductive categories.

Table 3
Codes for Measuring the Behaviors of Model II.

Code	Behavior	Theoretical concept
2a	Dynamism in the decision making of the organization (Effort to actively engage in the changes of the organization).	Double loop learning. (Argyris & Schön, 1978)
2b	Analysis and evaluation of the error (It leads to feedback and structural changes).	Lundberg (1989)
2c	Search for being informed, communicating ideas and sharing insights.	Garrett (1990)
2d	Remove obstacles (Emphasis on providing resources, information and materials to those who learn, promote and create formal and informal opportunities that help the growth and development of employees, putting themselves in the place of the other to change expectations).	Cortés (2008).

In this methodology, the behaviors of MI and M II were codified. The interviews are linked to two hierarchical levels within the company, categorized with the number of respondents 1, 2, 3 and 4. According to the number of interviews, numbers 1 and 2 correspond to workers at operational level * (not involved in administration), while numbers 3 and 4 correspond to workers at administrative level ** (Involved in the administration with rank of average command). Tables 2 and 3 show MI of Argyris & Schön (1978) and MII, respectively, according to the answers obtained regardless of their hierarchical level. This refers to registering the code for each response of each participant (it is suggested to use two differentiation colors in the analysis, green for the elements that favor and red for those that inhibit learning.) At the end the results per participant are added to determine whether type of MI or MII prevails in the company according to the response criteria in each of the interviewees that determine the differentiation ranges. In this multi-case study does not aim to generalize results, but to provide an empirical contribution to the subject of study (Yin, 2012). Finally, it is mentioned that researchers from both countries followed the ethical principles of explaining the intervention and requesting permission from the directors of the companies to be able to conduct interviews with employees.

3. Results

The information obtained in each of the categories is contrasted with the behaviors that facilitate or inhibit learning according to the model of Cortés (2008) and Jimenez (2012), based on MI and MII of Argyris & Schön (1978), see Table N ° 4.

Table 4
Models Model II Behavior
Results Matrix and I.

Categories	Interviews				Num. Behav. Mod. I	Num. Behav. Mod. II
	1 Operator	2 Operator	3 Administrative	4 Administrative		
I.- Management Style	Chile (CL) 2c, 2c, 1d, 2d, 2b	2a, 2c, 2b, 1c, 1c	2a, 2c, 2b, 1e	2b, 2b, 2c, 2c	CL 4	CL 14
	Colombia (COL) 2c, 2a, 2b, 2d, 1a, 1a, 1a, 1 ^a	2c, 2a, 2b, 2d, 1a, 1a, 1 ^a	1a, 1c, 1b, 2c, 2b, 2c	1a, 1b, 1d, 1c, 1e, 2c, 2b	COL 13	COL 12
II.- Participation of the Employee in the Decision-Making Processes of the Organization	CL 2a, 2a, 2a, 2b, 2c, 2c.	2a, 2a, 2c, 2c, 1c	1a, 2a, 2b, 2c, 2c, 2c	2a, 2a, 2c	CL 2	CL 18
	COL 2c, 1a, 1e, 1d, 2b	2a, 2c, 1a, 1e, 1d, 2b	1e, 2a, 1a, 2c, 2a	2a, 2b, 2c, 1a, 2d	COL 9	COL 12
III.- Stimuli and Sanctions	CL 1c, 1c, 1c, 1e	1c, 1c, 1d, 2b	1c, 1c, 1d, 2b	2a, 2b, 1c, 1e, 1d, 2d	CL 13	CL 5
	COL 1c, 1a, 1b, 1d, 2a, 2b	1c, 1d, 1a, 1b	1c, 1a, 2d, 1a, 1b	1c, 2b, 1e, 2d, 1a	COL 15	COL 5
IV.-Employee's Management Job-Position	CL 2c, 2d	2c, 1c	2c, 2d	2c	CL 1	CL 6
	COL 1c, 1e	1c, 1e	1c, 1e	1e, 2d	COL 7	COL 1
Total					Mod. I CL 20 COL 44 CL 31.75% COL 59.45%	Mod. II CL 43 COL 30 CL 68.25% COL 40,54%

Source: Own elaboration, 2019. Based on the transcription of interviews carried out with employees of the manufacturing company, according to Cortés (2008) and Jiménez (2012) in Chile (CL) and Colombia (COL).

According to Alcover & Gil (2002), the learning is into adaptive rational system from experience, and is considered the result of a process of reflection and maturation. Argyris and Schön cited by (Cardona, 2006) and Cortés (2014) used model I and II, because are based on theories of action. The first refers to what individuals say they follow, and it is based and on beliefs,

values and attitudes. The second is the one that really applies; it is consistent with the facts, even though it sometimes gets distant from what has been exposed in line with Cardona (2006).

4. Conclusions

The analyzes carried out and the testimonies given by the interviewees reported scarce evidence of behavior towards MI (inhibitor of learning) when compared to MII (facilitator of learning). Only the category "stimuli and sanctions" showed behaviors associated with

Model I, this propensity focuses only on the incentives that the company gives to its workers in Chile. In Colombia "stimuli and sanctions" was the same that Chile.

Through this recapitulation of behaviors associated with MI, a lack of management of the administrative staff towards their employers is evidenced, mainly for not requiring incentive programs for the staff and limiting new learning opportunities through incentives for good management, support and promotion of innovative ideas and improvements. M II had greater participation with behaviors directed towards the facilitating model of learning. The behaviors with greater evidence are linked to the categories "management style", "participation of employees in the decision-making processes of the company" and the "employee management -position", similarly, there are few behaviors in the category "Stimuli and sanctions" in Chile. In Colombia this category is inclined at Model I.

The behaviors demonstrated by the interviewees in Colombia are associated with MI. In Chile are associated with MII of facilitating learning, correspond to stable relationships between employee and boss, showing that there is good communication, they feel they are listened to, there is empathy and trust, they are transparent, there is team work, they deliver feedback, among other support factors. Similarly, it was evident that workers are participants in different decision processes of the company, stating that if they can demonstrate their concerns without fear feel capable of providing opinions, ideas and suggestions in their areas of work, in addition to receiving the necessary support through teamwork. Another behavior related to MII is the semi-flexible approach of the organization before the sanctions, granting feedback and support to avoid repeating errors, adjacent to new opportunities. The induction and training processes provided by the organization to its workers show that the company provides the tools and work resources necessary for the fulfillment of their work, in addition to provide training in areas outside their work to promote acquiring other knowledge but only at certain levels. In Colombia showed less participation in these categories.

Finally, through the behaviors described above, empirical support is provided identifying the main element that does not allow progress in learning. This helps to better understand the functioning of the model within the Theory of Action and evidences the lack of stimulus development among employees and the unbalanced relationship between stimulus/sanction. The companies demonstrate important processes that are associated with MI in Colombia and MII in Chile, such as the sharing of control and information between operators and administrators. It is evident that the organization is tenacious to stable learning, however, given the nature of the study the results are only based on a two-manufacturing company. Therefore, further studies are needed involving other companies in the manufacturing industry to determine if this is really a phenomenon at regional level in both countries.

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