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The Roles of Empathetic Competency and Participative Design in Organizational Stakeholder Relationships

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ABSTRACT

The objective of the present article was to encounter empirical evidence of the use that companies make of the empathetic competency and participative design for relationship development with their interest groups. Empirical comparison occurred by way of a case study in a Colombian family business group composed of three companies. A mixed research design was applied, using a questionnaire to measure the use of empathy, as was an in-depth interview, to learn the use of participative design in stakeholder relationships. Results show acceptable use of the empathetic competency, and that the participative approach, characteristic of design, is partially employed, although the upper level of co-creation is not achieved. It is concluded that, if the empathetic competency is not made to form the base of the participative approach, organization relational capital is wasted. Further, companies may improve stakeholder relationships if they are able to apply participative design methodologies, techniques, and tools, as these reduce resistance to change, and improve the work environment, leadership, and productivity.

Keywords: Relational Capital, Participatory Design, Empathy, Interest Groups.

INTRODUCTION

Companies are ever more concerned with increasing and improving their intangible assets, or those resources and capacities that may generate economic, social, and environmental value (Grant, 1991) and whose bases are human and organizational knowledge, which may be managed, measured, and protected (Timoteo et al., 2015; Bueno et al., 2008).

Recent specialized literature recognizes the contribution of strategic design to organizational intellectual capital (Gallego et al., 2020), specifically of the empathetic capacity as human capital (Postma et al., 2012) and the participative design approach as relational capital (Wilden et al., 2018; Teichmann et al., 2016).

Owing to the above, Borja de Mozota and Kim (2009) see an opportunity for design to conquer other dominions, beyond product or service design, and be placed as a corporate competence that may help to resolve strategic problems. Working from the participative design approach standpoint increases relational capital, insofar as its reason sine que non is work with stakeholders, without which it would be impossible to discuss co-creation or co-design (Spinuzzi, 2005).

In this context, the present investigation, whose objective was to identify empirical evidence of the use that companies make of the empathetic competency and participative design for the

development of stakeholder relationships, was performed. This is the knowledge gap that the present article seeks to fill, as while the theory recognizes these relationships, various authors have noted the need for empirical studies which show these in the organization reality (Pei & Zurlo, 2019; Sanders & Stappers, 2008).

The empirical comparison was performed in a Colombian family business group which consists of three companies from different sectors. First, their use of the empathetic competency was revealed, through adaptation of the instrument developed by Spreng et al. (2009). Later, by way of semi-structured interviews, the use of the participative design approach in stakeholder relationships was explored. Finally, the discussion and identification of contributions for theory and application were discussed.

1. LITERATURE REVIEW

1.1. Empathy and participative design

The literature on empathy presents three theoretical perspectives: one affective, such as the ability to share the feelings or the emotional state of another (Mehrabian & Epstein, 1972) another cognitive, or the comprehension of the feelings of others without sharing their emotional state (Mead, 2015), and finally the multidimensional perspective, which combines these perspectives (Kouprie & Visser, 2009).

Empathy may be strengthened as a competency, by way of training and experimentation (Leyva, 2013), reinforcing the ability to observe individuals' behavior (van Rijn et al., 2011), and making inferences by way of the combination of memory, knowledge, and reasoning (Ickes, 1997), and creating direct contact with interested parties by way of adequate participative design (Aguirre et al., 2017; Lee et al., 2018).

In organization and management studies, the empathetic behavior of company members is of great interest (Pavlovich & Krahnke, 2012). Empathy in companies creates meaning and knowledge, and developing processes that improve this capacity in workers can create costs, hence the importance of resorting to methods that promote it effectively. By way of design thought (Abildgaard & Christensen, 2017; Buchanan, 2019), one employs an empathetic process which is much more effective with the "body storm" method, which gauges how it feels to be the other person, the "empathy prototype" method, with the creation of prototype environments which are tested, or the "empathy narrative" (Köppen & Meinel, 2015).

On the other hand, based on participative design and the co-creation method is empathy, as a human competency, which is broadly discussed in the design discipline (Vink & Oertzen, 2018).

1.2. Relational capital, participative design, and stakeholder relationships

The capacity that companies have to establish links with stakeholders and generate knowledge corresponds to the so-called relational capital (Catalfo & Wulf, 2016). With this, they interact with workers, clients, providers, shareholders, communities, and the government, among others, and generate productive dialogues, create trust, improve collaborative work (Kale et al., 2000), improve company image and reputation, together with

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company prestige (Postma et al., 2012). Lastly, with these relational networks, company intellectual capital is extended (Cabello et al., 2011).

With relational capital, participative design serves mainly to work with stakeholders on the resolution of strategic organizational problems (Buehring & Bishop, 2020) and to weave company social fabric (Hussain et al., 2012). With these types of design practices, companies learn to speak, listen, interpret, infer, observe, and discover the needs, opportunities, and possibilities presented by their stakeholders, and in the context in which the organization exists, and to create and implement effective solutions, participatively (Sanders, 2002).

Within this framework, companies must make broad, transparent participation schemes (Mosleh & Larsen, 2020), for this to become a differentiating competitive factor. Perovich et al. (2018) believe that companies may use different participation levels, among others: (1) The non-informed, where data is not shared or the workers are involved in the decisions or projects of the company; (2) The informed, in which information and data are conveyed through different means of communication to all workers verifying their access; (3) The consulted, using different strategies to know the opinions of workers on a project or decision made by the company; (4) Collaboration or cooperation, that implies participation of workers in certain projects or work processes through help in the implementation of specific actions; and finally, (5) Joint construction or co-design, where workers are creatively involved in solving problems/business potentialities (Sanders et al., 2010; Cockbill et al., 2019). On this last level, the quality of the relationships created with stakeholders is qualified and improved, and a viewpoint change is generated, in terms of existing roles between employees, clients, providers, and owners (Bail et al., 2020).

On the other hand, management of the stakeholder relationship consists of the identification of those who conform this, learning their interests, needs, and expectations, understanding the organizational processes necessary to manage them, and their transactional processes with the company (Freeman, 1999). It is also vital to feed company relational capital by way of effective stakeholder management, thus re-signifying the role that they play in said process, moving them from being receptive players to strategic partners (Kuratko et al., 2007).

A topic of special interest in the academic environment is relationships with employees and internal stakeholders, among others, owing to their role in resistance to change and commitment (Bapuuroh, 2017), which the participative design approach seeks to resolve (Delgado et al., 2011). Essentially, studying their level of participation determines indicators for success or failure, for which reason it is essential, in this context, to generate awareness in the company for the use of the participative design approach.

2. METHODS

2.1. Study design and environment

The mixed approach was applied, which integrated qualitative and quantitative elements, as recommended when complete comprehension of a phenomenon with diverse data is sought (Chen, 2006). This method increases the study's interpretative wealth (Johnson & Onwuegbuzie, 2004).

In terms of research design, the case study was employed (Stake, 2005) by taking a Colombian family company group with three companies, which were treated as units of analysis (Yin,

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2009; Villarreal Larrinaga & Landeta Rodríguez, 2010). The first company, which will be called C1, is an industrial company founded in 1974, and which currently has 169 employees. The second, C2, is a marketing company with 335 employees, and the third, C3, has 162 employees, for a total of 666 group employees.

2.2. Data collection

Two techniques were employed to gather information. Firstly, a survey was applied to learn the level of use of the empathetic competency. The Toronto Empathy Questionnaire (TEQ) was applied (Spreng et al., 2009), adapted, and validated for the research context, and was composed of 16 items with six components: emotional contagion, emotional comprehension, sympathy, altruism, helpful behavior, and evaluation of others' emotional states. A generic description of each component is as follows: 1) Emotional contagion: sensation of sharing the same emotion of the other. 2) Understanding of emotions: ability to identify the emotion that an event produces. 3) Sympathy: ability to perceive and feel affection or inclination for the feelings of others. 4) Altruism: concern or disinterested attention for other people. 5) Helping behavior: concern for others and subsequent actions of support. 6) Evaluation of the emotional states of others: ability to understand the emotions of others based on their own.

For questionnaire content validity, expert judgement was applied (Escobar-Pérez & Cuervo-Martínez, 2008) by seven national and international experts who evaluated the sufficiency, clarity, coherence, and relevance of each question (Galicia Alarcón et al., 2017). For reliability, a pilot test was applied to a group different from the research population, so as to identify failures, limitations, or other weaknesses in the questionnaire (van Teijlingen & Hundley, 2001). With Cronbach's alfa coefficient, the internal consistency of the Likert scale items was evaluated and revealed to be superior to 0.7 for all items (Corral de Franco, 2009).

Secondly, a semi-structured interview to demonstrate the use of empathic competence together with a participatory approach of the design to establish links and relationships with interest groups. This was addressed through eleven descriptors: (1) Characterization of the interest groups of the company; (2) Understanding of interest groups; (3) Construction of inferences about knowledge of interest groups; (4) Use of the characterization of interest groups; (5) Level of relationship with its interest groups; (7) Understanding the effect of stakeholder participation; (6) Formation of multidisciplinary teams for research or understanding of interest groups; (8) Creation of meaning and value within a work team; (9) Tools and methods to create empathy; (10) Work of the competence of empathy in workers; (11) Competence of empathy as human capital and approach to participatory design as relational capital. Its validity and reliability were verified by way of the pilot test. Corrections and adjustments were made prior to its definitive application (van Teijlingen & Hundley, 2001). The interviews took 87 minutes, on average, and were applied at the interviewees' workplaces. Participants were recorded with previous informed consent.

2.3. Participant and sample selection

In order to select the sample, all group employees were distributed by organizational levels: strategic (directors), tactical (middle management), and operative (auxiliaries and operators). Simple random sampling was utilized (Vivanco, 2005) (Table 1). The interview was applied by intentional sample (Etikan et al., 2016) using their experience in relating to any of the stakeholders as a central criterion (Table 2).

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Table 1: Population and sample questionnaire application

	C1			C2			C3			Total group by levels		
	Population	Sample	% Sample	Population	Sample	%Sample	Population	Sample	%Sample	Population	Sample	%Sample
Strategic	9	9	100,0	13	13	100,0	11	5	45,5	33	27	81,8
Tactical	38	19	50,0	32	32	100,0	15	12	80,0	85	63	74,1
Operative	122	61	50,0	290	187	64,5	136	61	44,9	548	309	56,4
Total company	**169**	**89**	**52,7**	**335**	**232**	**69,3**	**162**	**78**	**48,1**	**666**	**399**	**59,9**

Table 2: Summary of interviewees

Company C1	Company C2	Company C3
P7 [E, 28]	P4 [E, 1]	P7 [E, 20]
P3 [E, 5]	P5 [E, 3]	P1 [E, 19]
P5 [E, 7]	P7 [T, 13]	P5 [E, 8]
P6 [T, 2]	P8 [T, 14]	P2 [T, 18]
P4 [T, 22]	P9 [T, 26]	P4 [T, 6]
P1 [O, 5]	P10 [T, 2]	P6 [T, 5]
P2 [O, 13]	P2 [T, 22]	P3 [O, 15]
	P3 [O, 14]	
	P6 [O, 17]	
	P1 [O, 17]	

Note: The P identifies the interviewee number, the letter identifies the level E, for strategic, T for tactical, and O for operative. The number indicates seniority in the company, expressed in the number of years worked therein.

2.4. Data analysis

The quantitative analysis was carried out by way of SPSS, calculating results for the entire group, for each company, and organizational levels: strategic, tactical, and operative. Analysis percentages correspond to the results obtained, on levels four and five, of the measurement scale applied, named the “zone of high competency use” herein.

The qualitative analysis occurred with Nvivo software, categorizing in accordance with research objectives and the reference framework (Butterfield et al. 2005). Although several categories come from the aforementioned reference framework, the majority emerged from the data (FitzGerald et al., 2008). Transcriptions were then read and re-read, so as to identify primary codes with which categories are conformed, and from there, topics which were integrated with those identified in the reference framework were examined (Ryan et al., 2009; Vaismoradi et al., 2016).

3. FINDINGS

3.1. Level of empathetic competency use in cases studied

The results regarding use of the empathetic competency are presented for the company group as a whole, by business case, and by organizational level (see Table 3).

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Table 3: Components of the empathetic competency

Components	Group (%)	Companies (%)			Organizational level (%)		
		C1	C2	C3	Strategic	Tactical	Operative
Emotional contagion	69.3	70.6	67.2	74.4	79.7	68.8	68.8
Evaluation of others' emotional states	66.2	71.5	62.9	69.7	69.6	65.8	65.8
Sympathy	50.3	52.8	48.5	53.2	61.1	48.9	48.9
Altruism	60.5	65.9	57.9	62.0	60.5	64.6	59.7
Emotional comprehension	68.4	62.9	73.3	60.3	44.4	55.6	73.1
Behavioral help	73.4	84.3	68.1	76.9	44.4	84.1	70.6
Total	62.1	65.9	59.9	64.6	63.9	63.4	61.5

On a general level, the empathy competency was used significantly on the group, company, and organizational levels, although less so in the marketing company (C2) and on the operational level. By component, behavior was coherent. The least used on all levels was sympathy, and the most used was helpful behavior, except in the marketing company, where it came in second, following emotional comprehension.

On an organizational level, the only atypical behavior, in terms of the group and companies, was strategic behavior, in which the component used most was emotional contagion, followed by evaluation of others' emotional states. In contrast to all others, sympathy had an important percentage of use, and low percentages were present for emotional comprehension and helpful behavior. It should be highlighted that, for the majority, the latter was the most-used component.

The existence of a high degree of use of said competency in the group, companies, and on all organizational levels demonstrates the existence of important potential, from the standpoint of the human capital associated with design, to improve organizational relational capital. The findings further reflect a greater tendency to use cognitive empathy (emotional comprehension and helpful behavior) than the affective or emotional competencies (emotional contagion, evaluation of emotional states).

Three things stand out from this initial result: firstly, that the marketing company has the lowest use of the competency, given that its activity requires greater empathetic activity with external groups, as well as with clients and providers. Secondly, it is positive that the strategic and tactical levels have an average of use above that of the group average, as this is an important competency for compliance with the leadership function characteristic of said levels, and lastly, the fact that the strategic level uses emotional components more than cognitive components reflects that there is a greater ability to share or feel the emotions of others than to comprehend them.

3.2. The participative design approach and stakeholder relationships

In the semi-structured interviews, the way in which organizations use the participative approach in stakeholder relationship management was explored. Firstly, it was of interest to learn the importance of these groups for companies. One manager affirms: "*the company basically is an entity regulated by its stakeholders, community, employees, and shareholders. We must satisfy the interests and objectives of each one of these groups*" (p7C3).

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They recognize the negative effects that ignoring their responsibility to these groups would imply: "*failure to have them in mind, would cause us to become authoritarian and would cause conflicts with society and governmental entities, which in turn would bring sanctions, fines, disciplinary processes, and even closure*" (p7C3). Despite this recognition, in practice, there are no clear policies or mechanisms for their relationship: "*there is no defined conduct employed to work with company stakeholders*" (p6C1), "*in terms of external stakeholders, there is very little, the company must seek additional relationships, for example, with the Chamber of Commerce, to approach them in the environment*" (p4C2).

A second aspect investigated was stakeholder identification. One interviewee affirmed: "*understanding who stakeholders are is vital, mistakes bring business consequences*" (p2C3). They recognize both workers and clients: "*we are working with employees, asking them how they feel, how they see us, and involving them. The same is happening with clients, but not with providers or other interested parties*" (p5C3).

The third aspect, and one on which much emphasis was placed, was stakeholder management, as it is insufficient that companies have them identified or segmented if they fail to delve further into their characteristics, beyond demographic data. Valuable information for innovation management and organizational improvement is wasted. As this is the basis of participative design, it is of the utmost importance in organizational processes.

On the subject, the group with which the most management occurs is internal (workers), although this is a question of internal corporate social responsibility: "*the business group has a foundation, where all matters of social responsibility, employee funds, and other social well-being activities for company employees affiliated with the group are managed*" (p6C1, p10C2, and p6C3). Although this is important, it is insufficient to capitalize on the collaborative work potential of these groups: "*the emotional effects that transformations may have on personnel are not identified, nor are employees previously prepared to receive these, they sometimes generate uncertainty and malaise, and affect the work environment*" (p6C1).

Further, it is insufficient to simply identify company stakeholders. That which generates the most value is involving them in matters of organizational life. This implies a change in their role of receptors of business improvement to co-creators of joint solutions. In the case studied, a gap is recognized on said topic: "*every day, we learn to share with stakeholders, but we still need to involve them a great deal more*" (p7C3, p2C3), "*especially workers, as they are merely informed of changes occurring in the company, they are not involved*" (p1C1, p10C2, p3C1).

In terms of clients, companies recognize this, as a group, but know little about them and fail to involve them in collaborative work: "*studies are being carried out with experts to determine what our clients feel and need*" (p6C3), "*at the company, there is no defined characterization of stakeholders, clients, or employees*" (p6C1, p9C).

The recognition, characterization, and involvement in collaborative work of external groups marks the difference between companies that interact with their environment, read its behavior, and make strategic decisions based thereupon, and those which do not. When this interaction with the environment is absent, processes become routine, stagnate, lose competitive value, and squander the possibility of increasing corporate relational capital.

The fourth and final aspect explored was the degree of participation achieved with the groups, for which reason the guidelines of Perovich et al., (2018) and Sanders et al. (2010) were employed, in an attempt to show the degree to which the studied organizations approached

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co-design. It was found, in the companies studied, that the participation level used most is informed participation: "*the company does not co-create transformation projects with stakeholders, at best they are informed*" (p6C3), "*the operative part is not very participative, the promotion of the matter of participation spaces is still lacking*" (p3C1), and "*incentives must be generated to motivate individuals to participate*" (p3C1).

As a synthesis, Figure 1 presents different types of interest groups within companies, and two possible ways of carrying out exchanges. The so-called natural ones, established as those that each group is traditionally expected to exercise, among them, that clients buy, and that suppliers supply. But potential exchange is highlighted, that is, that promotes a vision of contribution of interest groups in co-design processes as strategic allies in transformations from a two-way interaction.

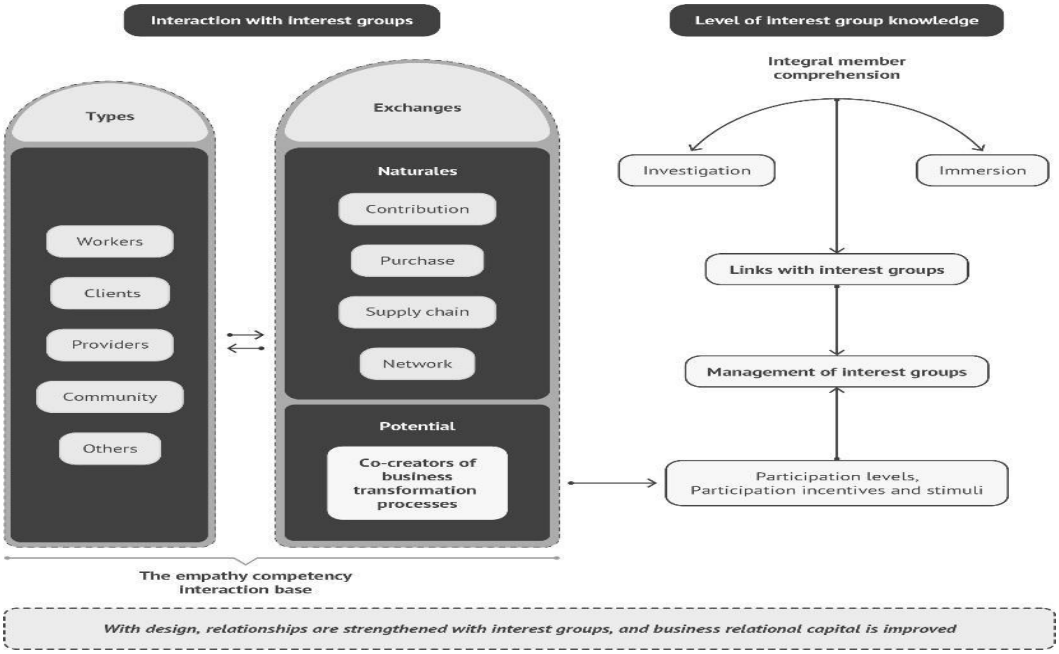

Figure 1 Categorial comprehension of the participative design approach

In the same way, two levels of knowledge that allow an approach to create links with interest groups are specified, which is acquired through an investigative process or through immersion processes, both of which are highly demanding in terms of theoretical and methodological rigor. By obtaining an understanding of these groups, their effective management is achieved, which allows participation to upgrade until reaching the highest levels.

4. DISCUSSION

This article addresses the relationship between the empathetic competency, characteristic of strategic design, and the participative design approach, as related to organization stakeholder management. Empathy is recognized in the literature as a promoter of internal stakeholder relationships, as when individuals feel valued, they perceive that their ideas and feelings are respected and considered (Akoglu & Dankl, 2019), and the socio-labor relationship is strengthened, which impacts business goals (Baron-Cohen, 2011).

The fact that this study revealed the simultaneous existence of the two competency approaches, cognitive and affective (Kouprie & Visser, 2009), implies the existence of the potential to recognize other changes in emotional states, identification of emotional signals,

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comprehension of the values, preferences, and internal conflicts, and recognition of others' perspectives (Israelashvili et al., 2019; McDowell et al., 2018), which facilitates stakeholder relationships.

On the strategic and tactical levels, there are higher levels of the use of empathy, which is quite significant, owing to its impact on management. Empathetic individuals tend to be more effective leaders (Kellett et al., 2006; Carison-Morales et al., 2020), and are able to achieve positive effects on work teams, personnel well-being, and productivity (Scott et al., 2010).

Empathy also affects relationships with external groups. Moya (2016) considers it to be a differential factor in the business competitive environment, as according to the "Global Empathy Index 2016", companies are more profitable and productive when they act empathetically. In accordance with this index, half of the companies in the Top 10 of the ranking are ICTs, followed by automobile, and mass consumption companies. Said behavior is similar to that found in the present investigation, which showed greater use of empathy in the industrial, service, and commercial sectors, in that order.

While in terms of the participative design approach and the establishment of ties and relationships with stakeholders, that found in previous work was confirmed. Companies in general have little knowledge of the real value of involving stakeholders, internal or external, in organizational projects (Mallon, 2017). This is determinant for the achievement of greater participation and co-creation levels (Sanders & Stappers, 2014), which increase company relational capital (Mondal & Ghosh, 2012; Kensing & Blomberg, 1998).

A starting point for their adequate management is knowledge of ways in which to analyze and comprehend their needs, attitudes, conducts, intentions, and interests (Brugha & Varvasovszky, 2000), and having a method to make their work fructiferous. If this does not occur, it disorients and erodes participation. This is the real meaning of learning from the participative design process: involving stakeholders in business processes (Gasparini, 2015).

Assuming co-creative work (Steen, 2013) requires a business vision focused on people, in which empathy is a core competency (Fernández-Silva et al., 2018; Lee et al., 2018), the value of participation must be present, as must the real involvement of stakeholders, both internal and external, in the organizational dynamic (Granda Revilla & Trujillo Fernández, 2011), this increases company relational capital and promotes communication and the necessary commitment to construct joint, creative solutions to business problems (Robertson & Simonsen, 2012; Suchman, 1995).

One way to manage and promote work with stakeholders is by implementing assertive characterization processes. In design, this refers to one's ability to understand and identify the thoughts and feelings of others, the empathetic competency (McDonagh, 2006). In other words, in design, one must achieve stakeholder comprehension (cognitive) and sense their emotional states (affective) (Kouprie & Visser, 2009).

5. CONCLUSIONS

The present investigation was oriented toward the identification of empirical evidence of the use of the empathetic competency and participative approach, both as contributions of strategic design, in stakeholder relationships.

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The findings demonstrate that there is acceptable use of the empathetic competency, which is above 60% in the upper evaluations of the Likert scale, in the questionnaire applied (Spreng et al., 2009). The participative approach characteristic of design is partially used, as it achieved the level of informed participation, but not the superior co-creation level identified by Perovich et al., (2018).

The following may constitute lessons for the literature: 1) while it has been recognized that stakeholders and stakeholder management are important for organizational success, and that participative design is the vehicle for said management (Frauenberger et al., 2015), if the empathetic competency does not constitute the basis for the participative approach, this will generate misspending of relational capital in organizations, 2) in order to make stakeholders the protagonists of strategic business development, as formulated in organizational theory and design theory, co-creation should be considered as the basis of relational capital, and empathic competence as the core of human capital. From the practical point of view, companies may capitalize on the empathetic competency to reduce resistance to change, improve the work environment, achieve more effective leadership, and increase productivity (Drain et al., 2018; Salmi & Mattelmäki, 2019). Similarly, they may improve stakeholder relationships, on the assumption of participative design as an organizational axis, which implies that managers share a view of design focused on human beings (understanding individuals integrally, together with their objectives, concerns, aspirations, motivations, among other things, so as to jointly resolve problems or attend to needs or aspirations, in which the employee empathetic competency makes sense in work duties, increases participation levels, and makes the co-creative creation of strategic organizational solutions possible).

One limitation of this study is the impossibility of generalizing its findings, as it is a case study. In the future research agenda, the performance of causality studies between participative design and measures of organizational performance related to stakeholders, is recommended. Therein, human capital competencies, such as empathy, creativity, and abduction could be applied, as in the literature, these have been recognized as important in this type of relationship, and design has addressed the matter broadly.

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