

Heuristics as Microfoundation Of Organizational Capabilities: Case Study In Strategic Human Resources Management

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SUMMARY

Organizational capabilities are fundamental for understanding the performance of firms and for understanding the implementation of their strategies. However, there are gaps in relation to the microfoundations, composition and functioning of capabilities that are still little disseminated in the current literature. In this thesis it is proposed that capabilities are composed of microfoundations bringing heuristics as a transversal articulating element. This perspective makes it possible to understand capabilities from the point of view of functional areas and also from the point of view of the multiple hierarchical levels of the organization. It is understood that the alignment of heuristics between the individual, intra-organizational (routine) and organizational (meta-routine) levels favors the achievement of expected results from the execution of capacity processes. Thus, the general objective was to understand how heuristics interact at different levels of the organizational capacity of Strategic Human Resources Management - SHRM. The method chosen to carry out the research was an integrated single case study, encompassing the different organizational levels (individual, intra-organizational and organizational). Furthermore, this is a qualitative research of an exploratory and descriptive nature, the data collection technique was open observation, associated with semi-structured interviews and documents. The theoretical contribution of this thesis advances knowledge about capabilities through the study of microfoundations, in this case heuristics. It presents a theoretical-empirical model of capacity, which encompasses multiple levels of analysis and the microfoundation (heuristics) as a transversal articulating element of the HRM capacity. It demonstrates that heuristics are promoted from lower levels to higher levels of capacity, in a down-top process, that is, managers at lower levels, such as coordinators or supervisors, tend to use top management heuristics to their advantage, in a process reverse. Furthermore, interaction mechanisms, when mobilized by managers in a systematic way, can promote heuristics aimed at improving the results of activities, routines or capacity. As a managerial contribution, it presents insights on how to use heuristics to improve task performance and, consequently, organizational capacity since using heuristics applied to organizational routines generates greater ease of absorption at the individual level.

Key words: *Organizational capabilities. Heuristics. Multilevel. Organizational routine.*

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I. INTRODUCTION

Heuristics are central to strategy (Bingham & Eisenhardt, 2011), in the same way that organizational capabilities are fundamental for companies and their performance (Bingham, Howell, & Ott, 2019) since heuristics define and project how organizations, or rather, the people in that organization, make decisions. Heuristics make it possible to understand the cognitive processes used in non-rational decisions of organizational capacity. When talking about decision making, there are many factors and aspects to be considered when making a choice, however, in an antagonistic way, there is less and less time to think and make the best option (Bazerman, 1994).

Heuristics, alternatively, can be the "rational" approach to decisions when there is high heterogeneity in experiences (e.g., multiple tasks and distinct human resources), high unpredictability, and few experiences (e.g., implementation of a new project or new routine) that are attributes of most strategic decisions. (Bingham & Eisenhardt, 2011). In this sense, heuristics contribute to understanding the functioning of organizational capacity, whatever it may be. Heuristics, when observed in their environment, tend to work inextricably in all components of the capability, whether in the interaction between human resources and technological resources,

in the execution of the task, in the organizational routine and its meta routines, realizing the functioning of the organizational capability, evidently, generating better performance or not.

Studies on organizational capabilities have some aspects such as the analysis of the capability after its formation, analyzing the evolution over time (Helfat & Lieberman, 2002; Nelson & Winter, 1982), evolution of the capability as performance measurement factors (Hayward, 2002), in a more recent aspect that addresses the microfoundations of organizational capacity (Felin & Foss, 2005; Morris, Hammond, & Snell, 2014; Paruchuri & Eisenman, 2012). Heuristics in this sense function as microfoundations of capabilities, with microfoundations “being the underlying individual and group-level actions that shape strategy and organization” (Eisenhardt, Furr, & Bingham, 2010, p. 1263).

In view of this, the proposed article seeks to contribute to the literature on organizational capabilities with regard to microfoundations, approaching heuristics as a microfoundation of the composition and evolution of organizational capacity, in this case, the capacity for strategic management of human resources. In view of this, strategic human resources management capacity is defined as the company's ability to manage human resources in favour of improving organizational performance. In this way, the definition presented is similar to other organizational capabilities and is, therefore, in line with broader definitions of capabilities such as a company's ability to perform a key task reliably (Helfat & Winter, 2011). The choice of strategic human resources management capacity is based on the general premise that organizational capabilities have a composition, this composition generates an action and an organizational result that is essential for the development of the organization. Specifically, we sought how heuristics interact at different levels of the composition of organizational SHRM capabilities and what is the role of heuristics in the functioning of organizational capabilities?

Methodologically, this is a single integrated case study, in a company in the large cargo transportation sector located in Chapecó-Santa Catarina. The study is qualitative and involves the researcher over a period of six months, working at different levels of organizational capacity through open observation, structured and open interviews. Collection took place through structured field diaries and analysis through content analysis (Bardin, 2011).

As research results, it is understood that the use of a more flexible capacity composition associating routines and microfoundations of organizational capabilities, in this case heuristics, contribute to the understanding of heuristics as an important element in the functioning of organizational capacity. As it becomes a microfoundation that has the capacity to explain how transition happens at different organizational levels. Even if seeding heuristics inserted at the organizational level tend to point out a direction, a basic rule, being anchored in value principles, in a way the heuristics at the organizational level are generalist, introducing an idea of direction and action, being elaborated at lower levels until reaching in the absorption process.

II. ORGANIZATIONAL CAPABILITIES

Over the years, research has focused on exploring the success factors of organizations that stand out in competitive environments, among the factors studied are resources and capabilities (Waleczek, Driesch, Flatten, & Brettel, 2019). Due to high competitiveness, uncertainties, changes and the need to act effectively, companies need to develop and articulate strategic assets and resources over time to survive and evolve (Breznik & Hisrich, 2014; Strone, Hoholm, Kvaerner, & Støme, 2017).

Although the topic of resources and capabilities is widely disseminated in strategy studies, the lack of clarity in the RBV concepts (Wernerfelt, 1984) and the inconsistency in operationalizing them in different studies hinder the development of the RBV in a syncretic way (Hoopes, Madsen & Walker, 2003). The criticisms reinforced by Dosi, Nelson and Winter (2000) regarding the definitions and relationships between key concepts, such as resources, competencies, core competencies, capabilities and dynamic capabilities, are not universal and constitute ambiguities and controversies.

Confusion, ambiguities and controversies about definitions impact the results of empirical work carried out, and generate the production of unacceptable or even unusable material (Battisti & Deakins, 2017). The distinction between the concepts of resources, organizational skills and individual skills helps in understanding the concept of capabilities. Organizational competencies would be the competencies necessary for each function, that is, it can be said that the organization has several organizational competencies, located in different areas/sectors; Of these, only a few are essential competencies, those that differentiate it and guarantee a sustainable competitive advantage over other organizations (Dosi & Teece, 1998). Thus, it can be stated that the development of organizational skills is closely related to the development of individual skills and the conditions given by the context (Pralhad & Hamel, 1990; Barney & Felin, 2013; Eisenhardt, Furr & Bingham, 2010; Felin, Foss & Ployhart, 2015; Helfat & Peteraf, 2015; Teece, 2007; Winter, 2013; Battisti & Deakins, 2017).

In this sense, the result of excellence in any business function results from collective learning in the organization, especially the coordination of different production skills and the integration of multiple technology streams, thus generating economic value (Pralhad & Hamel, 1990; Fleury & Fleury, 2000).

However, the capabilities literature presents a lack of clarity about how they are constituted (Barney & Felin, 2013; Eisenhardt, Furr & Bingham, 2010; Felin, Foss & Ployhart, 2015; Gavetti, 2005; Helfat & Peteraf, 2015; Teece, 2007; Winter, 2013; Battisti & Deakins, 2017; Froehlich & Liu, 2018), in some cases capacity and competencies are presented as synonyms (Ray & Ramakrishnan, 2006; Guerra, Tondolo & Camargo, 2016). However, it is understood that competence is a necessary condition for capabilities, and not the same thing, although the concept of competence is frequently used in strategy studies, the term is confusing and ambiguous (Eisenhardt, Furr & Bingham, 2010; Felin, Foss & Ployhart, 2015). Other concepts of capabilities consider capacity as a set of resources that generates competitive advantage (Wernerfelt, 1984), others take into account internal structures and processes and organizational routines of an organization (Ulrich & Lake, 1990; Stalk, Evans & Shulman, 1992) and Teece et al. (1997) introduces the term "dynamic" which refers to the organization's ability to renew competencies to be in line with the changing business environment, it deals with the adaptation, integration and reconfiguration of internal and external organizational skills, resources and functional competencies to match the requirements of the changing environment.

What can be seen is that the notion of capabilities is centered on some common aspects, such as human resources, tangible and intangible resources, tasks, routines and processes and competitive advantage (Ray & Ramakrishnan, 2006; Guerra, Tondolo & Camargo, 2016), in this sense, capabilities in this work are considered as a complex combination of an appropriate set of resources, united by organizational processes (tasks), which form a set of routines, to achieve a specific organizational objective. The adoption of a generalist concept allows for a better understanding of the different levels of analysis. In this case, heuristics are included as microfoundations of the capacity composition, playing a relevant role in the functioning of the capacity.

In order to generate an understanding between the elements that constitute capabilities, a research perspective that involves a multilevel view is necessary (Felin, Foss & Ployhart, 2015). The strategy literature understands that the difference in organizational performance and competitive advantage is not only impacted by macro environmental factors, such as demand, competition and institutional pressures, or factors related to the organization level (structure, processes and capabilities), but also it is impacted by behavioral elements, decision-making processes and strategic practices conducted by individuals (Cyert & March, 1963; Regnér, 2008). Given this, little attention was given to micro-organizational variables. (Felin, Foss & Ployhart, 2015; Salvato & Rerup, 2011).

HEURISTICS AS MICROFOUNDATIONS OF ORGANIZATIONAL CAPABILITIES

Heuristics make it possible to understand the cognitive processes employed in non-rational organizational capacity decisions (Eisenhardt, Furr, & Bingham, 2010). The need for and study of heuristics in strategy can be observed in studies involving the micro interactions between the constituent parts of the capability composition, that is, they care about understanding the lower-level origins of organizational capabilities, for example, individuals and their actions and interactions (Barney & Felin, 2013).

The microfoundations literature focuses on the argument that failure to observe individual aspects generates problems for capabilities research (Eisenhardt, Furr, & Bingham, 2010). When individuals are ignored, it is confirmed that individuals are homogeneous, malleable and randomly distributed in organizations (Abell, Felin, & Foss, 2008), showing that there is no difference between them, in this case, that individual skills do not they are important in carrying out a task, for example (Felin & Foss, 2009). Furthermore, individuals have different skills, which makes them self-selected into different roles within the organization (Mäkelä, Sumelius, Höglund, & Ahlvik, 2012). However, the focus of work at the collective level ignores micro issues of an individual nature, and is anchored in the explanatory burden of the organization's context and environment, which becomes problematic (Felin & Foss, 2005).

In this context, some research reinforces the role of managers in developing capacity (Adner & Helfat, 2003; Helfat & Peteraf, 2015). Other works focus on cognitive processes, such as less deliberate processes, such as emotion and intuition, which can strengthen organizational development and therefore accumulate capabilities (Gavetti, 2005; Hodgkinson and Healey, 2011). In the same vein, Helfat and Peteraf (2015) argue that perception, attention, problem solving and communication all represent the cognitive foundations of capabilities.

The main difficulty is centered on the microfoundations literature, which is recent and scarce. (Bingham, Howell, & Ott, 2019), although studies make an effort to show that individual aspects and cognition are important for the functioning of the capacity, there is still difficulty in showing how the transition from the individual to the collective level happens, that is, when an individual capacity becomes a company capacity (Winter, 2012; Salvato & Rerup, 2011; Helfat & Peteraf, 2015; Felin et al., 2015).

In this logic, heuristics can play a fundamental role in answering this question, as previously mentioned, heuristics make it possible to understand the cognitive processes used in non-rational decisions regarding organizational capacity (Ott, Eisenhardt, & Bingham, 2017; Maitland & Sammartino, 2015). The main difference in heuristic analysis is that it is not centered on the behaviour of individuals (managers,

employees, CEO), but rather on predictions and decision-making rules, anchored in a cognitive perspective (Baron, 2004; Felin et al., 2015; Maitland & Sammartino, 2015).

Recent studies on heuristics point out the difficulty in understanding microfoundations and the impact on the development of capabilities (Ott, Eisenhardt, & Bingham, 2017; Bingham, Howell, & Ott, 2019). The authors Bingham, Howell, & Ott (2019) pointed out that companies depend on a process of seeding, elaborating and abstracting sets of heuristics over time, in order to evolve their internationalization capacity. Other studies highlight that entrepreneurs are more likely to use heuristics than managers of large organizations (Busenitz & Barney, 1997), in a contrary view Bettis (2017) suggests that even managers of large established companies often rely extensively on a set of heuristics when making decisions. In this sense, it is possible to look at heuristics from a microfoundations perspective, approaching an organizational reality.

III. METHODOLOGY

Methodologically, this is a longitudinal single case study, in a company in the large cargo transportation sector located in Chapecó-Santa Catarina. The study is qualitative and involves the researcher over a period of six months, working at different levels of the organizational capacity for strategic human resources management through participant observation, structured and open interviews.

The option for strategic human resources management capacity was made for two reasons, firstly in line with broader definitions of capabilities as the ability of a company to perform a key task reliably (Helfat & Winter, 2011). Second, strategic human resource management is an important area for countries and organizations, whether public, private or in the third sector (Beltran-Martin & Garcia-Juan, 2019; Kim & Wright, 2011; Kaufman, 2010, Meuer, 2017). Looking at human resources management in the organization also means looking at organizational and financial performance (Rodwell & Teo, 2004; Sanyal & Sett, 2011; Roca-Puig, Bou-Llugar, 2019). The protocol (Table 1) addresses the research problem as well as its consequences (Yin, 2015).

The main source of data was 330 hours of observation, focusing on different pillars, including meetings with senior management, internal sector meetings, active observation of HR subsystems (recruitment, selection, T&D, administrative routines, among others). The information was saved through a field diary, which covered topics related to heuristics, processes, routines, individual skills, interactions and other topics of interest. The data was stored using the NVivo software version New.

The survey respondents were 1 HR manager, 1 HR supervisor, 2 Senior HR analysts, 2 Junior HR Analysts and the Administrative Director, who leads top management. All respondents have academic training consistent with their field of activity, whether administration or psychology. To categorize the interviewees, the PCB code (Portuguese Craft Brewery) plus gender, length of time at the company and interview time, as shown in table X.

In addition to the interviews, data collection relied on the main data collection technique of this thesis proposal will be open observation, for some logical reasons, first because it is believed that heuristics are elaborated and absorbed at lower levels, that is, in the execution of the task; second, that heuristics have a cognitive bias and are not necessarily easy to identify; Third, it is understood that heuristics have their locus in the tasks performed within an organizational routine, therefore, the direction transcends organizational levels. In this way, the research is concerned with collecting observable data that provide conditions for characterizing the heuristics at different organizational levels.

Although routines have a repetitive nature and a common result (Becker, 2009), they can be impacted by alternative paths to the result, and this alternative path is believed to be linked to heuristics. Thus, through participant observation, we seek to identify heuristics, seen as simple rules for conducting tasks and activities at different organizational levels. In this sense, we seek to observe aspects related to the execution of the task, elements that constitute routines and the interaction between different actors.

It is important to remember that the main difference in heuristic analysis is that it is not focused on the behaviour of individuals (managers, employees, CEO), but on predictions and decision-making rules, anchored in a cognitive perspective (Baron, 2004; Felin et al., 2015; Maitland & Sammartino, 2015). Observation is more effective in capturing dispositions and behaviours when carrying out activities that are repetitive and with longer time intervals (Birmholtz & Cohen, 2007). In the same sense, Pentland and Feldman (2005) highlight that organizational routines are partially tacit, that is, the routine can be partially described by executors, however, not every routine is linear and continuous in itself, executors tend to respond in a logical manner. It is understood that a routine has several variations and, consequently, changes, changes in results. This proposal seeks to understand how heuristics impact the development of the routine, that is, whether simple rules impact the development of the routine and, consequently, generate better or worse results.

IV. RESULTS AND DISCUSSIONS

As previously mentioned, a component-oriented capability structure was chosen, one of which is resources, which in turn are the tangible assets (work, factory and machinery, other physical assets, etc.) and intangible assets (such as knowledge (tacit and explicit), culture, reputation, goodwill, skills, etc.) of a company that can be used by the company when necessary, to achieve your objectives. In this way, resources are part of “a collection of productive resources.” (Penrose, 1959, p. 24), and should be considered as basic units of analysis (Grant, 1991, p. 118).

The other component to be analysed are organizational routines, organizational routines are understood from the perspective of Becker (2005) that organizational routines are closely linked to organizational tasks, therefore the majority of organizational routines to be observed in organizations are directly linked to the fulfilment of the organization's tasks. That is, routines are closely linked to the group level, organizational routines are collective-level constructions (Dosi et al., 2000, Becker, 2005), task characteristics are important, that is, it is the task level that helps to assess the organizational dimension of organizational routines (Becker, 2005).

From the perspective of organizational routines, it is also based on the meta-routine component, which is designated from a set of organizational routines that, combined, become a fundamental meta-routine for delivering organizational results. The meta-routine is intrinsically linked to sets of tasks, which form and anchor the organizational routine, performed by more than one individual. The meta-routine links organizational routines to central organizational topics, that is, as sets of tasks and routines essential to execution of organizational capacity (Becker, 2005).

As a fundamental component to understand the way in which resources interact with organizational tasks and routines, we chose to use the antecedents of routines presented by (Becker, 2005) which are task complexity, task interdependence, time pressure and uncertainty. Despite this, during the research, other linking mechanisms were identified, such as formal communication, guidance and direction, which end up having an impact on the execution of the task or organizational routine.

Finally, we introduce and analyse the concept of heuristics as a microfoundation of capacity based in Bingham, Howell, & Ott (2019), who classify heuristics into three forms: sowing (using a metaphor, it can be called the mother heuristic, it is the introductory heuristic of the process, which is condensed into selection and process issues), elaboration (refers to The process of deepening the seeding heuristic is based on correction of direction, repetition) and abstraction (increases the generalization of heuristics not focused on action, but on experience). Using the basis of heuristics makes it possible to understand how the transition from the individual to the collective level happens, that is, when an individual capability becomes a company capability (Winter, 2012; Salvato & Rerup, 2011; Helfat & Peteraf, 2015; Felin et al., 2015).

In view of the above, this study joins efforts to how heuristics interact at different levels of the composition of organizational SHRM capacity and what is the process that heuristics modify or transform organizational capacity, using based on resources, organizational routines, heuristics as microfoundations of capabilities, relating them in an attempt to operationalize capabilities through a multilevel analysis, encompassing micro (individual and group relations) and macro (organizational capabilities) levels. Figure 1 presents the capability model, using the components resources, organizational routines, meta-routines, connection mechanisms and heuristics. It is noteworthy that the model is based on the capacity for strategic human resources management.

To formulate the capability composition structure, specifically SHRM, they were defined based on the SHRM literature, anchored by Kaufman (2015) who points out that the basis of strategic management is centered on recruitment and selection of people, training and development of people in the organization and rewards or positions and salaries, which encompasses salary and benefits issues such as awards, health plans, among others, and culture and belonging, which involves aspects related to retaining people in organizations and organizational culture. In this sense, each of the tasks performed in each of the topics was observed and analysed, where we found the routines and meta-routine essential for the composition of the capacity. The model presents two routine goals, the recruitment and selection meta-routine, which in turn is made up of two routines, recruitment and selection, the development meta-routine is made up of two routines, performance evaluation and employee support. , in addition, it takes on seven key tasks. The other routines are training, which in turn consists of five key tasks, positions and salaries, which encompasses key job and salary routines and assessment of grant metrics, and includes four key tasks, putting an end to culture and belonging, which encompasses indicators, culture and health factors and well-being and includes six key tasks.

The constructs used to develop the empirical theoretical model are: (1) organizational routines anchored by Becker (2009), which encompass routines and tasks; (2) capabilities from the perspective of Helfat and Winter (2013), regarding the definition of capabilities and macro aspects; (3) multilevel analysis and microfoundations anchored in Salvato and Rerup (2011, 2016, 2017) and Felin et al. (2015) and (4) heuristics, anchored in Bingham et al. (2019) these encompass what are called microfoundations of capabilities.

The construct of organizational routines was adopted as an element of capacity composition. Organizational routines are understood from the perspective of Becker (2005) that organizational routines are closely linked to organizational tasks, therefore the majority of organizational routines to be observed in organizations are directly linked to the fulfilment of the organization's tasks. That is, routines are closely linked to the group level, organizational routines are collective-level constructions (Dosi et al., 2000, Becker, 2005), task characteristics are important, that is, it is the task level that helps to assess the organizational dimension of organizational routines (Becker, 2005).

From the perspective of organizational routines, it is also based on the meta-routine component, which is designated from a set of organizational routines that, combined, become a fundamental meta-routine for delivering organizational results. The meta-routine is intrinsically linked to sets of tasks, which form and anchor the organizational routine, performed by more than one individual. The meta-routine links organizational routines to central organizational topics, that is, as sets of tasks and routines essential for execution organizational capacity (Becker, 2005).

The model presented relies on routines and meta routines (if any) to present the basis of tasks divided by each of the actors, previously presented at the beginning of the data analysis section in Table 20. In this sense, the key tasks as presented include other tasks of greater granularity (Becker, 2005), in the model as an example we can mention within the recruitment and selection meta-routine and within the recruitment routine the key task fleet recruitment which has as its key activity the recruitment of drivers, however so that This happens, it develops seven more activities (represented in the model in parentheses) that make up the key task, which are: (1) pre-screening: registrations carried out in the system, WhatsApp, and roads (jobs website), (2) identification of key cities for selection processes, (3) pre-recruitment based on experiences, following criteria defined in presented in document

The simplification for key tasks helps to understand that there are relevant key tasks in each of the routines, it is known that there are still tasks that have a temporal nature, and are done less frequently than others, in this sense, Table 3 classifies the periodicity of time that tasks are performed, facilitating the understanding of which tasks tend to undergo greater changes within an organizational routine.

In this way, it was possible to observe the capacity in its functioning, analysing each of the components interdependently, whether the actors at the individual level, that is, in the execution of the task, or the interrelationship between the actors at the intra-organizational level and also the more macro aspects. capacity at the organizational level. Composing the capability using meta routines, routines and tasks enables a general understanding of how the capability works, albeit in a descriptive way.

The model has a vertical character, but not linear, and the interaction between the actors takes place throughout the structure of the model, so the processes of elaboration and absorption take place at all levels. The process of sowing heuristics tends to happen at an organizational level, but there is evidence that it can also happen at an intra-organizational level. The model's perspective is to contemplate actors at the individual level, in addition to their interactions at intra-organizational levels, since task executors move the circle of capabilities results, whatever they may be.

Finally, we introduce and analyse the concept of heuristics as a microfoundation of capacity based in Bingham, Howell, & Ott (2019), who classify heuristics into three forms: seeding (using a metaphor, it can be called the mother heuristic, it is the introductory heuristic of the process, which is condensed into selection and process issues), elaboration (refers to The process of deepening the sowing heuristic is based on correction of direction, repetition) and abstraction (increases the generalization of heuristics not focused on action, but on experience). Using the basis of heuristics makes it possible to understand how the transition from the individual to the collective level happens, that is, when an individual capability becomes a company capability (Winter, 2012; Salvato & Rerup, 2011; Helfat & Peteraf, 2015; Felin et al., 2015).

In view of the above, this study joins the efforts, presenting the empirical theoretical model using data related to the strategic management capacity of human resources also including a process of seeding, elaboration and absorption in order to contextualize the transition of levels relating them in an attempt to operationalize capabilities through a multilevel analysis, encompassing micro (individual and group relations in this we call intra-organizational) and macro (organizational capacity) levels. Figure 2 presents the capacity model, using organizational routines, meta-routines, linking mechanisms and heuristics. It is noteworthy that the model is based on company Y's strategic human resources management capacity. Figure 2 presents the SHRM model of company Y.

In this sense, the model intends to: (1) bring organizational levels closer together in a multilevel perspective, (2) explain how heuristics can contribute to improving organizational results, (3) which heuristics are fundamental for the better functioning of capabilities. In this way, the model works with a set of interaction mechanisms, the name adopted in this thesis. The interaction mechanisms are mainly responsible for supporting the transition from the individual levels of task execution to the intra-organizational levels that would be composed of the HR coordinator and supervisor and director, in this case.

The aim is to explain how interaction mechanisms function as a functioning element of the capacity, basically for the capacity to function it needs to generate results, that is, the capability has a common objective (Helfat & Winter, 2013). Interaction mechanisms have the role of connecting common objectives with lower levels, in the same way they function as multipliers for seeding heuristics, for example. Table 3 presents the types of interaction mechanisms found in the research, along with the frequency they are used by company Y, not least it was classified which levels use each of the mechanisms the most. To complement this, we sought to synthesize how interaction mechanisms can be used to strengthen the processes of elaboration and abstraction of heuristics (Salvato & Rerup, 2016; Felin et al., 2015; Bingham et al., 2019).

Starting at the individual and collective interaction level, in observation it was possible to identify the transfer of knowledge from analyst A to analyst B, as excerpt:

“the transfer of knowledge from one employee to another, the recruitment analyst became a development analyst, and another person was hired to carry out this activity. In this process, the development analyst (new employee) was asked about how the integration process was carried out, she still has some doubts, she has been in the position for 30 days, and is in an adaptation period. When asked the development analyst who is passing on the information to the recruitment analyst, she said that this stage is important for the company, because it shows the entire process of how it happens in company Y.” (field diary, 2022)

The interaction mechanism used was face-to-face training, the transmission of technical information helps in the process of disseminating heuristics at an individual level, it can be used as a way of multiplying heuristics, goals and organizational objectives (Guercini, & Milanese, 2020). Another significant event that promotes the dissemination of heuristics and favours the elaboration process are the monthly, quarterly and annual meetings. It can be observed that the interaction mechanisms permeate the entire functioning of the capacity, in the words of the director, “we debate the strategic part with the team once a month but they are responsible for multiplying this downwards”, in this case it mobilizes managers from different areas and some of the heuristics listed tend to be explained as, for example, “improving the process” and “making managers more strategic”.

Going to the culture and belonging routine, for example, in a monthly planning meeting of the HR team (composed of the coordinating supervisor and the analysts) and other managers, the coordinator (2022) explained: “we defined some things that were important in our scope of culture [...] we started to develop some things, a coffee, our agreement was that we spread this subject so that in our day-to-day attitudes we could make clearly what our culture is, so we don’t grow up forgetting about it”, in this case the interaction mechanism has the role of developing heuristics, in addition to the absorption process itself on the part of other managers. The perspective here is that managers have the ability to assimilate organizational-level heuristics and also assist in the elaboration process at the intra-organizational level (Bingham et al., 2019).

It is understood that at all levels analysed in the research, the interaction mechanisms adopted solidify and promote the heuristics in a transversal way, since the mechanisms are intended to generate greater interaction between the different organizational levels, through acts that involve interaction of actors. Therefore, heuristics tend to manifest themselves collectively (Guercini, & Milanese, 2020). It is noteworthy that interaction mechanisms such as the adoption of technology to reduce time and the flow of information, for example, can be important ways for companies to use heuristics to reach the individual level. Which tends to be a problem for organizations (Helfat & Peteraf, 2015). Still, at the intra-organizational and organizational levels interaction mechanisms such as evaluations and feedback and joint decisions can be an alternative for CEOs/directors to promote seeding heuristics at a higher level. Since heuristics tend to be developed at lower levels, in this case intra-organizational.

Returning to the model, we have what we call capacity results, the capacity results tend to be the set of indicators, objectives or goals of each of the corresponding routines or meta routines. The SHRM capacity includes a set of indicators that can be used in each of the routines or meta routines, as presented in the model, it is understood that any or all capacity must present results, whether good or not. In this sense, the routines that make up the SHRM capacity contain what we call planning, control and analysis of indicators. Within the routine, the supervisor and coordinator have the role of controlling, supervising and coordinating the activities to be developed as well as the results of these activities. This structure strengthens the interaction between the intra-organizational and organizational levels, thus once again enabling access to possible seeding heuristics at the organizational level through interaction mechanisms.

In this way, we enter into the processes of seeding, elaboration and absorption of heuristics that take into account the individual, intra-organizational and organizational levels. To highlight the heuristics found at each of the levels, a table was created that includes similar heuristics proposed at each of the levels and routines or meta routines. Heuristics are similar to those that assumed the condition of being identified at different organizational levels, that is, that were somehow identified in the analysts, supervisor, coordinator and director. Table 4 contains evidence of the heuristic, the heuristic, the level of analysis and the position.

For the analysis of heuristic processes, support was sought mainly in the work of Bingham, Howell, & Ott (2019) to strengthen the discussion. We used a set of data such as semi-structured interviews, in addition to documents and participant observation to analyse how heuristics act and function at different levels. Fourteen seeding heuristics were identified in our analysis, presented in the model. However, we will present seven heuristics inserted with at least one inserted in each of the routines/meta-routines for the composition of the capacity.

In the recruitment and selection meta routine, it was possible to identify three heuristics that remained similar from end to end. However, as you can see, heuristics driven by the organizational level are simpler, that is, they tend to be less rigid and allow for greater ease in the elaboration process (Felin et al., 2012). In the case of the heuristic “Hire and evaluate drivers better”, it is understood that the heuristic takes on the role of a seeding heuristic as it assumes a set of rules and limits on how to do things (Maitland & Sammartino, 2015; Bingham et al., 2019), in this case hire and evaluate. In this sense, at the intra-organizational level, it is clear that it undergoes the process of elaboration, that is, it begins to become better elaborated at lower levels.

This is because the elaboration process aims to strengthen the seeding heuristic and improve the dissemination process to lower levels (Maitland & Sammartino, 2015; Bingham et al., 2019), at the intra-organizational level the heuristic assumes technical criteria “Make a good assessment when hiring, taking into account behavioral aspects”, there is a tendency that at supervisor and coordinator levels, heuristics become more elaborate, taking on specific aspects of each sector. In this case, it is clear that the elaboration is sustained at the individual level. As the heuristic is presented as “Make a good assessment when hiring drivers” in this specific case, it is understood that the interaction mechanisms play a crucial role for the sowing heuristic to be sustained. Since the transition to the individual level is the responsibility of the intra-organizational level.

In relation to “Improving driver dwell time with effective R&S”, there is a significant interruption at the intra-organizational level, specifically in the role of the supervisor. Interruption is one of the criteria for external influences that can impact the development of heuristics and even the process of elaboration or abstraction. In this case, the interference is a demand for hiring drivers, where it was necessary to fill vacancies, the factor of pressure to close allowed a significant change in the heuristic, the sowing heuristic became “Hire by supply and demand, the demand is high”, in this sense the heuristic was not necessarily dispelled, but it was not fully considered in the execution of the task, for example. It is evident that the internal pressure to close vacancies influenced the execution of the heuristic in its integrity. At the individual level, it became “focusing on pre-selection to find compatible profiles”, disregarding, for example, driver permanence as a simple rule.

Although the heuristic does not maintain the original principles of the seeding heuristic, it is understood that aspects that may impact the process of elaboration and absorption of the heuristics, such as pressure (Becker, 2005), tend to be controlled over time, that is, as the pressure ceases to exist, the tasks continue to be performed, and in this way there is the possibility of the heuristic being elaborated and consequently abstracted.

The heuristics “Give drivers time off for a maximum of 60 days” included in the positions and salaries routine and “Train drivers on rules and procedures” show a process of absorbing the heuristics from end to end. The heuristic abstraction process has generalization as its principle, and is generally impacted by previous experiences. (Furr et al., 2020) In this sense, it can be said that this process, be it time off or procedural training, is carried out more frequently by actors. Allowing, for example, intra-organizational levels to adapt their ways of doing things, without losing the essence of the sowing heuristic.

The heuristics “Being close to people” inserted in culture and belonging and “Empowering people to take on leadership positions” present a significant elaboration process, the perspective in this case is that the sowing heuristic has already been absorbed. In other words, both at the individual and organizational levels, heuristics are a guide for the HR sector and consequently for the execution of tasks at the individual level. Since the elaboration process tends to be the process in which people correct errors, making the heuristic more accurate (Bingham et al., 2019), reinforcing the cycle of sowing, absorption and elaboration. In this sense, heuristics tend to be better propagated through interaction mechanisms.

Therefore, it is understood that the heuristics generate important information for thinking about heuristics as microfoundations of capabilities, such as, for example, that (1), in general, initial heuristics tend to be better absorbed at lower levels; (2) initial heuristics tend to be better developed at intra-organizational levels; (3) seeding sets the stage for the transition from individual-level factors to a firm-level capability, even if it is believed that the opposite is also real, we know the importance of the seeding heuristic for the development and functioning of the capability; (3) it is possible that the heuristic is not efficient and can be replaced or transformed by another that is more viable, for external or internal reasons such as pressure; (4) heuristics are present at all organizational levels, specifically in the execution of the task; (5) elaboration supports the development of a skill, making task performance more repeatable, a fundamental role of a capability; (6) many heuristics become less specific over time as they increase the level of abstraction of the rules. In this sense, it is

understood that the longer heuristics are developed, the more effective they become, acting at different organizational levels, being incorporated into the execution of tasks and routines.

In this sense, it is understood that the empirical theoretical conceptual model has explanatory capacity for how multiple actors interact and impact the functioning of organizational capacity, taking into account some points, namely: (1) the explanation of collective phenomena ultimately starts from explanatory mechanisms that involve individual action and interaction, in this case the Interaction Mechanisms. (2) It is taken into account that the use of organizational routines to establish routines and meta-routines and key tasks can be able to explain how routines can persist and be adapted at the same time. (3) Actors are the executors of the tasks, therefore, any impact or action taken by them can generate changes in the routine and consequently in the result of the capacity. (4) actors at different hierarchical levels make different decisions, which can alter the functioning of the routine or capabilities; in this sense, it must be considered, as far as possible, that actors involved in the functioning of the routine have cognitive and behavioural aspects that impact routine or capability outcomes. (5) an analysis of microfoundations helps to understand the interactions between levels, in this case heuristics as the microfoundations of capabilities. (6) the model presents the seeding, elaboration and absorption processes at different organizational levels. (7) Heuristics are the basis of value creation strategies that may be more effective to disseminate at lower levels. (8) heuristics can in this sense be adopted not only as simple rules, but as a principle of organizational development.

V. FINAL CONSIDERATIONS

The general objective of the work was to understand how heuristics interact at different levels of the organizational capacity for strategic human resources management. It is concluded that heuristics must be considered components of capacity, since heuristics act transversally to capacity, that is, heuristics seen as simple rules tend to be promoted at a higher level and disseminated (elaborated and absorbed) at a lower level. In this way, heuristics act on the functioning of the capacity and are driven by interaction mechanisms.

Interaction mechanisms play a crucial role in the functioning of capabilities. For a capability to be effective, it needs to produce results, that is, the capability has a shared purpose. Interaction mechanisms play the role of establishing connections between shared purposes and lower levels. Furthermore, interaction mechanisms strengthen coordination and collaboration between members of the organization, contributing to its effective functioning and achieving a greater understanding of how the routines in which actors perform tasks influence the results of the capacity.

In this case, it is understood that without the interaction mechanisms it would be impossible to generate an in-depth understanding of the functioning of the capacity. It can be seen that even at lower levels there are seeding heuristics replicated in some way at individual levels. Therefore, the guiding principle of interaction mechanisms improves communication between organizational levels, improves interpersonal relationships, and promotes better organizational performance.

At the same time, organizational routines play a crucial role as a fundamental component of the theoretical-empirical model of organizational capabilities. This occurs because routines have the function of structuring tasks, routines and meta routines, making them more systematic and subject to less interference. When organizational routines are highly systematized and less prone to interference, they become more transparent in their composition and, as a result, have the ability to better explain the functioning of capabilities.

Considering the perspectives addressed, the theoretical-empirical conceptual model demonstrates its explanatory capacity in relation to the interaction and impact of multiple actors on the functioning of organizational capabilities. This can be understood through several key points. First, the explanation of collective phenomena is generally based on explanatory mechanisms that involve individual action and interaction, highlighting the essential role of Interaction Mechanisms. Second, using organizational routines to establish routines, meta routines, and key tasks offers insights into how routines can simultaneously persist and adapt.

Furthermore, it is important to highlight that actors play a central role as executors of tasks, and any action or impact on their part can result in changes in routines and, consequently, in the performance of capabilities. At different hierarchical levels, actors' decisions can affect the functioning of routines and capabilities, considering that the actors involved in routines have cognitive and behavioural aspects that directly influence the results. A microfoundations analysis is valuable for understanding interactions between levels, highlighting the role of heuristics as a basis for capabilities.

In this sense, the model incorporates the processes of seeding, elaboration and absorption at different organizational levels. Heuristics play a key role in value creation and can be disseminated more effectively to lower levels of the organization. In this context, heuristics can be adopted not only as simple rules, but as guiding principles for organizational development. Thus, the model offers a comprehensive understanding of the dynamics involved in the functioning of organizational capabilities.

The work presents six theoretical contributions. The first contribution to the literature on microfoundations of capability by inserting heuristics into a generalist organizational capability model. The

second contribution refers to the explanatory capacity of heuristics acting across capacity. The third contributes to highlighting the interaction mechanisms with an explanatory element for the micro-macro level transition. The fourth refers to heuristics being boosted from lower levels to higher levels of capacity, in a process down-top. The fifth refers to analysis of microfoundations that helps to understand the interactions between levels, in this case heuristics as a microfoundation of capabilities. As the sixth theoretical contribution the model presents the seeding, elaboration and absorption processes at different organizational levels, corroborating the heuristics literature.

Empirical contributions six contributions are presented. The first contribution is evidence of the heuristics used by company Y. The second contribution refers to the presentation of company Y's SHRM model and its relationships with heuristics and results. The third is to present the heuristics as guiding principles of organizational development. The fourth presents insights on how to use heuristics to improve task performance and, consequently, organizational capacity. Fifth, heuristics can be used in academia in management disciplines, they are directly linked to strategic human resources management models, such as recruitment and selection, training and development, and compensation and benefits.

Limiting factors of the research include a limited sample, since the research was limited to just one organization, the data cannot be generalized. However, the study offers evidence for future studies and possible replications. Another limitation is the researcher's bias, despite being familiar with qualitative research, the structuring of heuristics has a high level of complexity, in this sense the analysis can affect the objectivity of the results. In the same sense, subjectivity itself can interfere in the interpretation of the data, it is understood that there was no more than one researcher on site, therefore the interpretation and analysis of the data, even following methodological criteria, may have been affected. Methodologically, it is understood that it would be necessary to carry out the research at two distinct moments, to see if the heuristics are maintained over time. Finally, the context of the COVID-19 pandemic that was experienced at different times, pre and post qualification.

Six paths for future studies are suggested. As a first path, it is suggested to expand the sample size in other companies that have a minimally implemented HR sector, as well as applying it to other business segments. The second is to deepen the identification of seeding heuristics at lower levels. The third recommendation is to structure an HR sector in companies through a pilot project. The fourth recommendation is to systematically present the identification and extraction of heuristics. The fifth refers to interaction mechanisms, since it is important to delve deeper into how interaction mechanisms affect the performance of organizational capacity and sixth, it is suggested to apply the organizational capacity model to other types of capacity, such as logistics, administrative and other capabilities.

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