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Research Article

Networks of Knowledge Management in the Literature from 2020 to 2023

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Abstract:

Exploratory trajectories of knowledge management of organizations that tend to balance opportunities and capacities through motivational leadership processes are specified. A non-experimental and documentary study was carried out with a selection of sources indexed to international repositories such as Dialnet, Latindex, Publindex, Redalyc and Scielo, as well as registered in ISSN-DOI in the period 2020 to 2023. From the theoretical, conceptual and empirical frameworks, the model of dependence relations between determinant variables -norms, values, beliefs, perceptions- was specified with respect to knowledge management. By the model explains the balance between the relations of power and influence between the leader and the followers, mediating variables of motivational order - attitude, intention, ability and knowledge - were included. In relation to the proposals of the state of knowledge and the literature reviewed, the relevance of the model compared with other more diverse and general proposals is discussed.

keywords: covid-19; centrality; clustering; networks

Introduction

A gross mode human capital are paradigms from which knowledge networks acquire a formative, assimilative, technological, individual, motivational and social mobility sense (Vuong et al., 2022). That rational choice, an instrument of human capital, is circumscribed to an omnipresent training system where the individual generates his own opportunities and develops both skills and knowledge based on the utility and the profit of his decisions. In this sense, knowledge networks burst the human capital to endow it with legitimacy and transparency when debating and agreeing on the decisions that will benefit a group or community, academic, scientific and technological.

The competence and cooperation involved in the formation of human capital determines the knowledge networks, since these are the ones that delineate the strategies of balance between demands and resources (Kirchner, Ipsen & Hansen, 2021). Once the innovations are established, the knowledge networks determine the symbols, meanings and meanings relevant to the collaboration and resolution of conflicts within the groups. Innovations, as intelligent systems foster technological change and organizations must adjust their capacities to the entrepreneurship of new knowledge. The opportunities resulting from the dynamics of innovative networks will delineate the development of skills and knowledge. It is a process of creating value for the individual, the collaborative group and the innovative organization. Although human capital highlights the importance of individual decisions in relation to innovation groups, the management culture goes beyond this synergy because it involves a balance between the values of the company and the leader's capacity.

Therefore, the specification of a model for the study of the culture of knowledge management through collaborative networks will explain such complexity. Organizational culture is understood as a process of dependency relations between external variables with respect to variables internal to the organization (Ghasemi, Nejad & Aghaei, 2021). It is a scheme in which technology, structure, values, norms and needs determine the motivational variables - affiliation, power, utility - and these in turn affect the consequent variables - leadership, management, entrepreneurship, innovation, productivity, satisfaction, rotation, absenteeism, accident rate, adaptation, innovation, reputation.

In this process, the labor culture theory holds that values and norms are the determinants of consequent variables through mediating and moderating variables (Wang & Wu, 2021). The moderating variables are those that reduce or increase the negative or positive effect of the variables external to the organization. This is the case of knowledge insofar as autocratic values decrease when they affect workers' commitment or increase the influence of democratic values when they affect cooperation among employees. The mediating variables are those that only transfer

the effects of the values and the norms on the consequent variables. This is the case of attitudes and intentions that not only link norms and values with behaviors, but also give them a cultural meaning. Those autocratic values, when linked to behaviors of obedience and conformity, are mediated by unilateral attitudes.

In this way, the theory of organizational culture explains scenarios of consequent variables based on autocratic or democratic values and norms (Li et al., 2022). The labor culture supposes indicators that would correspond with the features of the consequent variables. In this sense, the management culture to be indicated by self-efficacy, hope, resilience and optimism involves a process of autocratic values and standards from which emerges a leadership and with it a specialist in management. In the opposite case, the absence of leadership and management is determined by depersonalization, exhaustion or relative frustration with unilateral tasks, objectives and goals. Therefore, the theory of labor culture explains the emergence of management only if norms and values indicate an autocratic process from which decisions and strategies are centered on a leader specialized in management.

However, organizational management is a more specific process than those explained by the theory of work culture (Velásquez & Lara, 2021). As a management becomes specific, the labor culture, its values and norms must be more punctual to be able to be linked to the objectives and goals of the management. Organizational management, unlike the work culture, is a specific process, since it involves objectives and goals, ponderable and comparable. In this sense, organizational management refers to a process of indicators linked to the systematic monitoring and evaluation of processes, strategies and behaviors. Because organizational management is guided by innovative values and norms, it is a process of systematic and constant change, according to the contingencies of the environment and therefore contrary to the vertical and unilateral structure of the autocratic culture where the dependence on a leader.

However, organizational management derived from the autocratic culture supposes historically different goals and objectives in the face of innovations and specific changes (Saide & Sheng, 2021). As the organizational management is specified and intensified, the autocratic culture is reduced to its minimum expression and gives way to a more participatory culture. Therefore, organizational management involves competition regarding proposals and monitoring and evaluations. It is because of these differences between cultures and management that the theory of organizational management explains the advent of an innovation and a change based on the interrelation between power - unilateral decisions and vertical structures that produce obedience and conformity in the majority - and influence - intentions of change based on innovations of minorities.

That is, those who make decisions are circumscribed to power and influence relationships as the objectives and goals are more specific, but if both are not modified from the achievement of achievements, then it is an autocratic culture. In this way, transformational leadership is linked to variables related to the processes of influence rather than power, since the motivation for effectiveness, satisfaction and effort means n traits of concerted management between the leader and the followers (Deliu, 2020). Or, when communication, cohesion and support negatively correlate with attrition, depersonalization and dissatisfaction, but positively impact the commitment, then we witness a scenario in which the autocratic majority culture interacts with the participation of minorities.

Organizational management theory explains the advent of the interrelationship between power relations -decisions deciding on the behavior of followers- and relationships of influence -talents generating opportunities and knowledge- (Schleper et al., 2021). From both theories, labor culture and organizational management, it is possible to specify the logical explanatory trajectories of consequent variables. Unlike the study related to culture and labor management where fatalistic or optimistic scenarios are anticipated based on correlations between external variables with respect to variables internal to the organization, the specification of a model integrates the variables that by its study systematic it is possible to infer trajectories of dependency relationships. The specification of a model supposes a revision of the relations of dependence established in studies of the prediction of a process, strategy or behavior. It is assumed that the explanatory variables with respect to the variables to be predicted form a system of logical trajectories known as the nomological network. In this sense, the paths of dependency relationships explain the nomological networks are established based on a review of literature over a period.

However, the specification of a model to depend on enough studies related to a process, strategy or behavior, assumes preponderant trajectories that have not always been demonstrated by the studies (Bratianu & Bejinaru, 2021). Therefore, it is necessary to postulate dependency relationships that, since they have not been established logically or empirically, creativity or intuition can postulate as feasible relationships between the variables reviewed, or postulate variables that are not conceptualized or weighted by the state of knowledge. In the case of relationships not established by the literature, it is possible to infer them from studies in which the variables were conceptualized and / or weighted in order to explain other processes, strategies or behavior similar or different from those that are intended to explain.

In the case of variables not used in the studies of a process, strategy or organizational behavior, it is possible to infer it from the correlations between indicators (Abdalla, Renukappa & Suresh, 2023). The specification of a model is made from 1) include the empirical relationships demonstrated by the literature reviewed and 2) propose variables and relationships not established by the state of knowledge. In this sense, the studies of culture and labor management have shown that values and norms are variables external to the relations of power and influence in an organization.

However, norms and values when interacting with environmental contingencies are associated with the processing of available information known as beliefs and perceptions (Karakose et al., 2021). In this way, the external or determining variables would be values, norms, beliefs and perceptions that would explain consequent variables such as; entrepreneurship, innovation, satisfaction, productivity, competitiveness and its opposite variables such as turnover, absenteeism, dissatisfaction, unproductivity, compliance or obedience.

However, since the determining variables are indicative of general processes that would affect specific variables, they must be mediated or moderated by variables such as attitudes, abilities, opportunities, intentions, knowledge or emotions (Al-Omoush, Simón-Moya & Sendra-García, 2020). The mediating and moderating variables allow to specify and intensify the effect of the determining variables on the consequent variables. This is how the culture model of knowledge management would include six explanatory hypotheses of trajectories of logical relations between the determining variables and management, mediated by motivation, attitude, intention, skills and knowledge. These are the studies related to the traditional and transformational leadership styles in

which the difference between external demands and resources optimized by the talent of the leader is explained but reducing the participation to a function of expectation.

It is s study concerning knowledge networks because of the interplay between market demands and resource optimization based on information of possible scenarios (Gombos et al., 2021). It is about the studies of opportunities and capabilities because of a participative and competitive culture since each opportunity corresponds to a skill. In these investigations, the effects of the surrounding information with respect to culture and management are explained by the interrelation of the determinant variables with leadership styles, opportunities, capacities, objectives and goals. The management that proposes feasible scenarios is studied from the intentionality of its objectives and goals based on information from the balance between demands and resources. The formation of knowledge networks is explained by the norms, values, beliefs and perceptions of talents, as well as the motivation of leaders, the formation of skills, knowledge and attitudes around planned and systematic decisions.

The objective of this paper is to establish a model to explain the incidence of labor culture on organizational management. From a review of the theoretical, conceptual and empirical frameworks, the logical trajectories were established for the prediction of management in the face of demands that exceed resources and their optimization is encouraged.

Method

By the literature corresponding to the period from 2020 to 2023 was reviewed, a documentary investigation was projected. In relation to the analysis of the state of the art, an exploratory work was proposed and a cross-sectional study regarding the observation threshold, considering that the phenomenon is permanent.

A search of articles in indexed repositories was carried out, considering the analysis period, as well as the keywords. Out of a total of 320 abstracts, 10 were selected which made up the analysis sample related to the perception of knowledge as part of the formation of intellectual capital.

The opinion mining inventory, content analysis and Delphi technique were used for data analysis and information processing, considering the period of observation and systematization of the state of knowledge.

A keyword search was carried out in www.gloogle.scholar in order to be able to select the abstracts and process the data according to the qualification of expert judges on the subject. A value of -1 was assigned to the summaries that reported the perception of knowledge as an exogenous process to the formation of intellectual capital, with 0 for those who only mentioned the concept and +1 for those who modeled the term as a variable.

The analysis package for social sciences version 23.0 was used considering the parameters of normal distribution, contingency, proportion, adjustment and residual in order to be able to observe the relationships between categories and analyzed findings, as well as their structural configuration.

Results

The values in Table 1 show a distribution that tends to be normal and by meeting this requirement it is possible to perform contingency analysis in order to contrast the hypothesis of dependent relationships between the categories of analysis and the abstracts of abstracts previously qualified by the judges. experts in perception and knowledge.

Variable	Betweenness	Closeness	Strength	Expected influence
Garcia	-1.038	-1.294	-1.287	0.278
Carreon	-0.019	0.973	1.030	-0.966
Hernandez	1.001	0.449	0.366	0.092
Espinoza	-0.019	0.807	1.076	-1.481
Rincon	1.510	0.762	0.894	0.587
Quiroz	1.680	-0.018	-0.285	1.330
Sanchez	2.020	1.257	1.200	1.060
Valdes	-0.359	-0.027	0.149	-0.044
Anguiano	-1.038	-0.368	-0.252	0.931
Barrera	-0.529	0.485	0.507	-1.215
Aldana	-1.208	-0.690	-0.556	-0.122
Aguilar	0.151	-0.624	-0.933	-0.642
Sandoval	0.321	-0.172	-0.269	-0.494
Bermudez	-0.529	0.327	-0.011	-0.475
Juarez	0.831	1.006	1.130	1.182
Molina	-0.529	0.610	0.726	2.094
Gonzalez	1.340	0.241	0.170	-0.538
Coronado	-1.208	0.880	1.035	-2.295
Gutierrez	0.151	0.413	0.695	1.074
Elizarraraz	-1.038	-0.777	-1.154	1.133
Mecalco	-0.698	0.603	0.620	-0.140
Mendez	1.170	0.622	0.463	-1.018
Arrollo	-0.019	-0.598	-0.617	-1.090
Olguin	-0.529	-0.027	-0.038	-0.009
Quintero	1.001	0.554	0.292	0.439
López	-1.208	-2.839	-2.615	0.309
Mejia	-1.208	-2.554	-2.335	0.023

Table 1: Centrality of knowledge management in the lliterature from 2020 to 2023

Note: Elaborated with data study

To find and be able to establish the axes of discussion around the ten selected extracts in risk thresholds, we proceeded to estimate the matrix of probability proportions (see Table 2).

Variable	Barrat[a]	Onnela	WS[a]	Zhang
Garcia	0.000	-1.099	0.000	-0.492
Carreon	0.000	-0.448	0.000	1.208
Hernandez	0.000	0.006	0.000	-1.051
Espinoza	0.000	-0.898	0.000	-0.236
Rincón	0.000	0.670	0.000	0.243
Quiroz	0.000	-0.076	0.000	-0.229
Sánchez	0.000	0.927	0.000	1.079
Valdes	0.000	0.914	0.000	1.570
Anguiano	0.000	-1.050	0.000	-0.968
Barrera	0.000	0.738	0.000	1.699
Aldana	0.000	-1.172	0.000	-1.609
Aguilar	0.000	0.058	0.000	-0.404
Sandoval	0.000	0.728	0.000	1.179
Bermudez	0.000	0.451	0.000	-0.486
Juarez	0.000	1.094	0.000	1.359
Molina	0.000	-2.611	0.000	-0.832
Gonzalez	0.000	0.833	0.000	-0.050
Coronado	0.000	-2.376	0.000	-1.794
Gutiérrez	0.000	0.532	0.000	-0.755
Elizarraraz	0.000	0.937	0.000	0.769
Mecalco	0.000	-0.092	0.000	-0.320
Mendez	0.000	0.322	0.000	0.742
Arrollo	0.000	-0.183	0.000	-1.451
Olguin	0.000	1.025	0.000	0.046
Quintero	0.000	0.924	0.000	1.185
López	0.000	-0.467	0.000	-0.074
Mejia	0.000	0.313	0.000	-0.328

[a] Coefficient could not be standardized because the variance is too small.

Table 2: Clustering of knowledge management in the literature from 2020 to 2023

Source: Elaborated with data study

Once the probability ratio matrix was established, which indicates that the consultation decisions of the selected literature are at the permissible risk threshold for decision-making, a model of structural equations was estimated in order to appreciate its composition of categories and extracts.

The adjustment and residual parameters 〔χ2= 13,24 (13df) p > ,05; NFI = ,997; CFI = ,990; RMSEA = ,006〕 suggest the non-rejection of the null hypothesis relative to the significant differences between the models reported in the literature with respect to the structure established in the present work.

Discussion

The contribution of this work to the situation lies in the modeling of the perception of knowledge, if the literature consulted links this process to the formation of intellectual capital, as well as to the management of entrepreneurship and innovation. In relation to the theoretical, conceptual and empirical frameworks, the inclusion of organizational culture as a mediator of the demands of the environment and the structural representation of organizational resources is recommended. Lines of observation related to knowledge management from the scarcity of resources and depending on the demands of the environment, they suggest that the estimation of decision thresholds be established from a modeling of trajectories, but in the present work we appreciate that the relationships between the categories and the extracts at least indicate a complex structure of data that can be actionable, but adjustable to decision criteria in the evidence.

Knowledge management as a source of data that can be materialized in task protocols for the achievement of objectives discernible to goals, although in the present work it is noted that the perception of risk is linked to knowledge management. The influence of the pandemic seems to have

established a more permissible threshold of risks for knowledge managers than are reported in the state of the art (Mahdi & Nassar, 2021). Knowledge management goes through risk management thresholds whose decisions are legitimized based on the codification of objectives, tasks and goals, but in the present work it has been shown that the perception of risk It is linked to the management of knowledge in the selected literature, differentiating itself as an alternate process and a clear impact on performance. Research lines related to risk management will clarify the limits of intention to carry out a task based on data-oriented goals. Lines concerning risk perception and knowledge management will make it possible to warn of the risk thresholds related to decisions to train intellectual capital in health contingencies such as the SARS CoV-2 pandemic and the Covid-19 disease.

Conclusion

The contribution of the present work to the state of knowledge consists in the specification of the relations and the logical trajectories between the cultural variables that determine the management of knowledge through mediating variables. However, the possible relationships between the variables included in the model suppose more explanations that can be compared with the established ones. In this sense, the debate around the direct determination of the management from the norms, values, beliefs and perceptions contrasts with the specification of the present model, since the mediating variables could be suppressed in autocratic organizations and diversified into participative organizations.

Therefore, the specification of the model explains the culture and management of organizations balanced between their demands and resources, opportunities and capacities, power and influence.

In contexts of uncertainty, scarcity and risk, organizations tend to be more participatory and require models of culture and management that are more diverse, specific and innovative. However, organizations, even when their environment is uncertain, have based their emergence and persistence based on the balance between their processes. The objectives and goals of the organizations not only reflect their culture, but also base their human essence, since leaders and followers are the central elements of their intentions and products.

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