Contribution of Grounded Theory in Management Research Between 2013 and 2022: A Bibliometric Study

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Abstract: The importance attributed to the qualitative methodology has been increasing in recent years, since it is becoming consensual that it has a relevant role when one wants to deepen topics that are traditionally studied through methodologies anchored in the quantitative approach. This article aims to analyze the contribution of Grounded Theory (GT) in research in the field of management, since it is essential to begin to approach this area from methodologies that are more sensitive to the institutional and cultural context in which organizations are inserted. Therefore, it seeks to identify and justify the application of GT in this topic, since it is a methodology little explored in this area of knowledge, which emphasizes the relevance of taking stock of the articles published between 2013 and 2022. Through a bibliometric approach with the support of visual maps of the research indexed to the Web of Science, created with VOSViewer, it was intended to give a panoramic view of the studies published in this scientific area. The results indicate that although the number of published articles has been increasing in recent years, there are still few publications that use GT in the area of management, which may be due to the practical nature of management studies, where the measurement and analysis of numerical data are considered more objective and reliable. In addition, many management studies have tight timelines and limited budgets, which may make it difficult to implement such a resource-intensive approach. Nevertheless, GT contributes to generating new knowledge and insights in the field of management. By challenging existing theories, it fosters the development of new perspectives that enhance the understanding of organizational phenomena, which contributes to the advancement of knowledge in the field of management.

Keywords: Grounded theory, Qualitative research, Research methodology, Management research method.

1. Introduction

Born in 1967 by the hands of sociologists Glaser and Strauss, Grounded Theory (GT) became the first manifesto of the so-called renaissance of qualitative research. Motivated by inductive theorizing, these authors suggested a methodology to build conceptions and theoretical models based on empirical data, based on observed reality (Assimos and Pinto, 2022). Therefore, it does not focus on an existing theoretical view, but on constant comparative analyses that allow building a grounded theory (Niasse, 2023).

Similar to other qualitative approaches, data from GT can be collected from various sources, namely: interview, observation, document analysis, case study, focus group, and/or Delphi panel (Gliger, 2018). This approach can be applied to management, with the aim of gaining insights into the ways organizations function (Sato, 2019).

Data are analyzed to identify patterns and topics that emerge, and can be used to develop a theory of how management works in a particular context (Gligor et al., 2016). It can also be used to inform decision making and to guide organizational change, because when a specific management practice is effective in a particular context, it can be replicated in other organizations in similar contexts (Sato, 2019). Makri and Neely (2021) add that GT also helps to identify areas where more research is needed. Nevertheless, it is still little used in this area of knowledge, which is why it was considered pertinent to know its application in management. To this end, a bibliometric study was conducted on articles published in full-text in the Web of Science (WoS) between 2013 and 2022.
2. Literature review

2.1 Grounded theory

As previously stated, rather than imposing pre-existing theories or assumptions on the data, GT involves developing a theory from the data that are generated during the research process (Centeno et al., 2020). Data are analyzed in a systematic and iterative manner to develop categories and concepts that are used to develop a theory that builds on reality and explains the phenomena under study (Makri and Neely, 2021).

Being considered one of the purest forms of qualitative research, GT is operationalized through ten phases (Ligita et al., 2020):

1. Identification of the research area considering the dynamics of each object under study, in order to strengthen the disciplinary and interdisciplinary relations of the topics that may emerge;
2. Definition of the research question, which constitutes the starting point for theory building, guides the investigation and allows a preview of the phenomenon under study in its natural environment;
3. Selection of the instruments that will be used in data collection, so that the results are not biased;
4. Open coding (initial) to identify the concepts and their properties;
5. Recording of observations on the various phases of the GT construction process;
6. Theoretical sampling, which occurs when all categories are saturated in terms of properties and dimensions;
7. Axial coding that relates the categories to each other and associates them according to their properties and dimensions;
8. Selective coding (conceptual) that integrates and refines the theory around a concept;
9. Preparation of the report with the description of all phases and research processes;
10. Evaluation of the research with respect to the procedures and method used to generate the results.

Critical engagement in particular situations makes it possible to recognize the uniqueness of knowledge development and to assume that it is simultaneous and multiple. In this context, Clarke et al. (2018) argue that elements should not be analyzed in isolation, but rather interpreted in their connection to the whole, because things only have meaning when they are related to the situation in which they are found or in which they occur. According to the authors, it makes no sense to write a theory about something that is constantly changing, so all concepts must be continuously compared with the data that are collected.

2.2 Advantages and disadvantages of the Grounded theory

GT can be described as a method that aims to build a theory grounded in the observed reality from the collected data. Like any methodology, GT also has positive and negative points (Ássimos and Pinto, 2022).

The main advantages are the process of coding the variables that help to outline the research, the method of constant comparison that allows to delimit the data collection and the fact that the research continues until all categories are saturated in terms of properties and dimensions (Centeno et al., 2020). According to Ebrahimi (2020) the fact that it does not only contribute to enriching the data collected, but also to increasing its objectivity in terms of interpretation and discussion, is one of its added values. It also enables the development of explanatory models that are enhanced by the processes of data triangulation and/or theoretical saturation to build models that study situations in real contexts (Maupa and Abidin, 2020). This approach brings a number of operational advantages such as the process of coding the variables, the constant comparison method that aims for exhaustion of data collection, the coding process that helps outline the research, and theoretical sampling that looks for similarities with other studies (Makri and Neely, 2021). Considering that it is a dynamic and iterative process, it allows for greater flexibility in its approach, because it can be adapted as new data are collected and analyzed, and it provides a new perspective on a research problem (Niasse, 2023).

Despite its advantages, GT also has negatives points, among which are the difficult operationalization of the process and the dependence on the theoretical subjectivity of the researcher, since biases and preconceptions may influence the interpretation and analysis of the data (Kiger and Varpio, 2020). In addition, it requires a significant amount of time to collect and analyze the data, which can be a limitation for researchers who have limited resources or a tight schedule (Qureshi and Ünlü, 2020). Ligita et al. (2020), further state that GT usually involves a small sample size, which can limit the generalizability of the results. The fact that it is a process that relies on ongoing data collection and analysis, it can make it difficult to determine when to stop data collection.
This can result in an overly complex theory or an incomplete understanding of the research problem (Makri and Neely, 2021).

3. Methodological procedures

Bibliometric research makes it possible to identify, synthesize, and conduct a broad analysis of the literature about a specific topic (Donthu et al., 2021). This research was operationalized through a data mining supported approach using VOSViewer, a software that enables the creation and analysis of bibliometric networks, from data searched in databases (Williams, 2020).

The research was conducted on the WoS platform of the Institute for Scientific Information (ISI), an online service that indexes the most cited periodicals in their respective scientific areas and allows one to know the number of times each article is cited during a given period of time (Liu, 2019). Thus, a research was conducted on the articles published in the management area between 2013 and 2022. The PICO method was used (Frandsen et al., 2020), which stands for Problem (P), Intervention (I), Comparison (C), and Outcomes (O).

3.1 Inclusion and exclusion criteria

The search was based on the Boolean equation "Grounded theory" AND "Management". Only scientific articles in English were selected (Table 1).

Table 1: Inclusion and exclusion criteria

<table>
<thead>
<tr>
<th>Selection criteria</th>
<th>Inclusion criteria</th>
<th>Exclusion criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem (P)</td>
<td>GT and Management</td>
<td>Studies that address only one of the variables</td>
</tr>
<tr>
<td>Intervention (I)</td>
<td>Use of GT in Management</td>
<td>Studies using other types of methodology</td>
</tr>
<tr>
<td>Comparison (C)</td>
<td>Comparison of the data within the defined time period</td>
<td>Studies outside the defined time period</td>
</tr>
<tr>
<td>Outcomes (O)</td>
<td>GT's contribution to management research</td>
<td>Studies that do not allow the construction of a theory based on the observed reality</td>
</tr>
</tbody>
</table>

Adapted from Frandsen et al. (2020)

3.2 Article Selection

In addition to the previously mentioned inclusion and exclusion criteria, only documents belonging to the Management category in the WoS were selected, those that addressed the topic Business, Management and Accounting. Moreover, the following filters were applied: Document types, Publication years, and Open access, so only articles published between 2013 and 2022 with free full text were included. Books, book chapters, conference proceedings, master’s dissertations, doctoral theses, and articles that after reading the abstract did not correspond to the research objectives were excluded.

4. Results

From the WoS search, 4,662 articles were identified; however, only 292 were considered eligible because the remaining articles (n = 4,370) did not have full text (Figure 1).

Figure 1: VOSViewer map of full-text articles published in WoS between January 1, 2013 and December 31, 2022
After reading the abstract and taking into account the inclusion and exclusion criteria, 39 articles were selected, which met the research objectives. To systematize the article selection process, we used the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA; Rethlefsen et al., 2021) methodology, whose steps are shown in the flowchart in Figure 2.

**Figure 2: PRISMA Flowchart for selecting articles to be included in the research**

The results showed that although the number of documents that relate the descriptors GT and Management has been growing in the last two years, it is quite scarce, and out of a universe of 4,662 documents, only 39 (3.1%) meet the inclusion and exclusion criteria (Figure 3).
During this time period, a management research can be divided into five groups (Figure 4) directly related and mostly overlapping:

1. The red cluster is dedicated to strategic management and is composed of nine items encompassing the following keywords: decision making (Lynch and Barnes, 2020), entrepreneurship (Burgos et al., 2020), strategic change (Cunha et al., 2019), management ideas (Jha and Jacob, 2020), task performance (Douglas et al., 2022), and project management (Li et al., 2022).

2. The green cluster consists of nine items that address aspects related to operational management. This cluster covers the following descriptors: operational alignment (Bidmeshk et al., 2021), software development process (Chen et al., 2018), advanced management (Hanningan et al., 2019), target consumers (Kapoor et al., 2022), digital transformation (Krasnikolakis et al., 2020), organizational routines (Nair, 2021), and test preparation industry (Pandey et al., 2022).

3. The blue cluster encompasses seven items pertaining to change management. Key terms include: radical change (Bennett et al., 2018), skill development (De Vos et al., 2015), international projects (Klimkeit, 2013), organizational performance (Ndevu, 2019), and blended leadership (Painter-Morland and Deslandes, 2017).

4. The yellow cluster refers to innovation management and includes seven items, whose keywords cover: open innovation (De Aro and Perez, 2021), innovation success (Ibrahim, 2016), localized knowledge transfer (Iddy, 2021), global virtual teams (Mattarelli et al., 2017), open opportunities (Rogiers et al., 2021), business model innovation (Schaffer et al., 2022), and patterns of change (Sune and Gibb, 2015).

5. The purple cluster encompasses seven items related to international business and integrates the keywords related to mergers and acquisitions (Chakkol et al., 2018), international business (Chakkol et al., 2018), blending (Gregory et al., 2015), future trends (Hall and Rowland, 2016), and business growth programs (Pinnington et al., 2021).
After organizing the articles into clusters, it was considered pertinent to develop a content analysis grid based on the following dimensions: thematic area, theoretical paradigm in methodological terms, data collection technique, data analysis procedures, participants, main results, and theoretical and practical contributions. At this moment the articles are being subjected to detailed analysis.

5. Final considerations

Bibliometric research makes it possible to delve into specific topics and identify what has already been published on a given topic, in a time period previously defined by the researcher (Quevedo-Silva et al., 2016). Based on this approach, we intended to analyze the contribution of GT in research in the field of management. The relevance of the study is related to the fact that this methodology uses the data collected during the research process to develop theories based on reality and explain the phenomena that occur in the organizational context in a substantiated way.

The research was operationalized through a bibliometric approach that used WoS to identify the articles published, in full text, in the management area between 2013 and 2022. Subsequently, VOSViewer was used to group the articles according to their thematic similarities. These visual maps revealed the existence of five clusters covering strategic management, operational management, change management, innovation management, and international business, respectively.

Data analysis revealed that publications using GT in management have been increasing in recent years. Nevertheless, the results showed that the number of articles resulting from the Boolean equation "Grounded theory" AND "Management" remains scarce, as it was found that in the last decade only 292 articles have been published in the area of Business, Management and Accounting, and only 72 are in open access. It should be noted that, due to the inclusion and exclusion criteria previously defined, the final sample was composed of 39 articles, since 33 did not meet the objectives of the study. The selected articles are still being analyzed.

Like any research, this one also has its limitations, namely the fact that the search was conducted only in WoS. Nevertheless, it is considered that this work contributes to highlighting the importance of GT in management, and to draw attention to the scarcity of existing studies. Given this evidence, it is suggested that in future studies we analyze to what extent the different phenomena that occur in organizations can be evaluated through GT and to what extent this approach contributes to the advancement of research in the management field.

It is expected that this work will contribute to encourage the use of this methodology in organizational contexts, since GT allows the construction of new theories that are based on the reality observed from the data collected.

References


