

RESEARCH IN MANAGEMENT ACCOUNTING: EPISTEMOLOGICAL, ONTOLOGICAL AND METHODOLOGICAL DIMENSIONS

A PESQUISA EM CONTABILIDADE DE GESTÃO: AS DIMENSÕES EPISTEMOLÓGICAS, ONTOLÓGICAS E METODOLÓGICAS

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Resumo

Em qualquer processo de pesquisa, existe uma sequência holística que abrange vários constructos, começando com a generalização e terminando com a particularização, descritos neste artigo. Em outras palavras, a pesquisa tem o seu início com a visão geral do pesquisador sobre o mundo - ontologia - seguida pela perspectiva do conhecimento - epistemologia - e, posteriormente, define a abordagem geral da pesquisa - metodologia - métodos de pesquisa - quantitativa e / ou qualitativo - e, finalmente, técnicas de pesquisa - entrevistas, questionários, análise documental. Nesse contexto, este artigo aborda as dimensões / perspectivas metodológicas / epistemológicas que a pesquisa em gestão envolve (epistemologia regional). Em particular, serão referidos os paradigmas da pesquisa em contabilidade (epistemologia interna) que refletem pilares teóricos e metodológicos cruciais para a produção de conhecimento científico, desde as dimensões tradicionais até as mais recentes. Com base nos aspetos epistemológicos, nos vários ramos da epistemologia e nos paradigmas inerentes, este artigo aborda os seguintes tópicos: paradigmas de pesquisa em contabilidade, nova visão paradigmática da pesquisa em contabilidade, paradigma interpretativo e a sua abordagem pela conceção da teoria institucional, dimensão ontológica assumida pelo pesquisador e sua relação com as dimensões epistemológicas e metodológicas e método de pesquisa - estudo de caso. Os resultados mostram que o paradigma interpretativo começa a ser cada vez mais utilizado na área da contabilidade, dada a sua flexibilidade para estudar fenómenos contextuais, como por exemplo, o processo de controlo de gestão, particularmente nas multinacionais, onde as pessoas são o construto central do mesmo, vulgo expatriados. Evidente que a fraca validade externa deste método, deve ser colmatada com a triangulação de outras informações disponíveis sobre o caso em estudo e, ainda, com os construtos da nova teoria institucional. Esta teoria defende que as práticas adotadas pelas organizações eram por estas assimiladas como resultado de um processo cultural e não só como um meio formal para melhorar a sua eficiência (Leite, 2015). Por outro lado, tem como premissa o uso de estruturas e processos que são legitimados e padronizados, bem como, fazem parte de um todo integrado e aborda o sistema de controlo de gestão como um conjunto de práticas de gestão e não apenas como um modo de controlo per si e estuda as relações organizacionais entre as partes envolvidas. Ainda são tecidas outras implicações para a teoria e para a prática, bem como, sugeridas pistas futuras de investigação.

PALAVRAS CHAVE: Epistemologia, Paradigmas, contabilidade, paradigma interpretativo

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Abstract

In any research process, there is a holistic sequence that spans several constructs, starting with generalization and ending with particularization, described in this article. In other words, the research begins with the researcher's overview of the world - ontology - followed by the knowledge perspective - epistemology - and then defines the general approach to research - methodology - research methods - quantitative and / or qualitative - and finally research techniques - interviews, questionnaires, document analysis. In this context, this article addresses the methodological / epistemological dimensions / perspectives that management research involves (regional epistemology). In particular, we will refer to accounting research paradigms (internal epistemology) that reflect crucial theoretical and methodological pillars for the production of scientific knowledge, from the traditional to the most recent dimensions. Based on the epistemological aspects, the various branches of epistemology and the inherent paradigms, this article addresses the following topics: accounting research paradigms, new paradigmatic view of accounting research, interpretative paradigm and its approach to institutional theory design, dimension assumed by the researcher and its relationship with the epistemological and methodological dimensions and research method - case study. The results show that the interpretative paradigm is increasingly used in accounting, given its flexibility to study contextual phenomena, such as the management control process, particularly in multinationals, where people are the central construct of the same, expatriates. It is evident that the weak external validity of this method must be addressed by the triangulation of other available information about the case under study and also by the constructs of the new institutional theory. This theory argues that the practices adopted by organizations were assimilated by them as a result of a cultural process and not only as a formal means to improve their efficiency (Leite, 2015). On the other hand, it is premised on the use of structures and processes that are legitimized and standardized, as well as part of an integrated whole and addresses the management control system as a set of management practices and not just as a way of control per se and studies the organizational relationships between the parties involved. Other implications for theory and practice are still woven, as well as future avenues of research suggested.

KEYWORDS: Epistemology, Paradigms, accounting, interpretative paradigm

1. PARADIGMS OF RESEARCH IN MANAGEMENT ACCOUNTING

In general, research is an intellectual / cognitive method of constant discovery for the understanding of the phenomena that surround us (Ryan, Scapens, & Theobald, 2002). The choice of a scientific research paradigm is related to what is studied, to the formulations of research questions, to the research methods used and, finally, to the way the results are interpreted (Lukka, 2010). That is, the theory of knowledge (epistemology) comes from the nature of the phenomenon to be investigated (ontology) and the research procedures that are used (methodology), which may include different methods of collecting and treating the evidence (Leite, 2015). Corroborating this argument, Theophilos and Iudicibus (2009) Evidenced that epistemology plays a preponderant role in questioning and criticizing the foundations and scientific principles that are established in the various sciences.

This criticism / contestation / questioning fits in with the epistemological one of Bachelard (1996) that considers that the formation of the scientific spirit is a process that implies time, constant reformulations and even resignations. This means that one must renounce pre-conceived and already existing values (attributes), since they cause inertia and stagnation, that is, they are

epistemological obstacles (Bachelard, 1996). However, there is another epistemological aspect of Popper (1975), also important, which is the false dichotomy. For this author, scientific knowledge is approaching reality as it becomes rational; This rationalization occurs when a scientific method is used that legitimizes / validates the results obtained by the criterion of falsity. This assumption means that it can never be observed without interpretation and that all propositions are theoretical (Popper, 1975), that is, the systematic inductive method is rejected and all inferences withdrawn from it, since the scientificity of a proposition is not Defined by its verification, but by the tests that corroborate this proposition - criterion of falsifiability - (Costa & Martins, 2016).

Therefore, it has been argued that any investigation is a process to discover something new intellectually, that allows to reach the understanding of the phenomena that surround us (Ryan et al., 2002). Thus, it is important to recall the origins and meaning of epistemology.

Blanché (1975) advocated that epistemology arises, above all, to look at science from the point of view of results rather than processes, in which this concept is surrounded by some nebulosity, by the difficulty in delimiting boundaries between epistemology and The theory of knowledge, because there is an area of interception between these two, a zone of contact. For this author, epistemology is contained in the theory of knowledge, in which there is a discourse, a rational reflection on science, so it is extremely difficult to define boundaries between both.

On the other hand, the concept of paradigm arose with Kuhn's (2000) scientific revolution structure, which argued that in order to exist progress there must be rupture, that is, it criticizes scientific rationality. For this author, science is not a philosophical tradition, nor something with critical rationalism (testability, falsifiability, falsifiability) as argued by Popper (1975), who concluded that theory precedes experience and that certainty is a subjective criterion.

This means that scientific development is a discontinuous process, which takes place through abrupt breaks in the visualization of the world, which, at a later stage, go through a consensus, consolidation, and improvement of new theories that displace the older ones (Kuhn, 2000). In this sense, the process of competition between paradigms arises, which are incommensurable with each other and are not comparable to each other, that is, paradigms succeed each other so that the anomalies / errors that arise are progressively solved - the paradigm Is replaced by another with new solutions - argued the same author.

Other authors consider that the scientific research paradigm is related to what is being studied, the typology of the research questions that are defined, the research methods used and the type of content analysis defined (interpretation of results) (Lukka, 2010). Another definition, he argues, is that the paradigm is a concept that designates how a social phenomenon is interpreted in the case of the social sciences (Kakkuri-Knuuttila, Lukka, & Kuorikoski, 2008). That is to say, in the language of Kuhn (2000), first it is necessary to determine the significant facts, according to which it is necessary to harmonize these facts with the theory and, thirdly, it is necessary to proceed with the articulation with the theory / paradigm.

It is also argued that epistemology arises as a result of the nature of the phenomenon to be investigated (ontology), of the research procedures used (methodology), and also of the methods defined for the collection of data and the analysis of empirical evidence Quivy & Campenhoudt, 2005, Ryan et al., 2002). However, the level of objectivity of phenomena is always a relevant issue, although no research can be entirely objective (Hopper & Powell, 1985). However, the choice of a research methodology should always be guided by ontological and epistemological factors, human nature and methodology (determinism / voluntarism), the same authors argued. In addition, these authors mentioned that all these elements are distinct but related to each other, that is, they have common characteristics and are not exhaustive per se. In this sense, two different conceptual dimensions were created: subjectivism and objectivism. Subjectivism has implicit an interpretive epistemology, in which a reality is the effect of individual consciousness, free will and methodology is related to the emphasis given to social reality (Hopper & Powell, 1985; Ryan et al., 2002). Already in objectivism, knowledge is originated by the observation of a concrete reality and human actions are the result of the environment and the methodology follows the deducti-

ve method, the same authors argued. Although there are three distinct conceptual dimensions, which are summarized in the taxonomy defined by Hopper and Powell (1985), only two of these dimensions, the positivist and the interpretative, will be focused.

It should be noted, however, that the methodology of science is an extension of a new epistemological approach that aims to study the general method of scientific investigation and the methods and techniques of a particular science (Salmerón, 1980). This assumption led to the fact that management accounting is a social science, and it is opportune and pertinent to apply epistemology to accounting scientific production as a way of contributing to epistemological literature and, simultaneously, to improve the understanding of the intrinsic characteristics of accounting as a science (Ikuno & Niyama, 2015).

Thus, the paradigms of research in management accounting are related to the way in which the scientific knowledge obtained for a given phenomenon is interpreted. Thus, in this section we will address two of these paradigms - positivist research and interpretative research -.

Before discussing these two types of research, we must mention Carnap and the logical positivism evidenced in the work of Pasquinelli (1983). Carnap, influenced by Frege and Russell, wanted to find truths, so he introduced the concept of logical positivism / logical empiricism, creating a criterion of demarcation based on the logical analysis of language. This means that according to Carnap for a proposition to have meaning, it has to be well constructed at the level of grammatical syntax and at the level of semantics, that is, it must have meaning as a reference, it must point to a factual reality, it must be propositions Empirical, scientific. Also for this author, just one of the elements of the sentence has no meaning, so that it has no semantic reference and becomes a pseudo-proposition. This means that in empirical / scientific propositions, their value of truth or falsity depends on a verification process. This process of verification aimed at the absolute truth, however, Carnap realizing this weakness (analysis of particular cases to conclude, inductively, for a universal truth), distinguished this process in strong and weak verification.

Thus, this process of verification or experimentation through the logical analysis of language, allows to introduce the positivist and inductive investigation in management accounting, which is described next.

Positivist research represents the most classical and predominant line of management accounting research (Modell, Jacobs, & Wiesel, 2007). Its theoretical premises were constructed from neoclassical economic theory and organizational theory (Wickramasinghe & Alawattage, 2007). This way of investigating society objectively, viewing individual behavior as deterministic, resorts to positivist methodology to develop research (Chua, 1986, Hopper & Powell, 1985, Ryan et al., 2002) And emphasizes quantitative data and the generalization of results (Chua, 1986, Ryan et al., 2002). Therefore, researchers adopting this type of research assume that management accounting functions independently and disconnected from human consciousness and organizational imperatives. For these researchers, management accounting practices are based on the requirement that there are linear cause and effect relationships and that organizational practices are universal and independent of the surrounding context, that is, they function in a similar way anywhere in the world (Simões And Rodrigues, 2012). According to Simões and Rodrigues (2012), the role of management accounting is to ensure that all organizational processes are executed in accordance with what is planned and thus ensure that resources are used effectively in dynamic and competitive contexts.

This means that positivist research emphasizes the relations between things, which stems from the fact that positivism does not concern the causes of phenomena, but rather how to produce the relations between the facts, studying them without interest in their practical consequences. That is, the purpose of the investigator is to portray reality, not to judge it (Theophilus and Ludicibus, 2001). On the other hand, in the last years, some works of interpretative research have appeared, which, according to Silva and Silva (2013), tries to understand the social nature of the accounting practices. Its purpose is not to generalize or predict future events on the basis of present studies, but to understand everyday events, social structures, the meanings people ascribe to it, including

the behavior of individuals in a given context. These ideas are shared by Ryan et al. (2002) who considered that this type of interpretation takes into account the relationship between the daily actions and the dimensions of the general structure, more concretely, in the management accounting tries to understand how the systems interact with their context, that is , The researchers follow a holistic orientation.

However, some critiques have been made to the assumptions underlying this paradigm, in which some researchers / theorists, such as Baker and Bettner (1997), Chua (1986), Hopper and Powell (1985); Modell et al. (2007), Ryan et al. (2002); Scapens (2006), concluded Simões and Rodrigues (2012). The main criticisms and / or limitations to this paradigm were compiled by Wickramasinghe and Alawattage, (2007) and are listed below: 1) management accounting practices are universal, so the surrounding context does not matter and, consequently, the Socioeconomic, cultural and political variables are ignored; 2) organizations are mechanical, standardized and bureaucratic (neoclassical theory), with unique organizational objectives, affecting their resources to their activities rationally and formal systems, rules and procedures; 3) control systems are an effective mechanism to achieve the objectives of organizations; 4) management accounting generates objective information that supports decision making process; 5) Researchers who adopt a positivist research perspective tend to support their work on theories of neoclassical economics - transaction cost theory and agency theory - or contingency theory.

As opposed to the paradigm stated above, the interpretive perspective assumes that social practices, which include management accounting, are not a natural phenomenon, but a socially constructed phenomenon (Covaleski, Dirsmith, & Samuel, 1996; Ryan et al. , 2002), where reality is understood as a result of a process of social construction and the parties involved can change the social rules and practices that direct their behavior (Simões & Rodrigues, 2012). In addition, Wickramasinghe and Alawattage (2007) have argued that this perspective postulates that accounting practices are the result of the meanings and perceptions shared by the actors involved in organizations. Put another way, the interpretive perspective seeks to understand and discover the meanings and beliefs underlying the actions of these actors, in which subjectivism is always implied (Loureinro & Filgueiras, 2016).

In general, interpretive research uses qualitative methods, using an interactive process, which involves a field study, which is interpreted in its context from the perspective of the various actors. In this type of research the researcher does not worry about obtaining ultimate truths, but reports that translate the different interpretations, since it is considered that reality is a construction of its various actors (Silva & Silva, 2013).

Although in the light of positivist theories an inadmissible procedure seems to exist, in interpretative research there is an involvement of the researcher himself in the object of investigation in which the interpretation obtained results much from his experience as a researcher (Silva & Silva, 2013). The results of this type of investigation usually present an account of concrete situations, allowing for several interpretations that are tested (case study) (Yin, 2015). A widely used theory in this type of research is institutional theory. It should be noted that the positive approach also allows triangulation with institutional theory, however, this cross has been little used to study this theme (Leite, 2015).

The theoretical sustainability of the previous arguments is found in the conclusions of Simões and Rodrigues (2012), which pointed out that the 1980s was marked by research supported by single case studies, which report on management accounting practices and their consequences, the Which is not visible by mainstream research, which led many researchers to begin to defend the interpretive research with the theoretical framework of social theories. These social theories include institutional theory, which includes the old institutional economics (VEI), the new institutional economics (NIS), and the new institutional sociology (NSI) (Burns & Scapens, 2000; Moll, Burns, & Major, 2006; Wickramasinghe & Alawattage, 2007), which help the understanding of management accounting practices (Simões & Rodrigues, 2012).

On the other hand, in epistemological and ontological terms, it is verified that the investi-

gation in management accounting presents several theoretical approaches and investigation methods (Luft & Shields, 2003). In historical terms, research in this area has predominated positivist (quantitative) research versus the interpretive (qualitative) (Major, 2009; Major & Ribeiro, 2009). In this context, it was verified that there is a superiority of the empiricist philosophy, objective in the methodology adopted, mainly by the US researchers (Ryan et al., 2002). In Asia-Pacific and Europe, it has been verified that the interpretative or alternative research has gained position (Oliveira, Pereira, & Ribeiro, 2009). This means that in Europe research in this area is accepted as multiparadigmatic, while Americans prefer the positivist paradigm (Lukka, 2010). However, the differences between the paradigms did not impede a strong growth of publications on management accounting (Luft & Shields, 2003). This is especially true of qualitative research, compared to quantitative (positivist) research, and Parker (2012) pointed out that the focus on qualitative research has been a contribution to the understanding and criticism of management and accounting systems And also a means of answering the apprehensions of the professionals of the area. This argument had already been corroborated by Lukka and Kasanen (1995), who concluded that in-depth case studies make it possible to understand the complexity of the analyzed processes and provide a critical understanding of organizational phenomena.

As already mentioned, the US predominates in the positivist paradigm, so research in management accounting has given way to research in the area of financial accounting (Lukka, 2010). This conclusion is clear in the analysis of the top five US accounting journals, whose published articles are predominantly financial accounting and framed in the positivist research paradigm (Merchant, 2010).

Also Luft and Shields (2003) have mapped the theories used in management accounting research (in top journals) and have concluded that there are a number of theoretical approaches to the social sciences used, the understanding of which is provided by organizational, psychological And sociological (Covaleski et al., 1996). For these authors, institutional theory recognizes factors of the social and organizational context that aid the interpretative and intellectual understanding of management accounting (Meyer & Rowan, 1991).

2. NEW PARADIGMATIC VISION OF RESEARCH IN MANAGEMENT ACCOUNTING

As already mentioned, research in the area of accounting developed in the 1950s and 1960s, around the idea of the usefulness of information for the decision-making process of managers (Major, 2009). Later, in the 1970s, researchers began to direct their research to the explanation of reality and its prediction and essentially developed works of positivist research, which implies being able to predict the phenomena and to generate hypotheses, which will be further tested (Major, 2009).

On the other hand, in the 70s / 80s, accounting management has become more of a practice and a social phenomenon than as a natural phenomenon, leading to research on it be directed towards the interpretation of phenomena rather than being To the search for universal laws (Baxter & Chua, 2003). These authors also showed that the extension of the theoretical base to the social area, through the adoption of qualitative methods, originated that these methods happened to be a common characteristic in the empirical investigation in management accounting. This type of research provides an understanding of management accounting practices in their holistic context (Baxter & Chua, 2003). Additionally, Covaleski et al. (1996) found that alternative approaches to research view accounting as a social practice and not so much as a technique.

These alternative interpretive approaches seek to use social theories to explain and understand the dynamism implicit in management accounting practices, that is, in their holistic context (organizational, cultural and social dimensions), argued Ryan et al. (2002).

This holistic context generates a diversity (heterogeneity) considered a scientific wealth, said Lukka and Mouritsen (2002). This conclusion was refuted by Zimmerman (2001) who understood this heterogeneity as an obstacle to the homogenization of knowledge, due to the use of a multidisciplinary theoretical framework (theories of other scientific areas) as scientific support for the explanation of multiple practices and roles (Covaleski et al., 1996) of management accounting.

Also according to Oliveira et al. (2009) theoretical critiques of this research methodology have arisen, pointing to an excessive diversity of approaches and a weak accumulation of knowledge (Zimmerman, 2001). This heterogeneity is the result of different theories to explain management accounting practices and different ontological, epistemological and methodological assumptions (Oliveira et al., 2009). These factors, coupled with language differences, provide results that are often not comparable, which is a limitation for the accumulation of knowledge (Oliveira et al., 2009). This means that pluralism in management accounting research is both considered a scientific wealth, as excessive and harmful (Oliveira et al., 2009). In fact, the enormous diversity of ontological and epistemological paradigms, approaches and disciplinary contributions, fundamental assumptions and detail, leads to the research in this area is particularly diverse in themes and results (Oliveira et al., 2009).

This diversity has been seen both as a weakness and as a force, and is clearly evident in the debate between Zimmerman (2001) and Lukka and Mouritsen (2002). Zimmerman (2001) considers that there would be a greater accumulation of knowledge if the investigation in management accounting converged to a single paradigm based on the economy. However, Lukka and Mouritsen (2002) radically rejected such a suggestion of paradigmatic uniqueness, arguing that this would entail the rejection of some relevant contributions to the understanding of accounting practices and would impede the progress of research in this area. In this way, Lukka and Mouritsen (2002) defended the diversity / plurality of approaches as a wealth to stimulate, not as something to combat.

Still in this context, Iudícibus, Filho, Lopes, and Pederneiras (2011) clarified that accounting is an applied social science that commits itself to other social sciences in order to stimulate multiplicity and interdisciplinarity to achieve its objectives. Therefore, research in management accounting has been presenting arguments and theoretical results foundations in case studies (qualitative) and recurrent (Pereira, 2007).

As can be seen, qualitative research has opposed prevailing (quantitative) research a few decades ago (Baxter & Chua, 2003), because the former realizes reality as a whole and seeks a global understanding of phenomena. This means that interpretive research holistically studies socially constructed accounting practices in their total context (historical, economic, social, cultural and organizational), argued Miller (2007) and Ryan et al. (2002). In other words, this type of research tries to understand the relationship of management accounting systems and practices in their context (Baxter & Chua, 2003; Ryan et al., 2002). In this sense, it is based on crucial assumptions, namely that: the real context is socially generated by human interaction, that theory allows the understanding of action and social order and that knowledge is subjective (Chua, 1986).

Thus, investigating management accounting as a social practice implies taking into account social aspects, ie, symbols, myths, statutes, language, trust, class and intimacy (Busco, Riccaboni, & Scapens, 2006; Covaleski & Dirsmith, 1988, Covaleski et al., 1996, Miller, 2007). Also Burns and Scapens (2000) and Scapens (2006) have argued that this is a procedural approach.

It should be stressed that in order to study management accounting systems, subjectivity is assumed in relation to accounting phenomena and their relations with their total context (economic, political, social and cultural), says Ryan et al. (2002), because in the interpretative paradigm, research is subjectivist and the units of analysis are seen as something socially constructed (Lukka, 2010, Ryan et al., 2002). These premises had already been evidenced by Covaleski et al. (1996) when explaining that these systems must be studied simultaneously as management tools and as symbols of efficiency and rationality, in order to ensure their external legitimacy.

3. THE INTERPRETATIVE PARADIGM AND ITS PROCESSAL APPROACH VS THE CONCEPTUALITY OF THE INSTITUTIONAL THEORY

The theoretical support of the subject under analysis is institutional theory, in particular the new institutional sociology, which for Baxter and Chua (2003) is one of the theoretical currents for interpretive research, because in this theory, systems are rules that structure behaviors.

However, research in this area supported by social theory is too homogenized, both at the level of methodology and methods and theories (Lukka, 2010), but the counter-opinion states that it is through the theoretical language of case studies carried out in this area that Allows significant conceptual development of accounting forms of expression (Ahrens & Chapman, 2006). In addition, the basic steps in qualitative research include the appropriation of methods and theories and the personal reflection of the researcher on such (Flick, 2005), the execution of specific procedures (Berg & Lune, 2004; Yin, 2015). However, both arguments are supported by institutional theory (Burns & Scapens, 2000).

Thus, in the scope of institutional theory, in qualitative research, the empirical focus is on the broad organizational relationships, such as the imitation of dominant organization structures (mimetic isomorphism), the response to governmental pressures (coercive isomorphism) and adaptation to Norms of the professional and regulatory entity (normative isomorphism), emphasized Covalleski et al. (1996).

Obviously, the choice of a research method depends on the ontological assumptions of the researchers (Ryan et al., 2002). Based on this argument, the adoption of institutional theory, rather the new institutional sociology, allows us to scientifically support the research questions to be defined for studies in management accounting and the different methodological approaches and epistemologically referenced previously. It is therefore necessary to clarify the ontological assumptions that justify the choice of the research method - case study -.

Following the previous paragraph and according to the purpose and purposes of the case study in management accounting (management control system), it is understood that the theoretical approach that best supports it is institutional theory, namely the new institutional sociology, because it is premised on the use of structures and processes that are legitimized and standardized, as well as, form part of an integrated whole and approaches the management control system as a set of management practices and not only as a control mode per And studies the organizational relationships between the parties involved. The new institutional theory was developed in the late 1970s based on several applications of the theories of systems open to organizations and with the premise that the environment affected organizational practices (Leite, 2015). This theory argues that the practices adopted by the organizations were assimilated by them as a result of a cultural process and not only as a formal means to improve their efficiency (Leite, 2015). In short, the focus of this theory is on the organizational macro environment and legitimacy strategies of organizations, as well as on the use of the concepts of isomorphism and loose coupling (Leite, 2015).

Hall and Taylor (1998) argued that sociological institutionalism defines institutions not as something that includes only formal rules and procedures, but also cognitive and moral symbols. In this context, institutions (it is understood, organizations as an institution) have an effect on the behavior of the individuals that integrate it, both rational ones (commonly called normal ones), preferences and their own cultural identity (Leite, 2015). For Meyer and Rowan (1991) this theory emphasizes the cognitive, symbolic, cultural, and normative factors of organizations. For these authors, the organizations are the reflection of the economic pressures and the pressures of the institutional environment (Leite, 2015).

As for the concept of loose coupling, this translates the existing gap between the systems that are used for the purposes of external legitimacy and those used to manage the operational activity (Leite, 2015).

In short, the new institutional sociology postulates that the change in management control practices may not only be related to economic aspects, but also to external pressures from the sur-

rounding environment of the organizations and to the search for legitimacy vis-à-vis the various stakeholders, The implementation of more formal controls related to organizational culture and the type of relationships among its stakeholders.

4. ONTOLOGICAL DIMENSION ASSUMED BY THE INVESTIGATOR AND ITS RELATIONSHIP WITH THE EPISTEMOLOGICAL AND METHODOLOGICAL DIMENSIONS

It should be emphasized that the ontological assumptions assumed to carry out a case study imply an interpretative (qualitative) investigation framed by the new institutional sociology, in order to explore all the actors involved (internal and external).

Although the ontological position assumed is related to the interpretative paradigm (case study), contrary to the academic community, there is no incompatibility of this paradigm to be triangulated in the course of the investigation in question with other data obtained by the investigation in accounting of Management through the positivist paradigm (Vaivio & Sirén, 2010) based on institutional theory (Luft & Shields, 2003).

Of course there are several types of triangulation, such as data, researchers, theoretical (using different theories for data interpretation) and, finally, methodological triangulation (Duarte, 2009). In this case, we are talking about the methodological triangulation that allows one to adopt an approach in epistemological terms (positivist paradigm or interpretive paradigm) and another in methodological terms (Teixeira, Nascimento, & Carrieri, 2012). The combination of methods may reflect a fusion of approaches or different types of thinking on a thematic (Ritchie, 2003), which combines the benefits of both approaches to research enrichment, which may lead to a better understanding of the phenomena, argued The same author. According to Lewis and Grimes (2005), this type of triangulation can be a means to carry out paradigmatic studies, which can contribute to a better understanding of the complexity of the contexts (internal and external) in which organizations are involved.

In addition, Tuzzo and Braga (2014) analyzed the process of triangulation in qualitative research based on a tripartite approach (subject, object and phenomenon).

In this context, and according to defined epistemological, ontological and methodological position, it is assumed that the generation of scientific knowledge takes place in four elements (Theóphilo & Iudícibus, 2009): the epistemological, the theoretical, the methodological and the technical. The authors have argued that these elements are conceived as particular aspects of the process of knowledge production, in which scientific space is considered as a dynamic field, subject to the triangulation of these different instances. Generally, these elements are described as follows:

- Epistemology exercises a critical surveillance function of research. It discusses issues such as the explication of research problems and the production of the scientific object; And considered aspects such as the concepts of causality and validation (Theóphilo & Iudícibus, 2009), that is, it reflects the operationalization of the subject, theme and problem of the research, causality, reliability and validity of the investigations, With the objective of guaranteeing the quality and the scientific nature of the research in question (Costa & Martins, 2016);
- The theory guides the definition of hypotheses and the construction of concepts. It includes aspects such as theoretical approaches, theoretical postures and scientific development programs (Theóphilo & Iudícibus, 2009). This means that theories are the conceptual basis for the empirical evidence, which can be confirmed (not rejected) or unconfirmed (rejected) (Costa & Martins, 2016);
- The methodology is the instance that includes the strategies or the ways in which the

explanation for the studied phenomena is sought. This pole comprises the (inductive, deductive) research method associated with the assumed research paradigm (Theóphilo & Iudícibus, 2009). Therefore, this pole seeks to identify the ontological bases that guided the researchers in the elaboration of an investigation (Costa & Martins, 2016);

- The technique includes procedures for collecting data to obtain empirical evidence and its analysis of content or other transformation in information relevant to the research problem (Theóphilo & Iudícibus, 2009). This technical dimension privileges the strategies and forms of data collection, data processing techniques and their analysis, where a differentiated methodology can be used for each research question (Costa & Martins, 2016).

Lukka (2010) recapitulates that this characteristic has beneficial impacts for it, since it allows the definition of new questions / propositions of research structured and defined by the researcher when leaving the A zone of comfort (iron cage), that is, to leave the traditional positivist paradigm. Lukka (2010) stated that research in management accounting is extremely superficial in the contemporary world due to the lack of advances in relation to established theories. This author also pointed out that the absence of criticality on the methodological elements of a given area can cause the researcher to run the risk of only being able to perform works with formal quality, but with little contribution to the area, for thinking only inside the box. Faced with such a situation, there is a need for a critical vigilance on the scientific production being carried out and on the way knowledge is constructed, a task for epistemology (Costa & Martins, 2016).

Synthesizing, positivist research in management accounting aims to develop tools and techniques that provide efficient and effective management of organizations and is in alignment with contingency theory, agency, transaction costs, among others, and interpretive research aims to describe, interpret and theorize what is observed in the organizations and fits in the institutional theory (Baxter and Chua, 2003), being this the position and the intended objective with this thesis. However, whatever the approach is used, it can be seen that the case study method can be used in any of these types of research - positivist or interpretive - (Bloomberg and Volpe, 2012).

Finally, Ahrens and Chapman (2006) presented a different taxonomy, differentiating positivist researchers from qualitative researchers, but both can use the same methods of investigation - observation, content analysis, documentation, questionnaires, statistics. This means for these authors that qualitative research - case studies - is a methodology and not a question of method.

5. CONCLUSION

In sum, since management accounting is a social science, which is increasingly studied in function of the perceptions of individuals and their interaction with the information system that is inherent to it, it is assumed that, ontologically, the paradigm of interpretive research, is appropriate to study the management control system in organizations, whose implementation and performance process is the result of interaction between individuals. Therefore, this requires the use of the qualitative method - case study -, supported by institutional theory (new institutional sociology), to allow the exploration of all the actors involved in this process.

It is clear that this study is not free of limitations. Thus, it has the limitations of not having addressed the critical paradigm, which may also give important contributions to studies in management accounting, as well as the circumscription only to the case study.

As clues to future research, it is suggested to fill in the limitations referred to, as well as to prepare a systematic literature review article on the epistemological, ontological and methodological positions assumed by the researchers in the study on management control systems. Other future clues include a theoretical investigation of existing studies in the area of management con-

trol to determine the paradigms used and their results, to confirm the case study method as an alternative and effective way to advance accounting knowledge. . Additionally, a replication of this study could be carried out with other theoretical frameworks, such as the Anthony Model, Flamholtz and Flamholtz Model, Das and Tsui, Simon Model, Merchant Model and Van der Stede, Model Ferreira and Otley and the Malmi and Brown Model.

REFERENCES

- Ahrens, T., & Chapman, C. S. (2006). Doing Qualitative Field Research in Management Accounting: Positioning Data to Contribute to Theory. *Handbooks of Management Accounting Research*, 1, 299–318. [http://doi.org/10.1016/S1751-3243\(06\)01011-X](http://doi.org/10.1016/S1751-3243(06)01011-X)
- Bachelard, G. (1996). *A formação do espírito científico*. Rio de Janeiro: Contraponto. <http://doi.org/10.1017/CBO9781107415324.004>
- Baker, C. R., & Bettner, M. S. (1997). Interpretive and critical research in accounting: A commentary on its absence from mainstream accounting research. *Critical Perspectives on Accounting*, 8(4), 293–310. <http://doi.org/10.1006/cpac.1996.0116>
- Baxter, J., & Chua, W. F. (2003). Alternative management accounting research-whence and whither. *Accounting, Organizations and Society*, 28(2–3), 97–126. [http://doi.org/10.1016/S0361-3682\(02\)00022-3](http://doi.org/10.1016/S0361-3682(02)00022-3)
- Berg, B. L. (2004). *Qualitative Methods for the Social Scientist*. *Qualitative Research Methods for the Social Sciences*.
- Blanché, R. A. (1975). *Epistemologia*. (Brasil: Martins Fontes; Portugal: Presença, Ed.).
- Bloomberg, L.D., Volpe, M. (2012). Chapter 1 Introduction to Your Study. In *Completing Your Qualitative Dissertation: A Roadmap from Beginning to End* (pp. 233–236). SAGE Publications, Inc. <http://doi.org/10.4135/9781452226613>
- Burns, J., & Scapens, R. W. (2000). Conceptualizing management accounting change: an institutional framework. *Management Accounting Research*, 11(1), 3–25. <http://doi.org/10.1006/mare.1999.0119>
- Busco, C., Riccaboni, A., & Scapens, R. W. (2006). Trust for accounting and accounting for trust. *Management Accounting Research*, 17(1), 11–41. <http://doi.org/10.1016/j.mar.2005.08.001>
- Chua, W. F. (1986). Radical Developments in Accounting Thought. *The Accounting Review*, 4, 601–632.
- Costa, F., & Martins, G. (2016). Características epistemológicas de publicações científicas em Contabilidade : evidências de um cenário produtivista. *Revista Contemporânea de Contabilidade*, 13(29), 33–68.
- Covaleski, M. A., & Dirsmith, M. W. (1988). The use of budgetary symbols in the political arena: An historically informed field study. *Accounting, Organizations and Society*, 13(1), 1–24. [http://doi.org/10.1016/0361-3682\(88\)90023-2](http://doi.org/10.1016/0361-3682(88)90023-2)
- Covaleski, M. a, Dirsmith, M. W., & Samuel, S. (1996). Managerial accounting research: The contributions of organizational and sociological theories. *Journal of Management Accounting Research*, 8, 1–35.
- de Iudícibus, S., Ribeiro Filho, J., Lopes, J., & Pederneiras, M. (2011). Uma reflexão sobre a contabilidade: caminhando por trilhas da “teoria tradicional e teoria crítica.” *BASE - Revista de Administração E Contabilidade Da Unisinos*, 8(4), 274–285. <http://doi.org/10.4013/base.2011.84.01>
- Duarte, T. (2009). *A possibilidade da investigação a 3 : reflexões sobre triangulação metodológica*.
- Flick, U. (2005). *Métodos qualitativos na investigação científica*. (Monitor, Ed.). Lisboa.
- Hall, P. A., & Taylor, R. C. (1998). The potential of historical institutionalism: a response

- to Hay and Wincott. *Political Studies*, 46(5), 958–962.
- Hopper, T., & Powell, A. (1985). Making Sense of Research into The Organizational and Social Aspects of Management Accounting : a Review of Its Underlying Assumptions. *Journal of Management Studies*, 22(September), 429–465. <http://doi.org/10.1111/j.1467-6486.1985.tb00007.x>
- Ikuno, L. M., & Niyama, J. K. (2015). Uma Análise Epistemológica Das Pesquisas Em Contabilidade Internacional: Um Estudo Em Periódicos Internacionais De Língua Inglesa. *Revista Ambiente Contábil*, 7(1), 109–131.
- Institutional theory. (2006). In Moll, J.; Burns, J.; Major, M. (in Hoque, pp. 183–205).
- Kakkuri-Knuuttila, M. L., Lukka, K., & Kuorikoski, J. (2008). Straddling between paradigms: A naturalistic philosophical case study on interpretive research in management accounting. *Accounting, Organizations and Society*, 33(2–3), 267–291. <http://doi.org/10.1016/j.aos.2006.12.003>
- Kari, L., & Kasanen, E. (1995). The problem of generalizability: anecdotes and evidence in accounting research. *Accounting, Auditing & Accountability Journal*, 8(5), 71–90.
- Kuhn, T. S. (2000). *Estrutura das Revoluções Científicas*. (editora perspectiva, Ed.). São Paulo.
- Leite, J.(2015). Abordagem Histórica e Institucional da Mudança em Contabilidade de Gestão : o Caso da Normalização nos Hospitais Públicos Portugueses. Universidade do Minho.
- Lewis, M., & Grimes, A. (2005). Metatriangulação: a construção de teorias a partir de múltiplos paradigmas. *Revista de Administração de Empresas*, 45, 72–91.
- Loureiro, R., & Filgueiras, F. (2016). Revistando possibilidades epistemológicas em contabilidade gerencial: em busca de contribuições de abordagens interpretativas e críticas no Brasil. *Revista Contemporânea de Contabilidade*, 55(21), 99–122. <http://doi.org/10.5007/2175-8069.2016v13n28p99>
- Luft, J., & Shields, M. D. (2003). Mapping management accounting: Graphics and guidelines for theory consistent empirical research. *Accounting, Organizations and Society*, 28, 1–3. [http://doi.org/http://dx.doi.org/10.1016/S0361-3682\(02\)00026-0](http://doi.org/http://dx.doi.org/10.1016/S0361-3682(02)00026-0)
- Lukka, K. (2010). The roles and effects of paradigms in accounting research. *Management Accounting Research*, 21(2). <http://doi.org/10.1016/j.mar.2010.02.002>
- Lukka, K., & Mouritsen, J. (2002). Homogeneity or heterogeneity of research in management accounting? *European Accounting Review*, 11(4), 805–811. <http://doi.org/10.1080/0963818022000047109>
- Major, J. (2009). Reflexão sobre a investigação. *Revista Portuguesa E Brasileira de Gestão*, 43–50..
- Major, M. J., & Ribeiro, J. (2008). A teoria institucional na investigação em Contabilidade. *Contabilidade e controlo de gestão: teoria, metodologia e prática*. (Cap. 2, pp. 37-59). Lisboa: Escolar Editora.
- Merchant, K. A. (2010). Paradigms in accounting research: A view from North America. *Management Accounting Research*, 21(2), 116–120. <http://doi.org/10.1016/j.mar.2010.02.004>
- Meyer, J., & Rowan, B. (1991). Institutionalized organizations: formal structure as myth and ceremony, in Powell, W., & DiMaggio, P. *The new institutionalism in organizational analysis*. The University of Chicago Press, 41–62.
- Miller, P. (2007). Management accounting and sociology. In Elsevier (Ed.), Chapman, C., Hopwood, A., & Shields, M. *Handbook of Management Accounting Research* (Volume 1). (pp. 285–295). Oxford.
- Miller, S., Hickson, D., & Wilson, D. (2008). From Strategy to Action. Involvement and Influence in Top Level Decisions. *Long Range Planning*, 41(6), 606–628. <http://doi.org/10.1016/j.lrp.2008.09.005>

- Modell, S., Jacobs, K., & Wiesel, F. (2007). A process (re)turn?. Path dependencies, institutions and performance management in Swedish central government. *Management Accounting Research*, 18(4), 453–475. <http://doi.org/10.1016/j.mar.2006.12.001>
- Oliveira, J., Pereira, S., & Ribeiro, J. (2009). *Investigação em Contabilidade de Gestão. Contabilidade E Controlo de Gestão*, 1–20.
- Parker, L. D. (2012). Qualitative management accounting research: Assessing deliverables and relevance. *Critical Perspectives on Accounting*, 23(1), 54–70. <http://doi.org/10.1016/j.cpa.2011.06.002>
- Pasquinelli, A. (1983). Carnap e o positivismo lógico.
- PEREIRA, C. A. (2007). Uma Análise das Contribuições das Teorias Organizacionais para o Estudo da Contabilidade Gerencial, (Abril).
- POPPER, K. (1975). *A lógica da pesquisa científica*. (Edusp, Ed.). São Paulo.
- Quivy, R., & Campenhoudt, L. (2005). *Manual de investigação em Ciências Sociais*. (Gravida, Ed.) (4a edição). Lisboa.
- Ritchie, J. B. (2003). The applications of qualitative methods to social research. In *Qualitative research practice: A guide for social science students and researchers* (pp. 24–46).
- Ryan, B., Scapens, R. W., & Theobald, M. (2002). and Methodology in Finance and Accounting. *Research Methods in Finance and Accounting*, Chapter 1.
- Salmerón, F. (1980). Que é, e para que serve a epistemologia? In BUNGE, Mario (Org.) *Epistemologia: curso de atualização*. São Paulo: T. A. Queiroz, EdUSP, 1980. In Edusp (Ed.), In BUNGE, Mario (Org.) *Epistemologia: curso de atualização*. São Paulo.
- Scapens, R. W. (2006). Understanding management accounting practices: A personal journey. *British Accounting Review*, 38(1), 1–30. <http://doi.org/10.1016/j.bar.2005.10.002>
- Silva, R., & Silva, P. (2013). O contributo dos métodos qualitativos na investigação em contabilidade de gestão. *Indagatio Didactica*, 5(2), 1047–1063. Retrieved from <http://revistas.ua.pt/index.php/ID/article/viewArticle/2509>
- Simões, A. M. D., & José Azevedo Rodrigues. (2012). A abordagem da velha economia institucional na investigação em contabilidade e controlo de gestão contributos teóricos. *Observatório Iberoamericano*, X, 1–24.
- Teixeira, J. C., Nascimento, R., & Carrieri, A. (2012). Triangulação entre Métodos na Administração: gerando conversações paradigmáticas ou meras validações convergentes?, 46(1), 191–220.
- Theóphilo, C., & Iudícibus, S. (2009). Uma análise crítico-epistemológica da produção científica em contabilidade no Brasil. *Contabilidade, Gestão E Governança*, (Xxix), 147–175.
- Theóphilo, C. R., & Iudícibus, S. de. (2001). As novas abordagens metodológicas na pesquisa em contabilidade gerencial. In VII Congreso Internacional de Costos y II Congreso de la Asociación Española de Contabilidad Directiva (p. 197).
- Tuzzo, S. A., & Braga, C. F. (2014). O metafenômeno no processo de triangulação da pesquisa qualitativa. *Investigação Qualitativa Em Ciências Sociais*, 3, 145–151.
- Vaivio, J., & Sirén, A. (2010). Insights into method triangulation and “paradigms” in interpretive management accounting research. *Management Accounting Research*, 21(2), 130–141. <http://doi.org/10.1016/j.mar.2010.03.001>
- Wickramasinghe, D., & Alawattage, C. (2007). *Management accounting change: approaches and perspectives*. (Routledge, Ed.).
- Yin, R. (2015). *Case study research: design and methods - Applied social research methods series* (4th ed.-). Thousand Oaks, CA: Sage Publications, Inc..
- Zimmerman, J. L. (2001). Conjectures regarding empirical managerial accounting research. *Journal of Accounting and Economics*, 32(1–3), 411–427. [http://doi.org/10.1016/S0165-4101\(01\)00023-4](http://doi.org/10.1016/S0165-4101(01)00023-4)