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Sustainability and Performance in Organizations: an Analysis of the Triple Bottom Line Approach

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Abstract

This theoretical study aims to discuss how to define organizational performance regarding sustainability based on the Triple Bottom Line (TBL) approach, that is, economic, social and environmental dimensions. The analysis is based on defining what Sustainability-Oriented Organizational Performance (SOOP) is, and to discuss three theoretical propositions, as follows. Proposition 1: Sustainability-Oriented Organizational Performance should consider, simultaneously and in an integrated way, economic, social and environmental aspects; Proposition 2: Considering the TBL approach, Sustainability-Oriented Organizational Performance will have different compositions within the three dimensions, economic, social and environmental; And finally, Proposition 3: Sustainability-Oriented Organizational Performance will be defined differently for each organization in each period. After an analysis of the unfolding of the propositions, the article is finished with suggestions for an initial research agenda for studies that can empirically investigate its validity.

Keywords: sustainability, triple bottom line, sustainability performance, performance measurement.

1. Introduction

Sustainability issues have gained importance in the last decades, especially after the Brundtland Report (WCED, 1987). More specifically, several authors have emphasized the positive results of the inclusion of sustainable practices for organizations (e.g. PORTER, VAN DER LINDE, 1995; HART, MILSTEIN, 2003; HART, 2007; EPSTEIN, 2008; NIDOMOLU, PRAHALAD, RANGASWAMI, 2009). The theme has hit the business sector harder by the 1990s, and since then the term "sustainability" has become a recurring discussion in the business community (VAN MARREWIJK, 2003), leading to a consensus on the role of business organizations broader the technical knowledge of their performance for society (BARKEMEYER et. al, 2014).

Thus, both among scholars and within the business environment, several definitions and approaches regarding sustainability integration into management have been proposed. In the midst of this multiplicity, the Triple Bottom Line approach (TBL) (ELKINGTON, 1999) is recognized in the literature as present in a significant amount and within a broad variety of studies on the subject (e.g. DILLYCK, HOCKERTS, 2002; HANSMANNA, MIEGB, FRISCHKNECHTA, 2012; HØGEVOLD et al., 2015; GLAVAS, MISH, 2015; SMITH, SHARICZ, 2011; VALENTE, 2012).

Through TBL, sustainability guides organizational actions so that they are contextually developed and conditioned by the quality, timing and availability of the resources, so as to allow an integrated management of the so-called three pillars, i.e., economic, environmental and social

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dimensions (ELKINGTON, 1999). Consequently, for organizations to be able to incorporate and develop sustainability successfully, their activities must be measured against identified goals, and progress in that direction should be recorded and disseminated (SMITH, SHARICZ, 2011). Accordingly, many studies that aim to study sustainability and performance in organizations use TBL as their conceptual basis, mentioning Elkington's proposal as their conceptual reference (e.g., CINELLI, COLES, KIRWAN, 2014; DENG, 2015; EKINS; VANNER, 2007; KRAJNC, GLAVIC, 2005; PADUA, JABBOUR, 2015; SUBRAMANIANA, GUNASEKARANB, 2015; YAKOVLEVAAY, SARKISB, SLOANC, 2012).

However, while executives recognize sustainability's relevance and necessity (LACY et al, 2010), the challenges in implementing it seem to hold back its operationalization, measurement and evaluation in organizations (STUBBS, COCKLIN, 2008). In this sense, the TBL, despite been widely used in this sense, has also been objecting of disclaims (SRIDHAR, JONES, 2013). The measurement and comparison of data on organizational performance mainly in the environmental and social dimensions suffer from a lack of consensus on understanding, and of mechanisms that make them viable (NORMAN, MACDONALD, 2004). Consequently, performance in the three dimensions turn out to be disassociated from each other and often put in debate (WASILUK, 2013), in contradiction to what organizational sustainability advocates in the light of TBL.

In this fashion, this theoretical study aims to discuss how to define organizational performance concerning sustainability based on the TBL approach. The analysis involves topics related to performance measurement and its splitting in economic, social and environmental dimensions. These concepts will guide the theoretical propositions that may support future research to test them, contributing to the development and maturity of the subject both in the sciences and in the business environment.

The paper is structured in five sections. The next one covers the main concepts on the research themes, i.e., organizational sustainability and the TBL approach. In section three, we discuss and present the study propositions. In the following section, we suggest a research agenda on the theme, and we finally close with the main implications that arise from the study.

2. Theoretical background

Even after three decades from the spread of the "Sustainable Development" (SD) concept, with the publication of the Brundtland Report (WCED, 1987), the diversity of terms related to this idea, and consequently the different definitions found is significant (WEINGAERTNER, MOBERG, 2011). Additionally, Hart and Milstein (2003) argue that the term "sustainability" - commonly and misinterpreted interchangeably with the term "sustainable development", despite the apparent lack of consensus on the meaning of both (VOS, 2007) - is a multidimensional concept that cannot be simply directed at every action of the organization.

Due to its nature and complexity, in addition to the diversity of research and initiatives, it is also expected that there will be different types and types of indicators when it comes to measuring aspects related to sustainability. Hák, Moldan and Dahl (2007) highlight a series of international proposals - which can be models, set of indicators or indexes. Significant initiatives such as the Millennium Development Goals (MDGs), the United Nations Commission for Sustainable Development (UNDP) set of indicators, the Ecological Footprint, the Living Planet Index, the World Wildlife Fund (WWF), among others, have been disseminated worldwide. More recently, we can add the Sustainable Development Goals (UN, 2015).

Because it is still too broad and even vague, the concept of sustainability can be replaced by more accurate definitions equivalent to the levels of development, awareness and ambition of organizations. There is the understanding that each organization can choose the approach to sustainability that is more coherent with its objectives, purposes and strategies, as well as more appropriate to the contextual circumstances in which it operates and to the dominant values that shape it (VAN MARREWIJK, WERRE, 2003). However, the main concepts of sustainability should enjoy a minimum of consensus to allow the assessment of progress towards sustainable development, as well as comparative assessments at organizational, local, regional, national and, perhaps even global levels (VOS, 2007).

When organizations are the units of analysis, there are also numerous studies and approaches for assessing sustainability in organizations. Singh, Murty, Gupta and Dikshit (2009) have identified 41 different initiatives that can assist in strategic formulation and training, standardization, weight assignment and data aggregation to enable sustainability assessment. Likewise, Vinodh (2011) listed several scientific papers, published between 1997 and 2009 and coming from different parts of the world, on sustainability management and evaluation tools, in which the emphasis was on buildings and

indicators and metrics. Thus, sustainability in organizations can be understood as the company's activities that demonstrate the inclusion of social and environmental aspects in its economic decisions and operations, as well as in the interactions with its several stakeholders (VAN MARREWIJK, WERRE, 2003). Notwithstanding, we can recognize that studies associating sustainability practices and organizational performance vary regarding outcomes (MCWILLIAMS, SIEGEL, WRIGHT, 2006; WASILUK, 2013).

Given the importance of the theme and the need for differentiation for unequal realities, several studies have tried to shed some light on how to integrate sustainability measurement in organizations from different sectors. Thus, studies depict industries such as mineral (AZAPAGIC, 2004); textile (ZAMCOPE, ENSSLIN, ENSSLIN, 2012); agricultural (GUTTENSTEIN, SCIALABBA, LOH, COURVILLE, PAPER, 2010); oil and gas (INFANTE, MENDONÇA, PURCIDONIO, VALLE, 2013); and steel (SINGH, MURTY, GUPTA, DIKSHIT, 2007).

We can notice, however, that the understanding of sustainability by the business community has not yet been presented in a consolidated way, which brings barriers to its operationalization, measurement and evaluation in organizations themselves (STUBBS, COCKLIN, 2008). Despite the large number of initiatives related to guidelines for the dissemination of the so-called sustainable practices, we can notice the distance between rhetoric and reality, and the decoupling of environmental management from other activities (HANH, SCHEEMESSER, 2005, VOS, 2007, HACKING, GUTHRIE, 2008, BARKEMEYER et al., 2014). Furthermore, Nunes et al. (2014) report that most of the studies are still focused on absolute and relative amounts of emissions, waste and consumption. Socioeconomic indicators are often neglected, probably due to the difficulty of measuring and assessing the social dimension. Thus, sustainability performance indices do little to define the role of organizations in sustainable development clearly.

In the search for a consensus, among countless definitions and terminologies, the three-pillar approach called the Triple Bottom Line (TBL) has been a widely accepted perspective for sustainability not only by scholars but also by society and organizations (LACY et al., 2010), although TBL has not been exempt from criticism and contention (NORMAN, MCDONALD, 2004; MACDONALD, NORMAN 2007). In addition to assigning a systemic view through its three interdependent dimensions, TBL proposes that its operationalization to be simultaneous and interactive. This approach has been extensively emphasized as an inspiration for the practice of sustainability in organizations (HØGEVOLD et al., 2015; SAVITZ, WEBER, 2006). Moreover, according to the TBL approach, to achieve sustainability, companies must develop and manage their activities in the economic, social and environmental spheres – as interrelated and mutually influential pillars - while contributing to sustainable development in their political domain within the society (DYLLICK, HOCKERTS, 2002).

Thus, the social, environmental and economic dimensions must come together in an articulated way for the achievement of sustainability within the organization and, consequently, be a part of a broader sustainable development (HANSMANNA, MIEGB, FRISCHKNECHTA, 2012). Over time, sustainability and the TBL approach have been graphically represented in several ways, such as pillars, overlapping ellipses and circular flows (Nunes et al., 2016), as shown in Figure 1.

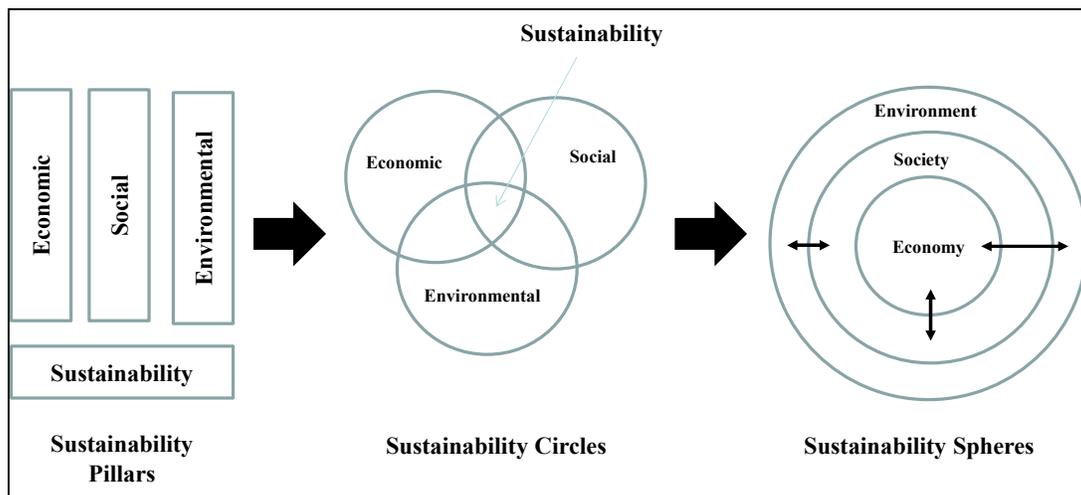


Figure 1: Sustainability graphical representation evolution.

Source: Nunes et al. (2016).

As these representations and their respective theoretical compositions have evolved, it has been no longer argued whether organizations will incorporate TBL or not, but there have been efforts to understand the reasons and the ways in which they will do so (GLAVAS, MISH, 2015). Amongst the various motivations for adopting it - for example, are government regulations and pressures from different stakeholders -, sustainability is seen as "the right thing to do", and that would be the only way in which its perpetuation may be possible and probable (EPSTEIN, BUHOVAC, 2010). Thus, sustainability should represent a new way of acting in the organization, not just a focus on voluntary practices and responses to stakeholders' demands (VALENTE, 2012).

For those companies in search of sustainability, performance measurement has been fundamental to define the actual position of the organization towards sustainability itself. Whether it comes to comply the minimum standards only as a means of obtaining a license for operation or it actually goes beyond compliance with independent performance control mechanisms to promote sustainability more effectively (HART, MILSTEIN, 2003). According to Fauzi, Svensson and Rahman (2010), since the spread of the TBL concept, the term "organizational performance" has been extended to include not only economic but also environmental and social aspects. Thus, sustainability performance must include components of economic, social and environmental measures in an integrated manner.

In short, TBL allows us to capture the essence of sustainability, to measure the impact of organizations' activities (SAVITZ, WEBER, 2006). Such an impact would be captured using indicators related to the three natures, economic, social and environmental, and would serve as a reference or "a metaphor that reminds us that organizational performance is multi-dimensional" (PAVA, 2007: 108). The tendency to incorporate such an approach for sustainability performance measurement can be seen in academic research, with a strong emphasis on the relationships between financial performance and the pillars of TBL, and in business practices found in the content of companies' annual reports (GLAVAS, MISH, 2015).

The theoretical basis presented in here allows us to discuss the TBL approach as a conceptual and practical guide for sustainability in organizations. Given this context, the next topic will examine and present the propositions that guide the ideas contained in this paper.

3. Theoretical propositions and discussion

Since sustainability has increased its role related to several aspects of management, many studies have dealt with how companies could turn the sustainability performance into something systematic and effective (VELEVA, ELLENBECKER, 2001; WARHUST, 2002; AZAPAGIC, 2004; KRAJNC, GLAVIC, 2005; SEARCY, 2009).

Although organizational sustainability measurement is generally accepted from the TBL approach (LACY et al., 2010), there are several studies dedicated to sustainability measurement that are focused only on one or two of the dimensions, such as already reported by Nunes et al. (2016).

Studies that focus only on the environmental pillar of sustainable performance are quite frequent, such as Gerbens-Leenes et al. (2003), Caritte, Acha and Shah (2014), Wang, Li and Sueyoshi (2014) and Jo, Kim and Park (2015). In the same way, it is possible to find several works that focus on the social pillar, such as Nicolosi, Grassi and Stanghellini (2014), Saeidi et al. (2015) and Yung (2015). In others, both pillars are taken into account. Wolf (2014), for example, by studying the relationships between stakeholder pressures, supply chain management, and sustainability performance, focuses only on the social and environmental dimensions. On the other hand, studies that also emphasize the economic pillar are rare, implying the incomplete inclusion of economic aspects in the evaluation of sustainability performance in organizations, as already accused Schneider and Meins (2014).

It is not a matter of condemning research that explicitly and purposefully emphasizes one of the TBL's pillar over the others. However, by using TBL as a proxy, the integration and necessary inclusion of the economic, social and environmental dimensions would be envisaged. Criticisms, therefore, can be directed to the conceptual incoherence found. That is, questions and applications that depart from the prerogative of using the TBL approach are questionable, but which in fact use only one or another pillar as an object.

Fauzi, Svensson and Rahman (2010) point out that the performance regarding sustainability based on the TBL derives from the interface between its three dimensions. Thus, if any of them is neglected or used insufficiently, the performance assessment will have inherent and problematic flaws. Thus, sustainability performance requires the complexity and variability among the measurement elements in the economic, social and environmental dimensions to be synchronized properly and conveniently. Otherwise, the results may be adversely affected.

In this context, differences in the applicability of the TBL concept regarding organizational performance (NORMAN, MCDONALD, 2004; MACDONALD, NORMAN 2007) can be seen. It is believed, as Kranjc and Glavič (2005) argue, that it is necessary for organizations to adopt aggregate measures that indicate the performance of organizations about sustainability. Analyzes in the TBL dimensions are relevant insofar as managerial decisions can be more assertive when one has an interdependent but integrated framework of the pillars that underlie the understanding of sustainability in organizations.

Thus, it is possible to suggest the first proposition:

P1: Sustainability-Oriented Organizational Performance should consider, simultaneously and in an integrated way, economic, social and environmental aspects.

From this proposition, the content composition of organizational performance regarding sustainability will be distinct among organizations. Once conditioned by the context, in addition to the particular definition, it is possible to assume that the distribution of metrics, indicators and/or indices between the economic, social and environmental dimensions that compose it will not be somehow fixed or predetermined. In other words, the set of indicators assigned to each of the dimensions will not be unanimous for different organizations.

Even by relying on references in this area, for example, indicators recommended by Global Reporting Initiative (GRI), ISO or stock exchange sustainability indices, it is possible to observe that organizations measure and disseminate different volumes and natures of information and results among the three pillars (KASSEL, 2011). The GRI (2013) itself provides specific recommendations for organizational sectors where some indicators to be disclosed differently in each dimension.

Another issue concerns the weighting attributed to indicators within the economic, social and environmental dimensions in the assessment of sustainable performance by organizations. Krajnc and Glavič (2005) proposed that, in the measurement process, a determinant step was the weighting of the indicators following the organization specialists' opinion and the organizational strategy. This condition provides a right orientation for the management decision making, since it allows the alignment of concepts and practices of sustainability and the business strategy, as well as to evaluate its pertinence and adjust improvement points.

The argument can also be justified due to the inherent difficulty in the systematization and operationalization of the sustainability indicators. Epstein and Buhovac (2010) show that the environmental and social impacts of corporate activities have effects that are often of a long-term nature and harder to measure than most of the impacts that managers deal with typically. There is a strong tendency of the dominant economic system, which emphasizes the economic pillar as a priority, leading the business community to translate the benefits and sustainability performance into usual financial measures, without respecting the nature of social and environmental aspects (WASILUK, 2013). Furthermore, it is easier or - less difficult - to set environmental indicators rather than social ones (NUNES et al., 2016).

Thus, the problem begins with the vision of sustainability to be adopted and goes on (and probably increases) in its operationalization and management. We cannot say, at this point, that the distribution of the dimensions is uniform when assessing sustainable performance from the TBL approach, even though its integration and simultaneity are prerogatives. Accordingly, we have the second proposition:

P2: Considering the TBL approach, Sustainability-Oriented Organizational Performance will have different compositions within the three dimensions, economic, social and environmental.

As previously discussed, data measurement and comparison regarding sustainability and performance suffer from the lack of unanimity and mechanisms that make them viable (NORMAN, MACDONALD, 2004). Siena (2008, p.359) reports that "there is no consensus on what to measure, how to measure, and especially on how to weigh and match data." Therefore, methodological inconsistencies in measurements can inhibit research in the area and hinder measurement itself, as well as the resulting comparisons on sustainable performance among different organizations.

In addition to the complexity of this task, one of the main (and most likely) reasons for this lack of consensus lies in the concept adopted by organizations. Van Marrewijk (2003) indicated that sustainability is something built by the context, and each company must take the definition that best suits its objectives and strategies. Smith and Scharicz (2011) believe that the definition of sustainability by a particular organizational reality brings the possibility of establishing and implementing more integrated, strategic and long-lasting measurement systems.

Under this circumstance, several papers deal with the measurement of sustainability in organizations, with specific focuses for different industrial sectors, sizes and localities of companies. The implication is that the integrated and mutually influential relationship between the three pillars of the TBL, when converged in sustainability performance, varies from one organization to another, according to situational contingencies (WASILUK, 2013).

Regarding the external environment, Glavas and Mish (2015) demonstrate in that the impact on the environment and society is central to the strategy and decision-making concerning TBL in organizations. As the institutional context and societal circumstances linked to sustainable development change constantly, companies, in seeking to meet these demands and provide answers, are forced to realign their business foundations (mission, vision, policies) to some extent, to adapt to the emerging guidelines (VAN MARREWIJK, 2003). Therefore, it is reasonable to assume that objectives, targets, indicators and even methodologies change, possibly leading to different understandings regarding performance and sustainability assessment.

Thus, in line with the arguments of Fauzi, Svensson and Rahman (2010), we state that the definition of the content of each measurement element – each indicator and each dimension of the TBL and, as a result, the sustainability performance – may vary according to the context and over time. The congruence between the internal and external environments and stakeholders regarding what constitutes this performance represents a factor conditioning this particularity. Likewise, the need for reviewing the monitoring methods and components are pointed out. Performance regarding sustainability must, therefore, be understood as a relative concept that is dynamic and iterative, rather than static.

Thus, the third proposition is:

P3: Sustainability-Oriented Organizational Performance will be defined differently for each different organization in each period of time.

These three propositions and their theoretical relationships can be synthesized by Figure 2.

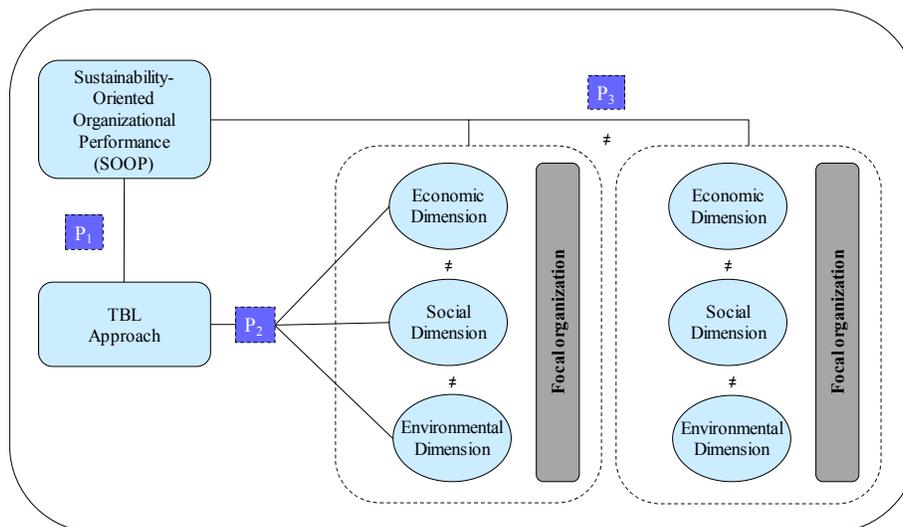


Figure 2 – Propositions and theoretical model.

Figure 2 shows all the three propositions with two main elements interconnected: the TBL Approach and Sustainability-Oriented Organizational Performance (SOOP). The first proposition (P1) shows the direct connection between these two features. The second (P2), in turn, lies within the scope of the TBL Approach, when dealing with the composition of its three pillars - Economic, Social and Environmental - about SOOP. Finally, the third proposition (P3) represents the relationship between how SOOP is for organizations, which would consist of a set of indicators from the three dimensions of TBL in its most different compositions, specific for each organization.

From the theoretical model, it is possible to present a definition about SOOP as:

The result identified by the set of indicators that measures and defines, in a simultaneous, integrated, joint and specific way, the performance of organizational activities in economic, environmental and social dimensions.

Thus, the goal of SOOP is to monitor the organization's progress in sustainability. That is, sustainability is placed at a level of strategic relevance in the organization, which allows its evolution to be incorporated into the business development itself. From then on, it is possible for a company to register and disclose the SOOP to internal and external stakeholders, in periodic reports, taking into account its particular demands. Consolidated information will serve as a basis for decision-making on the topic of planning, investment, (re)allocation of resources, for example, in addition to identifying gaps and the need for revisions.

Because it is a contextual and dynamic measure, particular to the strategic definitions, it is expected that the indicators and their weights, methodologies and application tools, or the analysis of the SOOP results will change and evolve over time. The organization can use the DOOS assessments also to compare their evolution over time. It is also possible that an organization with different business units has different compositions for SOOP. In this case, the comparisons can also be made for each unit, and the systematization of these results in a single SOOP evaluation will be the responsibility of the organization itself. Again, due to the customization, comparisons with other organizations can be made only in a relative way, since the definition and composition of SOOP will not necessarily be the same for different companies. Nevertheless, it can be a proper exercise to extract analyzes of the sustainable development of companies in a given sector or region, for example.

4. Setting a research agenda

By synthesizing and discussing the literature on sustainability in organizations, their conceptualization, incorporation, and measurement from the Triple Bottom Line approach, this article presented three propositions with an emphasis on the Sustainability-Oriented Organizational Performance (SOOP).

For the first proposition, P1, it is recommended to research within positively recognized companies (certified and/or rewarded) to their positioning about sustainability, focusing on the policies and practices associated with SOOP, to investigate the impacts of economic, social and environmental aspects. Studies such as these can be done, qualitatively, from the content analysis of secondary documents (sustainability reports, integrated reports and others). With a significant sample of companies, if it is possible to normalize the data found in quantitative terms, correlations can be performed by validating or refuting this proposition. The same can be done with negatively recognized companies (fines, notices, scandals in the media), with the intent of observing their behavior regarding the proposition in different contexts, besides a possible comparative study.

In the case of the second proposition, P2, we suggest studies that focus on companies of the same business sector or the same region. The SOOP for these units of study can be accessed through analyzes of the indicators for each of the TBL dimensions. This set of indicators would reveal whether the composition within economic, social and environmental nature is done in a balanced way, both in terms of the amount of indicators in each dimension and, in terms of quality, that is, if there is a differentiation in weight relative to the indicators in each dimension, as already proposed in previous works (KRAJNC, GLAVIČ, 2005; SCHOLL, HOURNEAUX JUNIOR, GALLELI, 2015), reinforcing the idea of the proposition. Nevertheless, numerous studies continue to be developed to investigate and strengthen the connections between economic, social and environmental performance in organizations (HACKING, GUTHRIE, 2008; HAHN et al., 2010).

Finally, for the last proposition, P3, comparative research is adequate because it would provide the verification of the contextual factors in the definition of the SOOP. We suggest, initially, studies that focus on the same business sector or the same region as the focal company. The SOOP for the units of analysis can be obtained through secondary data, as well as from surveys. Qualitative analysis of the content of the documents can be carried out, through data categorization, as well as quantitative analyzes, for example, through the identification of clusters. In both cases, the heterogeneity or homogeneity of these categories or clusters would indicate the validity of the proposition or not.

Although there have been many initiatives, both by scholars and businesspeople, aimed at measuring sustainability in organizations, many uncertainties and limitations on the aggregate measurement of organizational sustainability performance remain. When seeking solid answers that can fill these gaps, we hope this study to contribute with the Academy, aiming to advance scientific knowledge on the practice of sustainability in management studies and to stimulate interdisciplinary approaches, initially within the area of applied social sciences itself, between management and accounting, for example, when dealing with indicators, results and performance regarding sustainability.

Accurate and integrated information regarding organizational performance regarding their sustainability will continue to be demanded or even required by other companies, investors and society. In this scenario, this paper also aims to disseminate the SOOP practices to organizations already recognized as a reference in the theme, in the sense that they can count on subsidies capable of strengthening and/or readjusting their efforts, as well as for organizations that are in the early stages in this process, which may have a guiding base of reference.

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