BENCHMARKING OF QUALITY AND SUSTAINABILITY OF SCIENTIFIC PRODUCTION IN MANAGEMENT

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ABSTRACT

This article aims at elaborate a framework that underpins the qualification of papers preparation in the Management field. From this, a quality and sustainability benchmarking is proposed for boosting the academic production in this field. The goal is to contribute for qualifying works that can be submitted to journals in strata Qualis A or B of the Improvement Coordination for Higher Education Personnel (Brazilian CAPES). The departure point is a bibliographic analysis on the situation of Management research according to publications in seven Brazilian journals in this area, classified as A or B. Afterwards, a synthesis of the criteria available to the reviewers of such journals and of other three international Management journals is carried out, in order to assess their scientific production. The bibliographic review resulted in 51 selected papers that indicate the main problems in this research field. It was found that the criteria assessment of these Brazilian journals match with the mentioned in the selected papers. However, it does not enable to explore aspects of the assessment underlying to blind and peer review practices. The result is a framework to support in the building of a benchmarking system for submission to well qualified journals of the CAPES system. Continuous improvement of the articles is internationally recommended.

Keywords: quality, productivity, scientific production, management, sustainability.

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1 INTRODUCTION

Journals assessment has generated significant debate and dead-lock, given the wide comprehensiveness of such activity and its variability, according to the perception of each reviewer. Besides, the form of assessment is distinct in each journal. Several variables influence the assessment of a paper. This study is focussed on the assessment of journals in the Management field. It is supported in the idea proposed by Kneipp et al. (2013), according to which scientific periodics play a pivotal role in the consolidation of a given knowledge area, due its condition of disseminate the results of academic research.

In this paper, the aim is to elaborate a framework that can support a qualified production of articles in Management. Also, it has as purpose to propose a quality and sustainability benchmarking for the academic production in this area. Such objective is aligned with the purposes of the project “Strategic Map of Higher Education (SMHE), based on an integrated management system: a methodological proposal for the operationalization of the Institutional Development Planning (IDP)” (CORRÊA, et al., 2009).

The buzzword “publish or perish” is increasingly real in the academic world. It has consequences in the continuous refinement of the assessment criteria of CAPES graduate programs, reinforcing the need for narrowingbonds among researchers of diferente programs through co-authorship publications (SERRA et al., 2008). Following such reasoning, Alcadipani (2011); Rossoni (2013); Cabral and Lazzarini (2011) argue that the academic Brazilian production has became a ceaseless race for points.

Benchmarking is a continuous process of products, services or management practices assessment (CAMP, 1997) in the seek for the identification of what is the best to adopt in order to fulfill planned goals. The benchmarking process, therefore, entails the identification of systematizable referentials that can be followed and improved throughout the time. Kyrő (2003) observe that benchmarking can be performed in relationship to a process – as, for instance, in the context of production, submission and assessment of academic articles. It embraces the learning practice. Using a comparative benchmarking, Sartori (2013) has found that Brazil advanced in educational assessment under experiences in behalf of CAPES.

Three phenomena justify the need for investigating and to propose solutions for a benchmarking system addressed to underscore the qualification of publication in Management:

- the growth of the amount of publications in proceedings and in journals under the Qualis/CAPES system (WOOD & CHEUKE, 2008), which influence the graduation ranking in Brazil;
- the concentration of qualified publications of researchers from few Management graduation programs (OLIVEIRA & SAVERBRONN, 2007);
- the increasing number of Management graduation programs in Brazil, in a basis of 168%, between 1998 and 2009 (ROSSONI & GUARIDO, 2009).

Regardless these facts, it is noticeable the lack of detailed criteria for authors (in the submission) and reviewers (in the review system).

Finally, it is necessary to consider the relevance of better knowing the Brazilian situation in the context of publications in Management. This is pivotal, not only for the mapping of meta-studies and updating in specific areas, as usual, but rather for the necessity of structuring a standardized referential for the system of publications. It would enable proper comparisons of the Brazilian positions and challenges, vis-à-vis to foreign situation.
2 METHOD

This research is characterized as qualitative, of exploratory nature. It is descriptive in its forms of investigation, and prescriptive for the results presentation. It looks for the systematization of the set of factors that can contribute for the quality and the sustainability of the production and publishing of articles in Management field.

In practice, this investigation reviewed rules for publication launched by editorial boards of journals indexed by the Qualis/CAPES system. Seven national and three international journals were targeted. Also, articles on Management published in the selected national journals were considered.

A bibliographic review was carried out in two instances: one addressed to articles published in the main Brazilian journals, in strata Qualis A and B, in the whole area of Management, Accounting Sciences and Tourism, and closer to the electronic websites where these journals keep instructions to authors and to reviewers. At the same time, there were selected three international journals, of the same area and with the same level (corresponding to the Brazilian Qualis A), for the assessment of the criteria that they make available for referees and authors, aiming at a comparison between these guidelines, and whether they are or not similar to the corresponding Brazilian journals.

The Brazilian journals that compose such review are:

1) “Revista de Administração Contemporânea” (RAC), ISSN 1415-6555, Qualis B1 in Management, Accounting and Tourism (RAC, 2010), all editions reviewed, available online, from 1997 to July, 2010;
2) “Revista de Administração de Empresas da Fundação Getúlio Vargas” (RAE/FGV), ISSN: 00347590, Qualis B1 in Management, Accounting and Tourism, all available online editions reviewed, from 1961 to July, 2010;
3) “Revista de Gestão da Universidade de São Paulo” (RAUSP), ISSN 1516-7747, Qualis B3 in Management, Accounting and Tourism, all available online editions reviewed, from 1994 to July, 2010;
4) “Revista de Administração Pública” (RAP), ISSN 0034-712, Qualis A2 in Management, Accounting and Tourism, all reviewed editions available in Scielo system, version online since 2006 to July, 2010.
5) “Revista de Administração Mackenzie” (RAM), ISSN 1678-6971, Qualis B 1 in Management, Accounting and Tourism, all available online reviewed editions, since 2000 to July, 2010.
6) “Organizações e Sociedade” (O&S), ISSN: 1413-585X, Qualis B2 in Management, Accounting and Tourism, all online available editions reviewed, from 2000 until July, 2010;
7) “Organizações Rurais e Agroindustriais” (OR&A), ISSN 1517-3879, Qualis B2 in Management, Accounting and Tourism, all online available editions reviewed, since 1996 until July, 2010.

The international journals’ websites that compose this research are:

1) Academy of Information and Management Sciences Journal (AIMSJ);
2) Business Strategies and the Environment (BSE);
3) Canadian Journal of Administrative Sciences (CJAS).

From the selected national journals, it resulted a synthesis of the content of 51 articles about research in Management, classified by similarity of approach and tenor. Also, a synthesis of guidelines and recommendations to the authors of the respective journals resulted from this process. The international journals were explored, for this research, only in regards to the submission criteria for the authors and review for referees.
3 RESULTS

From the state-of-the art of the publications in Management field, this research enabled some significant findings. Section 3.1 presents the main recommendations of the authors, where they indicate the weaknesses and initiatives to promote quality and sustainability of the knowledge quality that is produced and disseminated.

3.1 Synthesis of recommendations and criteria for publications in Management field

1st) Interdisciplinarity in the means rather than at the ends

Management research, in Brazil, presents conditions of interdisciplinarity mainly in at the graduation level (BERTERO, 1984). Nonetheless, its results are predominantly descriptive and reflect much more the existant knowledge reproduction than the analysis towards new knowledge creation (BULGACOV & VERDU, 2001; ROSSONI & GUARIDO, 2009; ALCADIPANI, 2013). In undergraduation, this situation is worsened due the lack of inter-relationship between the disciplines of the curriculum, as the teaching institutions give preference to teaching over the research (NICOLINI, 2003; OLIVEIRA & SAVERBRONN, 2007).

A positive factr in this contexto is the worriness of the academic community in analyzing the scientific national production in several areas of Management (GRAEML & MACADAR, 2010), given the considerable amount of meta-research.

2nd) Academicism, lack of continuity, and theoretical fragility in specialities

Usually, what it is verified in general Management research is reflected in specific sub-areas: dominance of international authors and distancing of academic production from the business reality. There are specialities with low production in some subfields.

In Organizational Management, research is concentrated in few institutions: according to Takashi and Fischer (2009), 72% of 43 published articles in the main Brazilian Management journals are authored from researchers of the Federal University of Bahia, São Paulo University, Vale do Sinos University, Federal University of Santa Catarina, Federal University of Parana, and Federal University of Rio Grande do Sul.

The participation of the Accounting area in the Management research is low: 2,95% of the bulk of papers published between 1990 and 2003 in Qualis A of the CAPES strata, according to the analysis of 2,037 articles performed by Cardoso, Mendonça, Riccio and Sakata (2005). Furthermore, such authors inform tha the articles of this subfield published in Qualis A strata have low theoretical contribution and are poorly structured. Mendonça et al. (2009) reinforce that Accounting has low productivity in Brazilian research compared with the foreign similar work..

In summary, it is observed that, once recorded, the quantitative growth of the national publication, in Management specialties, is discontinued and/or presentes fragilities in its theoretical bases.

3rd) North-american influence disproportionate to the quality of the debate

North-american influence in Brazilian Management research is highlighted by several authors (BULGACOV & VERDU, 2001; VERGARA & PINTO, 2001; MACHADO-DA-SILVA et al., 2008; ALCADIPANI & CALDAS, 2012; ALCADIPANI and BERTERO, 2012; VALE et al., 2013; BERTERO et
al., 2013). According to Serra et al. (2008), the majority of the citations in Brazilian Management research is from foreign source (52.4%). It was found in 4,081 published articles in the proceedings of the Brazilian National Meeting (ENANPAD) of the Brazilian Association of Research and Graduation Management (ANPAD). It was also found in the main journals of Management in Brazil reviewed by Machado-da-Silva et al. (2008). This phenomenon is verified specially in the foreign literature of research on Organizational Learning (TAKASHI & FISCHER, 2009). The nationality issue of the citations would not be so problematic in the academic production if the derived articles were more analytics than solely reproducers of exogenous knowledge.

4th) Undergraduation, the beginning of the lack of culture in research

Generally, undergraduation students are averse to methodology of research, according to a study performed with 124 students of Management higher education institutions in Fortaleza, Ceara State (COSTA and SOARES, 2008). Although this is a not representative study for other realities, it brings clear indications of the constraints to the development of a culture for articles writing already in undergraduation.

Nonetheless, graduation students consider that the attributes of a high qualified teacher include the publication of scientific articles, as understand 214 interviewed students in 24 higher education institutions of Management in Curitiba, Parana State (MACIEL, HOCAYEN-DA-SILVA & CASTRO, 2008).

5th) Recurrence to case study and weakening of traceability

According to Fleury (2003), case studies correspond to 32% of the articles-type published in the Public Management Review (RAP) during eleven years. This proportion is even higher when there are considered the publications of the ENANPAD: 55.7% of the 549 published in the proceedings of this event, between 2000 and 2005, in the fields of Public Management and Social Management, have employed case study, as observed by Hocayen-da-Silva et al. (2008).

6th) Co-authorship and nets: recent strategy in the face of CAPES assessment criteria

There are few partnerships between Brazilian and foreign researchers for publishing in Management in Brazil (SERRA et al., 2008). It is possible to state that the planned integrated action of the researchers for publication is in its infancy. A recent study close to 32 graduation programs in Management, in Brazil, shows that the research net among them is weak, has low density, and the relationships are scattered. Furthermore, the geographical placement and the research lines are relevant for the definition of the structure of the nets; the research lines with higher levels of sharing are: Organizations, and Organizational Behavior and Strategy (GUI-MARÃES, GOMES, ODELIUS, ZANCAN & CORRACHI, 2009). However, the number of co-authorships in graduation programs of strict nature (those that include only Master and Doctorate studies) has increased between 2000 and 2006, mainly due to changes in the assessment criteria of CAPES, or due to configuration of new groups, and/or due to the ripening of the existent groups (MELLO, CRUBELLATTE & ROSSONI, 2009; 2010).

In fact, researchers are shifting the individual authorship for the collective one (GRAEML & MACADAR, 2010; LEAL et al., 2013) because the CAPES assessment system motivate high level of quantitative performance of intellectual production. It thereby requires the constitution of cooperation groups for the aims of publication (MACCARI et al., 2009; ROSSONI & GUARIDO, 2009; LEAL et al, 2013).
Nonetheless, in order to avoid the endogenous phenomenon and the excessive concentration of the research in higher qualified graduation programs by CAPES, there are necessary institutional policies that value and strengthen the net of graduation programs, encouraging joint research, as recommended by Guimarães et al. (2009). It can be concluded that programs with higher intellectual production are inclined to have more interaction internally, and peripherals programs tend to look for relationship with stronger, central programs.

7th) Process of articles assessment: lack of clarity

The process of articles assessment in journals of high classification, under the Qualis/CAPES system, generates several discussion among researchers. Usually, the editors adopt the methods blind and double blind review, which correspond, respectively, to a type of assessment in which the authors are not identified to the referees, and vice-versa, and to the peer review – more than one reviewer, each one not identified by the other.

The blind review system is criticized mainly under the argument that the anonymity gives power without merit to the referee (THIRY-CHERQUES, 2005).

High indexes of rejection of papers also discourage the authors. According to Serra et al. (2008), this is not an isolated phenomenon. For instance, the Science Quarterly, in the Management field, has a rejection rate of at least 90%. And the Academy of Information and Management Journal presents an average of acceptance of 25% (AIMJ, 2010).

One of the pivotal issues in this context is how to increase the publishing indexes without dispensing care to the quality criteria of the articles. Not all the well qualified journals in the Qualis/CAPES system, in the Management field, have clear recommendation to the authors, which would ease the screening of the articles regarding the requirements of the journals.

8th) Criteria and recommendations of the national scholars for the quality of the research

The main common points related to the criteria of papers acceptance, accordingly the reviewed studies – 51 published researches in the main Brazilian Management journals with high classification under the Qualis/CAPES system, are the theoretical and methodological rigor and the inarguable scientific contribution for the theory represented by the article (POZZEBON & FREITAS, 1998; BERTERO et al., 2003; PFEFFER & FONG, 2003; SANTOS E ICHIKAWA, 2003; HOPPEN & MEIRELLES, 2005; VIEIRA, 2007; SERRA et al., 2008; BERTERO et al., 2013). A propositive, detailed assessment is suggested by Pinho (2005). Bertero et al. (2013) suggest eight elements that enable reflexion, besides a possible leading for the research: focus in Brazil and in the local reality; rapprochement between theory and practice; design of research plans looking for the deepening in specific themes; incentivation of scientific rigour; concentration in the impact of the production; target in international journals of high level; changes in the graduation programs; recognition of exemplar researchers.

9th) Criteria and recommendations of editors of national and international journals

The common criteria required by editors and presented in the websites of the national journals of Management are: unpublished research; submission to the editorial policies of the journal; internal and external validity of the research; theoretical and methodological robustness; delivery of relevant contribution to the current knoweldge (RAC, 2010; RAE/FGV, 2010;
RAM, 2010; RAP, 2010; RAUSP, 2010; O&S, 2010; OR&A, 2010). Matches are observed between criteria and recommendations present in Management literature and in journals website.

Regarding to the considered international journals, two of them do not present, in their websites, clear information about the process of papers assessment: Business Strategy and the Environment (BSE) and Canadian Journal of Administrative Science (CJAS). Both belong to the Wiley data bases, which adopts the system of triple blind review for its publications and keeps technical instructions (guidelines) for formatting and submission of articles. Otherwise, the AIMJ, of Allied Academies, brings instructions for authors and reviewers. For the first ones, the main recommendation is the completeness of the bibliographical review and the methodological consistency, as well as the adequacy of the constructs to the conclusions. For reviewers, the main recommendation is being propositives, indicating specifically what must be done for the article acceptance.

In a brief comparison of the national and international journals with respect of the assessment system and the recommendation of reviewers and referees, it is realized that the editorial policy for the support to the author, with the aim of encouraging the continuous improvement for achieving the publication, is a relevant differential in the AIMJ, but it is not necessarily presente in the editorial policies of the Brazilian journals.

3.2 Benchmarking for supporting quality and sustainability of publications

In the current proposal, the systematization of elements for a benchmarking of support to the qualification and sustainability of the publications in the Management field is embedded in the scope of the MEES project (CAPES, 2009). It is also underpinned in three questions: two for the researchers, and other for them and for the referees and reviewers. For the researchers, the key considered questions are: “What is supposed to be overcomed?” and “How to create synergy to improve the research?”. For the authors and reviewers, the question is: “What must be followed/pursued?”. Such questions arise from the resulto f the literature review and from the gaps that were found in the same review regarding the looking for answers in order to make clearer and effective the process that goes from the production and submission to the assessment of articles.

Figures 1, 2 and 3 present, for authors, reviewers, and researchers in general, respectively, the main recurring problems identified in the research in the Management field, the recommendations in terms of synergy for improving results, and a prescriptive approach of what to do in order to achieve excellence in publication.
**Figure 1 – Recurring problems**

<table>
<thead>
<tr>
<th>What needs to be overcome</th>
<th>References</th>
</tr>
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<tbody>
<tr>
<td>Lack of Interdisciplinarity in the results of the research in Management field</td>
<td>Bertero (1984)</td>
</tr>
<tr>
<td>Distance between the research and the reality of business or organizations</td>
<td>Vieira (2007); Bertero et al. (2013)</td>
</tr>
<tr>
<td>Undervaluation of the Brazilian academic production</td>
<td>Bignetti and Paiva (2002); Alcadipani (2013)</td>
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<tr>
<td>Undervaluation of theoretical aspects in research</td>
<td>Vieira, (2007)</td>
</tr>
<tr>
<td>Lack of culture of research in undergraduation</td>
<td>Nicolini (2003); Oliveira and Saverbronn (2007)</td>
</tr>
<tr>
<td>Lack of integration between teacher and student for publication</td>
<td>Fleury (2003)</td>
</tr>
<tr>
<td>Excessive recurrence to case study method</td>
<td>Roesch (2003)</td>
</tr>
<tr>
<td>Centralization of research nets</td>
<td>Braga et al. (2008)</td>
</tr>
<tr>
<td>Endogenous – tendency to concentrate publications in journals of local teaching institutions</td>
<td>Wood and Cheuke (2008)</td>
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</table>

**Figure 2: Synergy for improving research**

<table>
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<tr>
<th>What must be analyzed</th>
<th>References</th>
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<tbody>
<tr>
<td>Structure of the academic community for cooperation in publication</td>
<td>Braga et al. (2008)</td>
</tr>
<tr>
<td>Production of knowledge in net: reaching and deepness</td>
<td>Bulgacov and Verdu (2001); Guimarães et al. (2009)</td>
</tr>
<tr>
<td>Potential for publication internationalization</td>
<td>Serra et al. (2008); Cabral et al. (2013)</td>
</tr>
<tr>
<td>Focus on the causes of rejection by international journals</td>
<td>Serra et al. (2008)</td>
</tr>
<tr>
<td>Impacts of the experience of the reviewer/referee in his/her capacity of publication</td>
<td>Serra et al. (2008)</td>
</tr>
<tr>
<td>What to look for</td>
<td>Journals that require</td>
</tr>
<tr>
<td>-----------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Theoretical perspective, robustness, indicating of advancement, deepness, epistemology, bibliography based on qualified journals, Brazilian of international</td>
<td>Brazilian: 1/7 journal Internationals: AIMJ</td>
</tr>
<tr>
<td>Method: rigor in the performing of the steps of the research, variable analysis, data interpretation</td>
<td>Brazilian: 3/7 journals International: AIMJ</td>
</tr>
<tr>
<td>Focus: the research needs to identify itself as practical, theoretical, or theoretical-practical</td>
<td>Keinert (1994)</td>
</tr>
<tr>
<td>Internal validity: constructs, method coherent with adopted research techniques</td>
<td>Brazilian: 4/7 journals International: AIMJ</td>
</tr>
<tr>
<td>Locus and context: longitudinal or cross-sectional research</td>
<td>Pozzebon and Freitas (1998)</td>
</tr>
<tr>
<td>Objectives and clear writing</td>
<td>Brazilian: 4/7 journals International: AIMJ</td>
</tr>
<tr>
<td>Something to propose: originality, value, contribution, practical application, challenge to current thinking, addressing to change</td>
<td>Brazilian: 3/7 journals International: AIMJ</td>
</tr>
<tr>
<td>Organization: well defined designed, delimitation, unities of analysis, hypotheses</td>
<td>Brazilian: 1/7 journals International: AIMJ</td>
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<tr>
<td>Proportional contribution in case of more than one author; limit of submission by author</td>
<td>Brazilian: 4/7 journals International: AIMJ</td>
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<tr>
<td>Case studies: have a pedagogic profile, have hypertextual structure (several possibilities of harnessing), deepness</td>
<td>Nacionais: 1/7 journal International: AIMJ</td>
</tr>
<tr>
<td>Addressing of the research to Brazilian reality; novelty, opportunity</td>
<td>Brazilian: 2/7 journals Internationals: AIMJ</td>
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<tr>
<th>What to look for</th>
<th>Journals that require</th>
<th>References</th>
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<tr>
<td>Orientative, propositive addressmen, indicating what to do for the article has acceptance</td>
<td>Internationals: AIMJ</td>
<td>Gondim (2004); Pinho (2005)</td>
</tr>
<tr>
<td>Payment to the referees/reviewers</td>
<td>Internationals: AIMJ</td>
<td>Thiry-Cherques (2005)</td>
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From the performed bibliographic review and from the comparative assessment of the contents that were found in the Brazilian and the international considered literature, it is possible to propose the elements of the Figures 1 to 3 as relevant for integrating a benchmarking system for qualifying the research in the Management field.
4 FINAL REMARKS

The findings of this research enable to meet the general objective of this study – namely, to present a benchmarking for support quality and sustainability of the publications in the Management field. Also, such findings make available informations that bring reflections and questionings about the recommendations and criteria for publication in the Management field. And, it can be said, these results allow some generalization to other fields of knowledge. It is recommended to enlarge the basis of the research in international journals with respect to criteria of assessment, test and refine such criteria, and create a scale for valuation of the resulting elements. Activities of editors, referees, reviewers and experts from CAPES in order to discuss a harmonic referential of articles assessment can also contribute for the improvement of the general quality of the national system of publications in Management.

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