NOTES ON RIGOR-RELEVANCE GAP IN THE CONTEXT OF PROFESSIONAL MASTERS

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ABSTRACT
The lack of harmony between academic research and the needs of practitioners in the field of Accounting and Management (rigor-relevance gap) is well-known and has been a topic of discussion in the academia. This essay aims to contribute to the discussion of professional masters role in the mitigation of this issue (rigor-relevance gap). Through discussing the main reasons for the mismatch between academic research and professional practice, that is, the resistance in the incorporation of techniques by culture and the resistance presented by the academy in accepting alternative research paradigms. It is proposed to use interventionist research as an alternative methodology in professional masters, for solving problems from the practice and creating knowledge. Thus, suggesting that for the rigor-relevance gap to decrease, a few steps must be taken, such as the improvement of CAPES evaluation criteria, and the acceptance, by the academia, of different research paradigms and widening the space for the dissemination of professional master's research.
Keywords: rigor-relevance gap, professional masters, interventionist research, practice.

INTRODUCTION

The lack of harmony between academic research and the needs of practitioners in the area of accounting and management (rigor-relevance gap) is a well-known fact that has been discussed in a recurrent way in the literature (HOPWOOD, 1983; SCAPENS, 2006; VAN DE VEN; JOHNSON, 2006; AHRENS; CHAPMAN, 2007; HUGHES; O'REGAN; WORNHAM, 2008; MALMI; GRANLUND, 2009; MALMI, 2010; SCAPENS, 2010; SEAL, 2010; NICOLAI; SCHULZ; GÖBEL, 2011; BARTUNEK; RYNES, 2014; COLEMAN, 2014).

In an editorial to a special issue of *Management Accounting Research* devoted to the relationship between theory and practice in management accounting, Baldvinsdottir, Mitchell and Nørreklit (2010) expressed their disappointment at the small number of papers submitted to discuss the topic, inquiring if this fact does not reveal the lack of concern of the academic community with the relevance of their research to the improvement of the practice. Scapens (2010), in this same issue of *Management Accounting Research*, warned that if the answer to this question is positive, the social role of academic research must be questioned.

The literature also suggests that this mismatch is not limited to research, but also extends to teaching. Hughes, O'Regan and Wornham (2008) register that "[…] much of the teaching and research carried out in universities is irrelevant to the needs of business".

Bennis and O'Toole (2008), on the other hand, emphasize that courses in the management field, by adopting a science model based on abstract economic and financial analyses and multivariate statistics produce some quality researches; however, it seems to be irrelevant to practitioners. Moreover, they are unable to develop useful skills in their students, they do not form leaders, and they fail to give them norms of ethical behavior. The authors also point out that Law and Medical Schools adopt a different model, favoring practical experience, a model in which management schools should mirror, after all, as the authors continue (2008), "Business management is not a scientific discipline but

a profession, and they must deal with what a professional education requires" (p.99).

On the same critical line, based on the results of a survey with 34 investment fund managers in New York, Melbourne, London and Istanbul, Coleman (2014) found that: "[…] finance theory is of limited relevance to practitioners because its quantitative approach requires data about the future that are unavailable, and because it ignores practitioner objectives and skill[...]" (p.226). Coleman (2014) further states that "Thus there is an intriguing paradox in finance: neoclassical investment theory forms the basis of academics' teaching and mainstream finance research; whereas investment practitioners generally prefer to use alternative techniques." (p. 226).

The Brazilian reality in this respect is no different. Here, the literature also suggests a similar gap between research and practice (SOUZA; LISBOA; ROCHA, 2003; FREZATTI, 2005), a mismatch that has already been discussed for some time also in works related to the role of professional master's programs. Wood Jr. and Paes de Paula (2004), for example, analyzed a controversy that is still very current, promoted by some critics who suggest that the professional masters are nothing more than courses of *lato sensu* MBA (Master in Business Administration) with a new look and conclude that the professional masters have their own characteristics that differentiate them from the MBAs, targeting a specific public, since responding to the demands of the market. On the other hand, Moura Castro (2005) vehemently defends the creation of professional master's programs arguing that the business market needs professionals with a level of preparation that exceeds undergraduate programs, but criticizes the affiliation of these professional master's programs to academic postgraduate programs, noting, however, that "what is holding back the development of the professional masters is its affiliated structure to the academic postgraduate program that takes away their own lives and converts them into consolation prizes or beggars in the Olympus of academic courses" (MOURA CASTRO, 2005, p. 17). Along the same lines, Fischer (2005) proposes that "the professional masters should be valued as an innovative experience capable of contributing to the renewal of Brazilian postgraduate programs" (p. 24).

In spite of this discussion already dating back more than a decade, the role of professional masters is not yet clearly defined in practice and its acceptance by academia is still far from a consensus, as can be seen in Fischer's statements "[...] (I) defend a position favorable to the professional masters as an innovation in process, which needs to be the object of research not only of models and practices but also of surface structures." In another work, the same author (FISCHER, 2010b) continues the debate:

> "We probably already know how to make good researchers and maybe good teachers. In a way, the mirror of what we think we are and sometimes actually are. It is more challenging and more interesting developing professionals to the work world of these new times that rescue developmental ideals" (FISCHER, 2010b, p. 359).

Within this context, this article aims to contribute to the discussion of the role of professional masters in mitigating this problem (rigor-relevance gap). From this introduction on, the text is developed in four parts. The first part analyzes, based on literature and the academic and on the professional experience of the authors of this text, the main reasons for the lack of alignment between academic research and professional practice (rigor-relevance gap). The second presents some reflections of the authors on the characteristics of the professional masters of the accounting and management field and the third part presents a discussion about the methodological research approaches that we deem to be most appropriate for the development of researches in these masters programs. This search for alternative methodological approaches is in line with the thinking of Bennis and O'Toole (2008) when they declare that the problem of management and business schools is not the adoption of scientific rigor, but the abandonment of other forms of knowledge. The fourth and last part refers to the final considerations.

 ISSN 2358-0917

ACADEMIC RESEARCH, PROFESSIONAL PRACTICE, AND RIGOR--RELEVANCE GAP

The main difficulty presented by the literature for the fact in question is related to the incorporation of the technique by culture. Before starting this discussion, it is worth mentioning the concepts of technique and technology. According to Abbagnanos Philosophy Dictionary (2012), technique "[...] comprehends any set of rules capable of effectively directing any activity "(p.1106). Technology is defined as the "study of the technical processes of a given branch of production or of various branches" (p. 1109), or, in a more anthropological meaning of the term, as "a totality of techniques dominated by a given group or culture" (p. 1109). Lalande (1973), on the other hand, defines technique in the same way as Abbagnano, but defines technology as "[...] the theory of a technique, but sometimes (due to a frequent metonymy in the use of terms in *"logy"*) the word is used to refer to technique or set of techniques (p. 597). This last definition by Lalande (1973) seems to be more adequate for the purpose of this article

Regarding the resistance of incorporation of the technique by culture, Simondon (1958/2012, 2005) observes that "[...] culture ignores in the technical reality a human reality and that in order to fully play its role, culture must incorporate technical beings in the form of knowledge and sense of value " (SIMONDON, 1958/2012, p. 9). The author is quite critical regarding this situation, point out that:

> "The raised opposition between culture and technique, between man and machine, is false and foundationless; it only masks ignorance and resentment. It conceals, behind an easy humanism, a reality rich in human efforts and natural forces, and which constitutes the world of technical objects, mediators between nature and man" (SIMONDON, 2012, p. 9).

Also, according to the author, this situation of recognizing certain objects as aesthetic (giving them a place of prominence in the world of meanings and refusing others), particularly the technical ones, as something that does not have a meaning, but only a use, makes culture unbalanced. This

cultural imbalance can have, and often has, disastrous consequences, since, faced with this refusal by a partial culture, men who know the technical object and sense its meaning seek to justify its judgment, giving it the only status currently valued beyond of the aesthetic object, that of the sacred object. Thus arises idolatry, technicism, a technocratic aspiration to unconditional power (SIMONDON, 2012, p. 10). The author further states that, in order to restore to culture the general character which it has lost, it is necessary to reintroduce in her an awareness of the nature of technology, of its mutual relations with mankind, and of the values implied in these relations. (SIMONDON, 2012, p. 15).

This concern with the incorporation of technique to culture comes from the 18th century, and is made explicit with the publication of the *Encyclopédie* (*dictionnaire raisonné des sciences, des arts et des métiers*), written under the direction of Denis Diderot (1713 – 1784) e Jean Le Rond D' Alembert (1717 – 1783) published in France in seventeen folio volumes and 11 engravings (technical drawings) between 1750 and 1772. Bombart notes"[...] sciences and practical knowledge are closely associated: one of the great innovations of the encyclopedia is the importance and the dignity that it attributes to the technical knowledge, the occupations (work) and the mechanical arts [...]" (BOMBART, 2008, p. 7-8).

Bombart (2008, p. 125) highlights that the great force of the encyclopedia is the prominent role that it reserves to what comes from practical knowledge, especially to manufacturing technologies. The author emphasizes that Diderot, up against the traditional hierarchy that despises the hand in favor of the spirit, shows that theoretical reflection needs practical realization. Philosophical reflection, for Diderot, is the result of permanent comings and goings between speculation and observation, abstraction, and concrete experimentation.

Despite all the efforts that have been made, much remains to be done and, in this sense, Ellul's (1990/2008) finding remains current: "No social, human, spiritual fact is as important as the technical fact in the modern world. No domain, however, is as unknown as the technical" (ELLUL, 1990/2008, p. 1). Also related to the incorporation of technique to culture,

 ISSN 2358-0917

we must also observe the ethical aspect because as Hotttois (1988, p.10) observes, the current philosophy, even from a theoretical perspective of reflection on contemporary science, will find in the core of its object the technical activity:

> "At a time when the great Western project of knowledge - science - becomes increasingly operational, active, manipulative; in a time when knowledge is, at all levels, synonymous with power and action, philosophical reflection on science must emphasize less pure reason than practical reason and, therefore, the ethics" (HOTTTOIS, 1988, p. 10).

Malmi (2010), in dealing with the current paradigms in the field of management accounting, observes that these are useful for any scientific community, as they provide the focus, organize the effort and help this community to accumulate knowledge on issues of their interest. However, the author points out that paradigms can be problematic when they restrict creativity and leave certain questions unanswered, issues that may be important for both organizations and society at large. In addition, the author comments: "Paradigms also produce academic elites. As we all know, elites have a tendency and ability to retain their privileges. Perhaps this partly explains why paradigms seem to be so sticky." (MALMI, 2010, p. 121).

In this context, in Malmi's (2010) view, there is strong resistance from the academic elite to sponsoring, or even accepting, research based on alternative paradigms. This elite will prefer to direct their students to work within a paradigm in which they feel comfortable and will have" caution against attempts to undertake something more creative and risky." (MALMI 2010, p. 121). This view reinforces Scapens' (2006, p. 28) view that one of the possible causes of misalignment between research and the needs of practice is the lack of practical knowledge on the part of researchers.

Baldvinsdottir, Mitchell and Nørreklit (2010) claim that research carried out in management accounting in recent years has focused mainly on the understanding of the behavior of practitioners, not to guide this behavior, which is a great advance. The authors point out that the conclusions of these studies are much more focused on carrying out new research than on

practice. Thus, the benefits to improving the practice of this research agenda are undermined, and this is a gap to be filled, since "[…] the ultimate purpose of social science research is to improve life (rather than simply to describe and/or understand it." (BALDVINSDOTTIR; MITCHELL; NØRREKLIT, 2010, p. 82).

The affirmation "to improve life" implies, of course, abandoning the paradigm of neutrality, deeply rooted in those researchers who are more aligned with positivism, whose scenario has been unable to produce changes for the improvement of professional practice, merely explaining and predicting some practices in specific situations (LEE, 2009, 153). Therefore, "to improve life", means to intervene in the reality.

It is curious (and even ironic) to note that until recently (late last century and beginning of this century), in Brazil, in the field of business, academic researches that adopted a normative approach, with very significant practical results, not only for professionals, and for society, in general, were predominant. Nothing less neutral than a norm which, in regulating, acts forcefully in the reality, for good or evil.

It is also important to note that the construction of accounting knowledge was carried out by practitioners. Colasse (2004) notes that accounting became only part of the concern of academics in the late nineteenth century, when American researchers began to"[...] formulate statements for the operational notions and principles used by practitioners" (COLASSE, 2004, p. 79) in an attempt to clarify and standardize these notions and principles.

In addition to the above-mentioned reasons, which seem to be the most relevant, the literature suggests others that we will point out below without, of course, trying to exhaust the subject. Some authors, such as Van de Ven and Johnson (2006) and Bogt and Helden (2012), among others, place the gap between theory and practice as a matter of knowledge transfer. According to Van de Ven and Johnson (2006), this approach assumes that practical knowledge in the professional field originates, at least in part, from scientific knowledge and that, therefore, the gap between theory and practice is a problem of translation and diffusion of scientific knowledge generated by scientific research for the practice.

The same authors (VAN DE VEN; JOHNSON, 2006) identify a second approach to the treatment of the issue, based on the assumption that theoretical and practical knowledge are distinct types of knowledge. According to the authors, each aspect reflects an ontology (meaning of truth) and a different epistemology (method) to address different questions. However, they argue that recognizing that this knowledge is different does not mean they are in opposition, or that one replaces the other, but that they actually complement each other. Based on these two approaches, the authors propose a third approach that they name as "engaged scholarship, in which researchers and practitioners co-produce knowledge that can advance theory and practice in a particular domain. This approach is very close to interventionist research, discussed later in this article.

Another aspect related to the lack of alignment between academic research and professional practice refers, at least in the case of the Brazilian academy, to ideological aspects. In a recent text, Giannotti (2016), who is far from being considered a conservative thinker, argues that "[...] the fairer creation and distribution of economic wealth today depends on capitalist production [...]" (p. 32) and that the countries that managed to emerge from the 2008 crisis did so through technological innovations, he also claim that development depends on these revolutions. In Brazil, continues the author, although we have some centers of excellence, technological research has left the university and is disorganized. The author concludes: "How often do you hear on campus that the university should not collaborate with capital? But where look for wealth to help the poorest people?" (GIANNOTTI, 2016, p. 32).

It should be noted that this concern about the narrowing of the relevance gap is not unanimity among the researchers. Some even reject such a possibility: Kieser and Leiner (2009), based on systems theory, argue that social systems are self-referential or autopoietic, that is, they produce their own structures and the constituent elements of communication that are unrelated to their environment. In this sense, the communication elements of a system, such as science, cannot be authentically integrated with the communication of other systems, such as the system of a business organization.

Another critical line that opposes the approximation of academia to practice is the one of academics concerned with the industrialization of education. From this point of view, as early as the 1950s, Harold Innis, a professor and researcher at the University of Toronto, argued that the utilitarian approach to university education results from the process of commercialization and industrialization of teaching, with a tendency to make the university become a response to the labor needs of the companies (TREMBLAY; PAQUELIN, 2016). According to this Canadian researcher, the industrialization of teaching presents in its scope university practices as markets that aim to satisfy the students' taste and the interest of the teachers, respectively perceived as customers and suppliers. In contrast, Moeglin (2016) identifies in Jacques Piveteau a defender in the 1970s of a new education, indicating the use of active methods centered on people, in order to obstruct the strong and disastrous connection between authoritarianism and the industrialization of education. In Brazil, the question of the industrialization of education also concern researchers, and the literature on the social role of the university - unrelated to the interests of the market - is vast and relevant, as shown by the works of Araújo (2012) Dias and Serafim (2015), Sobrinho (2014) and Spatti, Serafim and Dias (2016).

 ISSN 2358-0917

PROFESSIONAL MASTERS PROGRAMS

The Professional Masters (MP) programs were regulated in Brazil by Normative Ordinance No. 17 of December 28, 2009, of the Ministry of Education, which provides for the professional master's degree in the ambit of the Coordination of Improvement of Higher Education Personnel - CAPES. According to this Ordinance, in its Article 4, the objectives of the professional master's program are:

> I - to train qualified personnel for advanced professional practice, transforming of procedures, aiming to meet social, organizational or professional demands and the labor market; II - transfer knowledge to society, meeting specific demands and productive arrangements for national, regional or local development; III - promote the integrated articulation of professional qualification with demanding entities of different natures, aiming at improving the effectiveness and efficiency of public and private organizations by solving problems and generating and applying appropriate innovation processes; IV - contribute to aggregate competitiveness and increase productivity in companies, public and private organizations (BRASIL, 2009).

In the document referenced, CAPES also emphasizes that the MP's goal is to contribute to increasing competitiveness of the national productive sector and, to that end, "[…] (it) should present a curriculum structure that emphasizes the articulation between up-to-date knowledge, relevant methodology and application oriented to the field of specific professional activity "(CAPES, 2014). In addition, CAPES states that "the master's final project must always be linked to real problems of the area of activity of the professional-student and according to the nature of the area and the purpose of the course." (CAPES, 2014).

According to Takahashi, Verchai, Montenegro and Rese (2010, p.565), the main difference between Academic Master's Program (MA) and MP is the end product. In the first case, it is expected that the course will form a researcher (focus in the academy) while in the second, the

formation of a professional researcher (market focus) will be expected, making it clear that research is considered relevant in both cases. Chart 1 presents a summary of the main features (and distinctions) between the two modalities.

Chart 1 Characteristics of Academic Master's Program (MA) and Professional Master's Program (MP)

Criterion	Academic Masters (MA)	Professional Masters (MP)
1. Concept/ Goal	Through immersion in research, it is intended to form the researcher in the long term.	To instruct someone who, in the professional world, knows how to locate, recognize, identify and, above all, use research to add value to their activities
2. Professor profile	All docents must have a Doctoral degree. The faculty can be made up of permanent teachers, collaborators, and visitors. The permanent staff must have a 40-hour weekly employment relationship with the IES (Higher Education Institution) that maintains the course.	Teachers and advisors should have unquestioned doctoral qualifications or professional qualifications, including high-quality research. Professors selected by professional qualification may act as co-advisors and constitute a restricted portion of the faculty.
3. Student profile	Professionals of the market, interested in deepening knowledge and staying in the market or following an academic career. Graduates with an interest in pursuing an academic career or entering the job market	Professionals, with market experience, with interest in deepening their knowledge and returning to the market. The profile must be identified with the social demand to be met by the course

4. Final project	Investigation of a special topic of the selected subject resulting in a dissertation that evidences the research.	The same requirement of MA, also resulting in a dissertation with research applied to problem-solving.
5. Alumni Destination	Research, teaching or company personnel.	Research, teaching or company personnel.
6. Funding	Public sources.	Public and private sources.
7. Regulation	Statement 977/65 CES; Resolution CNE/CES, 1 de 03/04/2001	Statement 977/65 CES; Ordinances 47/95 CAPES, 080/98 CAPES e 17 de 28/12/2009-CNE
8. Evaluation	CAPES System.	CAPES System

Source: Takahashi, Verchai, Montenegro e Rese (2010, p.566)

In the final remarks of their article, Takahashi, Verchai, Montenegro and Rese (2010, p.573) conclude that "it is perceived that the MA is a consolidated proposal in Brazil, while the MP is a modality 'under construction'. This 'unfinished' character of MPs generates contradictions, ambiguities and many criticisms about their role, which often bring them closer to MAs or MBAs, modalities that 'precede' MPs.".

What is currently confirmed is that MP, in accounting and management areas, still remains a modality under construction. Its acceptance by the academic community, which, it should be noted, was its creator it is still far from unanimous. CAPES evaluation criteria, although having evolved in the last years, are still attached with calculability criteria, not worrying much about its end product, which is the development of management technologies, similarly to the ideas of Armstrong and Sperry (2006) and Bennis and O'Toole (2008), when they observe that the academy has adopted an inadequate model of academic excellence that, instead of being based on the competence of its graduates, privileges scientific rigor.

In addition, the means for disseminating technical production of these masters (technological reports) are still very scarce, since journals

classified as technical by CAPES are rare. This fact inhibits this type of research since researchers are evaluated in their institutions by the same calculability criteria adopted by CAPES. The great majority of indexed journals in the management field in Brazil do not even consider evaluating this kind of work (technological reporting) for an eventual publication, although there are already some exceptions in well-ranked journals, such as Revista de Administração Contemporânea (RAC) - (Journal of Contemporary Administration). When it comes to scientific events (congresses, seminars, meetings *etc*.), the flexibility is somewhat greater, since there is a specific event for the area, the Meeting of Professional Masters in Administration (EMPRAD), already in its fifth edition. Other traditional events (Enanpad, Semead, among others) also allow space for submission of technological reports. However, it should be noted that most evaluators still carry the "academic look" for appreciation of the work, indicating that it is also necessary to discuss the preparation of evaluators. After all, there are even cases where technological reports have been rejected for not having "hypotheses to be tested."

Another aspect to be mentioned is the "scientific" character of the end product of these masters programs, that is, of its dissertation. This fact has already been discussed by Mattos (1997):

> '[...] if the academy is supposed to be accredited by the nature of what it produces, to talk to the world of company and production, it must accept to discuss alternative ways of producing critical knowledge for practical purposes other than attending its own preoccupations and internal polemics, or maintaining their traditions and institutions "(MATTOS, 1997, p.163).

These "alternative ways of producing critical knowledge for practical purposes" are discussed in the following section, especially the interventionist research.

 ISSN 2358-0917

INTERVENTIONIST RESEARCH AND THE CREATION AND DEVELOPMENT OF TECHNOLOGIES

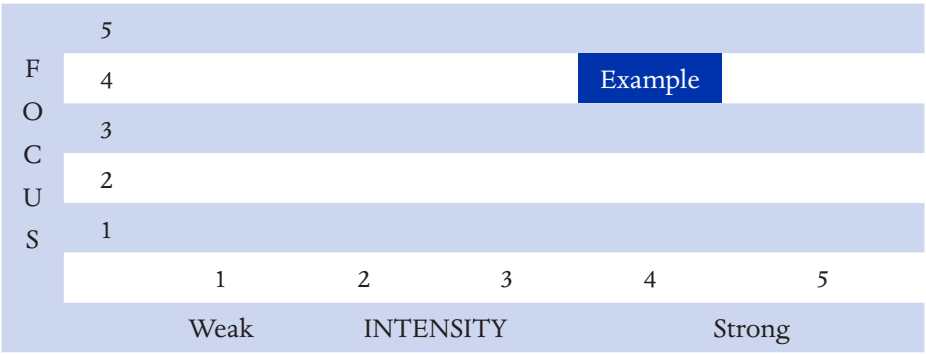
According to Suomala and Yrjänäinen (2012), interventionist research has been suggested as a possible way of producing research in management accounting with practical relevance. In this case, "[...] instead of simply being an observer, the researcher is actively trying to exert an influence on the organisation under observation, i.e. to intervene." (SUOMALA; YRJÄNÄINEN, 2012, p. 9). Still, according to the authors, interventionist research can be seen as a type of case study, in which the researcher is deeply involved with the object of study. Interventionist research, the authors continue, is part of a cluster of methodological approaches that includes stances such as: *action research, action science, design science, clinical research, constructive research, innovation action research, and conditional-normative research*. These alternative forms of interventionist research differ, according to Suomala and Yrjänäinen (2012), due to the importance they attach to practical and theoretical views of the study, as well as to the intensity of the researcher's intervention.

Based on the propositions of Labro and Tuomela (2003), Suomala and Yrjänäinen (2012, pp. 11-12), besides discussing critical factors in the preparation of a research project, present methodological suggestions for conducting interventionist research: to ensure the commitment and enthusiasm not only of the researchers, but also of several employees of the company, check the availability of sufficient resources to conduct the research, confirm consistency between the values of researchers and administrators, investing in understanding the management and research logic, and reaching an agreement on the publication of the research findings.

The authors also write that teamwork during the empirical phase of the study is important not only to ensure acceptance of the developed construct but also to ensure the interpretation of the work results, since different types of theoretical contributions should be recognized. With respect to the character of the intervention, Suomala and Yrjänäinen (2012, pp. 17-22), based on Jönsson and Lukka (2007), developed a more refined

model to measure *ex-post* the intensity and focus of the intervention. The authors used a scale of 1 to 5 to evaluate the intensity of the intervention, with level 1 referring to a weak intervention, and level 5 to a strong intervention. They also used a scale from 1 to 5 to evaluate the focus of the intervention, and level 5 refers to research focusing on management accounting constructs and level 1 refers to other fields of knowledge. Table 1 illustrates this model.

Table 1 Template for evaluation of intervention's intensity and focus



Source: Suomala e Yrjänäinen (2012, p. 20)

In the example illustrated in Table 1, we identify an interventionist research with level 4 intensity and with the same focus level. The meaning of these levels is shown in Chart 2.

 ISSN 2358-0917

Chart 2 Approach to analyze selected research projects

Level	Intensity	Focus
5	Strong collaboration - The researcher is viewed by the company as "one of our own".	Intervention only in Management Accounting practical tools.
4	Active and versatile participation, "almost family".	The main intervention is in management accounting and partially in other areas.
3	Rich participation, but within a limited domain.	The focus is equally on Management Accounting and on other fields of study.
2	External expert, limited participation.	The main focus is on other disciplines, but also on management accounting.
1	Intervention occurs through presence. Participation in the process is deeply limited.	Focus only on other disciplines.

Source: Suomala e Yrjänäinen (2012, p. 20)

It is necessary to recognize, however, that interventionist research is far from having a unanimous acceptance and it receives severe criticisms by sectors of the academy. Van de Ven and Johnson (2006) report that many of these criticisms are related to the involvement of practitioners in the formulation of research questions, and they refute: "Ironically these arguments seem to assume that research questions must be left for academics to formulate" (VAN DE VEM; JOHNSON, 2006, p. 810). They also highlight that by interacting with practitioners, researchers can be taken over by the interests of powerful stakeholders.

Huang (2010) defines action research, from which interventionist research is a derivation, as a guideline for the creation of knowledge that arises in a context of practice and requires researchers to work along with practitioners. When analyzing the relations of action research with other research and practice approaches, the author presents some important observations, which we summarize below: a) action research is similar to

qualitative research, and often uses the same methods. However, qualitative research is an investigation about practice and not with practitioners; b) consulting is a job done for practitioners (usually for their elite, that is, for those who can afford to have their worries solved). Action research necessarily extends beyond a consulting relationship, by being more systematically engaged with the creation of knowledge; c) according to the author, some may confuse action research with applied research, but the latter is also distinct, since it is about the practice and generated by academic researchers, and then offered by them to be used by practitioners.

To sum up, we sought to undo the prejudices regarding this research methodology, emphasizing that its use is already consolidated in other fields of knowledge, both nationally and internationally, such as in the field of medicine, law, and engineering, and the obtained results do not leave questions as to its effectiveness. Evidently, we do not want to claim the exclusivity of this research method for professional masters, but only that it be recognized, without *a priori* restrictions, as another methodology capable of solving practical problems and creating knowledge.

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FINAL REMARKS

The objective of this article was to contribute to the discussion of the role of professional masters in the mitigation of the rigor-relevance gap. In this sense, what we can suggest after this reflection is that, for this contribution to become more effective, some important steps still need to be taken. The first (and perhaps most important) is to improve CAPES' evaluation criteria so that they become more focused on the end product than on academic rigor and the calculability of academic production. It is necessary to acknowledge the effort already being made in this direction, but much remains to be done.

Although the road to be traveled is long, certain actions are urgent. A joint effort of CAPES, educational institutions, researchers and students is necessary, unless we agree with Kieser and Leiner (2009): "researchers and practitioners can not produce research collaboratively, they can only irritate each other, but even these skeptics recognize that, however, sometimes irritations or provocations become inspiring "(p.516).

Here we should mention the warnings of Worrall, Lubbe e Klopper (2007, p.311) "[…] there are real risks for academics if they fail to engage their core stakeholders in more collaborative forms of research [...] "This gap will be filled by the practitioners themselves". In other words, there is a risk of lacking the scientific rigor necessary to increase the knowledge of the field in question.

Other aspects to be considered include acceptance by academia of the use of alternative research paradigms, finding that interventionist research is a method of research like any other, able to solve practical problems and generate knowledge, expand the space for the dissemination of the production of professional masters, including technological reports. Only in this way can the professional masters consolidate their role in their respective field in Brazilian academy, and contribute more effectively to social development, through the creation of accounting and management technologies.

Finally, it is necessary to register that these suggestions reverberate recurring discussion in the academia. Sidor (2015), for example, in his work

on the debate of rigor and relevance in academia, presents a series of indications, among which stand out: academics should examine the problems that professionals really care about, to gain more relevance without abandoning rigor, to adopt measures, in business schools, since methods of instruction and research can impact the attitude that researchers have regarding relevance and practice, publish studies specifically for people working in the management field with accessible language. Thus, such measures tend to minimize a major obstacle, responsible for the rigor-relevance gap. Researchers should produce alternative versions of their research, focusing on what is relevant to practitioners, even though the original versions emphasize scientific rigor. In addition, business leaders should be encouraged to enable a better flow of information between the two groups, in order to achieve the appropriate level of rigor or relevance they desire.

In order to continue the analysis of the scenario here drawn, it is proposed to discuss the theme based on provocations presented by Brazilian authors, such as Mascarenhas, Zambaldi and Moraes (2011), Oyadomari, Cardoso, Mendonça Neto, Antunes and Aguiar (2013) Silva, Mendonça Neto and Riccio (2014) and Antunes, Mendonça Neto and Vieira (2016), who have also been concerned with the theme, producing papers aimed at suggesting alternative research methodologies with the objective of reducing the rigor-relevance gap, notably methodologies of interventionist characteristics, in the line proposed by Suomala and Yrjänäinen. In addition, the question of how the university traditionally concentrates its mission on developing knowledge with an emphasis on "pure science", often relegating the practical needs present in its surroundings, can also serve as a provocation for future research.

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