

Internationalization of higher education institutions: the underestimated role of faculty

Marcello Romani-Dias

Positivo University, Curitiba, Brazil;

Escola Superior de Engenharia e Gestão, Sao Paulo, Brazil and

FGV Sao Paulo School of Business Administration, Sao Paulo, Brazil

Jorge Carneiro

FGV Sao Paulo School of Business Administration, Sao Paulo, Brazil, and

Aline dos Santos Barbosa

University Positivo, Curitiba, Brazil and

FGV Sao Paulo School of Business Administration, Sao Paulo, Brazil

Abstract

Purpose – The purpose of this paper is to deal with the topic internationalization of higher education institutions (IHEI), in terms of the research they engage in. The main motivation for the study is to understand the role of researchers in the internationalization of the institutions in which they work through the academic activities they perform. Based on the assumption that each of the researcher's internationalization activities leads, to some extent, to a greater internationalization of HEI in which it operates, the following question was proposed: Do researchers' personal characteristics and academic activities affect the internationalization of their (higher education) institutions?

Design/methodology/approach – This qualitative study adopted as main methods a review of the literature on internationalization of higher education and in-depth interviews based on a semi-structured script with an intentional sample. A sample of 16 researchers was selected for interview using the snowball technique of sample selection.

Findings – The paper provides theoretical and empirical insights into the characteristics of researchers that influence the internationalization of HEIs. These include the researchers' international academic experience; insertion in international collaboration networks; international co-authorship; and experience in international publications. These are the four main factors that emerge at the individual level (researcher) that positively impact IHEI.

Originality/value – The paper responds to a gap found in the literature on the underestimated role of researchers in the internationalization process of HEIs in which they work.

Keywords Cross-border education, Faculty internationalization, International education, Internationalization of higher education, Internationalization of the academy, Scientific mobility

Paper type Research paper

Introduction

This paper deals with the topic of internationalization of higher education institutions (IHEI), especially in their research dimension. The main motivation for the study is to understand the role of researchers in the internationalization of the institutions in which they work through the academic activities they perform. It was assumed that the determinants of the IHEI process are strongly related to the role played by the faculty.

In addition, it is believed that the study of IHEI can contribute to the theories of international business due to the inherent characteristics of this type of organization. From a theoretical perspective, certain peculiarities in these organizations are evident, for example, in relation to the motivators of internationalization. While market expansion and profit maximization are important motivators for conventional for-profit businesses, in the HEIs we find other motivators. These include the training of citizen-students who are prepared to deal with global conflicts based on their understanding of other peoples' cultures; the development of higher



quality education (enabled by the comparison of large universities spread across the globe – a comparison made possible through internationalization); and a desire to participate in the international academic debate in order to increase the contribution of HEI research in a global scenario (Knight, 1994; Richardson and McKenna, 2003; Altbach and Knight, 2007; Stromquist, 2007). These peculiarities played a relevant role in the choice of the topic of study.

Also noteworthy are the rich and diverse ways in which an HEI can be internationalized, also known as HEI internationalization activities. These include participation in, and publication of, studies in international research networks (Dewey and Duff, 2009); exchanges of students, professors and staff in general (Coates *et al.*, 2014); the insertion of global curricula in courses (Van Damme, 2001); the organization of courses and events abroad in partnership with other HEIs (Knight, 2004); and the creation of campuses in other countries (Van Damme, 2001). Such activities tend to increase as developing countries become developed; but the opposite can also be seen, for example, the growing influx of students who see China as a potential destination (Huang *et al.*, 2014).

While, on the one hand, developed countries such as the USA, the UK, France and Germany are among those that receive the most foreign students, on the other, emerging countries have become an increasingly profitable option for direct foreign investment of HEIs; this is due to the higher average growth rate of the population and the high potential contribution that institutions in developed countries can contribute to the emerging market, which in some cases needs basic resources for development (Lima and Contel, 2011). These data portray the growth potential of the internationalization of education.

The literature also highlights the different levels of analysis that should be considered when dealing with IHEI. Conceptual models, such as those proposed by Knight (1994, 2004), Elkin *et al.* (2005), Paige (2005), Sanderson (2008), Dewey and Duff (2009), Maringe and Foskett (2010) and Gao (2015), bring together global, regional, national, sectoral, institution, departmental and individual aspects that involve the process of internationalization in higher education.

Individual and professional factors such as age, gender, family history, academic achievements, preferences and attributions of students and researchers are examples of individual analysis. At the institutional level, considerations such as the academic discipline, the type of higher education institution and, especially, the characteristics of its management are highlighted. At the national and regional levels, the context in which the academy is inserted such as country size, language, cultural tradition and the political and economic situation is highlighted (Rostan, Huang and Finkelstein, 2014).

Despite these important approaches, the academic researcher's role in internationalization has been neglected in the literature, since few studies analyze the extent of the impact of these individuals on the internationalization of educational institutions, despite the latter being the main agents of IHEI (Dewey and Duff, 2009; Rostan, Ceravolo and Metcalfe, 2014; Rostan, Finkelstein and Huang, 2014; Rostan, Huang and Finkelstein, 2014). The existing models leave a gap by not discussing in depth the activities carried out by the researchers, which include publishing, participation in congresses and international research groups, presentation of subjects abroad (and acting as visiting professor), participation in editorial boards and support/mentoring for student exchange (Miura, 2006; CAPES, 2010; Lazzarini, 2012; Rodrigues *et al.*, 2012; Carneiro *et al.*, 2015).

In order to fill this gap, and assuming that each international activity of the researcher leads to some degree of internationalization of their HEI, the following question was taken as the starting point for this paper: Do researchers' personal characteristics and academic activities affect the internationalization of their (higher education) institutions? In a broader sense, the paper also seeks to stimulate researchers to foster international insertion and provide a rationale for institutions to invest in the main catalysts of the IHEI process surveyed during the study.

In addition to this introduction, the paper is structured in seven sections, the first four of which comprise the theoretical reference on IHEI, that is, the definitions and activities of

IHEI within different dimensions, and the levels of analysis that have been utilized in the literature and their determinants, also understood as barriers and enablers. The fifth section deals with the methodology adopted in the paper, from which is proposed the conceptual model of IHEI based on the role of researchers. The model is described in the sixth section. The seventh section provides some final remarks on the results and the paper's contributions, and indicates some suggestions for future studies on the subject.

Conceptualization of IHEI

The IHEI has been gaining prominence in academic research, mainly due to the accelerated pace of globalization after the 1980s. Knight (1994), a seminal author on the subject, observed that IHEI means different things to different people, and these differences all the more evident with the increase in the number of surveys. Teichler (2003) suggested another reason for concept heterogeneity. The author argued that research related to internationalization and globalization is shaped by the values of the researchers involved, and that much of the research in the area is financed by agencies that promote internationalization. In other words, each institution tends to bring its own concept and vision of what internationalization means in the context of higher education. Indeed, this phenomenon is reflected in the research on the subject, insofar as the various definitions are motivated according to the various purposes (De Wit, 2002; Knight, 2004).

Arum and Van de Water (1992) were possibly the first authors to advance the concept of IHEI, defined it as the multiple activities, programs and services related to international studies, international educational exchange and international technical cooperation. The definition proposed by Knight (1994), two years later, was a milestone in the study of the subject, since it expanded the multiple activities mentioned by Arum and Van de Water (1992) into three dimensions, i.e., teaching, research and services of higher education institutions.

The breakdown in terms of these three dimensions is consistent with the position presented by the Association of Universities and Colleges of Canada (Knight, 1994), which concluded there is no simple, unique or all-encompassing definition of internationalization of the university. It is a set of activities aimed at providing an educational experience within an environment that truly integrates a global perspective. As a consequence of this definition, this study adopted the premise that an HEI internationalizes whenever it contributes, through different activities, to global education, from a geographic standpoint. Knight (1994) outlined four classic approaches to handle concepts related to IHEI, which illustrates the complexity of the phenomenon (see Table I).

Regardless of the approach used by the studies, IHEI involves cooperation and physical mobility, knowledge transfer and international education (Teichler, 2003). Van der Wende

Approach	Description
Process	This approach sees IHEI as a process that integrates an international dimension or perspective to the institution's major functions. A wide range of activities, policies and procedures are part of this process, and terms such as conduction, integration, penetration and incorporation are often used to characterize this approach
Activity	This approach describes internationalization in terms of categories or types of activities, such as curriculum, exchange of researchers and students, and technical cooperation
Competence	This approach looks at internationalization in terms of developing new skills, attitudes and knowledge of students, researchers and other collaborators of the HEI, bringing, therefore, a human dimension, not focused on academic activities or organizational issues
Organizational	This approach focuses on the development of an organizational culture – including habits and customs – that values and supports international initiatives. Closeness to the process approach, but brings culture as the main focus

Table I.
Approaches to IHEI

Source: Knight (1994, p. 3)

(1997) had a broader definition, regarding IHEI as any and all efforts to enable the institution to respond to the requirements and challenges related to the globalization of businesses, economies and labor markets.

Dimensions of IHEI

If, on the one hand, the authors differ in relation to the definitions and models of IHEI, on the other, there seems to be a consensus in the literature as to the activities that involve the process of internationalization. Dewey and Duff (2009), for example, classified activities according to four different types: faculty research and teaching, involving, for example, participation in networks and events, such as academic conferences, international publications and visiting professorships; curriculum, through the introduction of international standards in the teaching plans of the institution's courses; overseas study programs; an activity that may involve partnerships with other HEIs for courses that allow exchanges among those involved, sometimes in both directions; and other areas of activity: in this category are activities such as student exchange, partnerships involving former students of HEIs working abroad and research groups between institutions.

According to Chinelato *et al.* (2015) and Rodrigues *et al.* (2012), the internationalization of education refers to activities such as organization, financing, international franchises, curriculum, research collaborations, joint ventures, campus creation in other countries and exchanges between academics, be they students or professors. Another aspect of this internationalization can be measured based on publications by the researchers abroad (Chinelato *et al.*, 2015; Rodrigues *et al.*, 2012). From these examples, Table II presents a proposal for classification of the main IHEI activities found in the literature.

In addition to the classification of activities encompassed by research, teaching and extension, they can also be classified in relation to mandatory physical mobility (cross-border) or non-compulsory physical mobility (at home). As an illustration, certain activities normally require physical displacement to be performed, such as participation in congresses, acting as visiting professor in a foreign HEI, and exchanges in general. In contrast, most of the IHEI activities do not necessarily require physical displacement to be performed: thus, the so-called internationalization that can be performed “indoors” or “at home.”

Examples found in the literature include the publication of papers in international journals, the adaptation of teaching plans to international standards and the hosting of foreign visitors to the home institution. Still on this topic, it is worth mentioning the activities classified as (6)–(8) of the two forms, because for them the presence or absence of physical mobility will depend on the intended flow in the process. As an example, the organization and conduct of academic events (6) will have physical mobility only if it occurs in another country; otherwise, the internationalization occurs “at home.”

Note that the ten IHEI activities mentioned in Table II are the most frequently cited in the literature, and the three types of activities (research, teaching and extension) are distributed in a similar way. Thus, although there are more possibilities of activities classified as extension, a smaller number of authors seem to include this type of activity. As an example, there are ten complementary international activities on campus (e.g. music, dance, readings, lectures and other events) present in only two articles (Knight, 2004; Paige, 2005). Regarding the scope of activities, we highlight the work of Knight (2004), which addressed eight different internationalization activities.

IHEI levels of analysis

Two decades after the publication of her seminal work, Knight (2004) proposed a multi-level definition of IHEI in order to clarify the understanding of the subject and to garner increased attention and support from policy makers and academic leaders with respect to these

Activities and main authors	Classification	
	With compulsory mobility (border crossing)	Without obligation of physical mobility (at home)
<i>Research</i>		
(1) Participation in international research networks (including projects funded by organizations from other countries) (Van Damme, 2001; Knight, 2004; Teichler, 2004; Elkin <i>et al.</i> , 2005)		✓
(2) International scientific publications (with international co-authors or in journals and annals of international congresses or in a foreign language) (Dewey and Duff, 2009; Cummings <i>et al.</i> , 2014; Coates <i>et al.</i> , 2014)		✓
<i>Teaching</i>		
(3) Acting as a visiting professor, as a student, of courses such as post-doctoral studies abroad, participation in overseas examination boards and co-orientations (Teichler, 2004; Dewey and Duff, 2009; Rostan, Finkelstein and Huang, 2014; Coates <i>et al.</i> , 2014)	✓	
(4) Adapting the curriculum of the HEI courses to international standards (language and international analysis) (Knight, 2004; Paige, 2005; Altbach and Knight, 2007; Chinelato <i>et al.</i> , 2015)		✓
(5) Accomplishment of courses abroad in partnership with foreign HEI (including partnerships for dual academic qualifications) (Teichler, 1999; Van Damme 2001; Dewey; Duff, 2009)	✓	
<i>Extension</i>		
(6) Participation and organization of international academic events (in the country or abroad) (Knight, 2004; Teichler, 2004; Paige, 2005; Dewey and Duff, 2009)	✓	✓
(7) Student exchange (immigration or emigration) (Van Damme, 2001; Elkin <i>et al.</i> , 2005; Rostan, Finkelstein and Huang, 2014; Coates <i>et al.</i> , 2014)	✓	✓
(8) Exchange of professors and other collaborators involved in research and teaching (immigration or emigration). It includes the hiring of professor and foreign collaborators involved in teaching and research (Knight 2004; Coates <i>et al.</i> , 2014; Chinelato <i>et al.</i> , 2015)	✓	✓
(9) Creation of units (academic campus) in other countries (Van Damme, 2001; Chinelato <i>et al.</i> , 2015)	✓	
(10) Complementary international activities on campus (music, dance, readings, lectures and other events) (Knight, 2004; Paige, 2005)		✓
Source: Own elaboration		

Table II.
Classification of
IHEI activities

activities, which, according to her, have been neglected by these groups, given the importance that internationalization strategies have for their institutions. The author's main criticism at the time was based on the argument that without a precise definition of IHEI, there is a practical difficulty in its operationalization (Knight, 2004). From these arguments, she brought, for the first time, a multi-level definition for IHEI:

What is critical is that the international dimension refers to all aspects of education and to the role it plays in society [...] internationalization at the national/sectoral/institution levels is defined as the process of integrating an international, intercultural or global dimension into the purpose, functions or delivery of post-secondary education. (Knight, 2004, p. 2)

The author argued that an adequate definition on the subject must take into account different levels of analysis, such as the national, sector and institutional levels, and their different dimensions. Regarding the dimensions proposed by Knight (2004), it is worth clarifying that internationalization refers to the relationship between different nations, cultures or countries. Taking this argument that the relationship between different cultures also brings a type of internationalization, the author argued that there can be an at-home internationalization, that is, within the country itself, the community or even the institution – this phenomenon she referred to as interculturality. The global term, in turn, provides the idea that the IHEI should have a large geographic reach, that is, aim for a global reach.

In addition to Knight’s work, Sanderson (2008) proposed a new multi-level model based not only at the national, sectoral and institutional levels, but one also including the supranational level – this global and regional classification – and the intra-institutional level, classified in departmental and individual, according to Figure 1.

The author argued that the original model proposed by Knight, by including only three levels of analysis, does not take into account how other levels may affect the process of internationalization in higher education. Sanderson (2008) argued that in the face of the speed of world globalization there are other key actors in this relationship, which for this reason should be included in the model. It is, according to him, a more dynamic and comprehensive process than that illustrated by Knight (2004). By way of illustration, Huang *et al.* (2014) emphasized that internationalization in higher education is influenced by economic, political and cultural disparities between regions, countries, educational systems, educational institutions, families and individuals, and thus a multidimensional process.

Eisenclas and Trevaskes (2003), Liddicoat (2003) and Sanderson (2008) argued that the definitions proposed by Knight (1994, 2004), although of fundamental importance

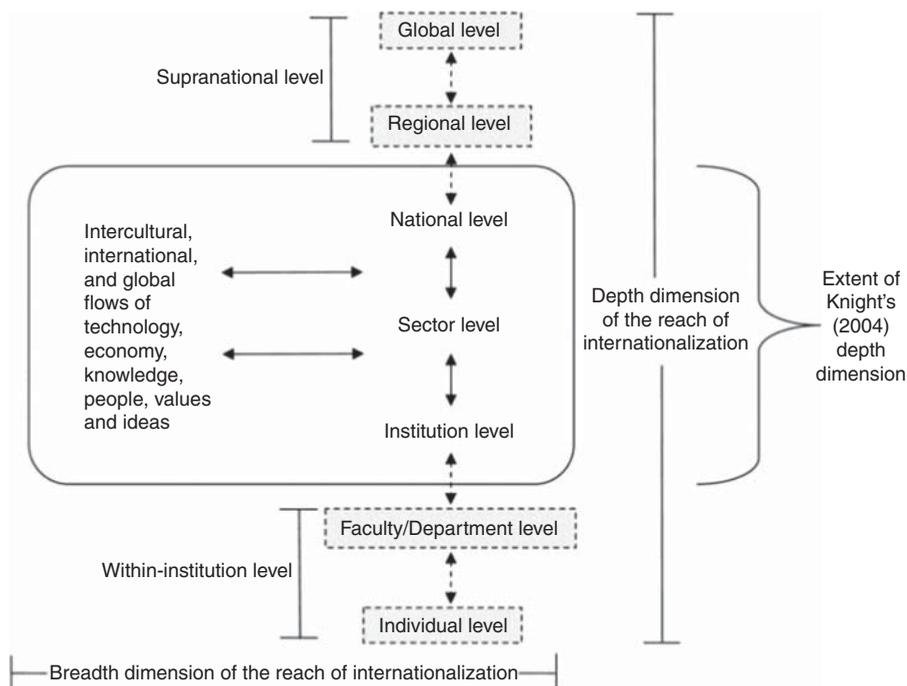


Figure 1.
Sanderson IHEI multi-level model

Source: Sanderson (2008, p. 280)

for the advancement of IHEI, are very general and, for this reason, have limited practical utility. Liddicoat (2003), for example, argued that the model does not provide support for researchers seeking to internationalize their teaching practices. In this regard, the work of Sanderson (2008) is an advance in terms of considering other agents that influence the IHEI process.

Determinants of IHEI: barriers and enablers

In the IHEI literature, a recurrent sub-theme refers to the barriers, which are found mainly at the institutional and individual levels, according to Table III.

Within the institution level, the HEI resistance to change to a culture of internationalization is highlighted; thus, the institution's values, norms and beliefs make this type of activity difficult (Childress, 2009a, b; Dewey and Duff, 2009). In this category it is possible to cite barriers such as the lack of coordination on the part of academic managers about the IHEI process, also expressed by the lack of consensus among the managers (and the staff of the HEI in general) about what internationalization means and, above all, about how internationalization should be accomplished (Van Damme, 2001; Childress, 2009b).

This lack of understanding, which is exacerbated by the lack of experience of the HEI with internationalization, results in administrative policies and procedures that discourage IHEI, both in teaching and research (Teichler, 1999; Fiorin, 2007; Dewey and Duff, 2009; Carneiro *et al.*, 2015). As an example, Carneiro *et al.* (2015) highlighted the low relationship between a researcher's rate of publishing in international journals and career advancement, especially in Latin American universities. The authors argued that a lack of papers published in top journals does not necessarily adversely affect, in the context of certain HEIs, career advancement. As such, this type of strategy on the may be less utilized by researchers. The authors also pointed out that the low salary increments with promotions (in some institutions) tend to exacerbate this phenomenon of low rates of international publishing.

Another example relates to the reality of certain public universities in Latin America, whereby the researcher can get tenure after having passed public exams. This situation makes an academic's job situation very comfortable and tends to discourage publishing, especially in renowned international journals (due to the greater difficulty of publishing this type of work). Additionally, the rate of publishing in such journals affects neither remuneration nor career advancement (Carneiro *et al.*, 2015).

Level	Hindrances
Institution	<ul style="list-style-type: none"> Resistance of HEI to change to a culture of internationalization Lack of coordination between researchers and staff for the IHEI process Difficulty in developing consensus with staff on internationalization Lack of (monetary) resources for internationalization activities Lack of direct accountability that supports international initiatives Administrative policies and procedures that discourage these activities Difficulty in cultivating diversity of international students in HEI Difficulty in measuring the equivalence of subjects for students and academic calendar Lack of recognition of the HEI of international publications made by the researcher Lack of experience/history of HEI with internationalization (first activities)
Individual	<ul style="list-style-type: none"> Lack of knowledge of researchers about foreign journal proceedings Low participation of researchers in associations, meetings and academic journals Studies that only test existing international theories and limitations of the administration area Insufficient understanding of the foreign language Lack of clarity of the researchers on benefits / importance of internationalization Lack of knowledge of researchers and staff about the IHEI process

Table III.
Barriers to IHEI

Source: Own elaboration

The literature on the subject also highlights operational difficulties for internationalization, for example, the lack of monetary resources and direct accountability for IHEI. On this point, the existence of a center specifically responsible for this project is salutary, since international activities are, in general, more burdensome and bureaucratic for the institution than are domestic activities (Van Damme, 2001; Dewey and Duff, 2009; Carneiro *et al.*, 2015). Dewey and Duff (2009) also highlighted the difficulty of cultivating international student diversity in HEI and of measuring the equivalence of coursework, as well as other operational barriers to IHEI, which are exacerbated by differences in the academic calendars of different countries.

In terms of the barriers at the individual level, the literature highlights obstacles related to the researcher, especially with respect to their research activities. For example, the lack of knowledge about procedures for getting published in foreign journals is among the main reasons for articles being rejected by these journals. Ferreira (2015) emphasized that the authors often fail to pay attention to the mission and the type of articles published by the journal, or the journal's standards (author guidelines). Such shortcomings often result in an otherwise good paper being rejected at the international level.

Another very common reason for articles being rejected by international journals is that the study may only have relevance to the context of the country in which the researcher works, with little applicability in global contexts (Rodrigues *et al.*, 2012; Lazzarini, 2012). Fiorin (2007) pointed out that this difficulty is particularly acute in the area of management and the field of human and applied social sciences, since, due to the inherent characteristics of these sciences, studies with more immediate interference in the national or local reality than, for example, in exact and biological sciences.

Another barrier, according to Carneiro *et al.* (2015), occurs when researchers have a low profile in associations and academic meetings outside their regions of origin, combined with weak participation in academic associations. The authors also pointed to the low participation, for example, of researchers from Latin America in the editorial boards of the main academic journals. This pattern may hinder the exchange of information between researchers and, consequently, compromise insertion – both of the individual and the institution – in the international scene.

In addition, the authors argued that Latin American faculty have limited time to dedicate themselves to academic research and publications, because their teaching and consulting activities can be financially more advantageous and in some cases there is no financial support, either public or private, to cover the expenses inherent in the internationalization of researchers. Such expenses include travel, food and lodging, congress registration fees, translation services and additional coursework performed abroad (Carneiro *et al.*, 2015).

Another important barrier for researchers – one much highlighted in the literature – is related to language. The language widely used in academic research is English, which has a very different style of writing than, for example, Portuguese and Spanish. If researchers are unable to adapt to this reality, they will have difficulty expressing themselves appropriately in an international scenario (Fiorin, 2007; Rodrigues *et al.*, 2012; Choi *et al.*, 2015; Rostan, Ceravolo and Metcalfe, 2014; Rostan, Finkelstein and Huang, 2014; Rostan, Huang and Finkelstein, 2014; Carneiro *et al.*, 2015).

In addition to the barriers already mentioned, there are also those resulting from the researcher's lack of knowledge. For example, authors such as Childress (2009a) and Dewey and Duff (2009) emphasized that the lack of knowledge about the process and the internationalization strategies adopted by the HEI can generate a problem of coordination between the two parties. Ignorance is also present when the researcher does not fully exploit the benefits and importance given by HEI to internationalization. By way of illustration, some institutions offer variable remuneration, based on the number of relevant international publications authored by the researcher. In this case, a researcher's ignorance of international rankings (e.g. Journal Citation Reports, SCImago and Association of Business Schools) used by HEI to define what is relevant can be seen as an obstacle to the IHEI process (Teichler, 1999).

In addition to the inherent obstacles to the IHEI process, the literature on the subject also highlights its catalysts (enablers) at the global level and at the institution level. One aspect of the process of globalization is the increasing speed of the global flow of people, goods, services and information; this is one of the main vectors of internationalization.

As an example of the accelerators of this process at the global level are the General Agreement on Trade in Services and the meetings of leaders of different countries to deal with the mobility of people through immigration and emigration policies (Stromquist, 2007; Jacob and Meek, 2013; Rostan, Ceravolo and Metcalfe, 2014; Rostan, Finkelstein and Huang, 2014; Rostan, Huang and Finkelstein, 2014). Van Damme (2001) also emphasized the importance of organizations to instrumentalize, regulate and classify IHEI activities, such as the OECD (2017), an organization that promotes forums between countries to discuss global social problems, including those related to education and more specifically to the globalization of education. The catalysts at the level of institution analysis can be divided, together with their main authors, into subgroups, namely, existence of a governance structure, a center directly responsible for internationalization, a code of conduct for IHEI and of a specific plan for the IHEI with the participation of its stakeholders (Van Damme, 2001; Stromquist, 2007; Dewey and Duff, 2009; Childress, 2009b, c); relationship and connections of HEI with companies, especially multinational companies, and the presence of company representatives on HEI boards, to stimulate contact with the market activity carried out abroad (Stromquist, 2007); budget forecasting (with a fund in place for private donations) and several monetary incentives specific to internationalization activities (Van Damme, 2001; Dewey and Duff, 2009; Childress, 2009c); and fostering a culture of interdisciplinarity, collaborative research, international knowledge of the subjects, and fostering awareness and commitment to IHEI (Dewey and Duff, 2009; Childress, 2009a; Bozeman *et al.*, 2013; Jacob and Meek, 2013; Choi *et al.*, 2015; Rostan, Ceravolo and Metcalfe, 2014; Rostan, Finkelstein and Huang, 2014; Rostan, Huang and Finkelstein, 2014; Kwiek, 2015).

Method and data

This qualitative study adopted in-depth interviews as the main method, with an intentional sample and semi-structured script. This approach made it possible to reflect on the concepts, relationships and categorizations on the IHEI, through the triangulation of data analysis between the literature on internationalization of higher education, the responses of interviewees who experience this phenomenon, and our perception as authors and professors who also seek this internationalization, following the methodological precepts proposed by Leech and Onwuegbuzie (2007).

To serve as the basis for proposing the desired conceptual model, permanent researchers from Brazilian master's and doctoral programs in Management were initially interviewed, who had scores of 6 and 7 (the highest grades in the ranking) in the triennial evaluation (2012–2014) of CAPES, a governmental institution responsible for evaluating Brazilian programs regarding quality in general and internationalization. The selected researchers were chosen because the programs in which they operate are considered the most internationalized in the country (CAPES, 2013). Ten researchers from these programs (EAESP, FEA and EBAPE) and six other researchers (from Insper, HEC and University of Georgia) with a notable international insertion (and indicated by the first group) were interviewed too, using the snowball method of sample selection. Thus, 16 interviews were conducted in the first half of 2016.

Regarding the profile of the sample, three of the interviewees are women, all are Brazilian, work in the field of management and act as associate, adjunct or full professors. Most (almost 80 percent of respondents) also act as coordinators or academic directors. It is, therefore, a sample of experienced researchers in the context of the internationalization of higher education, which is underscored by the fact that they work in internationalized institutions often publish academic articles abroad, and participate in international research associations. Three of the interviewees work concurrently in institutions in Brazil and abroad.

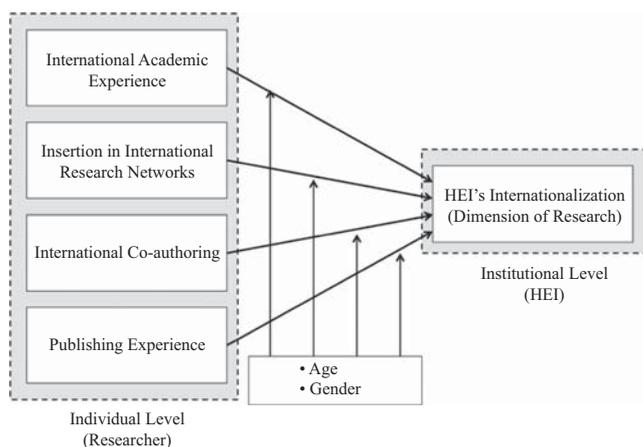
The interviews, carried out from a semi-structured script, lasted approximately 50 min and occurred in person, via Skype or by telephone. The script focused on the academic trajectory of the interviewee and their perception of the internationalization of Brazilian researchers and, consequently, of the higher education institutions in which they work. The research script (which can be viewed in the Appendix) was developed from the literature review. The first part of the script covered broader questions about the internationalization trajectory of the researcher in terms of the activities presented in the literature (Table II), which comprise our theoretical framework. The second part of the script covers the researcher's perception about internationalization and the institutional context in which he/she is a part (especially of the higher education institution in which he/she works). This strategy allowed us to survey the characteristics of the researcher that influence the internationalization (of the activities) of the institution where he/she works, as shown in our explanatory model (Figure 2).

It is necessary to point out that Brazil was chosen for the study because it is considered a new country in the academic research environment compared to, for example, Western European countries and the USA, thus the need to increase Brazil's international insertion in the scientific debate (CAPES, 2010). This need for greater participation can be illustrated with UNESCO data, which show that only 2.9 percent of what is produced in the scientific world comes from Brazilian studies. In comparison, the USA produces 25.3 percent and China produces 20.2 percent of the world's scientific papers (UNESCO, 2015).

Thus, Brazil's participation in total global publications is still low and, therefore, several initiatives will be necessary to increase the dialog between Brazil and other nations in various fields of knowledge, including management. Due to this need of insertion, the postgraduate *stricto sensu* national management programs have sought – mainly from the last decade – to increase their global participation.

Results: conceptual model of IHEI based on the role of researchers

As a result of the study, the cross-referencing of the theoretical and empirical data pointed to four main categories of IHEI catalysts in their field of research: international academic experience; integration into collaborative networks; international co-authoring; and the research experience acquired by the researcher.



Source: Own elaboration

Figure 2.
HEI research
internationalization
model

The international academic experience of a researcher can be assessed mainly in terms of years of study abroad – including undergraduate, master’s, doctoral, post-doctoral and extension courses – acting as a visiting professor, advisory positions and examining boards in foreign institutions, participation in international academic events (including acting in the organizing body of the event), and academic awards obtained abroad (Altbach and Knight, 2007; Fiorin, 2007; Rodrigues *et al.*, 2012; Choi *et al.*, 2015; Rostan, Ceravolo and Metcalfe, 2014; Rostan, Finkelstein and Huang, 2014; Rostan, Huang and Finkelstein, 2014; Carneiro *et al.*, 2015).

These experiences enrich the researcher’s global vision and, for this reason, are considered crucial for the internationalization of the institutions in which they operate, according to researchers interviewed:

I think it has a lot of relation (referring to IHEI) with the training of researchers already during the PhD. [...] it is the time when you have time to expand, qualify, and improve your qualification. [...] there (abroad) you will establish bonds; so when you are a researcher with your doctorate completed, you will have contact with the methods that are the most-used, and most valued by international journals. Then you can augment your training in relation to theory and methods of interest. (Interviewee 2)

The best advice I could give to future researchers would be as follows: abandon your program there (referring to PhD course in Brazil) and come and do it here abroad. (Interviewee 14)

I think the difference in internationalization lies essentially in the international background and experience of the researchers, in their history. Many have already done the PhD abroad or have spent a lot of time doing doctoral work abroad (as part of a sandwich degree) and are in Brazil for personal reasons, which is my case. (Interviewee 5)

Another important catalyst for IHEI results is participation in international collaborative research networks. By participating in international study groups, for example, researchers can gain familiarity with the current topics and the main methods within their area of knowledge; with this, in addition to applying this knowledge in their work, the researcher disseminates this information in their institution, thus facilitating the IHEI in the field of research (Richardson and Mckenna, 2003; Altbach and Knight, 2007; Kwiek, 2015; Diniz *et al.*, 2016).

Additionally, empirical studies by Kwiek (2015) and Rostan, Ceravolo and Metcalfe (2014), Rostan, Finkelstein and Huang (2014) and Rostan, Huang and Finkelstein (2014) pointed to an increase in productivity in terms of a researcher’s publications due to participation in research networks. Such participation tends to expand the boundaries of their publications, a point illustrated by the following quotes:

I think insertion is fundamental in research networks in international contexts. It is not only the research network, it is in international contexts. (Interviewee 4)

I think networking is critical to knowing what people are really seeing, what people are studying, what is distressing staff, and what is missing. (Interviewee 3)

I have articles published in books and articles published in journals, albeit not the leading ones. All of my international publications were based on networks and ties, a friend, someone who was in contact. (Interviewee 15)

Publications with international co-authors are also catalysts for the internationalization result of researchers and HEIs. These partnerships may enable improvements in research, for example, on language adequacy and contextualization comprehensiveness (Dewey and Duff, 2009; Rodrigues *et al.*, 2012; Cummings *et al.*, 2014). Some of these gains are highlighted by the researchers interviewed, as exemplified in the following quotes:

I have already had articles published in partnership with international authors. The fact that you get known beyond the borders, outside Brazil, opens more doors, even for my students. So, getting

internationally recognized, I will have more opportunities to work in partnership and I will also be able to open new frontiers for my students. (Interviewee 8)

My first international paper was a paper that came out of my doctoral thesis. It was published in [...], a good journal [...]. It does not have a stratospheric Impact Factor, but it has a great H-impact rating. I had already received a rejection from two other journals with this paper. I invited two coauthors and without them the paper would not have been published. I learned a lot. (Interviewee 13)

[...] What helped a lot in this internationalization process is that I have always tried to work together with colleagues from other countries. It's a bit more work, but it's very enriching, because you get a different view of what we have in Brazil, and, although it is more laborious, it is important. I have had two publications as a result of these international activities. (Interviewee 3)

The last major catalyst in the model is the experience in publishing acquired by the researcher throughout their academic career. This involves, in addition to their own published work, participation as a member of editorial staff and reviewer of journals, as well as participation and publications in scientific congresses. Part of the literature argues that the editorial process at foreign journals is different from that at Brazilian journals, for example. For this reason, having previous experience of this reality, including the rejection of articles, facilitates the internationalization of the research (Rodrigues *et al.*, 2012; Carneiro *et al.*, 2015). The following quotes illustrate this point:

[...] there's the issue of the English language, which has different conventions. The type of language in the text is crucial; but you will only learn by doing, and it is good to read everything you can, for example, the *Academy of Management Journal*, which in 2011 and 2012 published a series of editorials in which different editors explain what they expect in a good paper [...]. (Interviewee 13)

When you start submitting your paper and it gets rejected, you get better. Obviously people start to see you and recognize you and they know who you are. (Interviewee 15)

All the papers I published abroad (outside Brazil) were presented in two or three international congresses. And that's the great advantage of exposing your paper at international congresses: feedback. It's absolutely fantastic what kind of feedback you get. (Interviewee 12)

As proposed by Rostan, Ceravolo and Metcalfe (2014), Rostan, Finkelstein and Huang (2014), Rostan, Huang and Finkelstein (2014) and Oliveira and Freitas (2016), age and gender are important factors that influence each of these catalysts and, consequently, the internationalization of HEI research. If, on the one hand, the greater age allows researchers to consolidate their knowledge and international networks, on the other hand, they tend to markedly decrease productivity as they grow older, according to classic studies on the academic productivity cycle, such as Levin and Stephan (1991) and Oster and Hamermesh (1998). As such, mature researchers tend to contribute more to the internationalization of their institutions. The 16 researchers interviewed in our study were all mature researchers, which supports the view in the literature.

Regarding gender, Vabø *et al.* (2014, p. 220) argued, in an empirical study, that women face greater barriers to carrying out international activities that require physical mobility (border crossing):

[...] Some of these barriers are related to marital status, spouse employment, and parental status: we found that women with stable relationships and with children are less likely to participate in international research collaborations than are male scholars.

As a consequence, there is a tendency for some women to focus on at-home internationalization activities (i.e. within their own country), which prevents them from exercising their full internationalization potential. For example, only 3 of the 16 researchers

with a significant international performance are women, showing convergence in this respect with the findings of Vabø *et al.* (2014). Based on the interviews conducted with researchers who experience this phenomenon in its most diverse manifestations – and, consequently, in the quotations of the interviewees present in this section – we propose the following conceptual model, according to Figure 2.

We sought to demonstrate the importance of the researcher as the main agent in the internationalization of the institution of education, starting with the theoretical assumption that each internationalization activity of the researcher also generates, to some extent, internationalization of the respective higher education institution.

Final remarks

In view of the potential contribution of studies on higher education institutions to theories of international business, and the role of researchers (which although widely recognized in the literature as fundamental for this purpose, has been neglected by IHEI studies and conceptual models), in this paper we analyzed the impact of researcher characteristics on the internationalization of their HEIs. To do this, we performed an analytical review of the literature and conducted interviews with Brazilian researchers with a history of internationalization, to be able to triangulate the data analysis and provide a theoretical and empirical basis for a proposed conceptual model based on four fundamental catalysts.

Using this method, we verified that the interviews brought convergent results with the literature regarding the main catalysts of IHEI. However, we observed that the interviewees ascribed greater importance to “insertion in international collaborative research networks” and “international co-authoring” in this process, to the detriment of “international academic experience” and in “researcher publishing,” although both were recurrent in the answers of the interviewees.

Three main contributions of this paper are: analysis of factors that can enable theoretical development of a subject little explored in the international business community, i.e., the IHEI; a classification, based on an analytical review of the literature, of the different IHEI activities with respect to the presence/absence of physical mobility by the agent; and a proposed conceptual framework for the determinants (i.e. researchers) and moderators of the IHEI process.

Therefore, we suggest that future studies explore, through a mixed methodology, the impact of the different types of academic experiences of researchers in the internationalization of HEIs, to further clarify the understanding of the subject. As a limitation of this study we highlight the absence of interviews with foreign researchers, which could enrich the triangulation of the data collected, based on different perceptions of the internationalization outcome. In addition, the object of analysis chosen for research can be seen as a second limitation of the study: because we chose researchers as the object of analysis, the activities and characteristics of the research are the most present in the results of our paper and in the proposed model. Had we instead selected as a base professors who are not involved in research, we would possibly have obtained results more linked to internationalization in the teaching dimension. And had we instead selected academic managers, such as course coordinators, international extension activities would have been more apparent. We acknowledge, therefore, that our focus of analysis led to a deepening of the international dimension of research, albeit to the detriment of international dimensions (e.g. teaching and extension). We argue, for example, that tenured faculty are at once professors, researchers and often managers, and for this reason we have chosen to address the three dimensions (research, teaching and extension) in our theoretical framework, although the last two not stand out in our model. We understand, therefore, that the absence of results in the dimensions of teaching and extension in our model can be seen as a methodological limitation of the study, although this was not our central purpose in the paper.

Despite these limitations, we believe this paper can stimulate researchers to seek international insertion, based on the different motivators and benefits classified in the study. As a managerial contribution directed at HEIs, priority investment is recommended in research networks with foreign institutions and in activities that foster the development of international research experiences for the main agents of internationalization, i.e., the faculty members.

References

- Altbach, P.G. and Knight, J. (2007), "The internationalization of higher education: motivations and realities", *Journal of Studies in International Education*, Vol. 11 Nos 3-4, pp. 290-305.
- Arum, S. and Van de Water, J. (1992), "The need for a definition of international education in US universities", *Bridges to the Futures: Strategies for Internationalizing Higher Education*, Association of International Education Administrators, Carbondale, IL, pp. 191-203.
- Bozeman, B., Fay, D. and de, C.P. (2013), "Research collaboration in universities and academic entrepreneurship: the-state-of-the-art", *The Journal of Technology Transfer*, Vol. 38 No. 1, pp. 1-67.
- CAPES (2010), "Plano Nacional de Pós-Graduação (PNPG) 2011-2020", Coordenação de Aperfeiçoamento de Pessoal de Nível Superior, Brasília, available at: www.capes.gov.br/images/stories/download/Livros-PNPG-Volume-I-Mont.pdf (accessed April 20, 2017).
- CAPES (2013), "Documento de Área 2013: Administração, Ciências Contábeis e Turismo", Coordenação de Aperfeiçoamento de Pessoal de Nível Superior, Brasília, available at: <https://drive.google.com/viewerng/viewer?a=v&pid=sites&srcid=Y2FwZXMuZ292LmJyfiHRyaWVudWwtMjAxM3xneDozYTY0OWJkNGU1NWl3Y2Zh> (accessed April 20, 2017).
- Carneiro, J., Bandeira-de-Mello, R., Cuervo-Cazurra, A., Gonzalez-Perez, M.A., Olivas-Luján, M., Parente, R. and Xavier, W. (2015), "Doing research and publishing on Latin America", *International Business in Latin America*, Palgrave Macmillan, London, pp. 11-46.
- Childress, L.K. (2009a), "Interdisciplinarity: a catalyst for faculty engagement in internationalization", *Journal of Global Initiatives: Policy, Pedagogy, Perspective*, Vol. 4 No. 1, pp. 71-94.
- Childress, L.K. (2009b), "Internationalization plans for higher education institutions", *Journal of Studies in International Education*, Vol. 13 No. 3, pp. 289-309.
- Childress, L.K. (2009c), "Planning for internationalization by investing in faculty", *Journal of International and Global Studies*, Vol. 1 No. 1, pp. 30-50.
- Chinelato, F.B., Ziviani, F. and Rodrigues, S.B. (2015), "Internacionalização dos Programas de Pós-Graduação Stricto Sensu em Administração no Brasil", *XXXIX Encontro da ANPAD, Belo Horizonte*.
- Choi, S., Yang, J.S. and Park, H.W. (2015), "The triple helix and international collaboration in science", *Journal of the Association for Information Science and Technology*, Vol. 66 No. 1, pp. 201-212.
- Coates, H., Dobson, I.R., Goedegebuure, L. and Meek, V.L. (2014), "The international dimension of teaching and learning", *The Internationalization of the Academy*, Springer, Dordrecht, pp. 105-118.
- Cummings, W.K., Bain, O., Postiglione, G.A. and Jung, J. (2014), "Internationalization of the academy: rhetoric, recent trends, and prospects", *The Internationalization of the Academy*, Springer, Dordrecht, pp. 55-77.
- Dewey, P. and Duff, S. (2009), "Reason before passion: faculty views on internationalization in higher education", *Higher Education*, Vol. 58 No. 4, pp. 491-504.
- De Wit, H. (2002), *Internationalization of Higher Education in the United States of America and Europe: A Historical, Comparative and Conceptual Analysis*, Greenwood, Westport, CT.
- Diniz, E.H., Favaretto, J.R., Oliveira, H.G. and Brólio, D.R. (2016), "Inserção internacional do campo de Administração da Informação (ADI): análise da formação, publicação e participação em redes de pesquisa", *XL Encontro da ANPAD, Costa do Sauípe*.

- Eisenclas, S. and Trevasques, S. (2003), "Internationalisation at home: some principles and practice", *Australian Perspectives on Internationalising Education*, Language, pp. 87-102.
- Elkin, G., Devjee, F. and Farnsworth, J. (2005), "Visualising the internationalisation of universities", *International Journal of Educational Management*, Vol. 19 No. 4, pp. 318-329.
- Ferreira, M.P. (2015), *Pesquisa em Administração e Ciências Sociais Aplicadas: um guia para a publicação de artigos acadêmicos*, LTC, Rio de Janeiro.
- Fiorin, J.L. (2007), "Internacionalização da produção científica: a publicação de trabalhos de Ciências Humanas e Sociais em periódicos internacionais", *Revista Brasileira de Pós-Graduação*, Vol. 4 No. 8, pp. 263-281.
- Gao, Y. (2015), "Toward a set of internationally applicable indicators for measuring university internationalization performance", *Journal of Studies in International Education*, Vol. 19 No. 2, pp. 182-200.
- Huang, F., Finkelstein, M. and Rostan, M. (2014), *The Internationalization of the Academy: Changes, Realities and Prospects*, Springer, Dordrecht.
- Jacob, M. and Meek, L. (2013), "Scientific mobility and international research networks: trends and policy tools for promoting research excellence and capacity building", *Studies in Higher Education*, Vol. 38 No. 3, pp. 331-344.
- Knight, J. (1994), *Internationalization: Elements and Checkpoints*, Canadian Bureau for International Education, Ottawa, pp. 1-15.
- Knight, J. (2004), "Internationalization remodeled: definition, approaches, and rationales", *Journal of Studies in International Education*, Vol. 8 No. 1, pp. 5-31.
- Kwiek, M. (2015), "The internationalization of research in Europe: a quantitative study of 11 national systems from a micro-level perspective", *Journal of Studies in International Education*, Vol. 19 No. 4, pp. 341-359.
- Lazzarini, S.G. (2012), "Leveraging the competitive advantage of Iberoamerican scholars", *Management Research: The Journal of the Iberoamerican Academy of Management*, Vol. 10 No. 1, pp. 64-73.
- Leech, N.L. and Onwuegbuzie, A.J. (2007), "An array of qualitative data analysis tools: a call for data analysis triangulation", *School Psychology Quarterly*, Vol. 22 No. 4, pp. 557-584.
- Levin, S. and Stephan, P. (1991), "Research productivity over the life cycle: evidence for academic scientists", *The American Economic Review*, Vol. 81 No. 1, pp. 114-132.
- Liddicoat, A. (2003), "Internationalisation as a concept in higher education: perspectives from policy", *Australian Perspectives on Internationalising Education*, Language, pp. 13-26.
- Lima, M.C. and Contel, F.B. (2011), *Internacionalização da Educação Superior: nações ativas, nações passivas e a geopolítica do conhecimento*, Alameda, São Paulo.
- Maringe, F. and Foskett, N. (2010), *Globalization and Internationalization in Higher Education: Theoretical, Strategic and Management Perspectives*, Continuum, London.
- Miura, I.K. (2006), *O Processo de Internacionalização da Universidade de São Paulo: Um estudo de três áreas do conhecimento*, Tese de livre docência, FEA-USP, Ribeirão Preto.
- OECD (2017), "About the OECD", Paris, available at: www.oecd.org/about (accessed April 20, 2017).
- Oliveira, A.L. and Freitas, M.E. (2016), "Motivações para Mobilidade Acadêmica Internacional: a visão de alunos e professores universitários", *Educação em Revista*, Vol. 32 No. 3, pp. 217-246.
- Oster, S. and Hamermesh, D. (1998), "Aging and productivity among economists", *Review of Economics and Statistics*, Vol. 80 No. 1, pp. 154-156.
- Paige, M. (2005), "Internationalization of higher education: performance assessment and Indicators", *Nagoya Journal of Higher Education*, Vol. 5, pp. 99-122.
- Richardson, J. and McKenna, S. (2003), "International experience and academic careers: what do academics have to say?", *Personnel Review*, Vol. 32 No. 6, pp. 774-795.

- Rodrigues, S., Duarte, R.G. and de Padua Carrieri, A. (2012), "Indigenous or imported knowledge in Brazilian management studies: a quest for legitimacy?", *Management and Organization Review*, Vol. 8 No. 1, pp. 211-232.
- Rostan, M., Ceravolo, F. and Metcalfe, A.S. (2014), "The internationalization of research", *The Internationalization of the Academy*, Springer, Dordrecht, pp. 119-143.
- Rostan, M., Finkelstein, M. and Huang, F. (2014), "Concepts and methods", *The Internationalization of the Academy*, Springer, Dordrecht, pp. 23-36.
- Rostan, M., Huang, F. and Finkelstein, M. (2014), "The internationalization of the academy: findings, open questions, and implications", *The Internationalization of the Academy*, Springer, Dordrecht, pp. 259-280.
- Sanderson, G. (2008), "A foundation for the internationalization of the academic self", *Journal of Studies in International Education*, Vol. 12 No. 3, pp. 276-307.
- Stromquist, N.P. (2007), "Internationalization as a response to globalization: radical shifts in university environments", *Higher Education*, Vol. 53 No. 1, pp. 81-105.
- Teichler, U. (1999), "Internationalisation as a challenge for higher education in Europe", *Tertiary Education and Management*, Vol. 5 No. 1, pp. 5-22.
- Teichler, U. (2003), "The future of higher education and the future of higher education research", *Tertiary Education & Management*, Vol. 9 No. 3, pp. 171-185.
- Teichler, U. (2004), "The changing debate on internationalisation of higher education", *Higher Education*, Vol. 48 No. 1, pp. 5-26.
- UNESCO (2015), "Relato de ciência da Unesco Rumo a 2030: Visão Geral e cenário Brasileiro", United Nations Educational, Scientific and Cultural Organization, Paris, available at: <http://unesdoc.unesco.org/images/0023/002354/235407por.pdf> (accessed April 22, 2017).
- Vabø, A., Padilla-González, L.E., Waagene, E. and Næss, T. (2014), "Gender and faculty internationalization", *The Internationalization of the Academy*, Springer, Dordrecht, pp. 183-205.
- Van Damme, D. (2001), "Quality issues in the internationalisation of higher education", *Higher Education*, Vol. 41 No. 4, pp. 415-441.
- Van der Wende, M. (1997), "Internationalising the curriculum in Dutch higher education: an international comparative perspective", *Journal of Studies in International Education*, Vol. 1 No. 2, pp. 53-72.

Appendix. Interview script

Dimension 1 – academic trajectory

- A. Please give an overview of your academic trajectory, mentioning the institutions where you have worked and studied?
- B. Does your academic background include any international experience? (undergraduate, master's, doctorate)
- C. As part of an important institution of higher education, what are, in your view, the basic requirements for this position?

Dimension 2 – perceptions regarding internationalization

- D. Since the beginning of your career, what has changed in management research in Brazil?
- E. How has this affected the careers of teaching faculty?
- F. What does internationalization mean to you?
- G. Have you been aware of the internationalization of the field? In your opinion, is the focus quantitative or qualitative?
- H. What do you expect will change this process?
- I. What are the main motivations that, in your opinion, lead Brazilian researchers to seek to publish abroad? What are the respective advantages and disadvantages?

J. In your perception, what factors make internationalization difficult for Brazilian researchers in Management?

K. In your opinion, what aspects, if any, facilitate this internationalization?

Dimension 3 – institutional context experienced

L. What role do institutional pressures play in internationalization?

M. X is among the most internationalized (in Brazil) institution in the field of activity. In your opinion, why does this occur?

N. How does Institution X act in this internationalization process with its faculty?

O. Looking at the resumés of the professors of these institutions, in your opinion, what is the difference in the degree of internationalization of professors belonging to the same institution?

P. How does Institution X, with a major focus on internationalization, deal with these faculty members who are not internationally oriented?

Q. At Institution X, how are professors held accountable and encouraged to internationalize?

Corresponding author

Marcello Romani-Dias can be contacted at: mromdias@hotmail.com