



## Entrepreneurial Intention: Categorization, Classification of Constructs and Proposition of a Model

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### ABSTRACT

Literature review studies on Entrepreneurial Intention (EI) point to a future of high standardization (Liñán & Fayolle, 2015) and potential impoverishment of the current research (Terjesen, Hessels, & Li, 2013). There is an over-standardization in studies on EI, and a focus on potential dogmatism in the area – that is, theoretical and methodological inflexibility with replication based on alteration only in substantive domain of EI. The objective of this study is to broaden the focus of the literature review on EI. The research design is descriptive, with the use of quantitative data. We adopt the bibliometric technique in the field of research, based on the Principle of Least Effort (Zipf, 1949). We consider the Reinert (1993) method. Four classes emerged in the analysis. The relation between these classes indicated the concern of the studies on EI in replicating methods, techniques and analyses to the new profiles and roles of the entrepreneur. These results enabled the proposition of a preliminary model that increases the future opportunities for studies on EI.

**Keywords:** Entrepreneurial intention, Reinert Method, Categorization, Model proposal.

## 1. INTRODUCTION

The importance of studies on Entrepreneurial Intention (EI) in the modern world is unquestionable, both from the academic point of view and on the practical one. In the theoretical aspect, the EI is considered one of the pillars in any tangible possibility of undertaking a business venture (Krueger, Reilly, & Carsrud, 2000; Lee, Wong, Foo, & Leung, 2011). This can be demonstrated by the quantity of studies placing it as a trigger for several other social phenomena (Jennings & Brush, 2013). However, the conception of EI is complex (Bird, 1988; Lumpkin & Dess, 1996) and encompasses factors linked to the characteristics of entrepreneurs, as well as their needs and habits, including factors such as values, beliefs, and personal competences (Cope, 2005). According to Fayolle and Liñán (2014), the prevailing perspective in the cognitive behavioral approach for the entrepreneurship is focused on EI, integrating several personality traits and a wide range of linked observable values (Espíritu-Olmos & Sastre-Castillo, 2015).

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Therefore, we note that there is space for a great variety of studies. These studies, for example, focus on entrepreneurial study programs (Souitaris, Zerbinati, & Al-Laham, 2007), entrepreneurial literacy (Bae, Qian, Miao, & Fiet, 2014), EI intrinsic factors (Turker & Sonmez, 2009), as well as the implementation of such EI (Bird, 1988; Santos, Curren, & Caetano, 2010). However, the pragmatic observation of such studies in a collective way (Liñán & Fayolle, 2015) points to a standardization in the studies. Therefore, a widely ignored aspect is that this favors a growth motivated mainly by the accumulation of new items on the substantive domain, in detriment of advances in the methodological domain and, more important and more serious, in detriment of the conceptual domain (Brinberg, 1982; Brinberg & McGrath, 1989; Barlach, 2011).

While there are authors who defend the growth of the substantive domain because of its explanatory power of the entrepreneurial phenomenon being closer to practice than to the real necessity (Welter, 2011). On the other hand, there is a general decline in the quantity and quality of conceptual studies in corresponding areas in applied social sciences, which also happens in studies on EI (Terjesen et al., 2013). With this understanding, we intensify the content of the scientific articles analyzed above in an intentional sample overlapped in terms of time with the study by Liñán and Fayolle (2015). The objective of this study is to broaden the focus of the literature review on EI. For this purpose, we aimed to analyze the scientific production on EI indexed on Web of Science, from 1999 to 2017, through categorization and classification, and the proposition of a preliminary model to sustain future studies.

The research design is descriptive. The data are quantitative. First, we adopt the bibliometric technique in the field of research, based on Zipf's Law, or Principle of Least Effort (Zipf, 1949). In continuity, we consider the Reinert (1993) method.

The results obtained enable to verify that there is a natural sedimentation process surrounding the research paradigm and instrument proposed by Liñán and Chen (2009). Conversely, we are able to verify the formation of the field of studies on EI equally, in which we mainly find contributions from profiles and characteristics of the samplings, i.e., directly linked to the growth of the substantive domain on EI. Therefore, the data obtained allows us to believe that there is an orientation for a potential 'dogmatism' on EI – use of the settled theoretical structure (conceptual domain with little growth) – of the main research instruments – specially Liñán and Chen's scale – (restrict methodological domain) and extensive replication of studies of this baseline in new situations or samplings. Such impervious scenario points to the necessity of research beyond the established border, both incrementally in theoretical terms, and in lateral terms, outside of that which is already established and 'dogmatized'. These results enabled the proposition of a preliminary model that increases the future opportunities for studies on EI.

We structure the article in five parts, beginning with this introduction. Next, on the theoretical framework, we synthesize the main contributions for the study on EI and the relation of the epistemological domains and their connection with EI. Subsequently, we evince the methodological procedures adopted for the accomplishment of this investigation. In continuity, we can find the results of the research and the analysis related to them, including the categorizations and the classes of the constructs of the EI, as well as the presentation of the preliminary model for the continuity of studies on this theme. The references of the cited material, which substantiate the subject, complement the article.

## 2. THEORETICAL FRAMEWORK

The formalized research regarding EI can be outlined in its beginning with seminal articles by Shapero (Shapero & Sokol, 1982; Shapero, 1984), as well as by researchers such as Ajzen (1985, 1991). With the growth and expansion of the research on EI, some highly mentioned

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studies stand out, which formed the theoretical base on EI (Kolvereid, 1996; Souitaris et al., 2007; McGee, Peterson, Mueller, & Sequeira, 2009; Fitzsimmons & Douglas, 2011). These articles, among others, contributed to substantiate the study field on EI.

Models that explained the structural antecedents of the EI emerged based on psychological and sociological concepts (Krueger et al., 2000). The literature focusing on EI studies evince a series of models that seek to explain the relation between the individual's personal characteristics and their entrepreneurial intention (Bird, 1988; Boyd & Vozikis, 1994; Krueger & Brazeal, 1994). Such models focus on two main lines – the Theory of Planned Behavior (TPB), by Ajzen (1985, 1991), and the Model of Entrepreneurial Event (MEE) by Shapero and Sokol (1982) and Shapero (1984).

The studies on EI (Schlaegel & Koenig, 2014; Kautonen, Gelderen & Fink, 2015; Lortie & Castogiovanni, 2015; Liñán & Fayolle, 2015; Kolvereid, 2016; Pfeifer, Šarlija, & Zekić Sušac, 2016; Ibrahim & Mas'ud, 2016) demonstrate that the TPB continues predominating in the literature as base theory, overlapping the other ones and reinforcing the comprehension that Ajzen's (1985, 1991) studies are the most used to support the EI. However, besides the existence of studies with emphasis on the substantiation of the EI and its models, research points to a lack of theoretical and methodological transparency that weakens its greatest acceptance (Terjesen et al., 2013). In order to clarify such questions in relation to the validity of the definitions and constructs of EI, a strand of literature review studies and meta-analysis emerged in opposition. The main studies in this line are Schlaegel and Koenig's (2014), Bae et al.'s (2014), Lortie and Castogiovanni's (2015), and Liñán and Fayolle's (2015). Mostly, these studies approach the dominant theories, the limitations, and the perspectives in the area of EI, and they identify the predominance of the TPB (Ajzen, 1985, 1991) on the substantiation of the theory of EI.

Practically speaking, the measurement of the EI conducted by Liñán and Chen (2009) gained importance on the literature of the theme. Substantiated on the TPB (Ajzen, 1985, 1991) and on the data collection instrument entitled Entrepreneurial Intention Questionnaire (EIQ), this research was continued by Liñán, Urbano, and Guerrero (2011). These three authors adjusted and consolidated the EIQ (Liñán et al., 2011), affirming that this data collection instrument predicts and explains the propensity of the individual in becoming an entrepreneur. In recent years, international and national authors have been based on this data collection instrument to conduct studies applied in different realities. Rueda, Moriano, and Liñán (2015) lists studies performed in several countries with higher education students as a trend. Liñán and Fayolle (2015) also affirm that there is a concentration of research that adopted Liñán and Chen's (2009) and/or Liñán et al.'s (2011) research as model.

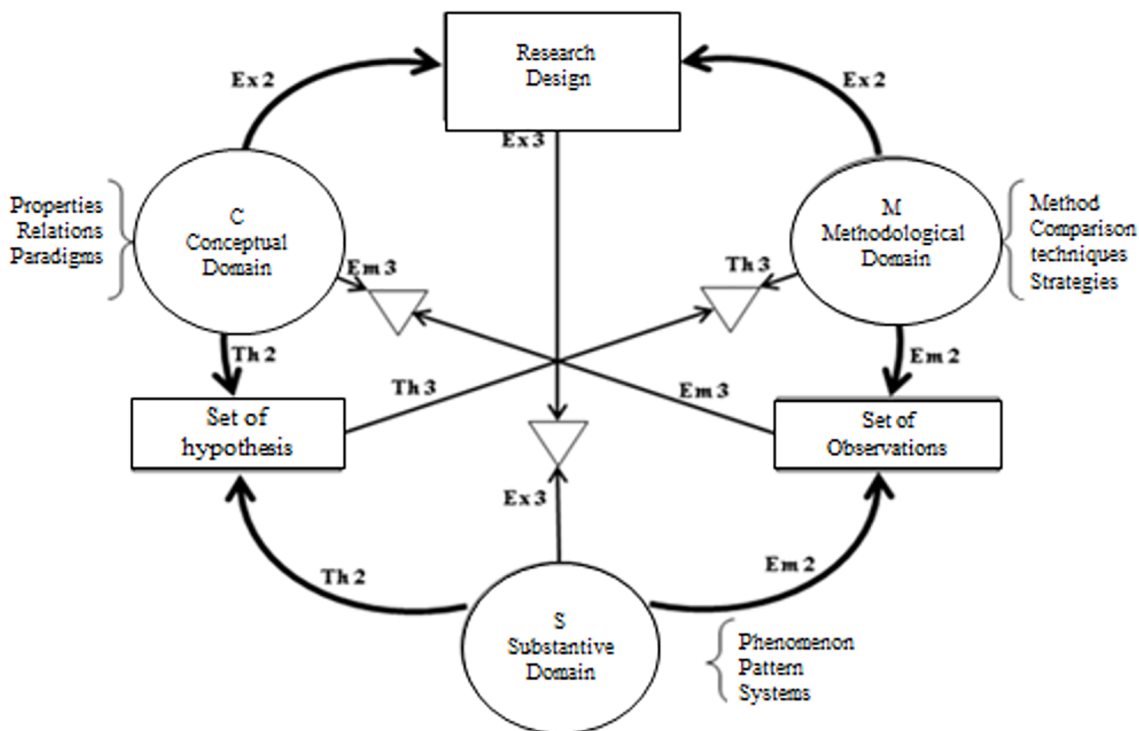
Broadly speaking, Liñán and Fayolle (2015) explain that the articles researched on EI are in the category of personal variables, or from the perspective of the psychology, life antecedents, genders, specific subcategories or access conditions to entrepreneurial processes. Moreover, focused on the entrepreneurial education. Thus, there is not only growing interest on the theme of EI, but also the gradual adoption of principals, models and data collection instruments for the conduction of research, despite eventual critics regarding the research models. The fact that these studies are present and current in EI justifies and supports conducting the present study. In which we seek to analyze the scientific production published in an international database about the entrepreneurial intention, based on the adoption of Zipf's Law (Zipf, 1949) and Reinert method (1993), proposing a preliminary model that supports, in continuity, research on this theme.

Due to the several possible configurations and wide combinations of variables, it is difficult to find extensive theoretical substantiations (Terjesen et al., 2013; Schlaegel & Koenig, 2014). Although a good part of the literature on EI addresses aspects of the formation and the characteristics of the entrepreneur, we are not able to summarize the concept of EI to the external factors. The EI includes internal aspects linked to the entrepreneurial behavior, interacting with the mental models (Grégoire, Cornelissen, Dimov, & Van Burg, 2015) and their strategic operation (Gielnik et al., 2015; Kautonen et al., 2015). Simplifying, EI deals about a decision, clearly conscious and fully planned, which compels a range of indispensable acts to start a business (Thompson, 2009).

This understanding is backed up by the Theory of Planned Behavior (TPB) by Ajzen (1985, 1991), derived from the Theory of Reasoned Action (TRA), by Fishbein and Ajzen (1975) and Ajzen and Fishbein (1980), in which the reasoned action focuses on the behavior: the behavioral intention. Likewise, Bandura's (1977, 2012) understanding on the self-efficacy supports the subject. The Model of Entrepreneurial Event (MEE), in turn, substantiated the EI (Shapero & Sokol, 1982; Shapero, 1984). Schlaegel and Koenig (2014) compare the TPB and the MEE evincing the convergent points between the two theories, confirming that the TPB is outstanding in relation to the MEE regarding the EI. Lortie and Castogiovanni (2015) have the same thoughts: the TPB stands out in terms of the substantiation of the theory of EI.

This theoretical base, in turn, substantiated a range of models of EI, related by Black (2011) and Souza (2015). These models have supported the EI, presenting application and replication. Terjesen et al. (2013) do not criticize these models; however, they show a methodological impoverishment in the research of EI. Liñán and Fayolle (2015), by analyzing the literature on EI, point to a stabilization. Therefore, the existing and ongoing literature focuses its criticism only on a generic impoverishment and stabilization. To be more accurate, we used the Validity Network Schema by Brinberg (1982), and Brinberg and McGrath (1985) as the starting point (Figure 1).

Figure 1 - Validity Network Schema



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We notice that the research hypotheses must be proposed from both the conceptual and the substantive point of view. However, if there is only an increase in the literature based on the substantive domain, it points to an impoverishment and restriction in the growth of new theoretical paradigms. The range of hypotheses also influences the methodological domain – and not the opposite. If we observe a growth of research based on what a certain scale is capable of measuring – instead of looking for a methodology that fits according to the existing research questions, hypotheses or propositions – there is a risk of high homogeneity and endogeneity in EI. Therefore, there can be a principle of ‘dogmatization’ – research on EI is conducted only based on the concept of TPB, with the scale by Liñán and Chen, with implied permission only to alter the locus of application of the theory.

What we advocate with the proposition of analysis of the same literature is that we can go further in-depth in the theme through categorization and classification of the constructs composing it, and through the proposition of a preliminary model for the continuity of the studies. It is worth asking the following questions: up to what extent can the analysis of this literature on EI expand the understanding on the theme, through categorization and classification, with consequent proposition of preliminary model for the continuity of its study? Is there an inflexibility state in the studies on EI, with high replication of a standard format, in detriment of the theory growth?

### 3. RESEARCH METHOD

The design of the research is descriptive, with the use of quantitative data. In other words, what we find is described considering measurement techniques and statistic treatment. For the selection of the intentional sample, defined due to the research objective, we consider the scientific articles published in international journals, of the great area of the social sciences, found indexed on the Web of Science platform in September, 2017 on entrepreneurial intention. The period for the search ranged from 1999 to 2017. The keywords we use for the bibliographical research are defined based on the keywords repeated on the abstracts found in this literature: *entrepreneurial intent*; *entrepreneurial intention*; *entrepreneurship intention*. Thereby, we retrieved 164 articles with full text, available on-line, and specifically focused on entrepreneurial intention.

With these scientific articles, we collected and analyzed data after reading the full texts. First, according to Zipf’s Law (1949), created in 1949 by George Kingsley Zipf, which describes the relation between words in a sufficiently long text and the serial order of these words (word count in large samples). Zipf’s Law, or Principle of Least Effort, measures the quantity of occurrences of words in texts. In other words, the principle of least effort advocates that there is an economy of word use, and if the tendency is using the minimum, it means that they will not break up; conversely, the same word will be used several times; the most used words indicate the essence of the subject of the document. Zipf’s Law (Zipf, 1949) is mainly adopted in frequency studies and co-occurrence of descriptors (Araujo, 2006).

Its adoption allows the study of occurrences of words or terms in a certain theme, being useful to verify which theme is addressed in a text. Meaning that this type of study enables the establishment of a correlation between the number of different words and the frequency of occurrence, allowing establishing the regularity in the use of the words. From this study, the constructs that substantiate a theory, through the words or terms frequently used, may arise and be indicated, showing the categories of the subject. In summary, we can assert that Zipf’s Law (Zipf, 1949) measures the relation between the words present in a theme and their frequency of use (Guedes & Borschiver, 2005). A small amount of words is used more frequently, and a great amount of words is used less frequently. According to this Law, the concentration of words define the research theme (Araujo, 2006). Therefore, we performed the adequacy of the volume and data sections chosen for the subsequent analyses on entrepreneurial intention in this research.

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Next, still having as database the scientific articles under analysis in this work, we adopt and apply Reinert (1993) method, which is based on the search by the similarity of words. This method measures the co-occurrence of words in a text, separating them in clusters (Reinert, 1993). The algorithm ALCESTE, employed on Reinert (1993) method, divides texts into blocks of words and concentrates diverse lexical forms (ex.: universality, universal, etc.) in primitive forms (universe), when they keep the same specific meaning. Afterward, the algorithm verifies the lexical proximity between the forms and their distance inside the text. With this purpose, we use the Program Iramuteq, which uses the Reinert Method to analyze the textual corpus. (Sbalchiero & Tuzzi, 2015; Uher, 2015). This method is widely used in text analyses to identify potential constructs (Costanza et al., 2016), for it removes the researcher's bias and lets only the program act according to the proximities and the word use (Wagner, Hansen, & Kronberger, 2014). Through this program, we perform the three main analyses:

- a) hierarchy of constructs (categories of "classes" according to the nomenclature proposed by Reinert), which are determined by the analysis of the program;
- b) spatial organization of constructs (how they influence and override each other);
- c) analysis of similitude, in which we verify the relation of importance between the main constructs, the second order constructs, and the strength of the relationship between them.

The adoption of these methods and instruments of analysis supported the understanding of the literature on entrepreneurial intention, enabling the analysis of full articles, published on the international database defined on this study.

Based on the results from these two phases of analysis, we will consider the proposition of a preliminary model of research. With this objective in mind, beginning with a general view of the topic, we seek to evince the relationship between classes, aspects, and groups of EI, considering the organizations of main constructs and the second order ones found in the analysis.

## 4. ANALYSIS OF THE RESULTS AND DISCUSSION

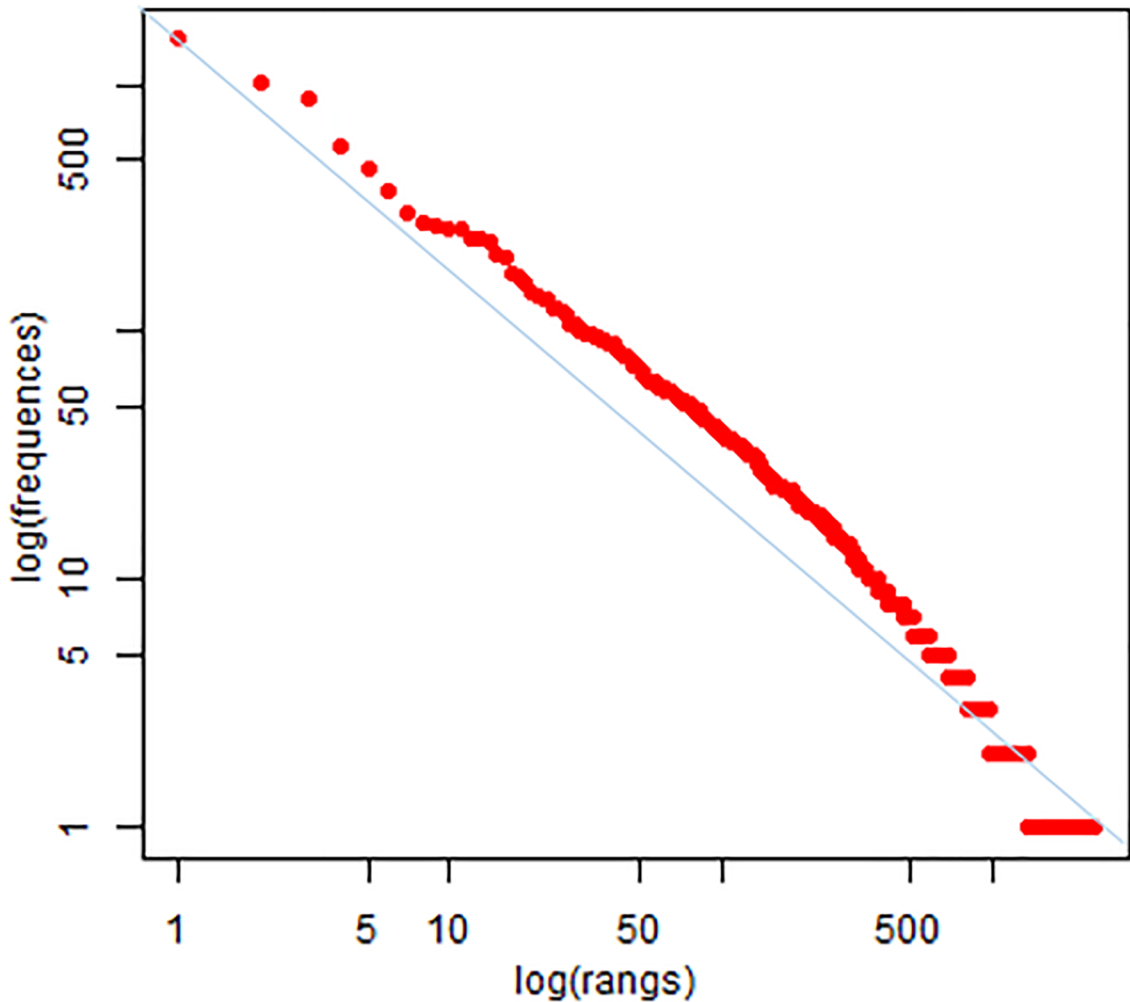
The first statistical treatment applied to the textual corpus is to perform a compliance test to Zipf's Law (Zipf, 1949). This Law is nothing more than a math distribution observed by means of the statistical empiricism, in which the frequency of an instance is inversely proportional to its descending order of importance according to the probability of a ranking  $r$ , such as

$$P(r) \approx \frac{1}{r \ln(1.78 R)}, \quad (1)$$

in which  $r$  is the number of different words in a linguistic corpus (Goetz, 2015). This distribution has common occurrence, and to verify the validity we can find its use in studies of various fields (Thurner et al., 2015). The application of Zipf's Law occurs in the analysis of ranges of words and texts. Applied to a natural linguistic corpus, the importance of a word will always be approximately the half of the following most important word. Graphically, the conformity of Zipf's Law is interpreted when the instances under analysis are close to the descending perpendicular axis, demonstrated on Figure 1. Knowing that there is a limitation to the distribution in terms of 1.000 instances (cases, words), when it loses explanatory power, we can assert that the volume of data employed in this research does not exceed the limit of 1.000 forms. Therefore, the range of words in this analysis is in accordance with Zipf's Law (Zipf, 1949).



Figure 2 - Compliance with Zipf's Law



Source: the authors.

Verifying the adhesion of the analysis to the distribution of Zipf's Law (Zipf, 1949) to a linguistic corpus is the empirical way of validating the existence of latent variables with low dimensionality. This indicates that such corpus deals with a relevant data extract. These data, in turn, portray typical phenomena of subjacent structures of the real world, as subjects with categories and subcategories interconnected to them (Aitchison, Corradi, & Latham, 2016). This property is not observed in ranges of data or texts that do not have internal coherence or whose arrangement is random (Ferrer-I-Cancho & Elvevåg, 2010). In other words, the range of articles selected provides enough internal variation in order to be understood as simulacrum of the reality, since the variation on the forms found in the corpus reflects the complexity found in extracts of sequential communications (Piantadosi, 2014). It occurs due to the artificial, but equally valid, communication between the various texts; it starts from the academic practice of sequential citation and construction based on previous results (Williams et al., 2016) This property does not depend on the language (Corral, Boleda, & Ferrer-I-Cancho, 2015) and the size of the corpus (Moreno-Sánchez, Font-Clos, & Corral, 2016). Similarly, it is implied that there is relatively high integrity and internal coherence in studies on applied social sciences (Vilhena et al., 2014), which we reveal to the corpus chosen here. The most repeated words (top left, descending order) correspond to the extremely relevant words for the intended analysis: *entrepreneurial*, *entrepreneurial intention*, *study*, *entrepreneurship* and *business*. Such results evince the fit of the data collected on the Web of Science database to the objective of this study, once it reflects the same natural variation of concepts and constructs of an ideal set.

Once the analysis of the application of Zipf’s Law (Zipf, 1949) proved the adequacy of the sample of articles and provided evidence of the existence of internal categories of theoretical groups, the analysis through Reinert (1993) method begun. According to this method, the essential speech elements of a text through statistical distributions are determined, and how they organize themselves internally, highlighting the regularities, symmetries, similarities and differences between ranges of words, their relations, as well as the limit of their semantic and the use of overlaps. This method deduces and extracts the internal categories assembled through internal components or constructs, by means of sorting blocks of words that establish mutual relations of combined use. For this purpose, we use the Iramuteq software, and from it, a Dendrogram was generated. In which it is possible to verify the existence of four internal classes (“categories”) in the analysis of the scientific articles on entrepreneurial intention.

We performed the analysis of the four categories in the light of the theoretical contributions found in the literature review, i.e., it was not only about mere inference based on word games, found on Dendrogram of Figure 2. The four classes or categories that emerged from this analysis were named for the purposes of this study as: 1) Theoretical Component; 2) Accessories and Contextualization; 3) Typical Characteristics; and 4) Structure of the Studies. We address the classes meticulously, afterwards.

It is worth highlighting that any analysis of studies on entrepreneurial intention in the last decades shows a theoretical stabilization (Liñán & Fayolle, 2015). Paradoxically, Liñán and Fayolle (2015, p. 907) begin their study at the same time citing the historic growth of the area whilst they admit that the studies on entrepreneurial intention are repeated to the point of exhaustion. One way to realize this fact is that currently, literature reviews that effectively show the growth of the theory on the subject barely exist.

Figure 3 - Dendrogram of internal categories



Source: the authors.



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Although some models compete as theoretical models and measurement tools, the most unsettling aspect in the development of the literature on entrepreneurial intention is the fact that nearly all current research replicate the original models, in different situations and contexts, such as countries, cultures, labor spaces, profiles, etc. (Ibrahim & Mas'ud, 2016; Singh, Verma, & Rao, 2016). The few that break this paradigm, however, add few relevant aspects to the models already used (Tsai, Chang, & Peng, 2016; Entrialgo & Iglesias, 2016), confirming the idea that the growth of the substantive domain occurs in detriment of the conceptual one.

It means that nowadays there are few studies in terms of theoretical growth in entrepreneurship. Quite conversely, entrepreneurship is studied in specific groups, oftentimes in hardly reproducible studies, and groups are compared. In some cases such as, for example, in Tsai et al. (2016), they compare entrepreneurial aspects in two countries whose institutional and educational models, in terms of economic or political environments, could serve better as alternative explanations rather than indicating that the local culture is the great explanation for the differences found. In other words, macro-environmental co-variables essential for the assembly of the models are frequently ignored. Although present on the theoretical model by Liñán and Fayolle (2015), institutional variables are systematically absent in literature; a remarkable exception is Engle et al.'s (2010) study.

This aspect of the studies on entrepreneurial intention makes a generic, applied and recycled format ('dogma'), arise. To clarify, it is possible to observe in the extraction of the sample data that nowadays only the same old things are produced. We intend to demonstrate that, through the analysis of the categories, this generic format is so clear that even by means of statistic methods, the results are somehow similar and point to the same direction than the ones considered by Liñán and Fayolle (2015). We can build other inferences, based on the spatial organization of the concepts. Figure 3 shows the concern due to the importance of each one of the classes in the range of the data and how the words of each category were ranked in hierarchic order.

Although they are very different methods, it was possible to observe that the literature on EI naturally focuses on four main axis (classes). However, we could only partially observe the estimated overlap with the constructs arisen by Liñán and Fayolle (2015). This partial coincidence justifies the proposition of an alternative model, whose purpose is to complement the assumption of those authors.

**Class 1 – Theoretical Component.** The first category found on the data is the one in which the theory is highlighted as the main factor and guide. This category, however, seems to be the least relevant in the current studies if understood explicitly, counting only on 17.4% of the instances in which ranges of words related to theoretical concepts emerge. However, we must consider that it is indispensable in the comprehension of the other studies. Some aspects related to this category are worth highlighting. The theory is presented as triggering the relationship between planning capacities and their effect on human behavior. This fact is supported by Ajzen (1991), with one of the keywords linked to the current theory. This paradigm, which is based on TRA (Fishbein & Ajzen, 1975; Ajzen & Fishbein, 1980), takes shape from the definition of the TPB (Ajzen, 1985, 1991). Although other strands suggest alternative ways of theoretical development, as well as measurement of proxies of entrepreneurial behavior (Liñán & Chen, 2009; Liñán et al., 2011), the influence of the first formal EI paradigms as theoretical essence is evident. Such analyses on splits and alternatives can possibly take the lead in the theoretical field, but the selected range of data does not allow such statement.

**Class 2 – Accessories and contextualization.** Whilst the first class clearly defined the main theoretical assumptions of the range of selected articles, its cohesion occurred by thematic affinity (pure theory), and the second category was directly attached to the first one (both share similar origin, see proximity in the Dendrogram) and presented 26.4% of



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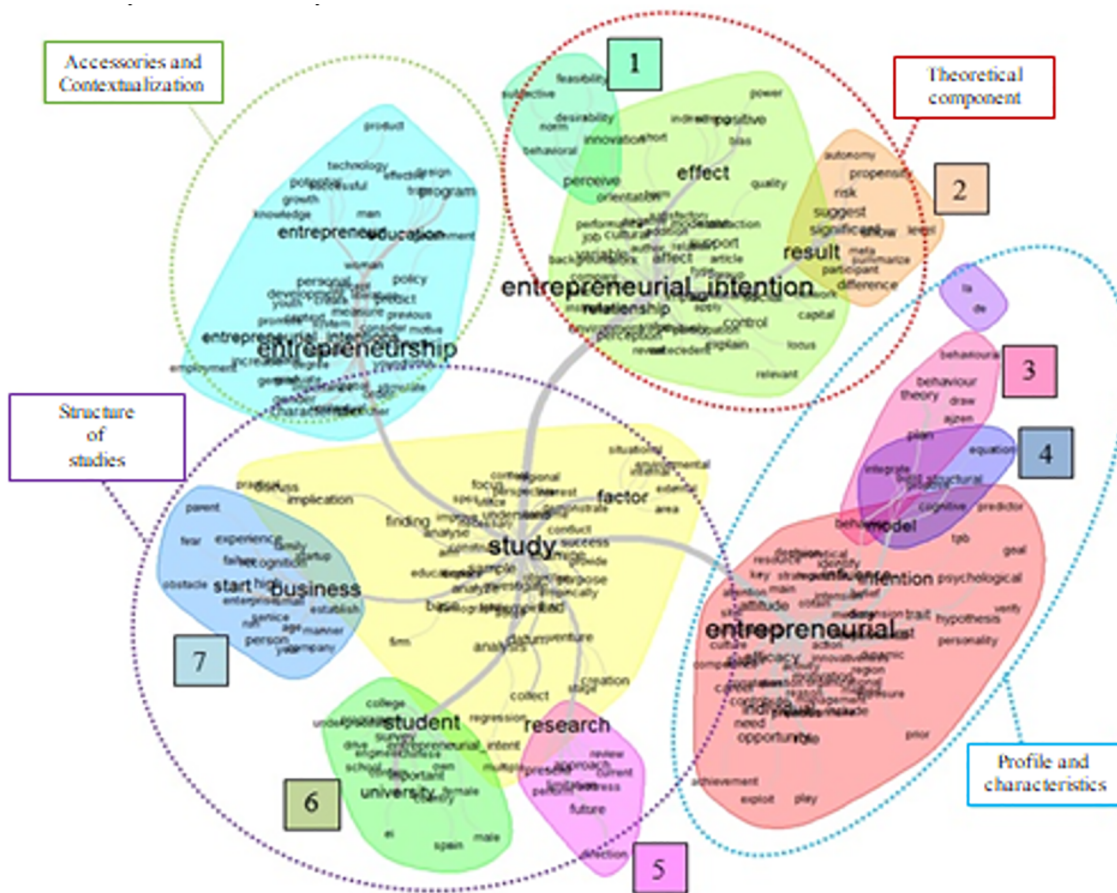
selected by the study, considered relevant to a theoretical outcome. Several paramount words in this scenario indicate different facets approached in research (personality, trait, risk, control, propensity, etc.) (Obschonka, Schmitt-Rodermund, Silbereisen, Gosling, & Potter, 2013). Another considerable perspective is concern, not only about innate or acquired in processes of EI characteristics, but the way these ones can be promoted, modified, and expanded - direction, perception, orientation, as well as kept in the individuality of the entrepreneurs -autonomy, relationship.

**Class 4 – Structure of the data.** This is the most widespread construct and, obviously, the most cited one, since all the textual analysis focused on the repeated-standard academic terms. Initially, the main concern of the studies was the data collection, due to the loss of reliability in results with inappropriate collections of non-representative samples. Another standard aspect present in most of the analyzed studies occurred due to the concern with the existence of a method that was appropriate to the intended analysis-method, purpose. A third fundamental aspect was the concern about the trinomial collection-analysis-verification. On the other hand, although there was an expressive quantity of empirical studies, we expected greater presence in terms of generation, increase-alteration and validation of models. Although the theory regarding the EI was properly developed and stabilized, the transition between models and its application in the practice of the action of undertaking a business venture seems not to have gained strength in the most recent studies.

The first conclusion we can draw is that classes 1 (Theoretical component) and 2 (Accessories and contextualization) are relatively stable. In other words, they were cohesive and restricted in their own limits, little permeated by concepts deriving from the other categories. On the other hand, classes 3 (Profile and characteristics) and 4 (Structure of the data) presented high degree of interaction and overlap. In addition, it is visually possible to verify that the conceptual aspects (class 1) and methodological aspects (class 2) are nearly isolated from the rest of the text of the studies. It means that there is a clear relationship between conceptual and methodological domain with the generation of knowledge. There is, on the other hand, a very intense inter-relation between the structure of the studies and the profile of the respondents. We can infer, therefore, that the theory had direct influence in the accessories and from them in a specific profile. To better, understand: from the theory (class 1) to the contextualization (class 2) in a new object (class 3). The construct represented by class 4 (Structure of the studies) was directly influenced by the theory and by the process of new contextualization, but its deepest relation occurred with the chosen profile. This relation, even though more evident, proved the concern of the studies on EI with adjusting methods, techniques, and analysis to the new profiles, not yet tested. The last analysis relates to the Analysis of Similarity. This one, still based on Reinert (1993) method, allowed to verify not only the organization and the overlap of constructs (this time, much more detailed, specially of the second order constructs), but also its relation of relative importance (how much a construct has in terms of linkage with another one).

The first and most relevant aspect is that the structure of the study is the main node (the speeches in the articles and their development are originated from it) and not the theoretical component – that is, the focus of the studies is on the replication of the theory and not on its discussion and expansion. From this analysis we can verify that each one of the main constructs is composed of individual components (second order constructs, marked with numbered squares in Figure 4), except the construct termed Accessories and Contextualization. This is understandable, once this construct is constituted of a transition of the Theoretical Component for the application in a new object of study (Profile and Characteristics).

The construct Theoretical Component, in turn, presented two second-order constructs: 1) dealt with the viability, desirability, and subjective aspects of the entrepreneurial intention; and 2) dealt with the levels of autonomy and propensity to undertake a business venture. The construct Profile and Characteristics presented other two components: 1) concepts



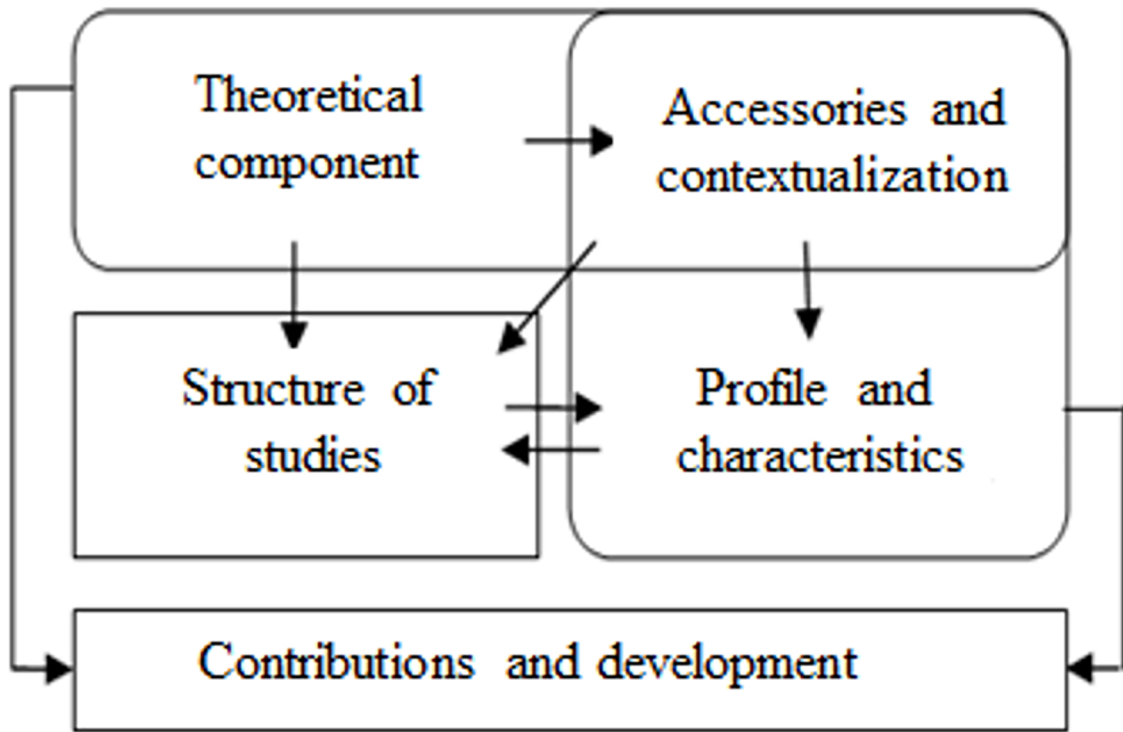
Source: the authors.

directly linked to the behavior of the entrepreneurial individuals; and 2) concepts related to the cognitive structures of the entrepreneurial behavior. At this point, we needed to highlight that the main construct and the second-order ones were overlapping in an area centered by the generation of models (entrepreneurial behavior).

By the analysis performed, the construct Profile and Structure of the Studies seemed to be the most complex one, for materializing the tangible and methodological part of the articles selected. As expected, it presented three second order constructs, which dealt, respectively, with: 1) the details of the research; 2) the kind of intended sampling; and 3) direct characteristics of the business. It is understood, therefore, that this study was able to offer an expanded view, with detailed aspects and groups, concerning a profitable and under development field of research like EI. A model evincing this relation emerged from the research performed, considering these results. Therefore, regarding the organizations of constructs found in the analyses, preliminary, the proposition of a model for the study of EI arose, as it can be seen in Figure 5. This model was based on the spatial organization and on the importance between the main constructs and the second order ones, present in the analysis.

According to the model's preliminary proposal, we find a separation of the construct Structure of the Studies and what the Theory is about, although of course it emerges from this one. In contrast to other fields in which the practice and the methods influence directly the way the theory conforms, we did not evince a bidirectional relationship between theory and methodology in EI. The construct Structure of the Studies still seems to be influenced by the construct Accessory and Contextualization and, unlike in the previous one, it seems to be a one-way course (Accessories → Structure).

Figure 6 - Model proposed for the continuity of the Study on Entrepreneurial Intention



Source: the authors.

There is also a high dependency relationship between the profiles chosen for the samples of the studies performed and the methodologies. This relationship is evident under the perspective of the scientific methodology, working as an alternative way of interaction of the theory with the object under study.

## 5. CONCLUSION

The object of study focused on EI appeared to be appropriate for a specific analysis of its literature, published in the major area of social sciences and indexed in the Web of Science platform, in the format of scientific articles. The research question, in turn, was answered: the literature on EI, through the categorization and classification, as consequent proposition of preliminary model for the continuity of its study, provided the expansion on the understanding of the theme. The objective proposed for the research was achieved, since this literature composed of 142 scientific articles, published on-line, in their complete form, proved to be relevant for the intended analysis. The keywords defined appeared to be relevant to address the theme overall.

Likewise, the descriptive methodological design, considering quantitative data, the adoption of the bibliometrics regarding Zipf's Law (Zipf, 1949), and Reinert (1993) method was enough for the delivery of results, allowing the increase of knowledge and comprehension of internal categories of the theoretical group. Four classes arose from the literature analyzed according to Reinert (1993) method: 1) Theoretical Component; 2) Accessories and Contextualization; 3) Typical Characteristics; and 4) Structure of the Studies. These classes of constructs, in turn, show relationship amongst each other, for the structure of the studies (class 4) was influenced by the theory (class 1) and by the process of new contextualization (class 2), and its deepest relationship occurred with the characteristics of the profile chosen (class 3). This relationship allowed understanding that the articles on EI are focused on adjusting methods, techniques, and analyses to the new profiles and roles of the



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entrepreneur. The dimension of contribution, which was not grouped through the analysis of the Reinert (1993) method, was integrated as a theoretical preliminary model. Therefore, we were able to propose a preliminary model for the continuity of studies on EI, which will be able to evince the relation that emerged from this research. We based this model on the spatial organization and on the importance between the main constructs and the second-order constructs, evinced in the data analysis performed by the program Iramuteq. Considering the organizations of classes and constructs found in the research performed, this model would serve as a guide for new studies on the theme of EI.

It is worth highlighting, however, the use of only one database as a limitation: Web of Science. However, with this international reputation, this fact does not preclude what we accomplished here. Similarly, since we did not test the preliminary model proposed here, we can also consider this as a limitation of the research, although this is not one of the objectives of the research. Therefore, a new phase of this study must be considered. We recommend that the study be resumed considering other international databases, in a period continuing what was accomplished here, and that the preliminary model proposed be applied in future studies on EI.

Generally, it is possible to affirm that there is a direct and quick depletion in the studies of entrepreneurship, according to the model replicated to the point of exhaustion, in accordance with what Terjesen et al. (2013) pointed out. Secondly, in opposition, there is the possibility of reconstructing the research on entrepreneurship, from the review of current models, the creation of new models, the inclusion of new variables and co-variables frequently set aside in the studies on the theme, and a new subsequent growth of high quality studies on EI. It is indeed incumbent upon the future of the area of EI, the choice between the two directions pointed out here. This article is eminently theoretical in nature, but both practitioners and academic students should verify the intention of the studies. For the practitioners, there can be new theories or methods of measurements of EI that are not that common due to the excess of dogmatization of the current EI. For academic students, the caution in transposing the mere replication of methods and theories remains, and advancing the development of the knowledge on EI.

Finally, it can be said that it was possible to verify that the EI field showed a theoretical essence developed with several research. There was expansion of the comprehension on EI in terms of the categorization and classification of constructs present in the scientific literature published in international journals during the period studied, as well as the preliminary proposition of a model in order to conduct new studies of the literature on EI.

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