

A bibliometric analysis of career adaptability: future research guidelines

Abstract

The main objective of this study is to offer a structured overview and synthetic taxonomy of the current state of scientific research regarding career adaptability. For this purpose methods derived from bibliometrics and content analysis were adopted to evaluate the state of the field, to identify some of the most relevant research, the most highly influential studies, and the newest trends according to the information found in Scopus and Google Scholar.

Using bibliometric analysis, we provide a systematic review of the 210 articles on career adaptability published since the beginning of the concept in 1981 (Super & Knasel, 1981).

Our goal is to show current tendencies in the existing literature and propose a taxonomy of career adaptability studies and derive implications for research and practice.

Several classifications are proposed, including an analysis of themes, influential journals and their impact factors, the most cited articles and the most productive and influential authors, preferred methods, and countries represented.

Keywords: career adaptability, bibliometric analysis

INTRODUCTION

As organizations change and environmental conditions are more unstable and unpredictable, we observe the proliferation of new career models, as boundaryless (Arthur, 1994; Arthur & Rousseau, 1996) and protean (Hall, 2004). Career management became the responsibility of the person (Sullivan & Baruch, 2009) and, as a consequence, more adaptative conditions are required.

The post-corporate global economy where individuals are, or should be, increasingly mobile and self-directed in their careers (Gubler *et al.*, 2014), requires that individuals develop the readiness and resources to cope with vocational choices, occupational transitions, and work strains.

Since the proposition suggested by Super & Knasel in 1981 of the term career adaptability as an adult's "readiness to cope with changing work and working conditions" (p. 195) and the posterior consolidation of the concept by Savickas (1997, 2013); the research and practice of career adaptability has seen a substantial increase in the scientific community and is noticeably expanding from year to year. Many important developments have consolidated a research field that today encompasses thousands of researchers. The constitution of a team of psychologist from 18 countries that has collaborated on the development with a scale for the measurement of career adaptability, constitutes a milestone that drives and enhances the development of the field. In the literature, several papers provide general overviews regarding fundamental topics on the concept. A remarkable example is the Special Issue about Career Adaptability of Journal of Vocational Behavior (volume 20, issue 3, 2012) which introduces from both quantitative and qualitative studies, and the study of Johnston (2016) which offer a general overview of key aspects and topics regarding career adaptability.

Although there are several papers providing general overviews on different aspects of career adaptability, to the best of our knowledge there are no papers that have analyzed the state of the

art from a bibliometric perspective. Since every scientific discipline is developed on the basis of a collection of relevant studies that become acknowledged as the foundations for further investigations, it is considered useful and interesting to analyze the most influential studies and authors in this field, with the object of tracing how the “career adaptability” field has grown and changed, identifying the key topics of research and determining different streams of research.

The general objective of this paper is to provide a general overview of research performed in career adaptability since the proposition of the term (Super & Snasel, 1981) using bibliometric methods. As White and McCain (1998) state, the object is to get a picture of the research done in the discipline by analyzing the “reflection in its rear window”. This general objective translates into two more specific ones. The first is to identify the most productive and influential authors, most frequently cited articles and preferred methods, journals, and represented countries, with the purpose of identifying the key topics of research in the field of career adaptability.

The second objective is to represent the networks of relationships between the most-cited studies, grouping them under common themes, to provide a diagrammatic description of the knowledge base constituted by accumulated works of research in the field, which should enable us to visualize the nucleus of the intellectual structure of the discipline by indicating the critical research topics in the area.

The paper is organized as follows. The first part is a review of the literature. In the second part, the research methodology utilized is described in detail, and in the third, the main results of the bibliometric analysis are presented which analyses the most cited papers of all time, most productive and influential authors and institutions in career adaptability according to Scopus and Google Scholar and thereafter discussed. Finally, the conclusions and limitations of the work are summarized, together with a proposal for future lines of research.

THEORETICAL FRAMEWORK

Career Adaptability which refers to “*a psychosocial construct that denotes an individual’s readiness and resources for coping with current and imminent vocational development tasks, occupational transitions, and personal traumas*” (Savickas, 2005, p.51) is critical in postmodern society and impacts on an individual’s general wellbeing (Schreuder & Coetzee, 2006).

Career adaptability, which deals with how an individual constructs a career, is a resource necessary for successful career development, positive responding to a number of challenges in the domains of work and career (Chan & Mai, 2015, Johnston *et al.*, 2015). The concept refers to career developmental tasks, role transitions and strategies for dealing with the challenge of how to work through developmental tasks and negotiate crossroads and role transitions (Hartung, 2010).

The earliest reference on career adaptability mentioned in the literature is Super & Knasel (1981). These authors defined the term as an adult’s “*readiness to cope with changing work and working conditions*” (p.195). More specifically, Super and Knasel considered career adaptability to be a function of five dimensions: (a) planfulness, or the importance of preparation in respect to life events, (b) exploration, or the act of deriving relevant career information, (c) information and skills, or the ability to use information in the interest of career adaptability, (d) decision making, or awareness of career decision-making principles, and (e) reality orientation, or knowledge of self and situations as they relate to coping with the tasks of career development (Cairo *et al.*, 1996).

Throughout his career, Super continued to refine his career development theory, but was Mark Savickas (1997) who develops the theory that led to the establishment of career adaptability.

Savickas (1997) asserts that the concept “career maturity” should be replaced by “career adaptability” as the central construct in the career development theory, thereby integrating the four segments of Super’s life-span, life-space theory; the individual, developmental, identity, and contextual perspectives. Hence, the term career adaptability was developed, stressing more appropriately the interplay between the individual and the environment (Super & Knasel, 1981), and is defined holistically and applies to all lifespan stages (Savickas, 2009).

Hall (2002, p 161) asserts that adaptability is a meta-competency which is evidenced by a person’s ability to “identify for himself or herself those qualities that are critical for future performance and his or her ability to make personal changes necessary to meet these needs”.

The core literature on career adaptability originated from Savickas (2002, 2005) Career Construction Theory (CCT). This theory contemplates the causes and consequences of individuals' vocational self-concepts, which are constructed over the life-course as individuals attempt to adapt themselves to their environments in order to obtain career satisfaction and success.

The career adaptability construct

Career adaptability resources are psychosocial constructs, in the sense that they are not traits possessed by an individual but rather are shaped by interactions between that individual and the context in which he or she functions (Dries *et al.*, 2012). According to Savickas (2005), they are deployed when an individual faces developmental vocational tasks, occupational transitions, and work traumas. The concept has a remarkable diffusion due a cross-national collaborative endeavor, where a group of 29 scholars operationalized the “individual's ability to adapt”, the Career Adapt- Abilities Scale (CAAS) (e.i, career adaptability resources) as a hierarchical construct with four reflective components:

- (1) Concern: entails looking ahead and planning for the future, becoming concerned about the vocational future;
- (2) Control: taking control of trying to prepare for one's vocational future;
- (3) Curiosity: displaying curiosity by exploring possible selves and future scenarios; and
- (4) Confidence: strengthening the confidence to pursue one's aspirations (Savickas & Porfeli, 2012).

The scale was tested in 13 different countries (see Table 5). The results provide considerable support for its validity and reliability. Separate studies report the psychometric characteristics of the CAAS, including initial validity evidence, for each of the 13 countries that collaborated in constructing the Scale. The CAAS demonstrated metric invariance across all the countries..The internal consistency estimates for the four subscales of concern, control, curiosity, and confidence were generally acceptable to excellent. The internal consistency estimates for the CAAS total score were excellent across all countries.

After the creation of Savickas & Porfeli Scale “Career Adapt- Abilities Scale” (CAAS), it seems that the topic is gaining the interest of researchers around the world.

Main contributions

Many reviews have been published in recent years, each approaching the act of perusing the career adaptability literature from a different angle: Savickas (1997) works with the definition of career adaptability based largely on the practitioner literature; Blustein (1997) incorporated the construct of career adaptability into a context-rich perspective of career exploration, Savickas and Porfeli (2012) developed a psychometric scale (CAAS) to measure career adaptability; and Johnston (2016) contributes to the concept analyses by the systematic review

of the career adaptability literature. Besides several studies during the past decade have sought to understand components and predictors of career adaptability.

METHODOLOGY

Bibliometric analysis

Hawkins (1977) defined bibliometrics as the quantitative analysis of the bibliographic features of a body of literature. The objective of bibliometrics as to identify patterns in the literature, such as the most prolific authors, institutions, countries, and journals within a scientific discipline, the trends of literary production over time and collaboration networks (De Bellis, 2009). By this type of studies, we can examine the history and structure of a field, the flow of information in a field, the impact of journals, and the long-term citation impact of publications (Garfield, 2006).

Search strategy and data analysis

To compile a database of relevant career adaptability articles for our bibliometric and content analysis a sequential two-step review approach was followed:

Step 1: data collection and inclusion criteria

Browsing the term “career adaptability”, we searched the Scopus databases and Google Scholar for relevant articles. These databases were chosen for a reason of convenience. In Scopus, the term “Career adaptability” appears in a total number of 851 publications. Nevertheless, following recommendations in the bibliometric literature (e.g., Ponomarev *et al.*, 2014), we restricted our search to English-language publications in peer-reviewed academic journals that mentioned “career adaptability” in their title, abstract, or keywords, excluding specific types of publications such as proceedings, books and book reviews, notes and commentaries, editorial notes, congress, and brief communications.

This research search process generated 188 articles from the Scopus database and 22 articles supplementary for Google Scholar database for the empirical study. We excluded from Google scholar the documents that overlap with Scopus, integrating only 22.

Step 2: data coding

Based on existing reviews of the career adaptability literature (Johnston, 2016; Tolentino, 2015), the two authors of the present paper jointly developed a coding template, including the following sections: research goals; problem setting; theoretical framework and definition of career adaptability, theoretical versus empirical study, methods used, longitudinal versus cross-sectionales studies; pre and post intervention studies, career adaptability as an outcome, as a predictor and as a mediator/mediating variable, affiliation of the first author and country of data collection. All articles retained for coding turned out to be from 1983 or after. Below, we discuss the findings of the bibliometric and content analyses we performed on the data resulting from our coding efforts. We undertook the following analyses to categorise the findings:

- identification of journals where most articles were published (see Table 1)
- identification of authors (see Table 2)
- identification of research methodologies (see Table 3)
- country of origin of research (see Table 4)

- thematic cluster (see Table 5)

RESULTS

Publication volume

Of the 210 articles included in our bibliometric analysis, 61.9% (i.e., 162 articles) were published in 2012 and thereafter which clearly suggests increased scholarly interest in career adaptability over the course of the last five years. In fact, prior to 2005 academic publications on career were quasi non-existent (14 articles). In 2009, the number of published articles rose markedly, with five articles appearing that year- mostly due to the publication of the most cited first special issue on career adaptability (i.e., Savickas *et al*, 2009). From 2012 to 2016, a gradual increase in publications can be observed, with peaks especially noticeable in 2015 (i.e., 47 articles, which correspond to 22.4 % of all publications on career adaptability that have appeared to date). As is clear from our analyses, the special issue listed above has produced a significant share of the career adaptability literature. The upward trend seems to be continuing, with 6.7 % of all publications in our database (i.e.14 articles) having appeared in the first two months of this year (2017).(see table 3).

Journals and impact

The 210 articles in our database appeared in a total of 52 journals, however 70 % (see table 1) is concentrated in a small number of specialized journals, ensuring less “scattering” of knowledge and more straightforward search strategies for a given topic. Only four journals published more than ten articles on career adaptability–i.e. Journal of Vocational Behavior (108 articles, 49%), Career Development Quarterly (15 articles), Journal of Career Assessment came in third place with 13 articles and Journal of Career Development (11 articles). At present, these four journals are the primary hub for career adaptability research, and seem to want to position themselves on the topic. 67.3 % of these journals published just 1 article on career adaptability; 13.46% published two articles; and 5.77% published three articles.

Impact factor (IF) and citation data are widely used as proxy indicators of quality in bibliometric analysis (Ponomarev *et al.*, 2014). While a journal’s IF is used to evaluate its relative importance compared to other journals in its subject area (see table 3).

Table 1. Top journals where at least three articles were published

Name of Journal	Number of articles		Total	Impact factor
	Scopus	Google Scholar		
Journal of Vocational Behavior	91	12	103	3.87 *
Career Development Quarterly	15	0	15	1.18*
Journal of Career Assessment	13	0	13	1.36*
Journal of Career Development	10	1	11	1.04
British Journal of Guidance & Counselling	4	0	4	0.645
Journal of Psychology in Africa	3	0	3	0.27
International Journal for Education and Vocational Guidance	3	0	3	0.84
Social Behavior and Personality	2	1	3	0.36
Frontiers in Psychology	2	1	3	2.46

* 5 year Impact factor

Most cited articles and authors

The information found in Scopus and Google Scholar can be classified in different ways. Apart from the publication and journal volumen, fields of study tend to be defined by seminal articles and authors-i.e., those that are cited most frequently (Ponomarev et al., 2014). To rank a set of articles by the number of citations received allows us to identify those articles that have received more attention by the scientific community. Table 2 gives an overview of the most frequently cited articles and authors in career adaptability.

Across different databases, the work of Savickas (1997, 2002, 2009, and 2012) emerges as the most influential to date. The most cited paper is the classical article on career adaptability published by Mark Savickas in 1997 in *Career Development Quarterly*, which has received 309 citations in Scopus and 815 in Google scholar. Savickas' (1997) work is often cited because it contains a widely used definition of career adaptability (referenced by more than one in three of the articles we analyzed).

If we consider the number of citations earned on an author basis (across all career adaptability publications from that author), we see that the work of Savickas ranks at the top (Table 2).

Most productive and influential authors since the beginning of career adaptability is Savickas, however, many/others authors have made fundamental contributions to the development of this field. We should mention that there are several other authors that have published over five articles on career adaptability either as a first or a co-author-i.e., Nota (12 articles), Hirschi (11 articles), Guan (11 articles), Zacher (8 articles) and Soresi (10 articles). These results include some of the most popular researchers in career adaptability. However, some very well-known authors do not appear in the current most cited ones due to the fact that some of their articles were published in 2015 or after. Clearly, the number of citations earned by an article is expected to increase over time (although not indefinitely), causing an apparent bias against more recent publications.

Table 2. Most cited articles and authors

According to **Scopus**:

Most cited articles	No citations
Savickas (1997)*	309
Savickas & Porfeli (2012)	164
Hartung, Porfeli & Vondracek (2005)	134
Blustein (1997)	117

*Google scholar 815

Most cited autor	N°. Career adaptability articles	N°. Citations	N°. Citations/articles	Rank
Savickas	4	538	134,5	1
Porfeli	5	396	79,2	2
Blustein	4	270	67,5	3
Ute-Christine Klehe	5	276	55,6	4

According to **Google Scholar**:

Most cited articles	N° citations
Savickas <i>et al.</i> (2009)	830
Mc Ardle <i>et al.</i> (2007)	349
Krieshok <i>et al.</i> (2009)	139
Coetzee & Bergh (2009)	62

We identified 417 researchers that have investigated career adaptability. 73.38 % of the authors of both databases have only written one article and 15.83 % two articles. The average productivity in Scopus is 1.27.

Theoretic versus empiric nature and referred methods

We set out to examine paper type and method of choice (see Table 3). We coded all articles into theoretical categories and three empirical categories (i.e., qualitative, quantitative, or mixed-method). As can be seen in Table 3. 89% of articles (i.e., 187 articles) were coded as empirical. Theoretical papers account for only 11% of the career adaptability articles.

The vast majority of empirical studies were published from 2013 on, possibly as a multiplicative effect of the publication of validated scales in 13 countries around the world. Quantitative research was most prevalent (i.e., 164 articles; 78.1%) as can be expected in a growing field and relied mostly on the Savickas & Porfeli (2012) Career Adapt-Abilities Scale (CAAS) as a valid a psychometric scale to measure career adaptability.

Qualitative research was less frequently reported (i.e., 17 articles; 8.1%). In fact, qualitative research was not found at all prior to 2002.

Among the empirical articles, mixed-method studies have been the least frequent (i.e., 6 articles; 2.9%). Sequential mixed-method procedures (that start with exploratory interviews and follow-up with a survey) are most commonly found.

Table 3. Paper type and method of choice by year of publication

Year of Publication	Theoretical	Empirical			Total
		Qualitative	Quantitative	Mixed	
1983			1		1
1995	1				1
1996	1				1
1997	2		1		3
2002	1	1			2
2004		1			1
2005		1	3	1	5
2006	1		1		2
2007	2		1	1	4
2008	1		4		5
2009	3		2		5
2010	1	1	8		10
2011			6		6
2012	4	4	20	1	29
2013	1	1	16		18

2014	2	2	22		26
2015		3	42	2	47
2016	3	3	23	1	30
2017			14		14
Total	23	17	164	6	210

Country representation by authors

In our bibliometric analyses, we found that career adaptability research has been published from 38 different countries located on all continents. Looking at country representation based on the affiliation of all authors listed on a career adaptability publication, the US leads the ranking (i.e., 95 authors; 21, 64%), followed by China (i.e., 66 authors; 15%). Australia occupies the third position with 34 authors (i.e., 7.74%), followed by Portugal with 20 authors. If we consider the location of the lead author alone, the US ranks first, followed by Portugal and The Netherlands. Although the Anglo-Saxon countries did indeed, emerge as dominant from our data, it is interesting to note that six out of the 10 most “productive” countries in terms of career adaptability research are mostly European and non-English-speaking countries: Portugal, Switzerland, Germany with the exception of China, Brazil and Turkey.

In addition to authorship, we also coded in which countries’ data were collected. United States was the most prevalent (i.e., 16.08 % of all empirical articles), followed by China (i.e., 11.6%), South Africa (i.e., 8.5%), and Australia (i.e., 7.5%). Notably, more than 35% of the data collected came from Europe (i.e., The Switzerland, Germany, Italy, The Netherlands, Portugal, etc.). Some data came from multiple countries in Europe (36.7%), multiple countries in Asia (25.13%), some countries in America (20.6%) and few countries in Africa (8.5%). Empirical data from Asia came, basically, from China, even though there were also studies from Turkey, Iran, Singapore, Korea, India, Thailand and Malaysia. Africa was only represented by South Africa.

Table 4. Main countries representation

Country	Number of authors	Percentage
USA	95	21,64
China	66	15,03
Australia	34	7,74
Portugal	20	4,56
Switzerland	17	3,87
Germany	16	3,64
Brazil and UK	14	3,19*
Turkey	13	2,96*
Netherlands, South Africa	12	2,73*
Spain	11	2,51
Iran, Romania, Singapore	10	2,28*
France, Italy, Israel	9	2,05*
Belgium	7	1,59
Lithuania, Taiwan	5	1,14*
Austria, Canada, Iceland, India,	4	0,91*
Finland, Korea, Japan	3	0,68*

Croatia, Hong Kong, Luxembourg, Malaysia, New Zealand, Sweden	2	0,46*
Denmark, Ireland, Macau, Philippines	1	0,23*
Total	439	100,00
*each country		

Content Analysis

Based on earlier reviews of career adaptability literature (Johnston, 2016; Tolentino, 2015), we composed a list of clusters that we used to classify each of the 210 articles in our database. These clusters are: theoretical versus empirical, longitudinal versus cross-sectional studies pre and post intervention, scales development and validation, predictor/antecedents of career adaptability, outcomes of career adaptability, mediating and moderating effects of career adaptability. A full analysis of these studies is beyond the scope of this paper for reasons of extension. Instead, we offer a numerical information about the subject in different studies and the most cited articles in each category.

Table 5. Clusters of career studies

Cluster	N ° of articles	Authors and studies	%
Theoriques	23	e.g. Savickas, 1997; Blustein, 1997; Savickas <i>et al.</i> , 2009, Hartung <i>et al.</i> , 2005; Karaevli & Hall, 2006; Super & Knasel, 2007, etc.	11
Empirical	187	e.g. McArdle <i>et al.</i> , 2007; Coetzee & Bergh, 2009; Blustein <i>et al.</i> , 2002., etc.	89
Scales Development and Validation	40	e.g. Rottinghaus <i>et al.</i> , 2005; Savickas & Porfeli, 2012; Tolentino <i>et al.</i> , 2013, Rottinghaus, 2011. etc..	21.4
Cross-sectional studies	168	e.g. Creed <i>et al.</i> , 2009; Hirschi, 2009 ; Koen <i>et al.</i> , 2010, etc.	89.8
Longitudinal Studies	19	e.g. Bikos <i>et al.</i> 2007; Praskova <i>et al.</i> , 2014; Stringer <i>et al.</i> 2011; Negru-Subtirica & Pop, 2015; Subtirica <i>et al.</i> , 2015, etc.	10.2
Intervention studies	11	e.g. Ferrari <i>et al.</i> , 2012; Del Corso & Rehffuss, 2011; Del Corso & Briddick, 2015; Stauffer <i>et al.</i> , 2014; Janeiro <i>et al.</i> , 2014; Maree & Gerruty, 2014; Cheung & Jin, 2015, etc.	5.9
Determinants/antecedents of career adaptability	52	e.g. Blustein <i>et al.</i> 2002 ; Hirshi, 2009 ; Duffy & Blustein, 2005; Zacher, 2014 ; Coetzee & Harry, 2014a y 2014b, etc.	27.8
Outcomes of career adaptability	73	e.g. McArdle <i>et al.</i> , 2007 ; Brown <i>et al.</i> 2012; Guan <i>et al.</i> , 2013 ; Ito & Brotheridge, 2005; Koen <i>et al.</i> , 2012; Rossier <i>et al.</i> , 2012 ; Soresi <i>et al.</i> , 2012, Maggiori <i>et al.</i> , 2013; Tolentino <i>et al.</i> , 2013, etc.	39
Career adaptability as mediator and moderator variable	11	e.g. Creed <i>et al.</i> , 2009; Koen, Klehe, & vanVianen, 2012; Rossier <i>et al.</i> , 2012; Maggiori, <i>et al.</i> , 2013 ; Johnston <i>et al.</i> , 2013, Guan <i>et al.</i> , 2014.	5.9

DISCUSSION

The first mention of career adaptability appeared in the literature at the beginning of the eighties. Since the proposition of the concept, research aim to common language and terminology through which to communicate. We observed that early work on career adaptability focused mainly on establishing definitions, and distinguishing it from other phenomena such as career resilience that relates more to the ability to survive change once it happens, whereas career adaptability has a stronger proactive dimension (Bimrose & Hearne, 2012). This first stage oriented to the development of a common language as a crucial feature of an embryonic stage, since it provides the members of an emerging scientific community with a distinctive identity, which facilitates the consolidation of their shared interest in career adaptability.

The number of publications on career adaptability (resources and responses) is growing fast in the last 5 years when we observe a rise in the number of publications, increasing number of citations and, consequently, the journal impact factor. A large academic community (439 authors from 38 countries all over the world) is committed to study the multiple implications, determinants and effects of career resources and responses. Based on our data, we posit that currently the career adaptability field is in the growing stage, as evidenced by the marked increase of publications, with peaks attributable to one milestone on the topic, when Savickas & Porfeli (2012) developed the Career Adapt-Abilities Scale (CAAS).

The study revealed a positive trend in scientific literature production and that the average number of references is increasing with a peak in 2015 (47 studies). It is worth noting that publications remain quite concentrated in a few journals (*Journal of Vocational Behavior* and *Career Development Quarterly*) and theoretical frameworks. Career adaptability researchers most frequently position their research in Career Construction Theory (CCT), adopting Savickas definitions (1997, 2002, and 2005) as justifications for their hypotheses and research and using CAAS scales (Savickas & Porfeli, 2012). This scale has been validated internationally and accepted as a valid instrument by most researchers in the field.

Our analysis of preferred methods and types of papers in the career adaptability literature by publication year (see Table 3) shows that empirical research on career adaptability didn't take off until 2012 (date of publication of Savickas & Porfeli, 2012 article). Previous studies vary widely in their operationalization and measurement practice of career adaptability (Creed *et al.*, 2009, Duffy & Blustein, 2005, Duffy, 2010, Hirschi, 2009, Ito & Brotheridge, 2005, Klehe *et al.*, 2011, Koen *et al.*, 2010, McArdle *et al.*, 2007), thus it was cumbersome to compare evidence that could clarify the career construction model of adaptation. These conceptualization and measurement inconsistencies are a critical deterrent to the advancement of career adaptability research (Tolentino, 2015).

We find some particular situations that show how the field of career adaptability is growing, with some topics becoming very popular and highly cited (e.g. the relation between personality and career adaptability, career adaptability and career outcomes, mediation models), whereas some other topics do not receive an equivalent research interest (intervention studies, evolution of career adaptability at different career stages).

Most of the studies are empirical, quantitative and cross sectional, the intervention and longitudinal and mixed-method studies are still rare. Besides a liability of most intervention studies, is that they rely on self-reports of participants and did not include pre-and post-measurements of career adaptability (Johnston, 2016).

Another important issue is that career adaptability is a concept that has generated the interest of researches around the world; we observed that studies have been conducted in a wide range of European, Asian, America and other countries such as South Africa. Nonetheless, even if we observe a geographic dispersion of studies, is also calls our attention to the fact that three countries concentrate a higher density of researchers on this topic: USA, China and Australia.

Based on our observations, we hypothesize that from 1981 until 2012, the career adaptability research field was in its infancy, it lacked a clear and consistent definition and scope as well as a conceptual framework based on empirical research. From 2012 until today in its adolescent period and facing the challenge of evolving into a more mature field of study where regularities encountered in the previous stages become predictable.

LIMITATIONS OF THE STUDY

Bibliometric methods, and in particular citation analysis, are not exempt from certain limitations. They are restricted to the analysis of documents stored in databases with a citation index, as well as to the usual limitations on the use of these databases. This research study did have some limitation. One limitations of this study is that we have selected those articles that mention the term “career adaptability” on title, abstract and and keywords only; it is therefore possible that the results could have been different if the whole publication had been analyzed. Another limitation is a theoretical one, the study did not establish a differentiation between research oriented to study adaptability resources and those oriented to analyse adaptive responses.

Despite the mentioned limitations, the strength of this study is that the bibliometric analysis revealed a number of characteristics of the literature production in the field of career adaptability, such as changes in the dynamics and quantity of production, the most prolific authors, countries, etc.

CONCLUSIONS

The novel contributions of the article are, not only the application of bibliometric methods to characterize the career adaptability field, but also to take note of a fast-growing body of research. We wanted to let the phenomenon “speak for itself”, by coding and quantifying relevant features of all peer-reviewed articles on career adaptability, published up to 2017. Science is cumulative; each new research builds on previous works and extends knowledge in a particular field. The growth of scientific production in recent years and its collection in bibliographic databases has led to the use of “bibliometrics” as a useful tool to measure scientific activity (Sancho, 1990).

A general bibliometric overview of career adaptability was presented with the purpose of evaluating the state of the field and deriving implications for further research, informing scholars entering the field of “where it is at”, and providing guidance for the theoretical and methodological positioning of future research.

The results obtained should be useful to both new and established researchers, in that we identify and describe the most influential studies and authors that currently embody the intellectual structure of the discipline and indicate theoretical and methodological issues that are stimulating work in the field of career adaptability.

From the results of this study, it is possible to establish that scientific literature production on career adaptability is a growing field. The most prolific institutions and journals (Journal of Vocational Behavior and Career Development Quarterly) are from the United States.

However, the study shows that there is a well-established community of career adaptability in China, Australia and Europe (Portugal, Switzerland, Germany, etc) which also shown a very productive and influential results in this field. In addition, the study determine that the cooperation between authors from different countries and institutions regarding co - authorships is reasonably intensive.

Finally, as a way to extend the research, it would be interesting to add other bases as Web of Science (WOS), to the study and carry out a comparative analysis of citations.

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