

PERSPECTIVES

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CURRENT CHALLENGES AND PROMISING AVENUES FOR ENTREPRENEURSHIP RESEARCH

INTRODUCTION

The research field of entrepreneurship has shown a significant increase in scientific production in the last two decades (Landström & Harirchi, 2018a), attracting researchers from many disciplines (Zahra, 2007). There has been a considerable increase in the quality of the research and legitimacy of the field (Audretsch, 2012; Davidsson, 2016). However, this research field still faces considerable challenges in its continuous advancement. The field has several different definitions for basic concepts and approaches (Landström & Lohrke, 2010), and still lacks consensus on, for example, what is its object of study (Burg & Romme, 2014; Machado & Borges, 2017). Thus, there are different understandings about what entrepreneurship means – generation of a result (e.g., creation of a new organization), discovery and exploitation of opportunities, and entrepreneurial process or action (Machado & Borges, 2017; Shane & Eckhardt, 2003; Shane & Venkataraman, 2000), among others.

Other challenges in the field include its variety of paradigms (Karatas-Ozkan, Anderson, Fayolle, Howells, & Condor, 2014) and diversity of theoretical orientations (Davidsson, 2003; Landström & Harirchi, 2018a). Moreover, publications of this scientific community are organized more around publication media than around mutual theoretical inspirations, characterizing it more as an academic social community than an academic intellectual community (Landström & Harirchi, 2018a). This means that the community connects and maintains its structure predominantly by linking to journals in which its members publish and conferences in which they participate. This is in contrast with the field of innovation, in which most publications adopt economic perspectives and theoretical orientations derived from Schumpeter (1934) and Nelson and Winter (1982), characterizing it as an academic intellectual community (Landström & Harirchi, 2018a).

Moreover, the main reasons for the modest advances and reduced potential for contribution of the less developed areas of entrepreneurship research are as follows: (1) little clarity about the cause-and-effect relationships among the variables studied (Williams, Wood, Mitchell, & Urbig, 2019); (2) low methodological diversity of the field (Neergard & Ulhoi, 2007; Wiklund, Davidsson, Audretsch, & Karlsson, 2011); (3) the fact that most quantitative studies only establish correlations, showing how the variables impact each other (Williams et al., 2019); and (4) the fact that few studies are experimental (Aguinis & Lawal, 2012; Hsu, Simmons, & Wieland, 2017; Williams et al., 2019). It is important to note that experimental methods help determine which variables take precedence, establish the causal direction between them, and identify the alternative explanations to be ruled out (Williams et al., 2019).

Given these various difficulties, in this study, we aim to briefly present additional information regarding the main challenges in the field of entrepreneurship research based on a literature review, thus helping identify promising paths for its advancement. In this non-exhaustive work, we deal with challenges and possibilities related to the following topics: understanding of the object of study, promising research topics, entrepreneurship education, and recommendations.

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DIFFERENT UNDERSTANDINGS OF THE OBJECT OF STUDY

There are different notions about entrepreneurship. [Eckhardt and Shane \(2003\)](#) and [Shane and Venkataraman \(2000\)](#) understand it as the generation of new goods, services, raw materials, markets, and methods of production and organization using new means, ends, or means-ends relationships. Other authors consider that entrepreneurship has a revolutionary and transformative role in the social and institutional spheres ([Rindova, Barry, & Ketchen, 2009](#)). These examples show that fundamentally different understandings are present in the field, which impairs research and, consequently, its development, due to lack of consensus on what entrepreneurship actually is.

Similar to the famous metaphor of the blind men who touch different parts of an elephant and are asked, separately, to describe the animal as a whole ([Mintzberg, Ahlstrand, & Lampel, 2000](#)), multiple conceptions of entrepreneurship arise from multiple ways of thinking. In isolation, none of them describes entrepreneurship well. Thus, both dialogue and flexibility of the convictions of each person who “touches” the phenomenon, through exchange and combination of knowledge to get to know the whole, are necessary. A step forward in building such a dialogue is the clarification of at least a part of the different understandings present in the field, which need to be considered as a whole.

[Machado and Borges \(2017\)](#) contribute to the debate about the ways of understanding what entrepreneurship is by proposing the synthesis in Exhibit 1.

Exhibit 1. Ways of understanding entrepreneurship

Ways of understanding entrepreneurship	Description
1. Entrepreneurship as a generator of results	1.1 Business creation <ul style="list-style-type: none"> It leads to the creation of new businesses aimed to explore opportunities in the environment (Gartner, 1985).
	1.2 Value creation <ul style="list-style-type: none"> It involves several possibilities for creating value in the dialectical relationship between the individual and the environment, over time and in space (Bruyat & Julien, 2000; Lackéus, 2015).
	1.3 Creation of innovative businesses or products <ul style="list-style-type: none"> It involves generation of innovation (Nelson & Winter, 1982; Schumpeter, 1934).
	1.4 Creation of markets or artifacts: <ul style="list-style-type: none"> It involves construction and expansion of markets and internationalization of businesses (Davidsson, 2004; Sarasvathy & Venkataraman, 2011); Entrepreneurs create new opportunities and open new markets; their actions go beyond economic value because they can generate value through institutions and social change (Sarasvathy, 2008).
2. Entrepreneurship as a process	<ul style="list-style-type: none"> Starting your own business involves various phases (e.g., creation or growth of a business; Shane, 2012); Considering these phases, there is a need to better know the process and what entrepreneurs actually do and how (Moroz & Hindle, 2011).
3. Entrepreneurship as a link between individual and opportunity	<p>Opportunity is a central subject in the study of entrepreneurship (Eckhardt & Shane, 2003):</p> <ul style="list-style-type: none"> The individual interacts with the environment; obtains information; and discovers, evaluates, decides, and exploits an opportunity in the market; Other researchers study actions and interactions, arguing that an opportunity is not only identified but also created by the entrepreneur and those surrounding that entrepreneur (Foss & Klein, 2010).
4. Entrepreneurship as actions	<ul style="list-style-type: none"> It deals with the complexity and dynamics of the relationships between the internal and external environments. It also deals with the process of adaptation/transformation that involves the entrepreneurs-actors interacting with their environment and the organization in daily actions, and creating and assigning meaning, that is, sensemaking and sensegiving (Steyaert, 2007; Watson, 2013); It addresses the micro-foundations of entrepreneurial action, focusing on the experiences of success and failure (Shepherd, 2015).

Source: Adapted from [Machado and Borges \(2017\)](#).

The accumulation of knowledge is facilitated by the consensus on fundamental premises regarding the nature of knowledge (ontology), how to understand the phenomenon (epistemology), and how to study it (methodology; Shepherd, 2015). As pointed out, in the field of entrepreneurship, such accumulation is impaired mainly by the existence of several understandings of the nature of knowledge and phenomenon (Davidsson, 2003), which is illustrated in Exhibit 1.

Nevertheless, Davidsson (2016) believes that these multiple forms of understanding can be accommodated roughly in two definitions:

1. Entrepreneurship is the creation (or attempted creation) of a new economic activity.
2. Entrepreneurship is anything that concerns those who create and run their own businesses/companies/ organizations.

Davidsson (2016) recommends that further studies on entrepreneurship should choose the first of the two understandings because it is the most commonly used in this field nowadays. That is, the author considers that an increasing number of researchers understand entrepreneurship as an effort to create a new economic activity (Davidsson, 2016; Wiklund et al., 2011).

Nevertheless, the problem of multiple understandings of what is entrepreneurship can be solved clearly presenting the definition of this concept and ensuring that the other components of the study, especially the research question, theoretical foundation, design, and methods, are aligned with the definition (Davidsson, 2016).

PROMISING TOPICS

Recent studies list promising topics identified by experts for the development of the entrepreneurship studies. Landström and Harirchi (2018b) thus summarize the following recommendations from 915 entrepreneurship experts:

1. Focus on specific issues, such as finance, intentions, and effectuation;
2. Use well-founded methods aligned with the phenomenon of entrepreneurship;
3. Ensure practical relevance and orientation to reality in the studies;
4. Conduct regional and cross-country comparative studies; and
5. Focus on specific types of companies, such as family, technological, and social companies.

Exhibit 2 presents the 10 topics considered most promising by experts, in descending order of frequency of mention.

Exhibit 2. Ten promising topics

- (1) Social entrepreneurship
- (2) Entrepreneurial opportunity (generation, identification, etc.)
- (3) Entrepreneurial learning and entrepreneurship education
- (4) Gender and correlated topics
- (5) Public policies and institutions
- (6) Entrepreneurial process
- (7) Creativity and innovation
- (8) Financial matters and acquisition of resources
- (9) Exit from/sale of businesses and failures
- (10) Effectuation

Source: Adapted from Landström and Harirchi (2018b).

Several of these topics converge with the hot topics in entrepreneurship research identified in the report by Kuckertz and Prochotta (2018) based on a survey with 225 experienced researchers in the field. The results of the report point to the importance of having more academic rigor in the use of research methods, using, for example, experimental and more appropriate methods to capture the complexity of the entrepreneurship phenomena. The results also indicate that the entrepreneurial process continues to be the most promising research topic to promote the field's evolution.

Exhibit 3 shows the four hot topics (and their subtopics) most frequently mentioned by the specialists, in descending order of frequency of mention (Kuckertz & Prochotta, 2018).

Exhibit 3. The four research hot topics

Hot topics	Subtopics
1. Entrepreneurial process	Development and performance of enterprises, exit from/failure of businesses, and entrepreneurial marketing
2. Entrepreneurial behavior	Entrepreneurial intention and action, entrepreneurial decision, and balance between work and life of entrepreneurs
3. Social entrepreneurship	Social entrepreneurship in general, its determinants, and scaling in social enterprises
4. Psychology	Entrepreneurial cognition, emotions in entrepreneurship, and processes of entrepreneurial teams

Source: Adapted from Kuckertz and Prochotta (2018).

Among the promising topics identified by both Davidsson (2016) and Kuckertz and Prochotta (2018) is the further exploration of psychology – item 4 in Exhibit 3. An example of a promising exploration of psychology in entrepreneurship, according to Davidsson (2016), is the study of entrepreneurial teams that would benefit from research on small groups in psychology. These teams have characteristics such as: voluntary participation in a given initiative, the fact that the participants are often already friends, specific financial risks involved in joint initiatives.

The field can also further explore the contribution of cognitive psychology to the understanding of entrepreneurial behavior, inspired by the theory of effectuation (Sarvasvathy, 2001), a theory that lacks further development and testing (Arend, Sarooghi, & Burkemper, 2015). With regard to the nexus between an individual and an opportunity, it would be appealing to conduct studies on the initial development of emerging economic activities, for which the theory and experiments of psychology have important knowledge to offer (Wood & Williams, 2014). Another recommendation is to further explore the concept of opportunity, a line of research that can be developed using constructs such as external enabler, idea for a new business/organization, and confidence in the identified opportunity (Davidsson, 2016).

Interestingly, entrepreneurship education (EE) ranked only 13th on the list of hot topics by Kuckertz and Prochotta (2018). This contrasts with the importance assigned to it by authors such as Fayolle (2018) and Fellnhofer (2019), but mainly with its relevance in Brazil. Despite the need and importance of developments on the subject in Brazil, few Brazilian in-depth studies have been conducted on it and/or have been published outside Brazil. The relevance of this subject in Brazil is reinforced by the recent call for articles dedicated to EE for a special issue of the *Brazilian journal Revista de Empreendedorismo e Gestão de Pequenas Empresas (Regepe)*. This topic is also linked to teaching practices in the country that need significant improvement, particularly because in Brazil EE focuses on teaching how to prepare a business plan. This teaching model is recommended only for students who want to start their own businesses (Liñán, 2007). Nevertheless, it has been used indiscriminately (tending to generate negative effects) with a vast majority of students who do not have this interest (Lima, Lopes, Nassif, & Silva, 2015). For this audience, awareness-raising activities are recommended, which may ultimately lead more students to develop entrepreneurial intention (Liñán, 2007).

Given its importance, EE is explored further in the following section.

ENTREPRENEURSHIP EDUCATION

EE plays a key role in any perspective of social intervention for economic and social development (European Commission, 2013; ICF Consulting Services Ltd. & Technopolis Group, 2015). Despite the political interest on the part of higher education institutions and schools, EE still needs to be studied in philosophical, ontological, epistemological, and ethical terms (Fayolle, 2018). EE programs and actions rarely explicit their considered meaning of EE and the exact EE teaching model they use. The methodological paradigm used – objectivism, subjectivism, or constructivism – thus becomes particularly unclear (Fayolle & Gailly, 2008). They also fail to specify didactically the objectives and goals of EE, to whom it is addressed, its methods and pedagogies, the knowledge and content addressed, and, finally, how the results are evaluated (Fayolle & Gailly, 2008). These aspects need to be considered to evaluate which didactic contexts and institutional conditions are most appropriate for each EE approach.

Fellnhofer (2019) points out that there is no consensus on definitions, but that, *roughly speaking*, there are two general conceptions of EE: (1) a broader conception of the development of entrepreneurial skills and personal qualities, and (2) a narrower and more targeted conception of education or training to entrepreneurship. The choice of one of the EE concepts implies the choice of a specific set of methods and EE practices.

Although EE's field of study is important and increasingly gaining recognition, it is still fragmented and faces multiple challenges. This is because of the complexity of the issues and diversity of the courses, programs, and actions in EE and the audiences served by it (Fayolle, 2018; Fellnhofer, 2019). There is plenty of room for theoretical improvement of studies on EE: a quarter of the articles reviewed by Nabi, Fayolle, Linan, Krueger, and Welmsley (2017) do not even state which theoretical framework they used. Other authors point out that the variables used to measure the impact of EE longitudinally have been inconsistent (Martin, McNally, & Kay, 2013; Pittaway & Cope, 2007). Factors such as these allow us to understand the scarce presence of EE research in the best journals and conferences on entrepreneurship and management (Fayolle, 2018).

Aiming at promoting progress by breaking the rationalist habits of study in the field of entrepreneurship, Fayolle (2018) recommends that researchers go beyond the predominant perspective of EE based on identification, evaluation, and exploitation of opportunities. Besides that, he suggests to conduct investigations on the research gap of EE using

approaches originated in the entrepreneurship field, such as effectuation (Sarasvathy, 2001) and bricolage (Baker & Nelson, 2005), and a mix of efforts to generate theoretical and practical contributions. There is also a need for studies that question the premises, approaches, and current practices of EE research using the knowledge from the education field (in fact, there is a lack of in-depth publications on EE in education journals) and educational, social, and cognitive psychologies (Fayolle, 2018).

Despite the recent growth in the number of studies evaluating the results of EE activities, the total number of studies on the topic is still relatively low. Bae, Qian, Miao, and Fiet (2014) mapped 55 studies in a decade with contradictory results, which shows the need for more robust research that is methodologically more rigorous, uses a control group, has a random experimental approach, and has previous and subsequent measurements, with studies also considering moderating variables.

According to Fayolle (2018) and Fellnhofer (2019), other paths may improve EE research, such as the following:

- Examining the effects of entrepreneurs' self-employment and independence on their physical and mental health as well as personal and career satisfaction;
 - Studying EE in specific groups – children, pre-university education, minorities, immigrants, unemployed, and so on – and investigating the best combinations of objectives, content, and teaching methods for each group;
 - Investigating whether and how much new education techniques (games, gamification, and simulations) help people become more entrepreneurial;
 - Evaluating the results and effectiveness of distance EE courses and programs, including those using the Internet;
 - Studying EE approaches that can engage students through feelings and emotions;
 - Investigating how being in contact with innovative entrepreneurs, besides models and cases related to failure, influence students' mindset and entrepreneurial intentions; and
- Studying the effectiveness of regional and national strategies in attracting diverse groups of people to an entrepreneurial career, and investigating how public policies influence and involve the stakeholders (government officials, community, neighbors, suppliers, and funders) and impact the development of EE.

BEING ENTREPRENEURIAL IN RESEARCH

A critical reading indicates that studies and publications in the field of entrepreneurship face the challenge of overcoming the trap of remaining in the safest path for research and using already established approaches. This leads to incremental growth in research through only answering narrow questions, which, consequently, attracts less people to this subject (Shepherd, 2015). To break this pattern of growing research with poor contributions and thus allow more expressive advancements in the field, Shepherd (2015) recommends that researchers should take more risks, be entrepreneurs, and use new research questions and theories. Thus, particular attention should be paid to the following topics:

1. Examine the entrepreneurial process in a more interactive way to capture the dynamics of the relationship between the entrepreneur and the information exchange community to which s/he belongs. This will show how both adjust to each other and make the belief in an opportunity to be exploited to evolve.
2. Deepen research on the micro foundations of entrepreneurial action to understand and examine the numerous activities related to the emergence of new ventures or organizations. Moreover, focus on the nascent entrepreneurs and the process of creating new organizations (Gartner, 1985; Shepherd, 2015). To this end, it is relevant to study the interrelationships of the various activities and knowledge that influence the formation of belief in an opportunity to exploit, and the motivations involved in this belief.
3. Study how emotions function in the cognitive process of entrepreneurs when they act on important or challenging tasks, such as identifying an opportunity (Baron, 2008; Cardon, Foo, Shepherd, & Wiklund, 2012; Welpe, Spörrle, Grichnik, Michl, & Audretsch, 2012).

4. Examine aspects of social, sustainable, and environmental entrepreneurship, especially entrepreneurial actions and pro-social motivation (Grant & Berry, 2011) observed in the so-called compassionate organizations (George, 2014) that benefit people and minimize human suffering. In addition, examine problems caused to animals and damage to communities and nature. This could include, for example, studying how organizations and communities face crises, such as after a disaster (Nelson & Lima, 2019).

To study these phenomena and understand how resources can be acquired, gathered, organized, and recombined to relieve suffering, Shepherd (2015) highlights the potential of concepts such as the following: bricolage (Baker & Nelson, 2005), effectuation (Sarasvathy, 2001), improvisation (Hmieleski & Corbett, 2008), knowledge corridors (Fiet & Samuelsson, 2000), entrepreneurial management (Bradley, Wiklund, & Shepherd, 2011), and identity (Powell & Baker, 2014).

The fourth research path in Shepherd’s (2015) list converges with the study of Sutter, Bruton, and Chen (2019) on entrepreneurship as a means to fight poverty. They review 77 journals covering various disciplines for 28 years of scientific production. They conclude that the studies examined could be categorized into three perspectives of entrepreneurship as a means to fight poverty (Exhibit 4).

Exhibit 4. Perspectives of entrepreneurship as a means to fight poverty

Perspective	Way of fighting poverty
1. Remediation	Access to resources, financing, training, and market.
2. Reform	Reform of social and institutional structures, offering participation and inclusion - e.g., in the market - by changing the structure of power and privileges and generating greater social equality.
3. Revolution	Introduction of economic systems alternative to capitalism.

Source: Adapted from Sutter, Bruton & Chen (2019).

According Sutter, Bruton & Chen (2019), there are research opportunities in each of the perspectives. With regard to poverty remediation, researchers can, for example, further explore the distinction between need-based and high-growth entrepreneurship; study the characteristics of high-growth

enterprises in poverty contexts; and study the efficiency in fighting poverty. From the reform perspective, they suggest analyzing the institutional context in detail, examining non-economic aspects by focusing on drivers of social and institutional change, deepening the study of ethics in social entrepreneurship, and so on. From the revolution perspective, they recommend, for example, investigating socioeconomic development based on community organizations and social enterprises.

In any of the three perspectives, it seems attractive to accept Shepherd’s (2015) recommendation to be more entrepreneurial when conducting research. The research path of searching for solutions to great problems of humanity, such as extreme poverty, is promising (Sutter et al., 2019). Following such a path can be rewarded with publications that effectively address the challenge of relevance and usefulness in the study of entrepreneurship (Wiklund, Wright, & Zahra, 2018).

FINAL CONSIDERATIONS

The academic conversation through publications (Huff, 1999) about relevant and promising topics in entrepreneurship continues to need new voices and more publications with new, interesting, and useful things to say. Especially for research students and newcomers, it is important not to forget to first understand what the ongoing academic conversation is about; this is the condition for entering into the debate with their own publication (Huff, 1999).

Thus, keeping informed about the national and international state of the art on the chosen topic through regular readings increases one’s chances of publication and contribution in the field of entrepreneurship. Knowing the main journals, their characteristics regarding the field, and the recommended practices for publication is also important (Fayolle & Wright, 2014). Moreover, it is useful to be inspired by the trajectory and recommendations of experienced researchers. For example, the *Revue Internationale PME* provides an opportunity in this regard in the *Chronicle on Research Work* series (e.g., Cossette, 2018). Editorial comments of *Revista Ibero-Americana de Estratégia* (n.d.) are in the same direction, even though the journal is from another area of study (e.g., Ferreira, 2014).

To avoid the common flaws in research that we describe in this article, it is recommended that researchers have a clear awareness of the understanding they are adopting of what entrepreneurship is and maintain the coherence throughout their work (Davidsson, 2016; Machado & Borges, 2017), clearly showing and respecting this understanding (Davidsson, 2016).

It is also recommended that the study fully respect the level of analysis initially adopted – individual, organizational, or societal (Davidsson & Wiklund, 2001). Otherwise, ambiguities regarding the dependent variables are introduced (Davidsson, 2016).

As we have seen, there is a broad spectrum of promising topics and research gaps, and it varies depending on the continent, country, and region. American researchers differ from Europeans ones in what they consider hot research topics (Gartner, 2013; Kuckertz & Prochotta, 2018). In Brazil, in turn, there is a special need to study EE, as described above. The country faces serious socioeconomic problems, which results in several real-life topics that demand innovative approaches. This reinforces the recommendation to be entrepreneurial in research (Shepherd, 2015), search for solutions to major problems such as poverty (Sutter, Bruton & Chen, 2019), and conduct relevant research (Wiklund, Wright & Zahra, 2018).

Problems are also opportunities and act as stimuli for new developments and the search for potentially beneficial solutions for more people than those initially aimed at. If future research searches for solutions to major problems faced by humanity in Brazil (e.g., Sutter, Bruton & Chen, 2019), such research would have both relevance and utility (Wiklund, Wright & Zahra 2018), especially if it is of high quality. If new studies have such characteristics, they would have great potential for publication, especially because the great questions of humanity are similar worldwide. In this sense, quality research from Brazil on such topics would be more likely to be published in not only good national journals but also international journals, as they have something to say about these problems that are present worldwide.

REFERENCES

- Aguinis, H., & Lawal, S.O. (2012). *Conducting field experiments using eLancing's natural environment*. *Journal of Business Venturing*, 27(4), 493-505. doi:10.1016/j.jbusvent.2012.01.002
- Arend, R., Sarooghi, H., & Burkemper, A. (2015). *Effectuation as ineffectual? Applying the 3E Theory-Assessment Framework to a proposed new theory of entrepreneurship*. *Academy of Management Review*, 40(4), 630-651. doi:10.5465/amr.2014.0455
- Audretsch, D. B. (2012). *Entrepreneurship research*. *Management Decision*, 50(5), 755-764. doi:10.1108/00251741211227384
- Bae, T. J., Qian, S., Miao, C., & Fiet, J. O. (2014). *The relationship between entrepreneurship education and entrepreneurial intentions: A meta-analytic review*. *Entrepreneurship Theory and Practice*, 38(2), 217-254. doi:10.1111/etap.12095
- Baker, T., & Nelson, R. E. (2005). *Creating something from nothing: Resource construction through entrepreneurial bricolage*. *Administrative Science Quarterly*, 50(3), 329-366. doi:10.2189/asqu.2005.50.3.329
- Baron, R. A. (2008). *The role of affect in the entrepreneurial process*. *Academy of Management Review*, 33(2), 328-340. doi:10.2307/20159400
- Bradley, S. W., Wiklund, J., & Shepherd, D. A. (2011). *Swinging a double-edged sword: The effect of slack on entrepreneurial management and growth*. *Journal of Business Venturing*, 26(5), 537-554. doi:10.1016/j.jbusvent.2010.03.002
- Bruyat, C., & Julien, P. A. (2000). *Defining the field of research in entrepreneurship*. *Journal of Business Venturing*, 16(2), 165-180. doi:10.1016/S0883-9026(99)00043-9
- Burg, E. Van, & Romme, A. G. L. (2014). *Creating the future together: Toward a framework for research synthesis in entrepreneurship*. *Entrepreneurship Theory & Practice*, 38(2), 369-397. doi:10.1111/etap.12092
- Cardon, M. S., Foo, M. D., Shepherd, D., & Wiklund, J. (2012). *Exploring the heart: Entrepreneurial emotion is a hot topic*. *Entrepreneurship Theory & Practice*, 36(1), 1-10. doi:10.1111/j.1540-6520.2011.00501.x
- Cossette, P. (2018). *Écrire, c'est bien; bien écrire, c'est mieux*. *Revue Internationale PME*, 31(3-4), 7-16.
- Davidsson, P. (2003). *The domain of entrepreneurship research: Some suggestions*. In J. A. Katz, & D. A. Shepherd (Eds.), *Advances in Entrepreneurship, Firm Emergence and Growth*, (vol. 6, pp. 315-372). Emerald Group Publishing Limited.
- Davidsson, P. (2004). *Researching entrepreneurship*. New York, NY: Springer. doi:10.1007/978-3-319-26692-3
- Davidsson, P. (2016). *A "business researcher" view on opportunities for psychology in entrepreneurship research*. *Journal of Applied Psychology*, 65(3), 628-636. doi:10.1111/apps.12071
- Davidsson, P., & Wiklund, J. (2001). *Levels of analysis in entrepreneurship research: Current research practice and suggestions for the future*. *Entrepreneurship Theory & Practice*, 25(4), 81-99. doi:10.1177/104225870102500406
- Eckhardt, J. T., & Shane, S. A. (2003). *Opportunities and entrepreneurship*. *Journal of Management*, 29(3), 333-349. doi:10.1177/014920630302900304
- European Commission (2013). *Educação para o empreendedorismo: Guia para educadores*. Bruxelles, Belgique: Comissão Europeia.
- Fayolle, A. (2018). *Personal views on the future of entrepreneurship education*. In A. Fayolle (Ed.), *A research agenda for entrepreneurship education* (pp. 127-138). Cheltenham, UK: Edward Elgar Publishing Ltd.
- Fayolle, A., & Gailly, B. (2008). *From craft to science: Teaching models and learning processes in entrepreneurship education*. *Journal of European Industrial Training*, 32(7), 569-593. doi:10.1108/03090590810899838
- Fayolle, A., & Wright, M. (Eds.). (2014). *How to get published in the best entrepreneurship journals: A guide to steer your academic career*. Northampton, MA: Edward Elgar Publishing.
- Fellnhöfer, K. (2019). *Toward a taxonomy of entrepreneurship education research literature: A bibliometric mapping and visualization*. *Educational Research Review*, 27, 28-55. doi:10.1016/j.edurev.2018.10.002
- Ferreira, M. (2014). *Comentário editorial. Resiliência e resistir à rejeição para o sucesso na carreira*. *Revista Ibero-Americana de Estratégia*, 13(3), 1-6.

- Fiet, J. O., & Samuelsson, M. (2000). Knowledge-based competencies as a platform for firm formation. In *Frontiers of Entrepreneurship Research*, (pp. 166-178). Wellesley, MA: Babson College.
- Foss, N. J., & Klein, P. G. (2010). Entrepreneurial alertness and opportunity discovery: Origins, attributes, critique. In H. Landström, & F. Lohrke (Eds.), *Historical foundations of entrepreneurship research* (pp. 98-121). Great Britain, UK: Edward Elgar.
- Gartner, W. B. (1985). A conceptual framework for describing the phenomenon of new venture creation. *Academy of Management Review*, 10(4), 696-706. doi:10.2307/258039
- Gartner, W. B. (2013). Creating a community of difference in entrepreneurship scholarship. *Entrepreneurship & Regional Development*, 25(1-2), 5-15. doi:10.1080/08985626.2012.746874
- George, J. M. (2014). Compassion and capitalism: Implications for organizational studies. *Journal of Management*, 40(1), 5-15. doi:10.1177/0149206313490028
- Grant, A. M., & Berry, J. W. (2011). The necessity of others is the mother of invention: Intrinsic and prosocial motivations, perspective taking, and creativity. *Academy of Management Journal*, 54(1), 73-96. doi:10.5465/amj.2011.59215085
- Hmieleski, K. M., & Corbett, A. C. (2008). The contrasting interaction effects of improvisational behavior with entrepreneurial self-efficacy on new venture performance and entrepreneur work satisfaction. *Journal of Business Venturing*, 23(4), 482-496. doi:10.1016/j.jbusvent.2007.04.002
- Hsu, D. K., Simmons, S. A., & Wieland, A. M. (2017). Designing entrepreneurship experiments: A review, typology, and research agenda. *Organizational Research Methods*, 20(3), 379-412. doi:10.1177/1094428116685613
- Huff, A. S. (1999). *Writing for scholarly publication*. Thousand Oaks, CA: Sage.
- ICF Consulting Services Ltd. & Technopolis Group. (2015). *Entrepreneurship education: A road to success*. 13 case studies. Prepared for the study compilation of evidence on the impact of entrepreneurship education strategies and measures. Luxembourg: Publications Office of the European Union. doi:10.2769/408497
- Karatas-Ozkan, M., Anderson, A. R., Fayolle, A., Howells, J., & Condor, R. (2014). Understanding entrepreneurship: Challenging dominant perspectives and theorizing entrepreneurship through new postpositivist epistemologies. *Journal of Small Business Management*, 52(4), 589-593. doi:10.1111/jsbm.12124
- Kuckertz, A., & Prochotta, A. (2018, February 4). What's hot in entrepreneurship research 2018? *Hohenheim Entrepreneurship Research Brief*. Retrieved from https://www.researchgate.net/publication/323258024_What's_Hot_in_Entrepreneurship_Research_2018
- Lackéus, M. (2015). *Entrepreneurship in education: What, why, when, how*. *Entrepreneurship 360*. Background paper. Paris: European Commission.
- Landström, H., & Harirchi, G. (2018a). The social structure of entrepreneurship as a scientific field. *Research Policy*, 47(3), 650-662. doi:10.1016/j.respol.2018.01.013
- Landström, H., & Harirchi, G. (2018b). "That's interesting!" in entrepreneurship research. *Journal of Small Business Management*. Publicação on-line antecipada. doi:10.1111/jsbm.12500
- Landström, H., & Lohrke, F. (2010). *Historical foundations of entrepreneurship research*. Northampton, MA: Edward Elgar Publishing.
- Lima, E., Lopes, R. M., Nassif, V., & Silva, D. (2015). Opportunities to improve entrepreneurship education: Contributions considering Brazilian challenges. *Journal of Small Business Management*, 53(4), 1033-1051. doi:10.1111/jsbm.12110
- Liñán, F. (2007). The role of entrepreneurship education in the entrepreneurial process. In A. Fayolle (Ed.), *Handbook of research in entrepreneurship education: A general perspective* (vol. 1, pp. 230-247). Northampton, MA: Edward Elgar.
- Machado, H. P. V., & Borges, C. (2017, June). Pesquisa em empreendedorismo: O desafio de diferentes compreensões do objeto de estudos. In R. Ascúa, S. Roitter, & L. Castillo (Eds.). *62^o ICSB World Conference*. Buenos Aires, Argentina. Rafaela: Asociación Civil Red Pymes Mercosur. Libro digital, PDF arquivo digital: online ISBN 978-987-3608-30-8, pp. 70-79.
- Martin, B. C., McNally, J. J., & Kay, M. J. (2013). Examining the formation of human capital in entrepreneurship: A meta-analysis of entrepreneurship education outcomes. *Journal of Business Venturing*, 28(2), 211-224. doi:10.1016/j.jbusvent.2012.03.002
- Mintzberg, H., Ahlstrand, B., & Lampel, J. (2000). *Safári de estratégia*. Porto Alegre, RS: Bookmam.
- Moroz, P. W. & Hindle, K. (2011). Entrepreneurship as a Process: Toward Harmonizing Multiple Perspectives. *Entrepreneurship Theory & Practice*, 36(4), 781-817. doi:10.1111/j.1540-6520.2011.00452.x
- Nabi, G., Fayolle, A., Linan, F., Krueger, N., & Welmsley, A. (2017). The impact of entrepreneurship education in higher education: A systematic review and research agenda. *Academy of Management Learning and Education*, 16(2), 1-23. doi:10.5465/amle.2015.0026
- Neergard, H., & Ulhoi, J. P. (2007). Introduction: Methodological variety in entrepreneurship research. In H. Neergard, & J. P. Ulhoi (Eds.), *Handbook of qualitative research methods in entrepreneurship* (pp. 1-16). Cheltenham, UK: Edward Elgar Publishing.
- Nelson, R., & Lima, E. (2019). Effectuations, social bricolage and causation in the response to a natural disaster. *Journal of Small Business Economics*. Advanced online publication. doi:10.1007/s11187-019-00150-z
- Nelson, R., & Winter, S. (1982). *An evolutionary theory of economic change*. Cambridge, MA: Harvard University Press.
- Pittaway, L., & Cope, J. (2007). Entrepreneurship education: A systematic review of the evidence. *International Small Business Journal*, 25(5), 479-510. doi:10.1177/0266242607080656
- Powell, E. E., & Baker, T. (2014). It's what you make of it: Founder identity and enacting strategic responses to adversity. *Academy of Management Journal*, 57(5), 1406-1433. doi:10.5465/amj.2012.0454
- Revista Ibero-Americana de Estratégia (s. d.). *How to Publish (or Perish)?*. Retrieved from <http://www.revistaiberoamericana.org/ojs/index.php/ibero/pages/view/publicar%20o%20perish>
- Rindova, V., Barry, D., & Ketchen, D. J. (2009). Entrepreneurship as emancipation. *Academy of Management Review*, 34(3), 477-491. doi:10.5465/amr.2009.40632647

- Sarasvathy, S. (2001). *Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency*. *Academy of Management Review*, 26(2), 243-263. doi:10.5465/amr.2001.4378020
- Sarasvathy, S. D. (2008). *Effectuation elements of entrepreneurial expertise: New horizons in entrepreneurship*. Northampton, MA: Edward Elgar.
- Sarasvathy, S. S., & Venkataraman, S. (2011). *Entrepreneurship as method: Open questions for an entrepreneurial future*. *Entrepreneurship Theory & Practice*, 35(1), 113-135. doi:10.1111/j.1540-6520.2010.00425.x
- Schumpeter, J. A. (1934). *The theory of economic development*. Cambridge, MA: Harvard University Press.
- Shane, S. (2012). Reflections on the 2010 AMR decade award: Delivering on the promise of Entrepreneurship as a field of research. *Academy of Management Review*, 37 (1), 10-20.
- Shane, S., & Eckhardt, J. (2003). The individual opportunity nexus. In Z. J. Acs, & D. B. Audretsch (Eds.), *Handbook of entrepreneurship research: An interdisciplinary survey and introduction* (pp. 161-191). The Netherlands: Kluwer Academic Publishers.
- Shane, S., & Venkataraman, S. (2000). *The promise of entrepreneurship as a field of research*. *Academy of Management Review*, 25(1), 217-226. doi:10.2307/259271
- Shepherd, D. A. (2015). *Party on! A call for entrepreneurship research that is more interactive, activity based, cognitively hot, compassionate, and prosocial*. *Journal of Business Venturing*, 30(4), 489-507.
- Steyaert, C. (2007). 'Entrepreneurship' as a conceptual attractor? A review of process theories in 20 years of entrepreneurship studies. *Entrepreneurship & Regional Development*, 19(6), 453-477. doi:10.1080/08985620701671759.
- Sutter, C., Bruton, G. D., & Chen, J. (2019). *Entrepreneurship as a solution to extreme poverty: A review and future research directions*. *Journal of Business Venturing*, 34(1), 197-214. doi:10.1016/j.jbusvent.2018.06.003
- Watson, T. J. (2013). *Entrepreneurial action and the Euro-American social science tradition: Pragmatism, realism and looking beyond 'the entrepreneur'*. *Entrepreneurship & Regional Development*, 25(1-2), 16-33. doi:10.1080/08985626.2012.754267
- Welpe, I. M., Spörrle, M., Grichnik, D., Michl, T., & Audretsch, D. B. (2012). *Emotions and opportunities: The interplay of opportunity evaluation, fear, joy, and anger as antecedent of entrepreneurial exploitation*. *Entrepreneurship Theory & Practice*, 36(10), 69-96. doi:10.1111/j.1540-6520.2011.00481.x
- Wiklund, J., Davidsson, P., Audretsch, D. B., & Karlsson, C. (2011). *The future of entrepreneurship research*. *Entrepreneurship Theory & Practice*, 35(1), 1-9. doi:10.1111/j.1540-6520.2010.00420.x
- Wiklund, J., Wright, M., & Zahra, S. A. (2018). *Conquering relevance: Entrepreneurship research's grand challenge*. Los Angeles, CA: Sage Publications.
- Williams, D. W., Wood, M. S. J., Mitchell, R., & Urbig, D. (2019). *Applying experimental methods to advance entrepreneurship research: On the need for and publication of experiments*. *Journal of Business Venturing*, 34(2), 215-223. doi:10.1016/j.jbusvent.2018.12.003
- Wood, M. S., & Williams, D. W. (2014). *Opportunity evaluation as rule-based decision making*. *Journal of Management Studies*, 51(4), 573-602. doi:10.1111/joms.12018
- Zahra, S. (2007). *Contextualizing theory building in entrepreneurship research*. *Journal of Business Venturing*, 22(3), 443-452. doi:10.1016/j.jbusvent.2006.04.007