ENTREPRENEURSHIP AND PSYCHOLOGICAL DISORDERS IN ACADEMIC PUBLISHING

Juan Uribe-Toril, University of Almeria
Jose Luis Ruiz-Real, University of Almeria
Francesco Ceresia, University of Palermo
Jaime de Pablo Valenciano, University of Almeria

ABSTRACT

The role that different psychological disorders play in entrepreneurial intentions and behaviors is of increasing interest and importance to the scientific community. Scholars have undertaken a range of investigations that demonstrate that individuals with specific psychological disorders should be treated differently to other individuals. Some studies contribute to psychological disorders shifting from a disability paradigm to a paradigm of diversity. The main objective of this work is to carry out a preliminary analysis of the literature published about the relationship between psychological disorders and entrepreneurship. For this purpose, a bibliometric methodology and a fractional counting method of clustering were developed, identifying and analyzing 108 documents as recorded in the Web of Science and Scopus databases on the relationship between entrepreneurship and psychological disorders. This paper represents a contribution to the state-of-the-art of research on entrepreneurship and psychological disorders, identifying trends and proposing future topics and research lines.

Keywords: Worldwide research, Psychological disorder, ADHD, Entrepreneurship, Disability.

INTRODUCTION

In the last five years, scholars have evinced growing interest in the role that some psychological or mental disorders play in entrepreneurial intentions and behaviors. Important entrepreneurship journals such as Journal of Business Venturing Insights, Journal of Business Ethics, Academy of Management Perspectives, Academy of Management Executive, Small Business Economics, Journal of Business Venturing and International Review of Entrepreneurship have published several studies that show a lowest common denominator: the attempt to highlight that some psychological disorders not only do not impede the development of an entrepreneurial career but rather seem to facilitate entrepreneurial success (Lerner et al., 2018; Verheul et al., 2015; Wiklund et al., 2018; Yu et al., 2018). The flourishing of this literature seems particularly noteworthy as it represents an appreciable and noble attempt on the part of scholars to demonstrate through empirical and experimental evidence how individuals with certain psychological disorders should simply be considered as different compared to others (the so-called “normal ones”) rather than being considered to have a disability, that is having a mental condition that precludes or limits their options and possibilities (Maritz & Laferriere, 2016; Wiklund et al., 2018).
From said perspective, these studies can significantly contribute to psychological disorders shifting from a disability paradigm to one of diversity. Mackelprang et al. (2016) highlighted that the main obstacle that individuals with mental disorders must overcome is the devaluation by society together with the lack of economic and professional resources necessary to facilitate their full social and occupational integration. An increasingly robust and extensive body of published research on this subject certainly has the potential to demonstrate how individuals with psychological disorders have the potential and capabilities that, if properly stimulated and valued, can contribute to them being productive and helpful members of the community.

The values and beliefs that a community expresses about what constitutes a psychological disorder significantly affects all phases of the management cycle of disabled people, from their assessment to the evaluation of the results produced by interventions. The more these values and beliefs translate into prejudices and stereotypes, the more difficult is the process of integrating individuals with psychological disorders, a process that can never be said to be fully concluded until these individuals are considered and treated as full members of the community (Mackelprang et al., 2016). However, in our over-diagnosed and over-medicated culture, scholars, professionals and social entrepreneurs have mainly focused on the negative aspects of psychological disorders, although there are some that stress that some disorders can be leveraged and considered to be an asset rather than a liability when it comes to entrepreneurship (White & Shah, 2011; Wiklund et al., 2018). This approach is also fostered by authoritative scientific sources. The most widely used system for classifying mental or psychological disorders—the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) provided by the American Psychiatric Association (2013) defines a disorder as “a syndrome characterized by clinically significant disturbance in an individual’s cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning”. In most of the literature, the concept of psychological disorder seems to be intrinsically linked to the concept of dysfunction.

It is therefore not surprising that several studies stress that mental illness is actually a bigger barrier to (self-) employment than physical disabilities and employment discrimination and is reported to play a significant role in the high rate of unemployment among those diagnosed with a psychological disorder (Heather, 2006; Pescosolido, 2013).

The main objective of this work is to carry out a preliminary analysis of the literature on the relationship between psychological disorders and entrepreneurship, paying particular attention to the role that entrepreneurship education programs can play in supporting individuals with psychological disorders to start their own businesses.

METHODOLOGY

Bibliometric studies allows looking at the impact of articles on research by using quantitative analysis and statistics from citation databases of peer-reviewed literature. The results helps to identify trends and gaps on research. The Web of Science Core collection (Clarivate Analytics) and the Scopus databases were used in this study. The search sequence included the following keywords: entrepren* disab* psych* or entrepren* pysch* disorder* or entrepren* mental* disorder* or entrepren* ADHD. These topics described a wide range of psychological disorders and gave satisfactory results. The 113 documents found contain these words in either
the title, abstract, author keywords, EMTREE medical terms (Embase subject heading) or MeSH (Medical Subject Heading).

The use of the asterisk guarantees better search results through the addition, of not only one term, but an entire the family of words (e.g. entrepren* would include entrepreneurship, entrepreneurial, entrepreneur…). The omission of quotation marks also allows for more flexible searching. The analysis was performed excluding documents published in 2019. After applying the filters, a final total of 108 documents were examined one by one to ensure that the selection only contained papers that matched the research parameters of this research paper.

Using the visualization network created with VOSviewer software, clusters and the evolution of trends can be observed. Data obtained from the Scopus database was also used for the mapping. VOSviewer constructs a map based on a co-occurrence matrix. The construction of the map is a process that consists of three steps. In the first step, a similarity matrix is calculated based on the co-occurrence matrix. In the second step, a map is constructed by applying the VOS mapping technique to the similarity matrix. And finally, in the third step, the map is translated, rotated, and reflected (Van Eck & Waltman, 2010).

RESULTS

Although the first publication on entrepreneurship and psychological disorders in scientific journals is from 1970, “Failure of a moral enterprise: Attitude of the public toward mental illness” (Sarbin & Mancuso, 1970), according to the Scopus and WoS databases, publications on these topics do not seem to be of much relevance until 2015. That being said and despite the very broad range of terms and criteria used in the search for relevant works, this topic is not addressed in any meaningful way in the scientific literature. In fact, the year with the highest number of articles is 2018 with a mere 14 papers in Scopus and nine in WoS.

However, with regards to the number of citations, this figure increases significantly from the beginning of the 21st century, evidence of the social relevance of the topic and greater interest on the part of the scientific community. The most cited document (Table 1) is Emily Martin’s book (Martin, 2009): Bipolar expeditions: Mania and depression in American culture, a multidisciplinary research about mania's appeal and how it weighs on the lives of Americans diagnosed with manic depression.

Two important research streams can be identified in the literature. The first is related to studies about start-ups and the creation of companies created around the treatment of these dysfunctions, as well as different models and theories around the phenomenon. An example of this is the work by Rosen & Davison (2003), “Psychology should list empirically supported principles of change (ESPs) and not credential trademarked therapies or other treatment packages”, in which the authors argue that any authorized body that represents the science of psychology should work to identify the principles of change (PEP) with only empirical support. With regards to the number of citations, other relevant publications within this field are Sugarman (2015); Adlaf & Zdanowicz (1999); Aro et al. (1995); Kaufman et al. (2009).

The other and more recent stream focuses on the creation of companies by entrepreneurs with different types of psychological disorders. The most cited article along this line of research is by Verheul et al. (2015). They confirm that individuals who exhibit behavior associated with Attention Deficit and Hyperactivity Disorder (ADHD)—a psychological disorder characterized by inattentiveness and hyperactivity—are more likely to have entrepreneurial intentions. Thus, this research highlights the importance of behavioral tendencies when making entrepreneurship
decisions which are associated with developmental disorders. Along the same lines, other relevant articles include those by Stephan & Roesler (2010); Nicolaou et al. (2011); Shane et al. (2010); Lerner (2016); Wiklund et al. (2017) and Thurik et al. (2016).

Table 1

<table>
<thead>
<tr>
<th>Title/Year</th>
<th>Authors</th>
<th>Journal</th>
<th>Citations (WoS/Scopus)</th>
</tr>
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<tbody>
<tr>
<td>Gender, relationships, and crack cocaine: A content analysis (1994)</td>
<td>Henderson et al. (1994)</td>
<td>Research in Nursing &amp; Health</td>
<td>31/39</td>
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The different perspectives from which these topics are analyzed encompass numerous research knowledge areas. In fact, many publications are classified in more than one area. Thus, it can be observed that, in Scopus, more than half of the publications on entrepreneurship and psychological disorders are framed in the field of Medicine (50.93%), in addition to other areas such as Psychology (19.44%), Health Professions (6.48%), and Neuroscience (4.63%). In contrast, there are research studies related to the Social Sciences (25%), Business, Management and Accounting (16.67%), Arts and Humanities (9.26%), and Economics, Econometrics and Finance (6.48%). With regards to the WoS database, Business Economics clearly leads the number of publications (43.18%), followed by Psychology (25%). This confirms the existence of these two publishing trends on the topic, one focused on the field of medicine and the study and treatment of psychological disorders, and the other aimed directly at researching entrepreneurship by people with these characteristics, contributing to an understanding of their disposition towards entrepreneurship, and their behavior in various management issues, such as
their level of risk aversion. It is also noteworthy that Educational Research only represents 4.55% of the total of publications on this topic.

Similarly, the most prolific journals in terms of publications on entrepreneurship and psychological disorders are split between the fields of Health Sciences (e.g., American Journal of Orthopsychiatry, European Journal of Epidemiology, Professional Psychology Research and Practice) and Business (e.g., Small Business Economics, Academy of Management Perspectives, Journal of Business Venturing and International Review of Entrepreneurship).

However, the most prolific authors are professors of Economics and Business, whose research focuses on entrepreneurship and business management. Thus, the most relevant authors on this topic, with regards to the number of publications and citations are: Prof. Ingrid Verheul (Centre for New Business Venturing and Entrepreneurship at Rotterdam School of Management, The Netherlands), whose research interests cover different aspects of entrepreneurship; Prof. Daniel Lerner (Universidad del Desarrollo-Institute of Entrepreneurship, Chile), whose most cited work in this field is “Behavioral Disinhibition & Nascent Venturing: Relevance and Initial Effects on Potential Resource Providers” (Lerner, 2016); Prof. Roy Thurik (Erasmus School of Economics-Erasmus Research Institute of Management, The Netherlands), teaching entrepreneurship and economics, one of his main projects is about ADHD and Entrepreneurship; and Prof. Johan Wiklund (Whitman School of Management, Syracuse University, U.S.), whose research interests include entrepreneurship and mental health; Prof. Michael A. Freeman (University of California San Francisco, U.S.), with an exceptional work entitled “The prevalence and co-occurrence of psychiatric conditions among entrepreneurs and their families” (Freeman et al., 2018).

The United States leads the ranking of the most influential countries publishing on this subject, being the country with the highest number of publications and citations, followed by United Kingdom and Germany. Other relevant countries are The Netherlands, Canada, France, Spain and Chile. Finally, regarding the entities that have promoted and supported the most research on these topics, some of the most notable include: Syracuse University and University of California San Francisco (U.S.), Erasmus University Rotterdam (Netherlands), Montpellier Business School and Languedoc Roussillon Universites (France), Universidad de Deusto (Spain), and Universidad del Desarrollo (Chile).

Clusters and Trends

In order to identify the main interactions between the most frequent terms on entrepreneurship and psychological disorders, a map based on the co-occurrence of the authors’ keywords was developed using a fractional counting method (Figure 1). The minimum of occurrences of a keyword was established as five for the 1,179 keywords found. Thus, 41 words were identified, classified in four groups or clusters, with different related subjects and topics identified.
FIGURE 1
MAP BASED ON CO-OCCURRENCE ON AUTHORS’ KEYWORDS (SCOPUS)

The cluster in red (14 items) addresses two main lines of research, one directly related to the field of entrepreneurship, economics and business, with terms such as: entrepreneurship; commercial phenomena; economics; employment; consumer; organization and management. The second area of research is related to mental health with terms such as: mental disorders; mental disease; mental health; health care organization; mental health care; mental health services and social aspect.

The cluster in green (11 items) focuses, on the one hand, on research on specific geographies including countries such as the United States and the United Kingdom; and on the other hand, on macro aspects, such as strategic governmental decisions with terms that include: politics, history, government and education. Finally, a field related to research in the Health Sciences includes the following terms: medical research and social psychology, review and priority journal.

The cluster in blue (9 items) includes topics related to market segmentation, analyzing specific targets and terms such as male, female, adult, and adolescent. A second group of terms within this cluster includes research on clinical studies related to drug use. Thus, the following terms may be found: controlled study, major clinical study, substance-related disorder and drug abuse.
The final cluster in yellow (7 items) addresses the field of Psychology, with terms such as psychology, or psychological aspect, while at the same time addressing the issue of disability and different modes for improving the quality of life. This final theme includes terms such as: disability, disabled persons, aged, decision making and quality of life.

In relation to the most important trends, Figure 2 shows a map of the evolution of the most frequent research terms with the most recent trends highlighted in yellow. Thus, trends focus on different lines with entrepreneurship being the central theme. Therefore, different research lines arise, such as employment and self-employment, a consideration of potential compensatory skills, assistive technology, and case studies. Other streams focus on aspects related to mental health, such as symptoms, fatigue, or depression. In addition, a more specific line addresses disability and psychiatric disabilities.

Finally, two main research streams can also be found in the latest trends. One of them is related to psychological disorders, mainly through neuroscience, and related to very common and current problems such as anxiety, impulsivity, ADHD, or ADHD-like behavior. The other research stream is mainly focused on social entrepreneurship. In either case, it is important to note the growing importance of cross-disciplinary projects.

**FIGURE 2**
**MAP BASED ON CO-OCCURRENCE AND EVOLUTION IN RECENT YEARS (SCOPUS)**
DISCUSSION

As a result of the bibliometric analysis and identification of clusters, it can be noted that the studies on the relationship between entrepreneurship and psychological disorders are articulated around three main areas:

Area 1: The Employment and Self-Employment of the Individuals with Psychological Disorders as a Consequence of the Process of their De-Institutionalization

Because of the process of de-institutionalization of people with mental disabilities, which started in several Western countries in the mid-1950s and 60s, mental health workers and public policymakers had to manage the process of their integration into the community, including through job placement programs. The publication of the paper "Failure of a moral enterprise: Attitude of the public toward mental illness" (Sarbin & Mancuso, 1970) is framed in this context. The article highlights how after approximately 15 years from the start of the de-institutionalization process of the psychiatric patient, prejudice, negative evaluations or even the rejection of the community towards people with psychological disorders remained strong. The data seems to indicate that even today, about 60 years after the start of this process, individuals with mental disorders are described as being "in" the community rather than "of" the community, highlighting how prejudices against these individuals remain in the population as well as the distrust of the sustainability of their real and functional (re)insertion in the community.

This field of research, although only linked indirectly to the theme of the relationship between "psychological disorders" and "entrepreneurship", highlights how:

a) The progressive process of de-institutionalizing people with mental disabilities represented a historically key step underlying the subsequent problems of their integration into the world of work, as well as the subsequent trend to consider entrepreneurial activity as a realistic prospect for their employment.

b) Although society has become more willing to discuss and address issues related to the reintegration of people with mental disabilities into the community, the stigma towards these people is alive and well and remains at a relatively similar intensity. In summary, there appears to be little change in the perception by the members of the community who are not considered to be "experts" of individuals with psychological disorders.

Area 2: The Possibility that Individuals with Psychological Disorders Can Undertake Entrepreneurial Activities

Among the pioneering studies in this field of research, the article by Krupa (1998) is worth mentioning. It highlights how the development of the mass consumption of goods and services can facilitate the creation of companies directly managed by individuals with psychological disorder. Another article, by Prince (2005), emphasized the role that microcredit can play in fostering the entrepreneurial initiative of people with psychological disorders. Since then, there has been significant growth in the number of published research exploring the sustainability of an entrepreneurial career for individuals with specific psychological disorders, including dyslexia (West, 2005; Logan, 2009), post-traumatic stress (P'Olak et al., 2007), ADHD (Kirby & Honeywood, 2007; Wiklund et al. 2018), manic trends (Johnson et al., 2015), the functioning of the behavioral inhibition system (Geenen et al., 2016), behavioral disinhibition (Lerner, 2016), and obsessive-compulsive personality disorder (Wolfe & Patel, 2017). Taking
the reasoning to its extreme consequences, Wiklund et al. (2018) hypothesize how ADHD can even be considered as advantageous for entrepreneurial activity.

**Area 3: The Role of Entrepreneurial Education in Supporting Individuals with Psychological Disorders to Undertake Entrepreneurial Activities**

Although the role of entrepreneurship education in fostering entrepreneurial intentions and performances has been widely explored in the scientific literature (Bae et al., 2014; Ceresia, 2018), there is a scarcity of studies on the contribution that entrepreneurial education could have in favoring the entrepreneurial career of individuals with mental disorders. Moreover, these studies are poorly represented in entrepreneurship journals.

In the first article that timidly begins to address the issue, the author wonders if “it may well be the case that there are more disabled people and people with learning difficulties who would like to benefit from learning opportunities in entrepreneurship than presently have the opportunity” (Pavey, 2006). Harris et al. (2013) highlight that social entrepreneurship can be an effective model of self-employment for disabled people if policymakers and professionals working in the field of vocational rehabilitation focus their interventions on education, training and information. Mandiberg (2016) highlights how individuals with psychological disorders can be assisted to undertake an entrepreneurial activity if they are included in a Business Incubator. Likewise, Dakung et al. (2017) show that entrepreneurship education, pedagogy and course content make a significant contribution to the entrepreneurial activity of disabled individuals.

**CONCLUSIONS**

It is important to point out the presence—even today—of a strong prejudice (stigma) towards people with mental disabilities that has been directing public policies and the actions of public and private operators increasingly towards the protection and care of such individuals rather than towards programs aimed at facilitating their autonomy. Initiatives aimed at the full social integration of people with mental disabilities through employment and—even more specifically—the launch of entrepreneurial initiatives represent—ar even today, the exception that confirms the rule. The effects that different psychological disorders have on entrepreneurial intentions and behaviors are of growing interest for the Academy, mainly from 2015. Several investigations determine the importance of people with specific psychological disorders being treated differently from other people in order to optimize their potential, thus shifting from a disability paradigm to a paradigm of diversity.

The different perspectives from which these topics are analyzed encompass numerous fields, such as Social Sciences, Business, Management and Accounting, Medicine, Psychology, Arts and Humanities, and Economics, Econometrics and Finance. Focused on the new trends, two main research streams can be identified. The first one is directly related to psychological disorders and neuroscience, addressing current topics such as anxiety, impulsivity, or ADHD behavior. The other one is focused on social entrepreneurship. Thus, it is important to highlight the growing importance of cross-disciplinary projects.

This article contributes to the scientific literature by identifying the interrelations between mental disorders and different areas related to entrepreneurship, as well as by pointing out various trending areas of study which could serve as a guide for future lines of research.
Finally, a limitation of this research analyzing the role of entrepreneurial education in supporting individuals with psychological disorders to undertake entrepreneurial activities, is represented by the fact that, in several articles, authors do not make a clear distinction between physical and psychological disabilities or disorders, thus not facilitating an effective differential analysis between several forms of disability that could have a distinctive impact on the entrepreneurial intentions as well as the employability needs and prospects of these individuals.

REFERENCES


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