




SYSTEMATIC REVIEW

Resilience and entrepreneurship: a systematic review [version 1; peer review: awaiting peer review]

Andrew Kweku Conduah ^{1,2}, Mary Naana Essiaw (PhD)³

¹Institute of Work, Employment & Society, University of Professional Studies (UPSA), Accra, Greater Accra Region, Ghana

²Regional Institute for Population Studies, University of Ghana, Accra, Greater Accra Region, Ghana

³Institute of Work, Employment & Society (IWES), University of Professional Studies (UPSA), Accra, Greater Accra, LD, Ghana

v1 First published: 23 Mar 2022, 11:348
<https://doi.org/10.12688/f1000research.75473.1>

Latest published: 23 Mar 2022, 11:348
<https://doi.org/10.12688/f1000research.75473.1>

Abstract

Background: The concept of resilience runs through an array of disciplines, consisting of engineering, public health, ecology, psychology, sociology, disaster management, and business administration. Researchers have tried to explain the relationship amongst connected ideas such as resiliency, adaptability, transformability, and vulnerability but their varied definitions and differences between them remain fuzzy. There are two reasons why resilience theory is important in entrepreneurship. Firstly, researchers generally employ the term resilience to mean consciousness, determination, perseverance, or self-value to justify why some entrepreneurs and their firms achieve better results than their non-resilient counterparts. Secondly, there are cognitive and behavioral entrepreneurial traits that strengthen a firm's capability to adapt to varying conditions.

The aim of this study is to review the literature that intercepts resilience and entrepreneurship. The study will attempt to identify scholarly conversations to construct notions of resilience and entrepreneurship. Therefore, limitations in the current literature will be examined and directions for future studies would be highlighted.

Methods: This paper adopted a systematic interdisciplinary review of relevant studies that is patterned using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA).

Results: The scholarly works selected from the literature portrayed six emerging colloquies or research tributaries that intercept entrepreneurship and resilience:

- Resilience as a function of entrepreneurial individuals or firms,
- Resilience generating entrepreneurial intentions,
- Entrepreneurial behavior boosting organizational resilience and,
- Resilience in the framework of entrepreneurial failure,

Open Peer Review

Approval Status *AWAITING PEER REVIEW*

Any reports and responses or comments on the article can be found at the end of the article.

- Entrepreneurship and culture,
- Resilience as a process of recovery and transformation.

Conclusions: This study serves as a backdrop for the emergence of more nuanced debates on the relationship that exists between different streams of conversations on resilience. In addition, this paper shows how entrepreneurs contribute towards promoting a constructively sustainable means for socio-economic development.

Keywords

Entrepreneurship, Resilience, Entrepreneurial Resilience, Entrepreneurial Self-Efficacy, Resiliency.

Corresponding author: Andrew Kweku Conduah (andrew.conduah@upsamail.edu.gh)

Author roles: **Conduah AK:** Conceptualization, Data Curation, Formal Analysis, Funding Acquisition, Methodology, Writing – Original Draft Preparation, Writing – Review & Editing; **Essiaw (PhD) MN:** Conceptualization, Resources

Competing interests: No competing interests were disclosed.

Grant information: The author(s) declared that no grants were involved in supporting this work.

Copyright: © 2022 Conduah AK and Essiaw (PhD) MN. This is an open access article distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

How to cite this article: Conduah AK and Essiaw (PhD) MN. **Resilience and entrepreneurship: a systematic review [version 1; peer review: awaiting peer review]** F1000Research 2022, **11**:348 <https://doi.org/10.12688/f1000research.75473.1>

First published: 23 Mar 2022, **11**:348 <https://doi.org/10.12688/f1000research.75473.1>

Introduction

An entrepreneur is a person that has a unique talent for recognizing opportunities and has the intelligence to mobilize funds, normally from others with the aim of exploiting identified opportunities (Sánchez, 2011). Entrepreneurship is gaining traction because entrepreneurs have the power to create employment and contribute immensely to the economic development of nations through the establishment of new firms (Tang & Koveos, 2004). Entrepreneurs, through their economic expansion activities, identify and exploit new products, processes or markets that tend to be confronted by multiple obstacles and uncertainties with respect to outcomes. Also, in entrepreneurial environments, decision making is often shrouded with errors or misjudgments mainly arising out of the Pareto principle or imperfect market information (Carson, 2000). This usually result in the “muddle through” or incremental approach in planning requiring entrepreneurs to adjust their goals and strategies in order to stay afloat as they explore new ventures.

Markman *et al.* (2004) stressed the importance of resilience as a valuable advantage to aid entrepreneurs in overcoming repeated obstacles that are usually faced with varied uncertain outcomes. Therefore, entrepreneurs are seen as resilient when in the process of exploring or exploiting opportunities and the unexpected happens, they are either able to overcome the challenge or modify it accordingly and take advantage of the new situation. Resilience as a construct is widely recognized to be colored with complexities that create significant challenges for researchers when they attempt to develop operational definitions of the term ‘resilience’ (Luthar *et al.*, 2003). On this, there exist so many scales for quantifying resilience, but they have not received any form of universal validation (Windle *et al.*, 2011). As such, scholars who conduct studies on resilience have very little evidence to justify their choices of certain resilience measuring scales and sometimes may adopt scales that are relatively inappropriate for the study of a specific population.

In their writing at the turn of this millennium, Bruyat and Julien (2001 cited in Kinoti *et al.*, 2017) noted the relevant role of entrepreneurship as well as its challenges. The Small Business Administration’s Report titled, Distorting the Interest of Small Business (Shapiro & Goodwin, 2012) noted that about 66% of businesses last beyond two years and about 50% of businesses last for at least five years. In consonance with this, Brownlee (2014), as cited Javadian *et al.* (2018), revealed that closer to 80% of startups flop due to a series of factors, such as entrepreneurs who do not have mastery over industry pricing conventions and have very little training when it comes to record-keeping. Brownlee also identified a lack of expertise in business management such as poor lending habits, which accounts for close to 76% of the reasons for the failure of small-scale businesses. Correspondingly, the term entrepreneurial resilience can be defined in line with the suggestion of Welsh (2014) as a rendition for any experience of recuperation or “bouncing back” after misfortune at any geographical or specific time scale it could be a person, group, an enterprise, a community, commerce, or ecosphere. Researchers in the entrepreneurship discourse domain can choose to redefine the various scales of measurement as far as research on resilience is concerned thereby establishing a framework of definite cognition for the experiences of resilience, as in the context of this study.

A brief history of resilience

Resilience is a very well-known phenomenon in the field of psychology and for a long time the concept has been viewed negatively by psychologists (Shae-Leigh & Nagash, 2019). Not long after World War II, the National Institutes of Health started to sponsor explorations related to psychiatric disorders. Psychotherapists became devoted historians of brainsickness investigating all aspects while constructing complex domains and sub-domains of disorders (Reivich & Shatte, 2002).

Thus, historically, researchers have concentrated on the problem by focusing on the medical model that spread to other scope on this subject. Scholars construct resilience as coping factors that enable one to overcome an assemblage of risk components like family affliction problem, ill health, infection, and long-term destitution. The focus here was a deficit model structured to get an understanding of processes through which individuals bridge the gaps between their shortfalls or risk factors and the steps that need to be taken to switch to survival mode. In 1988, the president of the American Psychological Association, Martin Seligman, admonished a shift in thinking from the deficit model to the strength model otherwise known as positive psychology (Reivich & Shatte, 2002). This was a paradigm shift that aimed at (1) widening knowledge on human strengths through the evolution of codification frameworks as well as techniques to quantify these strengths and (2) to invest this awareness into appropriate schemes and support-systems to boost the capacities of individual participants rather than restore their shortcomings (Reivich & Shatte, 2002). According to Pearsall (2003) positive psychology emphasizes three dimensions: positive experiences, like cheerfulness, satisfaction, delight, and contentment; positive individual traits, such as in the form of personality traits, skills, and capabilities; and positive institutions, including households, educational establishments, commercial enterprises, social factions, and humanity as a whole.

In consonance with the above and in the field of psychology, global attention on resilience as an individual trait gained traction when Werner and Smith published their (1992) paper entitled *Overcoming the Odds: High Risk Children from Birth to Adulthood*. Here, the researchers closely monitored the growth of some 505 children who were indigenous to

Kauai Island, Hawaii. This study was conducted for over three decades. The study discovered that closer to 75% of male and female children in this group were said to be high risk children due to their early exposure to poverty and experience of average to extreme levels of postnatal distress. Secondly, that the family environment these children lived in was dominated by various levels of conflicts, marital dissolutions, and parental alcoholism or psychiatric disorders (Werner & Smith, 1992). The above findings tilt towards the deficits model of psychology. Interestingly, the study revealed that about one-third of this category of high-risk children, developed to be efficient young men and women adored by their fellows, who worked well, socialized properly, and had great prospects. Also, none of the children in this category had learning or behavioral problems during childhood or adolescence. They were successful both in their schooling and personal lives, taking advantage of all opportunities presented to them after high school. Werner and Smith (1992) concluded that their work is a microcosm of hope for those plagued with adversity. Given a society, people with recurrent misfortunes have the ability to move beyond the sustenance condition, progress through sustenance modes, sail through the recuperation mode, and acquire the needed vigor to progress into the realm of resilience.

Following Werner and Smith's work, many researchers who work in the realms of positive psychology followed and continue to support, with practical discoveries, the conception that resilience is far from being a fixed-trait phenomenon. Indeed, it is expansive, can be acquired, and be imparted as well. Therefore, entrepreneurs can adopt this expansive evolutionary model in their careers and individual lives.

Rationale of the present study

We propose to conduct a review of the extant literature that intercept resilience and entrepreneurship. Current literature shows that resilience is personified as individual traits of entrepreneurs owing firms or businesses. However, we take a more holistic approach to bring out all the various positive and negative dimensions of entrepreneurship and resilience.

Objectives

- I. Investigate how entrepreneurial behaviors support business resilience.
- II. Refine the concept of entrepreneurial resilience as presented in extant literature.
- III. Establish/identify the cultural factors that promote resilience of entrepreneurs in developed regions and developing regions.

Methods

Systematic literature review (SLR)

This review used the SLR method to study works that explored the interface between resilience and entrepreneurship from January 2010 to November 2019. A literature review of this nature (SLR) is characterized by “explicit, rigorous, and transparent methodology” (Greenhalgh *et al.*, 2004: 582). The SLR approach is regularly employed to study the authority of knowledge connected to a subject matter (Ford *et al.*, 2011). The motive for this style is that, the SLR approach is said to be meticulous/thorough, structured/organized and robust/vigorous (Williams & Krasniqi, 2018). In this way, it becomes suitable to determine emerging trends in the literature. Additional potency of SLR is its knack to discover niche and offer facts from thorough reviews with empiricism found in a certain literature databases, using clearly spelt out research objectives, aims, and techniques (Williams & Krasniqi, 2018).

To achieve such goals, firstly, an outline is provided of how the collection of existing literature (mostly published works) which constitute the bedrock of the study, was carried out. Secondly, an illustration of how the six distinct exploration streams were derived is also provided to expatiate on how scholars systematically engage the extant literature and make reports on the features that best explain each engagement.

Protocol

In this review, the procedure adopted follows the Preferred Reporting Items for Systematic Reviews and Meta- Analyses (Moher *et al.*, 2015).

Literature search strategy

Databases

To ensure a wide coverage of the literature on resilience and entrepreneurship, both qualitative and quantitative studies were examined. Underlining the motivation for the choice of these two methods was that it boasts of having the ability to

discover features that either one of the approaches may have missed (Bryman, 2017). Qualitative research is often keen on exhaustive understanding of the subjective experience of participants and behavior of particular groups in given contexts. Yet, this manner of research has potential drawbacks because sometimes, both objectivity and reliability are lost in an attempt to find causality of the findings in relation to other contexts. In contrast, quantitative research is usually able to draw more generalized conclusions about behavior in populations and provide answers to specific research questions. The criticism is that it overlooks the uniqueness of people's standpoint, or human experience and behavior, giving basic answers drawn on variables that can only be quantifiable.

Both qualitative and quantitative research papers were searched in the following databases: Emerald Insight, Ebscohost and Google Scholar between January 2010 to December 2019. These were selected for their broad appeal and up-to-date cross-disciplinary scholarly works (Spires *et al.*, 2014). In gathering the data for the review, the focus was on works published between 1st of January 2010 to December, 2019. This period was selected because it aptly portrays the concept of resilience intercepting with entrepreneurship in its burgeoning state. Emerald Insight happens to be one of the recognized publishers of academic journals and books in the fields of management, business and education, library studies, health care and engineering. Ebscohost is also a well-known reservoir research database for academic research, electronic-journals, magazines subscription, electronic-books and discovery service for academic libraries, public libraries among others. Google Scholar has an array of literature from various disciplines and is freely available. Thus, by using these three databases, the review adequately captured what existing research, especially in the field of business, say on resilience and entrepreneurship.

Search terms

Within each database, a combination of the following key words or bookmarked exploration terminology was applied "entrepre* AND resilien*" (the exact outcome of the search depended on what type of search engine used) to recognize publications that have the terms resilience, entrepreneurship, as well as related expressions or words like entrepreneurial, entrepreneur, resiliency or resilient in the titles of the publications, keywords, or abstracts. The scope was limited to works published in English between January 2010 and December 2019.

Study selection

Criteria for inclusion and exclusion

The review included studies that were found to pertain to the intersection between resilience and entrepreneurship. The concentration was on original papers and articles that had been peer reviewed. Articles selected were only in English and passed ethical reviews in their respective institutions to ensure conformity with what has been outlined in the Helsinki Declaration (Rickham, 1964). Limitation was not placed on search for publication to any specific academic field. Synopsis of the papers collected were studied (or sometimes the complete work was studied, especially in situations where the classification was tentative) in order to authenticate the relevance of the paper to the prospective review. This manual searching was used to make a decision as to whether or not to use such a work as part of the final data. The basic variable for determining the incorporation or elimination of a particular paper in the data set was the extent to which the work discusses the interface between entrepreneurship and resilience. Detailed criteria for exclusion were: studies with multiple publications and those that actually failed to explore resilience and entrepreneurship in the course of their investigation and articles that were in languages other than English. All publications that were selected as part of the assorted data for this study either openly establish that resilience has influence on entrepreneurship or contrarily assert that entrepreneurship influences resilience. On the other hand, works that were discarded mostly did not make any correlation between the two phenomena or did not attempt to do any comprehensive discussion of the works at all. Madichie and Hinson (2013) who stated a participant's "resilience as a mother" in their abstract, but, do not discuss resilience (or related terms) in the rest of their study is one of such discarded papers. Similarly, resilience generally just stipulated the sustenance or recuperation from commercial crisis, without giving explanations on the role of entrepreneurship in the entire process. In all, 1,400 research works were excluded and all of them either did not establish a link between the two concepts or the discussion was quite weak. We search using the method reported in the PRISMA flow diagram (Figure 1) (Conduah, 2022) to reduce the element of bias and to comply with all outlined steps. The reviewers went to search engines such as SAGE, emeraldinsight.com, Taylor and Francis, Research gate, Elsevier, and JSTOR and selected the applicable articles for analyses.

The details of retrieved articles subjected to abstract and full reading and the number included in the study are shown in Figure 1.

Strictly going by the inclusion and exclusion procedure outlined above, the selected data was reviewed for the final analysis. The analytical process was in line with the Cochrane guidelines (Higgins & Elliott, 2011). Accordingly, 32 scholarly works on resilience and entrepreneurship were selected and used as primary data for the final analysis.

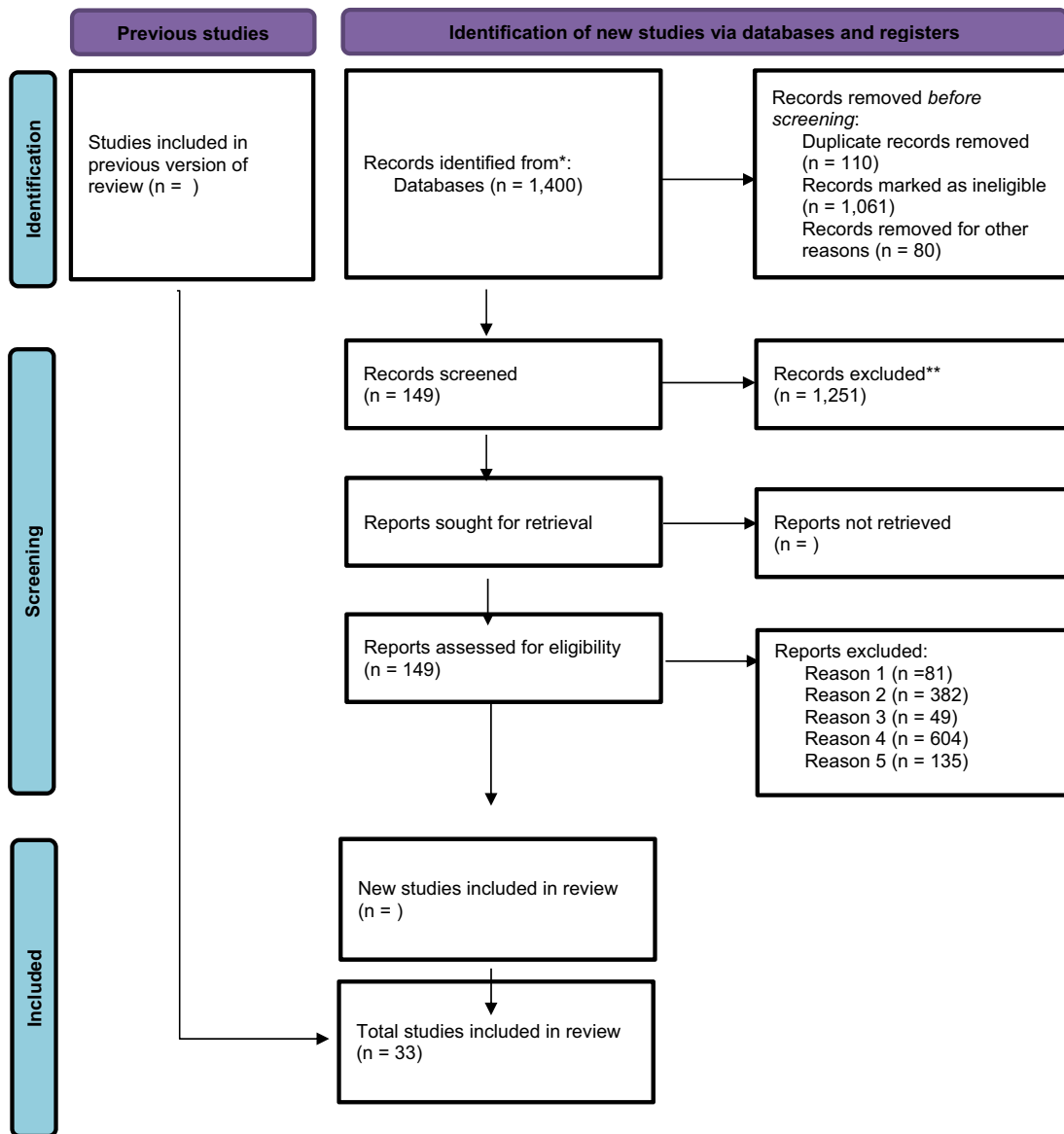


Figure 1. PRISMA chart showing the screening and selection process of publications. Data were systematically extracted using a designed data extraction form based on the objectives of the study. For each publication, data extraction was conducted manually.

Data collection and items
Data analysis and synthesis of studies

Meta-analysis was not performed in this review, due to the differing study designs employed by the articles chosen, example, quantitative, qualitative and mixed methods. In addition, the studies included in the review differed widely in design, variables measured, data requirements and study objectives. For this reason, it was difficult to summarize and compare results from the studies. There were wide methodological differences across the studies selected for the review, so it was not possible to conduct a unified synthesis of their findings. Thus, the analysis was done using thematic and content analysis. Given the stark differences in the characteristics of the studies, the results of each study were described independently and comparisons, across similar conversations, were to generate common themes or research tributaries.

Each study was examined based on characteristics of the work and taken through the various codification processes particularly by putting the final data into categories. The categorization process was dependent on the frequencies of citation of distinctions for what *Carpenter et al. (2001)* refer to as “resilience of what to what?” According to them, the “of

what” feature makes reference to the major stage of review, and also a concept the study sought to examine or discuss (Babbie, 2014; Mirriam, 2009). Closer to the extensive literature on resilience, Rose’s (2004) study concentrated on entrepreneurial resilience on the individual level, organizational level, or on macro systemic group, regional, as well as economic levels. The current study tried to categorize the components based on the external circumstances in an attempt to satisfy the “resilient to what” question. As far as existing literature on resilience is concerned, extrinsic circumstances can be instantaneous or interim (for instance: earthquakes, flash flooding etc.) or entail perennial misadventure and step-by-step revolution (for instance: economic recessions, liquidity crisis, tight competition or global warming). It must be stated however that the “to what” dimension has not been given any detailed examination in the data collected. For instance, researchers tend to only state that resilience constitutes an element in overcoming entrepreneurial setbacks and achieving financial prosperity.

As a way of solidifying the themes in the publications, an extra dimension to the analysis was added to concentrate on the duration before the disruptive incidents and associated traits took place and capabilities such as the critical capitals to brave the shocks or to adapt to new situations were revealed. With this done, it set the stage to rationalize the two concepts of resilience in the extant scholarship firstly as a capability to endure adversity or to persevere during difficulty and secondly, as the adaptable ability to craftily and agilely deal with and to change steadily over time (Bullough & Renko, 2013; Linnenluecke, 2017; Corner et al., 2017; Fisher et al., 2016; Dahles & Susilowati, 2015).

Also, some publications discussed the manner in which persons, organizations, or group-level establishments such as cities and regions respond to disruptive events, both of internal or external nature. These papers conceptualized resilience from the process standpoint and considered varied ways actors relied on an inherent trait or ability as well as capacity to switch into action (Williams et al., 2013, Linnenluecke, 2017; Dahles & Susilowati, 2015; Wall & Bellamy, 2019).

The papers in Table 1 showed the multifaceted construct of entrepreneurialism and the coding of the literature relied on underlying meaning placed on entrepreneurship. A number of researchers adopted broader definitions that entailed all proprietors-managers (Audretsch, 2012; Larson et al., 2016; Ayala & Manzano, 2014; Sahin et al., 2018), new venture founders (Jin, 2017), SMEs (Branicki et al., 2017), and family firms (Rodrigue et al., 2017). Besides, few of the papers focused on concepts such as entrepreneurial worldview or behaviors that center on beliefs that make references to the concept of innovation, creativity as well as exploitative and explorative tendencies and contingencies (Alexandre et al., 2019; Korber & McNaughton, 2017; Yufeng et al., 2017).

Results

General features and types of studies

A total of 32 scholarly articles were included in the review (Table 1); 11 studies (33%) were from Europe, followed by 9 studies from Australia (22%), 7 studies from North America (21%), 5 studies from Asia (15%) and finally 1 study from sub-Saharan Africa (3%). Furthermore, 17 studies (51%) were quantitative, 14 studies (42%) were qualitative, whereas 2 studies were mixed method. Ultimately, 32 articles that satisfied the inclusion criteria and published from January 2010 to December 2019 in English, featured in this systematic review. These studies included 21 (63.63%) review articles and 12 (36.36%) original research articles.

The articles were of varied design background—the majority had a cross-sectional design (n=25), and the others were longitudinal studies (n=4), systematic reviews (n=2), and panel studies (n=2). All the studies identified six colloquies or exploration tributaries that discuss the interface between entrepreneurship and resilience:

1. Resilience as a function of individual entrepreneurs or firms,
2. Resilience generating entrepreneurial intentions,
3. Entrepreneurial behavior boosting organizational resilience,
4. Resilience in the framework of entrepreneurship failure,
5. Entrepreneurship and culture,
6. Resilience as an exercise of recuperation and transfiguration.

Table 1. Articles selected with objectives and main findings.

Author(s)/ Year	Title	Objective(s)	Main finding(s)
Sahin <i>et al.</i> (2018)	Big five personality traits, entrepreneurial self-efficacy and entrepreneurial intention	The goal of this research is to compare and contrast personal attributes that lead to success.	The findings show that a high degree of entrepreneurial purpose can be achieved through a variety of combinations of the big five personality traits and ESE.
Sánchez, J. (2011)	University training for entrepreneurial competencies: Its impact on intention of venture creation.	This study looks at the impact of entrepreneurship education programs on university students' entrepreneurial competencies and intents in order to confirm (or disprove) the idea that entrepreneurship education increases the desire to start a business. . .	The 'programme' group improved their skills and intents toward self-employment, but the control group did not. The findings contribute to theories of planned behavior and the literature of entrepreneurship education by highlighting the effect of specific rewards for students acquired from the entrepreneurial 'programme.'
Dahles, H. and Susilowati, P. T (2015)	Business resilience in times of growth and crisis.	This article looks into the various ways that local tourism firms adapt to crises, as well as the tools they use to build resilience in an unpredictably volatile business environment.	During the decade of turmoil that hit the Indonesian tourism industry, local tourism enterprises showed extraordinary endurance, according to the study. This resiliency must be viewed in terms of the enterprises' integration into a broader set of livelihood options.
Javadian <i>et al.</i> (2018)	The influence of emotional carrying capacity and network ethnic diversity on entrepreneurial self-efficacy.	Entrepreneurial self-efficacy (ESE), defined as an individual's belief in his or her capacity to do entrepreneurial tasks, is a crucial factor of success. Rather than looking at how individual and business characteristics influence ESE, the goal of this paper is to look at how entrepreneurs' social networks influence ESE. The paper looks at how black and white entrepreneurs interact.	For white entrepreneurs, the authors discovered significant, positive associations between ECC and network ethnic diversity on ESE, but only for black entrepreneurs did they discover a significant positive relationship between ECC and ESE.
Alexander & Honig (2016)	Entrepreneurial Intentions: A Cultural Perspective	To see if indigenous ethnic culture can help to moderate the attitude-intention, subjective norm-intention, and perceived behavioural control-intention correlations. Attitude and perceived behavioural control have a beneficial impact on the likelihood of becoming a nascent entrepreneur, according to the theory of planned behavior.	Students from the Luhya and Luo tribes were found to be less likely than students from the Kikuyu tribe to have goals of becoming nascent entrepreneurs. Finally, our findings show that ethnicity has considerable moderating effects.

Table 1. *Continued*

Author(s)/ Year	Title	Objective(s)	Main finding(s)
Rodrigue <i>et al.</i> (2017)	Influence of early exposure to family business experience on developing entrepreneurs.	The effects of family business and exposure to family business concepts on students and graduates as they move from higher education (HE) to entrepreneurship as a vocation are examined in this study. It looks into the influences, values, and experiences that have an active impact on company start-up after being exposed to a family business or business idea.	This study examines the effects on practicing entrepreneurs who have been exposed to family businesses and are aware of company ideas generated by direct or extended family members prior to starting a firm. The findings contribute to the development of entrepreneurial education pedagogy by informing conversations regarding family role models. Individual business connection and family business values have been discovered to be deeply developed notions that inspire and steer entrepreneurial direction. This essay adds to the advancement of entrepreneurship education and enterprise development.
Williams <i>et al.</i> (2013)	Economic resilience and entrepreneurship: A case study of the Thessaloniki City Region.	The purpose of this research is to look at the link between economic resiliency and entrepreneurship in urban areas.	With the external shock of the Eurozone crisis and austerity forcing areas like the Thessaloniki City Region to reconsider its economic structure, the research concludes that entrepreneurship is critical to fostering the diversification and capacity building of city region economies. Before offering a set of recommendations about the study's larger policy implications, the essay concludes that entrepreneurship is crucial to the restructuring and adaptation of city region economies.
Jin, C. H. (2017)	The effect of psychological capital on start-up intention among young start-up entrepreneurs.	This research explores changes in the connection when measurements based on Hofstede's (1980) cultural dimensions model are used to examine the effects of positive psychological capital of young start-up entrepreneurs on start-up intention and entrepreneurial performance. The goal of this study was to see if the sub-factors that make up positive psychological capital differed between groups, hence strengthening the effects on start-up intention and performance.	The CFA's findings demonstrate that sub-factors of positive psychological capital, such as hope, resilience, and self-efficacy, have beneficial effects on start-up intention. However, another sub-factor, optimism, had no effect on the intention to start a business. Furthermore, the positive psychological capital of young start-up entrepreneurs was found to be strongly linked to their ambition to establish a business.
Bullough, A. and Renko, M. (2013)	Entrepreneurial resilience during challenging times.	To investigate what drives entrepreneurial decisions during tough times.	Entrepreneurs and aspiring entrepreneurs should (1) participate in business development training to strengthen their belief in their entrepreneurial ability (i.e., entrepreneurial self-efficacy); (2) attend networking events, special lectures, and mentoring opportunities to learn from others who have persevered in the face of adversity; and (3) be active in their entrepreneurial pursuits, practice business acumen, and develop resilience.

Table 1. *Continued*

Author(s)/ Year	Title	Objective(s)	Main finding(s)
Lin <i>et al.</i> (2017)	Factors related to the intention of starting a new business in El Salvador	The purpose of this paper is to fill this gap and provide solutions and suggestions for business administration students and people interested in becoming future entrepreneurs.	The results show that: lifestyle and entrepreneurial aptitudes are strong related to perceived opportunities, perceived capabilities, the intention of starting a new business and negatively related to the fear of failure. Perceived opportunities and perceived capabilities are related to the intentions of starting a new business in El Salvador.
Corner <i>et al.</i> (2017)	Entrepreneurial resilience and venture failure	The emotional and psychological functioning of entrepreneurs following a venture loss is examined in this article. As a result, it looks into how resilient entrepreneurs are in the face of a traumatic occurrence, which psychologists characterize as "stability in functioning across time."	The majority of entrepreneurs are resilient, which means they maintain a consistent level of performance. This stability is distinct from the functional abnormalities that psychologists refer to as "healing" from a traumatic incident. As a result, our findings call into question the notion that venture failure necessitates recovery. The implications for re-entering the entrepreneurial world, as well as learning from and coping with failure, are discussed.
Yufeng <i>et al.</i> (2017)	An entrepreneurial process model from an institutional perspective.	- Context is extremely important in the entrepreneurial process. Previous entrepreneurship research in industrialized countries has placed an excessive emphasis on its economic impact while ignoring its social influence, resulting in the delayed growth of entrepreneurship theories. Transitioning China offers entrepreneurs a typical setting in which possibilities and restrictions coexist, which is a new research subject in the field of entrepreneurship research.	The interaction among entrepreneurs, opportunities, and institutional context, according to the report, is at the heart of the process. An inner and an outside mechanism are included in the entrepreneurial process. The inner mechanism is based on relationships between institutional constraints, entrepreneurs, and opportunities: aspiring entrepreneurs are forced to start a business by institutional constraints, go through a psychological process of entrepreneurial angst, reflective learning, and effectuation, and then create business opportunities. The outer mechanism is based on the relationships between new ventures, institutional evolution, and opportunity development: new ventures help institutional evolution through institutional entrepreneurship techniques, which in turn helps ventures produce opportunities in a sustainable manner.

Table 1. *Continued*

Author(s)/ Year	Title	Objective(s)	Main finding(s)
Branicki <i>et al.</i> (2017)	How entrepreneurial resilience generates resilient SMEs	The purpose of this research is to examine how entrepreneurial behaviors contribute to SME resilience, to refine the concept of entrepreneurial resilience, and to determine how SME resilience might be cultivated.	Results from the study showed that because of their experience working in harsh conditions, firsthand experience of suffering, and the informal organizational contexts they inhabit, entrepreneurs are often very resilient and possess characteristics that enable SMEs to be robust. Entrepreneurial resilience is distinct from best practices as they are recognized in larger firms in that it offers a basis for SME resilience.
Shadbolt, N. M (2016)	Resilience, Risk and Entrepreneurship.	The paper examines farmers who are divided into groups based on their risk aversion. Based on their performance over a six-year period, it concludes that risk-takers are better aptly defined as gamblers.	The most successful farmers were risk averse, had a strong commercial focus and talents, and were adept at handling large levels of debt. They best met the broader definition of entrepreneur since they had a constructive attitude toward change and the ability to successfully adjust to changing surroundings. The risk-averse group had lower debt levels and beat the risk-taking group in terms of cash flow and retained earnings.
Fisher <i>et al.</i> (2016)	Does individual resilience affect influence entrepreneurial success.	The purpose of this paper is to explore if a well-accepted conceptualization of individual level resilience can be used to predict entrepreneurial success.	The results offer a parsimonious scale for use in future research into the resilience of entrepreneurs, the indicators of which could prove useful guidance in the development of resilience education and training for entrepreneurs.
Kshetri, N. (2011)	Institutional and economic foundations of entrepreneurship in Africa: An overview.	The purpose of this research is to identify and synthesize the available evidence on economic and institutional factors that influence entrepreneurship in Africa.	The development of a free enterprise economy in Africa with a strong rule of law and property rights is expected to benefit not only African society but the global economy as well.
Alexandre <i>et al.</i> (2019)	An investigation of migrant entrepreneurs: the case of Syrian refugees in Lebanon.	The goal of this study is to provide a response to the following question: what motivates refugees to start their own enterprises in a developing country, and how do they accomplish it?	According to the statistics, 71% of Syrian refugees in Lebanon appear to be willing to start a new business. The majority of the responders are young, with 62% being between the ages of 18 and 35. Men make up the majority (66.67%), while women make up 33.33%. 60% have already started their own businesses, and they are mostly driven by the desire to make a living in the field in which they previously worked in their home country. Finally, the roadblocks appear to be related to both financial and administrative concerns, as well as municipal policies. However, because they share some cultural values with Lebanese, including as language and cuisine, they are able to assimilate more easily and form social relationships.

Table 1. *Continued*

Author(s)/ Year	Title	Objective(s)	Main finding(s)
Carroll & Shabana (2010)	The business case for corporate social responsibility: A review of concepts, research and practice	The business case refers to the underlying arguments or rationales supporting or documenting why the business community should accept and advance the CSR 'cause'.	In developing this business case, the paper first provides some historical background and perspective. In addition, it provides a brief discussion of the evolving understandings of CSR and some of the long-established, traditional arguments that have been made both for and against the idea of business assuming any responsibility to society beyond profit-seeking and maximizing its own financial wellbeing.
Ingram <i>et al.</i> (2015)	"A Bad Apple Went Away": Exploring Resilience among Bitcoin Entrepreneurs	The new digital currency Bitcoin, as well as the other extraordinary events that have rocked it, have grabbed headlines around the world. One such occurrence, the bankruptcy of Mt. Gox, a well-known Bitcoin exchange, stunned the burgeoning sociotechnical industry. However, it is unclear how the numerous entrepreneurial businesses in this industry were able to withstand the shock.	In our research, we discovered that such entrepreneurial organizations create resilient solutions by relying on their collective identity. Furthermore, despite past dogmatic denials of such formal control, one result of this shock was a desire for regulations and oversight.
Linnenluecke, M. (2017)	Resilience in Business and Management Research: A Review of Influential Publications and a Research Agenda.	The purpose is based on a comprehensive evaluation of key publications among 339 papers, books, and book chapters published between 1977 and 2014, this paper examines the evolution of and gaps in knowledge in business and management research on resilience.	Findings from this review show that resilience research is fragmented across several research streams. These include, organizational responses to external threats. Resilience as reliability, resilience in business and management research, resilience post 9/11 and resilience in emerging trends.
Ayala, J. C. and Manzano, G. (2014)	The resilience of the entrepreneur. Influence on the success of the business. A longitudinal analysis.	In this paper, we investigate whether there is a link between resilience qualities and the success of established businesses in the Spanish tourism industry, as well as whether there are any gender-related disparities.	. The findings demonstrate that the three dimensions of resilience (tenacity, resourcefulness, and optimism) can assist predict entrepreneurial success. The most important criteria in forecasting an entrepreneur's success is resourcefulness. Both men and women can be considered to be like this. The ability to, on the other hand, it is difficult to forecast the entrepreneurial success of individuals who are hardy and optimistic suitable for both men and women

Table 1. *Continued*

Author(s)/ Year	Title	Objective(s)	Main finding(s)
Korber, S. & McNaughton, R. B. (2017)	Resilience and entrepreneurship: a systematic literature review.	The goal of this research is to examine the existing literature on the topic of entrepreneurship and resilience. It highlights six scholarly discussions, each of which focuses on a different aspect of resilience and entrepreneurship. On the basis of those discussions, flaws in the existing literature are examined, as well as prospective study directions.	At the intersection of entrepreneurship and resilience, this paper identifies six conversations or research streams: resilience as traits or characteristics of entrepreneurial firms or individuals, resilience as a trigger for entrepreneurial intentions, entrepreneurial behavior as enhancing organizational resilience, entrepreneurial firms fostering macro-level (regions, communities, economies) resilience, resilience in the context of entrepreneurial failure, and resiliency in the context of entrepreneurial failure. According to the review, these articles utilise a small amount of existing knowledge on both entrepreneurship and resilience and describe notions imprecisely. Future study should take a more holistic approach to entrepreneurship and resilience, especially in the context of socio-ecological sustainability, by looking at it from a multi-level and longitudinal viewpoint.
Santos <i>et al.</i> (2019)	Team entrepreneurial competence: multilevel effects of on individual cognitive strategies.	The goal of this study is to establish the concept of team entrepreneurial competence, which is a team-level construct that represents a new venture team's level of shared competencies in entrepreneurial activities. A multidimensional model assessing the impact of team entrepreneurial skills and teamwork on team performance.	The findings support a positive multilayer relationship between team entrepreneurial competency and team members' reliance on both causal and effectual reasoning techniques; team members with higher entrepreneurial competence and experience are more likely to participate in effectuation reasoning.
Wall, T. and Bellamy, L. (2019)	Redressing small firm resilience: exploring owner-manager resources for resilience.	It is widely acknowledged that the owner-manager of a small business can have a substantial impact on the firm's competitiveness, growth, and failure. However, in the research on small firm resilience, the owner-individual manager's resilience has been generally disregarded. The goal of this research is to correct this, as well as to broaden the debate and empirical evidence on small business owner-managers' personal resources for resilience.	The following are the four major findings: Owner-manager adaptability can manifest in extremes, such as a sense of helplessness or optimism in the face of disruptive circumstances; owner-manager confidence levels often reflect their own mindset of adaptability, ranging from helplessness to positive ambition; owner-managers can use discursive tactics with strong/weak ties to access a range of affective and technical resources for resilience; and purposefulness tended to be framed in terms of a necessity. It should also be highlighted that the owner-manager and the firm are inextricably linked, thus improving personal resilience resources is likely to have a good impact on their resilience, as well as the organization's resilience and strategic capabilities.

Table 1. *Continued*

Author(s)/ Year	Title	Objective(s)	Main finding(s)
Pomare, C. (2018)	A multiple framework approach to sustainable development goals and entrepreneurship.	From an economic and social standpoint, this chapter will explore the Sustainable Development Goals (SDGs) and entrepreneurship. This chapter focuses on the obstacles that small and medium businesses (SMEs) have when attempting to implement the goal of guaranteeing sustainable consumption and production patterns to their day-to-day operations.	The author demonstrated that entrepreneurship is a powerful driver of sustainability based on the theoretical implications of a literature review.
Welsh, M. (2014)	Resilience and responsibility: governing uncertainty in a complex world.	The concept of 'resilience' has gained popularity in a variety of academic areas and political contexts. The study argues that, for all its utility as a tool of conceptualising and managing change, the resilience narrative of complex adaptive systems is connected with modern governmental discourses that shift risk responsibility away from the state and onto individuals and institutions.	Resilience discourses, as mobilized by government institutions, appear to have a number of implications.
Hedner <i>et al.</i> (2011)	Entrepreneurial resilience.	To conceptualize entrepreneurial resilience.	Entrepreneurs prefer access to material resources, access to supportive relationships, development of a desirable personal identity, experience of power and control, adherence to cultural traditions, experiences of social justice, experiences of sense of cohesion with others.
Manfield, R. C. and Nevey, L.R. (2017)	Resilience as an entrepreneurial capability: integrating insights from a cross-disciplinary comparison.	The goal of this research is to explore different assumptions about the nature of resilience and choose the ones that are most applicable to a business setting. Assumptions are woven into a theoretical framework that demonstrates how different dangers necessitate different resilience strategies. A portfolio of resilience skills results in overall organizational resilience.	Resilience, according to other disciplines, is a process that varies depending on the threat and can be described as bouncing back, absorbing shocks, or bouncing forward. When these traits are applied to entrepreneurship, they lead to the idea of resilience being enacted through a capability portfolio. When dangers are familiar, basic, not severe, and regular, there is limited disorganization, and resource slack is available, a routine-based capability response is favored. Heuristics-based capabilities, on the other hand, are favored when threats are unknown, complicated, severe, and infrequent, when there has been serious disorganization, and when resource slack is unavailable. When companies need to convert from routine-based to heuristic-based resilience capabilities, an absorption threshold point is identified.

Table 1. Continued

Author(s)/ Year	Title	Objective(s)	Main finding(s)
Shapiro, S. S & Goodwin A.J. (2012)	Distorting the Interests if Small Business: How the Small Business Administration Office of Advocacy's Politicization of Small Business Concerns Undermines Public Health and Safety.	Promoting Win-Win Regulatory Solutions.	The Office of Advocacy has evolved into a powerful anti-regulatory force, trying to obstruct, delay, and diminish all rules, even those that do not directly affect small companies.
Burger-Helmchen, T. (2012)	Entrepreneurship – Born, Made and Educated.	To find out the impact of various influencing variables on entrepreneurship.	Entrepreneurship is a cognitive personality, motivating, self-efficacy, cultural and with value systems.
Kreiser <i>et al.</i> (2010)	Cultural Influences on Entrepreneurial Orientation: The Impact of National Culture on Risk Taking and Proactiveness in SMEs	To determine the impact of national culture and certain organizations that embody national culture on two fundamental elements of entrepreneurial orientation: risk taking and proactiveness	Uncertainty avoidance and power distance have a considerable negative impact on risk taking, while uncertainty avoidance, individualism, and power distance have a negative impact on proactive business activities. A variety of institutional characteristics have also been discovered to be significantly associated to differences in risk taking and preventative behaviors between countries.
Anlesinya <i>et al.</i> (2019)	Cultural orientation, perceived support and participation of female students in formal entrepreneurship in the sub saharan economy of Ghana	To investigate Ghanaian women's cultural orientations and intentions to engage in entrepreneurship, as well as the role of their perceived support system	The findings show that uncertainty avoidance and power distance cultural orientations had significant positive and negative effects on women's formal entrepreneurship engagement, respectively.
Pettit <i>et al.</i> (2010)	Ensuring Supply Chain Resilience: Development of a conceptual framework	To identify supply chain risk as the highest threat to firms/industries	Results from the study revealed that while efficiently managing operational risks has a direct impact on financial performance, the majority of corporate board members are under-informed about those risks.
Liñán <i>et al.</i> (2011)	Regional variations in entrepreneurial cognitions: Start-up intentions of University students in Spain	The primary goal of this research is to uncover some of the environmental cognitive factors that may contribute to regional disparities in start-up ambitions.	The findings show that valuing entrepreneurship in each location can help explain disparities in entrepreneurial inclinations across regions.
Curry <i>et al.</i> (2016)	Social entrepreneurship and indigenous people	How indigenous values are woven into the mission of community development organizations in First Nations communities, and how community-owned development corporations are closely aligned with the ideals and goals of social entrepreneurship	This finding suggests that establishing development corporations with a social goal is critical to the viability of First Nations communities.

Table 1. *Continued*

Author(s)/ Year	Title	Objective(s)	Main finding(s)
Jüttner & Maklan (2011)	Supply chain resilience in the global financial crisis: an empirical study	To define supply chain resilience (SCRES), as well as to identify and scientifically investigate its link with related concepts such as supply chain vulnerability (SCV) and supply chain risk management (SCRM).	The empirical evidence supports a beneficial influence of supply chain risk (SCR) and knowledge management on SCRES, as well as a favorable impact of SCRES on SCV. The SCR effect and knowledge management appear to improve the SCRES by boosting the supply chain's flexibility, visibility, velocity, and collaborative capabilities.
Ude & Bete (2013)	Traditional Value System and Leadership Effectiveness in Nigerian Organizations	An examination of the primary factors influencing value orientation across cultures and social systems around the world reveals the difficulties of constructing theories on social norms based on untested universal leadership assumptions.	Results from the study indicates that when dealing with majority issues, the obstacles are numerous, including membership status in organizations, leadership roles in organizations, tenure ship, and belief systems, and they occur across cultures in Africa and within a subculture.

Research alignments

With particular reference to the three basic features Firstly, definitions that entailed proprietor or managers and the second feature is new venture founders. Thirdly, entrepreneurial world views of innovation, creativity, exploitative or explorative tendencies and contingencies. Thus, the distinction at the micro level of the what dimension of resilience the researcher wants to explain something about. The resilience of (entrepreneurial) firms at the meso level and macro level systems such as communities, regions or economies stated at the data synthesis stage were applied to classify the data. The study identified six dialogues that seem to centre their discussions on the interface between entrepreneurship and resilience. The full list of papers for each stream can be found in **Box 1** attached as appendix.

Exploration stream (1): Resilience as a function of individual entrepreneurs or firms

A significant number of authors (n=14) in the articles reviewed sought to discover features that stimulate or augment the inherent resilience of entrepreneurs in general. Entrepreneurial resilience, as far as the discussion of this data is concerned, is considered as a pre-condition that aids entrepreneurs or firms to control upheavals, calamities and exigencies. These disturbances are closely related to what extant literature on resilience generally refer to as “vulnerability” while the other side of the coin is referred to as “preparedness” (Lin *et al.*, 2017; Bullough & Renko, 2013; Dahles & Susilowati, 2015; Corner *et al.* (2017). It also postulates that entrepreneurs (whether at the individual or firm levels) that are resilient usually are more prepared to combat disturbances, which is a basic pre-determinant of entrepreneurial success (Dahles & Susilowati, 2015; Corner *et al.*, 2017), translating into the financial and managerial performance of such firms. Bullough and Renko (2013) in their studies titled “Entrepreneurial action during challenging times” submitted that, aiding activities that aim at developing prospective entrepreneurial leaders helps promote behaviors that are required for an economy to thrive. Again, Ayala and Manzano (2014) submitted that entrepreneurial resilience has three dimensions namely, hardiness, resourcefulness and optimism concluding that these dimensions help predict entrepreneurial success.

Some papers, based on mental ideologies, conceptualize entrepreneurial resilience as a fusion of many personal attributes or features like conscientiousness, openness to experience, perseverance, optimism, resilience, emotional carrying capacity and extraversion, including entrepreneurial self- efficacy (Chang-Hyun, 2017; Linnenluecke, 2017; Jin, 2017; Liñán *et al.*, 2011; Sahin *et al.*, 2018) or the entrepreneur’s emotional intelligence (Korber & McNaughton, 2017; Susana *et al.*, 2019). Other papers discuss the entrepreneur’s social capital such as communal schemas and contracting practices, collective identity, trust and family models as well as support from friends that help entrepreneurs, especially newcomers, to tackle uncertainties (Ingram Claire *et al.*, 2015; Larson *et al.*, 2016). It is clear from the extant literature that resilience is a function of entrepreneurial individuals and firms.

Box 1. Exploration stream of papers.

Resilience as a function of entrepreneurial individuals or firms

Dahles H & Susilowati 2015, Ballough A. & Renko M. 2013, Lin *et al.*, 2017, Corner *et al.* 2017, Shadbolt, 2016, Fisher *et al.*, 2016, Ingram Claire *et al.*, 2015, Linnenluecke Martina K. 2017, Ayala J.C. & Manzano G. 2014, Audretsch, 2012, Larson *et al.*, 2016, Sahin *et al.*, 2018, Javadian *et al.*, 2018, Rodrigue *et al.*, 2017, Korber S. & McNaughton R. B. 2017.

Resilience generating entrepreneurial intentions

Lin *et al.*, 2017, Corner *et al.* 2017, Fisher *et al.*, 2016 Ballough A. & Renko M. 2013, Rodrigue *et al.*, 2017, Yufeng *et al.*, 2017, Branicki *et al.*, 2017, Hedner *et al.*, 2011, and Wall T., & Ballamy L. 2019.

Entrepreneurial behaviour boosting organisational resilience

Ballough A. & Renko M. 2013, Lin *et al.*, 2017, Corner *et al.*, 2017, Wall T., & Ballamy L. 2019, Korber S. & McNaughton R. B. 2017, Branicki *et al.*, 2017, Rodrigue *et al.*, 2017, Larson *et al.*, 2016, Sahin *et al.*, 2018, Jin, C. H., 2017 and Ayala & Manzano, 2014.

Entrepreneurship and culture

Corner *et al.*, 2017, Javadian *et al.*, 2018, Korber S. & McNaughton R. B. 2017, Santos *et al.*, 2019, Yufeng *et al.*, 2017, Kshetri, 2011, Hedner *et al.*, 2011 and Sanchez J.C. *et al.*, 2012.

Resilience in the framework of entrepreneurial failure

Rodrigue *et al.*, 2017, Branicki *et al.*, 2017, Linnenluecke Martina K. 2017, Yufeng *et al.*, 2017, Wall T., & Ballamy L. 2019, Korber S. & McNaughton R. B. 2017, Ballough A. & Renko M. 2013, Corner *et al.*, 2017, Ingram Claire *et al.*, 2015, Kshetri, 2011, Madichie *et al.*, 2008, Manifold R.C. & Newey L.R. 2017 and Alexandre *et al.*, 2019.

Resilience as a process of recovery and transformation.

Ayala J.C. & Manzano G. 2014, Ayala & Manzano, 2014, Manifold R.C. & Newey L.R. 2017, Santos *et al.*, 2019, Corner *et al.*, 2017, Korber S. & McNaughton R. B. 2017, Ingram Claire *et al.*, 2015 and Alexandre *et al.*, 2019.

As far as the intermediate level analysis is concerned, most of the research in the data focused on issues of increase entrepreneurial mindset and behaviours in the resilience of entrepreneurial firms. They are the resources at the firm's disposal to aid them navigate difficult or disruptive times. These resources include how to manage employee strengths (based on Clinical and Developmental Psychology), financial capital, the adaptability of business models, organizational response to environmental threats, organizational reliability and design principles that mitigate vulnerabilities associated with supply chain and other disruptions. Therefore, with a well calibrated supply chain embedded with design flexibility and redundancy alternatives, organizations can be collaterally resilient (Maklan, 2012). While discussing a resilient supply chain design, Maklan (2012) submitted that resilience in supply chain in relation to the intercontinental economic financial challenges depends on the four resilience accomplishments of agility, momentum, exposure to information on time, and partnerships participants of the logistics network. These minimize negative repercussions on present and future events mainly in the area of income, pricing and conception or availability targets (Linnenluecke, 2017; Manifold & Newey, 2017; Santos *et al.*, 2019; Ayala and Manzano, 2014; Lin *et al.*, 2017).

Conclusively, some of the publications in the data principally examined factors at the group-level that promote resilience among entrepreneurs at personal or organizational levels. A competitive commercial setting, for example, has the potential of weeding out most ineffective beginners who venture into the realm of entrepreneurship from business while the survivors are likely to grow resilient (Biswas & Baptista, 2012). Some other researchers make reference to facilitative variables like collective identity in building resilience (Ingram Claire *et al.*, 2015). Others make mention of family role models in molding resilient entrepreneurs (Hedner *et al.*, 2011). Coaching and counseling sessions and seminars designed to improve the skills of entrepreneurs when it comes to managing adversities or business judgments of merchants are also discussed when infused into curriculum of educational institutions (Bullough & Renko, 2013). Other researchers talk about trust and social values that yield shared understanding (Larson *et al.*, 2016) amongst entrepreneurs. The final common strategy discussed are public strategies and agreement customs that promote resilience among groups of entrepreneurs (Audretsch, 2012). These findings contrast dominant portrayals of successful entrepreneurs as egoistic and self-centered (Jüttner & Maklan, 2011). It emerged that entrepreneurs that have reliance do show concern for one another and have respect for their interconnectivity. Contrastively, a number of researchers relied on literature related to psychology (Jin, 2017) and define resilience as a person's capability to combat or develop amidst challenges and crisis.

Others still conceptualized resilience as an outcome, as an act that has taken place, or something that a person lacks (Corner *et al.*, 2017). Resilience in entrepreneurship is believed to be actualized when business actors are able to progress in the midst of all the strict socio-cultural and socio-economic traditional conventions (Sahin *et al.*, 2018; Branicki *et al.*, 2017; Alexander & Honig, 2016) or more threatening social factors like conflicts and other kinds of disturbances (Korber & McNaughton, 2017). In sum, resilience at the personal level is hypothesized to have direct consequences (positive or negative) on resilience at the organization level—hence resulting in positive outcomes in challenging environments (Williams *et al.*, 2013; Shadbolt, 2016). In short, this section of the study presents discussions on the two concepts (entrepreneurship resilience) in the light of intrinsic features or attributes of persons or enterprises. The above assertion is informed by a deductive opinion of agency: a number of previous circumstances (intellectual attributes, organizational features, or group-level variables) can have higher influence when it comes to the promotion of the resilience of a firm. This growth in the firm's resilience can consequently contribute towards enhancing entrepreneurs (especially organizations) to conquer subsequent disturbances. The data for this study however, did not reveal the said disturbances or crisis. Thus, the findings do not give insights as to how micro and macro entrepreneurial actors employ their inherent resilience to overcome adversities when they occur. The literature also hardly interrogates the assertion that entrepreneurial resilience at the personal level automatically improves resilience at the organizational level. Alternatively, entrepreneurial resilience is perceived to be an asset that organizations can generally rely on in the advent of adversity.

Exploration stream (2): Resilience generating entrepreneurial intentions

Another category of the papers (n=9) focus on issues related to the intents of entrepreneurs (Lin *et al.*, 2017) and argue that innate entrepreneurial resilience accounts for the reasons some individuals embark on business ventures while many do not. Thus, both facilitative and militating variables have direct bearings on resilience in entrepreneurship. Also, there are differences between “push” and “pull” entrepreneurs, high-growth and low-growth. Now, resilience is usually seen as self-efficiency or self-confidence. Bullough and Renko (2013), for instance, argued that aiding activities that aim at developing prospective entrepreneurial leaders helps promote behaviors that are required for an economy to thrive. As such, when entrepreneurship curriculum is integrated into the educational system, it would develop self-efficiency and resilience in prospective entrepreneurs. Thus, entrepreneurial aspirants that have the confidence in their capabilities of being able to survive unfavorable business settings would most likely venture into business. Similarly, Corner *et al.* (2017) propose in their investigative research that a greater percentage of entrepreneurs displayed a resilient approach in their psychology after unsuccessful business ventures. There is usually grief, coping and learning. There is stability in functions and learning from failure. Fisher *et al.* (2016) concluded that the level of individual resilience in entrepreneurial

success depends on how business performance is operationalized. Regrettably, publications in the exploration stream (n=2) fail to conceptually examine the difference between resilience and related features and do not often respond to the question ‘is it every entrepreneurial project that is worthy of pursuance?’. Thus, resilience as conceptualized in this exploration stream may stimulate highly ambitious entrepreneurs to embark on business pursuits that are condemned to be unsuccessful.

Exploration stream (3): Entrepreneurial behavior boosting organizational resilience

Although the 11 papers included in this stream see the concept of entrepreneurship as a state of the mind, the concept is further re-enforced by entrepreneurs exhibiting flexibility and innovativeness. This, according to [Bullough and Renko \(2013\)](#), equips entrepreneurs to build activities that result in producing prospective entrepreneurial leaders, who aim at developing behaviors that are required for the progress of an economy. It again projects entrepreneurship as having a personality dimension and is influenced by a series of variables such as the individual’s efficiency, education, gender, age, and social context ([Sahin et al., 2018](#)). Also, implied in the extant literature is the concept organization capacity, with entrepreneurs exhibiting resilient mindset due to the uncertain environments, adversity and the informal organizational setting ([Branicki et al., 2017](#)). Similarly, it further purports that psychological capital such as hope; resilience and self-efficacy, have a positive effect on startup intentions ([Jin, 2017](#)).

In this stream, many of the authors build constructs to suggest that entrepreneurship is a function of thought and action though many do not clearly define what entrepreneurial behavior is made of. The literature suggests entrepreneurs exhibit cognitive behavior traits. A number of the publications attempt to show the manifestations of the behaviors of entrepreneurs in the midst of serious upheavals ([Comer et al., 2017](#)).

Exploration stream (4): Entrepreneurship and culture

The fourth stream of literature centers on culture. According to [Curry et al. \(2016\)](#), the culture of entrepreneurship refers to an architecture of principles, ideologies and behaviors that are related in a specific dispensation or among a particular group of people, that have the power to facilitate the entrepreneurial leaning of that group (both at the personal and organizational levels). Viewing it from this angle, researchers have identified some culture related attributes as relevant components for the promotion and development of entrepreneurship in every social dispensation. [Pettit et al. \(2010\)](#), classified these traits based on concepts such as family background, religion, history, ideology and enterprise culture. In addition, as opined by [Anlesinya et al. \(2019\)](#), the balance that exists between managerial services and environmental variables constitute a core determinant of organizational successful progress. This study asserts therefore, that enhanced entrepreneurship progress can be achieved through appropriate integration of cultures and other geo-social variables ([Alexander & Honig, 2016](#)). Their argument draws a sharp contrast between some revealed patterns in certain African states that seem to project the idea that indiscriminate employment of Western frameworks of entrepreneurship development happens to be the ultimate remedy for combating the crisis of entrepreneurship growth in the continent. It therefore indicates the need for a revived collective effort that targets acquiring various social, economic, culture-related principles and guidelines that can help in bringing out unexploited entrepreneurship talents among Africans as a whole.

In fact, there are facts that seek to imply that some cultural dispensations (including some African states) possess some generational practices embedded in their cultures that have positive economic relevance to progress of their entrepreneurship projects ([Kreiser et al., 2010](#); [Pettit et al., 2010](#); [Hedner et al., 2011](#)). Regrettably, such relevant aspects of cultures appeared to have been left behind in pursuit of so called “modernity”. On this basis, it has become necessary to study other cultures with the hope of discovering cultural principles that might help in promoting the growth-related crisis of such societies as far as entrepreneurship is concerned. As [Ude and Bete \(2013\)](#) stated: “in an environment of uncertainty and risk, with imperfect information and positive transaction costs, Nnewi traders had a number of institutional advantages. In many ways, Nnewi Township has been described as an authentic ‘manufacturing miracle’ but because manufacturing miracles tend to be measured by national level production, Nnewi and other areas like it is probably doomed to pass unnoticed by those who are trying to understand the reasons why some nations grow, others stagnate, and yet others decline”.

Exploration stream (5): Resilience in the framework of entrepreneurial failure

The fifth stream of literature originates outside pure organizational science disciplines such as economics and focusses on others such as psychology, ecology and engineering. Apart from entrepreneurs contributing to job creation and economic growth, they are relevant to regional resilience and the enhancement and creation of a relatively stable and multifaceted commercial prospectus ([Korber & McNaughton 2017](#); [Williams et al., 2013](#)), opportunities and institutional contexts ([Yufeng et al., 2017](#)), and African economies introducing appropriate regulative changes needed to facilitate entrepreneurial development, improving of cost of starting business, procedural delays and red tape ([Kshetri, 2011](#);

Alexandre *et al.*, 2019). Researchers also draw on psychological, ecological and engineering literature in various unfavorable contexts that call for entrepreneurs' employment of efficient resilient skills. Organizations must learn to tackle the particular crisis confronted with the lessons learnt during the previous encounter. That comprises a combination of regular elicitations in an attempt to return to stability. The responses must however also be flexible to enhance a skillful configuration that portrays increase in biodiversity in the resilience of ecological systems (Manifield & Newey, 2017).

Some authors (n=5) discuss resilience as the organizational reliability, organizational response to potential environmental upheavals, employee capabilities in adopting entrepreneurial frameworks and designing guidelines towards mitigating the weaknesses associated with supply chain and other disruptions (Linnenluecke, 2017). Again, entrepreneurial establishments are branded by a talented and creative entrepreneur, favorable organizational systems, entrepreneurial culture as well as impressive skills acquisition support system. Moreover, a few of the papers here discuss the contributions of individual entrepreneurs in developing regional and community-based resilience (Korber & McNaughton, 2017). Likewise, Ingram Claire *et al.* (2015) submitted that collective identity shapes resilient responses and advocated that for shocks to be contained, a regulation and oversight regime must be put in place.

It could then be established that exploration streams from the first five streams construct resilience as a resource. It is a trait, possessed by individuals, cultural groups/communities, organizations, cities or regions that tend to help various vulnerabilities either in various fields related to organizational science, psychology, ecology and engineering in the event of disasters/disruptions. The last exploration stream to be discussed focuses on actions after disasters/disruptions. Thus, the construct here is more of post disaster/disruption.

Exploration stream (6): Resilience as a process of recovery and transformation

Finally, the idea of this stream of literature conjures a picture of adaptive resilience (Branicki *et al.*, 2017) with a touch on adaptive capacity. It mainly has to do with the ability to change and learn after disruption. As reported by Corner *et al.* (2017) in their investigative research, a greater percentage of entrepreneurs displayed a resilient approach in their psychological outburst after unsuccessful business ventures. There is usually grief, coping and learning, stability of functions and learning from failure. Along the same lines, Javadian *et al.* (2018) established a positive and significant relationship between emotional carrying capacity and entrepreneurial self-efficacy, all emphasizing the important role of adaptive capacity.

Ayala and Manzano (2014) conducted a study on the possible reason(s) that account for the different reactions that entrepreneurs exhibit when confronted with an industrial crisis. It was discovered that the reactions of victims in such technical situations is mostly defined by their personal, social, economic or cultural identities.

Discussion

This review analyzed 32 studies that focused on the interface between resilience and entrepreneurship. The study discovered six clear exploration streams that in different perspectives define the kind of conceptual relationship that exist between the constructs identified. The intellectual domain from which the discussions emerge often accounts for such differences. Firstly, there is resilience in psychology records and resilience in the context of commercial and administrative discourse studies mainly during the 1980s and 1990s with concentration on the adoption and familiarization of business frameworks and resilient supply chain designs. Also, there are those focused on the city, region and economy in general. For instance, Williams *et al.* (2013) studied economic resilience and entrepreneurship in the Thessaloniki city region. The authors submitted that entrepreneurship needs to be understood to be critical to resilience of city regions and serve as a vehicle to promote a more balanced and diverse economic means. Also, Kshetri (2011) in examining institutional and economic foundations of entrepreneurship foundations of entrepreneurship in Africa concluded that, the introduction of appropriate regulative changes can bring about entrepreneurial development in Africa without the usual red tapeism. These authors underscore why resilience generate entrepreneurial intentions (Lin *et al.*, 2017; Bullough & Renko, 2013; Corner *et al.*, 2017).

Furthermore, some individual resilience traits, skills self-esteemed, optimism and persistence influence entrepreneurship success (Dahles & Susilowati, 2015; Bullough & Renko, 2013; Ayala & Manzano, 2014).

Nevertheless, most of the publications reviewed seemed to construct entrepreneurship both at the individual and organizational level to nebulously define adversity or disruptions. Wall and Bellamy (2019) in their study expanding the debate and empirical basis of small firm owner-managers' for resilience found the following: owner-manager adaptability can appear in extremes cases including a sense of helplessness or optimism. Secondly, owner-manager confidence levels often echo their own mindset toward adaptability (helplessness to positive ambition). Finally, owner-managers can use discursive tactics with strong/weak impacts from a range of affective and technical resources for resilience.

Earlier, [Manifield and Newey \(2017\)](#) examined competing assumptions about the nature of resilience and select those most appropriate for an entrepreneurial context. They found out that, resilience is a concept for different threats and disciplines. Thus, entrepreneurship, is a capability portfolio that relies on routine-based capability response when threats are familiar, simple, not severe and frequent following minimal disorganization. The contrast is that heuristic-based capabilities are relied on when threats are unfamiliar, complex, severe and infrequent following serious disorganization.

[Anlesinya et al. \(2019\)](#) investigated the role of cultural factors on the emergence and success of entrepreneurs. The authors came to the conclusion that culture influenced the Nwewi people's entrepreneurial and managerial talents in a major and positive way. Prudence, independence, inventiveness, trust, intimacy and openness in the workplace, submissive apprenticeship, and perseverance were all identified as cultural characteristics. Trust and social capital promote resilience, according to [Larson et al. \(2016\)](#), and this manifests in common knowledge and a custom of not relying on written customs that emphasize reciprocity. In addition, the [Rodrigue et al. \(2017\)](#) looked examined the effects of family business and exposure to family company concepts on entrepreneurial career identity. The finding was that practicing entrepreneurs who were exposed to family business and were aware of business concepts from extended family before starting their businesses were more likely to succeed, reiterating the importance of family role models.

In contrast, some research defined the concept of entrepreneurship to mean a fusion of psychological asset such as emotional carrying capacity and entrepreneurial self-efficacy that classify who is or not an entrepreneur. Again, [Branicki et al., \(2017\)](#) investigated how entrepreneurial behaviors support small and medium size enterprise (SMEs) to be resilient. They submitted that, SMEs uncertain environments, adversity and the informal organisational settings that these SMEs operate, often makes them highly resilient and possess capabilities that enable SME's to be resilient.

Yet, most publications constructed it simply by arguing that innovation and creativity constitute the hallmark or a constant talent of every entrepreneur. For instance, [Jin \(2017\)](#) explored the effects of the positive psychological capital of young start-up entrepreneurs on start-up intentions and entrepreneurial performances. The author concluded that, sub-factors of positive psychological capital such as hope, resilience and self-efficacy have positive effects on start us intention. As a follow up to these results, this study suggests that future researchers should consider fusing all three constructs (resilience as a psychological trait, business management model and city or regional level) together in conducting research on resilience. Beginning with the exploration streams discussed, a background can be set by researchers for an all-inclusive or interdisciplinary research. Secondly, it is clear that a good regulatory framework, communal schemas and culture can also impact on entrepreneurial resilience. Research needs to pay more attention to the reactions that entrepreneurs exhibit in addressing or combating entrepreneurial crisis as well as how they are, as individuals, able to contribute towards improving community-level and regional-level resilience. Thirdly, this study advocates for the proposition of a working definition of entrepreneurial resilience in order to establish a progressive direction for further studies. This way, entrepreneurial resilience should not only be responsive, readiness, determination, or survival-oriented. Rather, it should be constructed as an ever-present multiple rank concept that refers to one's ability to dynamically cope under adverse conditions. Finally, this systematic review has at least pointed out a central peculiarity of internal property of a system and the coping capacity that relates to protective resilience and adaptive resilience to external threats.

Practical implications

This work reiterates the need for entrepreneurs to be aware that resilience is pivotal for the whole gamut of entrepreneurial endeavors.

Entrepreneurs consider the good times without regard to both internal and external threats in the environment. It is also clear that, entrepreneurs with resilient capabilities serve as a bulwark against bad times. The study proposes, contrary to the common custom that in an attempt to attain efficacy, entrepreneurs may consider using specific resources to pawn incipient dangers. Those who are able to do that show their capacity portfolio to respond to routine-based and heuristic-related resilient abilities for individual complicated crisis as well as disorganizations challenges. When entrepreneurs build their capacities to identify and manage these threats, whether routine or heuristic in nature, then they are poised to gain more from refining the various problem-solving talents and can well tackle situations that pose different threats.

This review stresses the need for policy makers in African economies to make the required regulations that can facilitate the progress of entrepreneurship in the sub region. It has been said that many potential entrepreneurs in some sub-Saharan Africa struggle with very high costs associated with starting a business. Again, procedural delays and red tape are other serious problems hindering entrepreneurial efforts in these economies. A study revealed, for example, that less developed nations like African countries can lose about 0.4% potential GDP growth for the delay in allowing people start businesses—this calculation was done by considering only a 10-day delay - ([Economist, 2012](#)). Some sub-Saharan Africa

economies have achieved a significant leap on this front. The World Bank's ease of doing business survey (World Bank, 2009) showed that Rwanda has been the fastest reformer with rankings improving from 143 in 2009 to 67 in 2010. This is a good example for policy makers in Africa to replicate.

Strengths and limitations

This review followed the Preferred Reporting Items for Systematic Reviews and Meta-analysis (PRISMA). One of the outstanding strengths of this study is the wide search which exposed the researcher to many different scholarly articles that are important to the aims and objectives of the study. However, it is relevant to state that the wider nature of the search has its own limitations, which include the fact that the search could not cater for grey literature and other relevant scholarly works on the subject that were not written in English. This study comprises of scholarly research conducted on populations, even though there was a focus on Western countries and to a lesser extent Asia and one study from sub-Saharan Africa. This may limit generalizability to other settings especially sub-Saharan Africa as there may be cultural or discipline differences in how entrepreneurial resilience is constructed. It therefore indicates the need for a revived collective effort that targets acquiring various social, economic, culture-related principles and guidelines that can help in bringing out the unexploited entrepreneurship talents among Africans as a whole (Alexander & Honig, 2016). The procedure of synthesis was contingent on my interpretations and there are chances that the initial experiences or findings were misinterpreted, but the adoption of PRISMA has improved robustness as well as transparency. Regardless of the above limitations, this review sheds light on entrepreneurial behaviors that support business resilience and help refine the concept of entrepreneurial resilience as presented in extant literature.

Gaps in evidence

The studies reviewed showed limited coverage of concepts associated with psychological capital as well as resilience research being fragmented across several research tributaries.

Future research needs

Future research should take a further all-inclusive method to study entrepreneurship and resilience from a multi-dimensional and longitudinal approach.

Data availability

Underlying data

All data underlying the results are available as part of the article and no additional source data are required.

Reporting guidelines

figshare: Resilience and Entrepreneurship: A Systematic Review: <https://doi.org/10.6084/m9.figshare.18093344> (Conduah, 2022)

This project contains the following reporting guidelines:

- PRISMA_2020_checklist.docx
- PRISMA_2020_flow_diagram_updated_SRs_v1

Data are available under the terms of the [Creative Commons Attribution 4.0 International license](https://creativecommons.org/licenses/by/4.0/) (CC-BY 4.0).

Review registry

This systematic review was not registered.

References

Alexander IK, Honig B: **Entrepreneurial intentions: A cultural perspective.** *Africa Journal of Management.* 2016; **2**(3): 235–257.
[Publisher Full Text](#)

Alexandre L, Salloum C, Alalam A: **An investigation of migrant entrepreneurs: the case of Syrian refugees in Lebanon.** *International Journal of Entrepreneurial Behavior & Research.* 2019; **25**(5):

1147–1164.

[Publisher Full Text](#)

Anlesinya A, Adepoju OA, Richter UH: **Cultural orientation, perceived support and participation of female students in formal entrepreneurship in the sub-Saharan economy of Ghana.** *International Journal of Gender and Entrepreneurship.* 2019; **11**:

- 299–322.
[Publisher Full Text](#)
- Audretsch D: **Entrepreneurship research**. *Management decision*. 2012.
- Ayala J-C, Manzano G: **The resilience of the entrepreneur. Influence on the success of the business: a longitudinal analysis**. *Journal of Economic Psychology*. 2014; **42**: 126–135.
[Publisher Full Text](#)
- Babbie ER: *The Basics of Social Research*. 6th ed. Belmont, CA: Wadsworth, Cengage Learning; 2014.
- Biswas PK, Baptista A: **Institutions and micro-enterprises demography: a study of selected EU countries, 1997–2006**. *Journal of Small Business & Entrepreneurship*. 2012; **25**(3): 283–306.
[Publisher Full Text](#)
- Branicki LJ, Sullivan-Taylor B, Livschitz SR: **How entrepreneurial resilience generates resilient SMEs**. *International Journal of Entrepreneurial Behavior & Research*. 2017; **24**: 1244–1263.
[Publisher Full Text](#)
- Brownlee G: 2014. *Small business failure rates and causes*. (accessed June 7, 2019).
[Reference Source](#)
- Bruyat C, Julien PA: **Defining the field of research in entrepreneurship**. *Journal of business venturing*. 2001; **16**(2): 165–180.
[Publisher Full Text](#)
- Bryman A: **Quantitative and qualitative research: further reflections on their integration**. *Mixing methods: Qualitative and quantitative research*. Routledge; 2017; pp. 57–78.
- Bullough A, Renko M: **Entrepreneurial resilience during challenging times**. *Business Horizons*. 2013; **56**(3): 343–350.
[Publisher Full Text](#)
- Burger-Helmchen T: *Entrepreneurship: Born, made and educated*. BoD–Books on Demand; 2012.
- Business D: **Doing Business 2010**. 2010.
[Publisher Full Text](#)
- Carpenter S, Walker B, Anderies JM, et al.: **From metaphor to measurement: resilience of what to what?**. *Ecosystems*. 2001; **4**(8): 765–781.
[Publisher Full Text](#)
- Carroll AB, Shabana KM: **The business case for corporate social responsibility: A review of concepts, research and practice**. *International Journal of Management Reviews*. 2010; **12**(1): 85–105.
[Publisher Full Text](#)
- Carson M: **Enterprise and Leadership: Studies on Firms, Markets, and Networks**. 2000. Accessed on December 17, 2021.
[Reference Source](#)
- Chang-Hyun J: **The effect of psychological capital on start-up intention among young start-up entrepreneurs. A cross-cultural comparison**. 2017; Vol. 11(No. 4): pp. 707–729.
- Conduah AK: **Resilience and Entrepreneurship: A Systematic Review**. *figshare*. *Journal Contribution*. 2022.
[Publisher Full Text](#)
- Corner PD, Singh S, Pavlovich K: **Entrepreneurial resilience and venture failure**. *International Small Business Journal: Researching Entrepreneurship* 2017. 2017; **35**(6): 687–708.
[Publisher Full Text](#)
- Curry JA, Donker H, Michel P: **Social entrepreneurship and indigenous people**. *Journal of Co-operative Organization and Management*. 2016; **4**(2): 108–115.
[Publisher Full Text](#)
- Dahles H, Susilowati TP: **Business resilience in times of growth and crisis**. *Annals of Tourism Research*. 2015; **51**: 34–50.
[Publisher Full Text](#)
- Economist T: **European Entrepreneurs: Les Miserables**. 28th July 2012. 2012.
- Fisher R, Maritz A, Lobo A: **Does individual resilience influence entrepreneurial success?**. *Academy of Entrepreneurship Journal*. 2016; **22**(2): 39–53.
- Ford JD, Berrang-Ford L, Paterson J: **A systematic review of observed climate change adaptation in developed nations**. *Climatic Change*. 2011; **106**(2): 327–336.
[Publisher Full Text](#)
- Greenhalgh T, Robert G, Macfarlane F, et al.: **Diffusion of innovations in service organizations: systematic review and recommendations**. *The Milbank Quarterly*. 2004; **82**(4): 581–629.
[PubMed Abstract](#) | [Publisher Full Text](#)
- Hedner T, Abouzeedan A, Klostén M: **Entrepreneurial resilience**. *Annals of Innovation & Entrepreneurship*. 2011; **2**(1): 7986–7984.
[Publisher Full Text](#)
- Higgins D, Elliott C: **Learning to make sense: what works in entrepreneurial education?**. *Journal of European Industrial Training*. 2011; **35**: 345–367.
[Publisher Full Text](#)
- Ingram C, Morisse M, & Teigland R: **“A Bad Apple Went Away”: Exploring Resilience among Bitcoin Entrepreneurs**. *ECIS 2015 Research-in-Progress Papers*. Paper 31. 2015.
- Javadian G, Opie TR, Parise S: **The influence of emotional carrying capacity and network ethnic diversity on entrepreneurial self-efficacy. The case of black and white entrepreneurs New England**. *Journal of Entrepreneurship*. 2018; **21**(2): 101–122.
[Publisher Full Text](#)
- Jin CH: **The effect of psychological capital on start-up intention among young start-up entrepreneurs: A cross-cultural comparison**. *Chinese Management Studies*. 2017; **11**: 707–729.
[Publisher Full Text](#)
- Jüttner U, Maklan S: **Supply chain resilience in the global financial crisis: an empirical study**. *Supply chain management: An international journal*. 2011; **16**: 246–259.
[Publisher Full Text](#)
- Kinoti MW, Kihiko K, Cooney TM: **Research Handbook on Entrepreneurial Teams**. *Theory and Practice*. 2017. Accessed on December 17, 2021.
[Publisher Full Text](#)
- Korber S, McNaughton RB: **Resilience and entrepreneurship: a systematic literature review**. *International Journal of Entrepreneurial Behavior & Research*. 2017.
- Kreiser PM, Marino LD, Dickson P, et al.: **Cultural influences on entrepreneurial orientation: The impact of national culture on risk taking and proactiveness in SMEs**. *Entrepreneurship Theory and Practice*. 2010; **34**(5): 959–984.
[Publisher Full Text](#)
- Kshetri N: **Institutional and economic foundations of entrepreneurship in Africa: An overview**. *Journal of Developmental Entrepreneurship*. 2011; **16**(1): 2011.
- Larson CL, Reed SE, Merenlender AM, et al.: **Effects of Recreation on Animals Revealed as Widespread through a Global Systematic Review**. 2016. Accessed on 20/02/2022.
[Publisher Full Text](#)
- Larsson M, Milestad R, Hahn T, et al.: **The resilience of a sustainability entrepreneur in the Swedish food system**. *Sustainability*. 2016; **8**(6): 550.
[Publisher Full Text](#)
- Lin LL, Pena AV, Chen CN: **Factors related to the intention of starting a new business in El Salvador**. *Asia Pacific Management Review*. 2017; **22**(4): 212–222.
[Publisher Full Text](#)
- Liñán F, Urbano D, Guerrero M: **Regional variations in entrepreneurial cognitions: Start-up intentions of university students in Spain**. *Entrepreneurship and Regional Development*. 2011; **23**(3–4): 187–215.
[Publisher Full Text](#)
- Linnenluecke MK: **Resilience in business and management research: a review of influential publications and a research agenda: resilience in business and management research**. *International Journal of Management Reviews*. 2017; **19**(1): 4–30.
[Publisher Full Text](#)
- Luthar SS, Cicchetti D, Becker B: **The Construct of Resilience: A Critical Evaluation and Guidelines for Future Work**. *Journal of Child Development*. 2003; **71**: 543–562. Accessed on December 17, 2021.
[PubMed Abstract](#) | [Publisher Full Text](#) | [Free Full Text](#)
- Madichie NO, Hinson RE: **Doing business in Ghana's informal sector – auntie muni and the 'waakyie' kitchen**. *African Journal of Business and Economic Research*. 2013; **8**(2/3): 39–50.
- Madichie NO, Nkamnebe AD, Idemobi EI: **Cultural determinants of entrepreneurial emergence in a typical sub-Saharan African context**. *Journal of Enterprising Communities: People and Places in the Global Economy*. 2008; **2**: 285–299.
[Publisher Full Text](#)
- Maklan S: **EXQ: a multiple-item scale for assessing service experience**. *Journal of Service Management*. 2012.
- Manfield RC, Newey LR: **Resilience as an entrepreneurial capability: integrating insights from a cross-disciplinary comparison**. *International Journal of Entrepreneurial Behavior & Research*. 2017; **24**(7): 1155–1180. 2018.
- Markman GD, Baron RA, Balkin DB: **Are perseverance and self-efficacy costless? Assessing entrepreneurs' regretful thinking**. *Journal of Organisational Behaviour*. 2004; **26**: 1–19.
[Publisher Full Text](#)
- Miriam-Goldberg C: **Field**. *The Midwest Quarterly*. 2009; **50**(4): 398–399.
- Moher D, Shamseer L, Clarke M, et al.: **Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement**. 2015.
- Pearshall P: *The Beethoven factor: The new positive psychology of hardiness, happiness, healing, and hope*. Hampton Roads Publishing; 2003.
- Pettit TJ, Fiksel J, Croxton KL: **Ensuring supply chain resilience: development of a conceptual framework**. *Journal of Business Logistics*. 2010; **31**(1): 1–21.
[Publisher Full Text](#)

- Pomare C: **A multiple framework approach to sustainable development goals (SDGs) and entrepreneurship.** In *Entrepreneurship and the Sustainable Development Goals*. Emerald Publishing Limited. 2018. [Publisher Full Text](#)
- Reivich J, Shatte A: *The resilience factor*. New York: Broadway Books; 2002.
- Rickham PP: **Human experimentation. code of ethics of the world medical association. Declaration of Helsinki.** *British Medical Journal*. 1964; **2**(5402): 17.01 Jul 1964.
- Rodrigue JP, Slack B, Comtois C: **Green logistics.** *Handbook of logistics and supply-chain management*. 2017.
- Rose A: **Defining and measuring economic resilience to disasters.** *Disaster Prevention and Management: An International Journal*. 2004; **13**: 307–314. [Publisher Full Text](#)
- Sahin F, Karadag H, Tuncer B: **Big five personality traits, entrepreneurial self-efficacy and entrepreneurial intention. A configurational approach.** *International Journal of Entrepreneurial Behavior & Research*. 2018; **25**(6): 1188–1211. 2019.
- Sánchez JC: **University Training for Entrepreneurial Competencies: Its Impact on Intention of Venture Creation.** *International Entrepreneurship and Management Journal*. 2011; **7**(2): 239–254. [Publisher Full Text](#)
- Sanchez JC, Singer AE, Ahmed I, Rodrigues RG: **Entrepreneurship - Born, Made and Educated.** 2012. Retrieved on March 6, 2020. [Reference Source](#)
- Santos SC, Morris MH, Caetano A, et al.: **Team entrepreneurial competence: multilevel effects on individual cognitive strategies.** *International Journal of Entrepreneurial Behavior & Research*. 2019; **25**(6): 1259–1282. [Publisher Full Text](#)
- Shadbolt NM: **Resilience, risk and entrepreneurship.** 2016.
- Shae-Leigh CV, Nagash BP: **A Theoretical Review of Psychology Resilience: Defining Resilience and Resilience Research Over the Decades.** *Arch Med Health Sci* 2019. 2019; **7**: 233–239.
- Shapiro S, Goodwin J: **Distorting the Interests of Small Business: How the Small Business Administration Office of Advocacy's Politicization of Small Business Concerns Undermines Public Health and Safety.** *Center for Progressive Reform White Paper #1302*. 2012.
- Spires M, Shackleton S, Cundill G: **Barriers to implementing planned community-based adaptation in developing countries: A systematic literature review.** *Climate and Development*. 2014; **6**(3): 277–287. [Publisher Full Text](#)
- Susana Lucia AM, Gallegos-Cari A, Muñoz-Sánchez S: **Analysis of components and definition of the concept of resilience: a narrative review.** *Revista de Investigación Psicológica*. 2019; **22**: 77–100.
- Tang L, Koveos PE: **Venture entrepreneurship, innovation entrepreneurship, and economic growth.** *Journal of Developmental Entrepreneurship*. 2004; **9**(2): 161. The World Bank Ease of Doing Business.
- Ude U, Bete E: **Traditional value system and leadership effectiveness in Nigerian organizations.** *Public Policy and Administration Review*. 2013; **1**(1): 16–25.
- Wall T, Bellamy L: **Redressing small firm resilience: exploring owner-manager resources for resilience.** *International Journal of Organizational Analysis*. 2019; **27**(2): 269–288. [Publisher Full Text](#)
- Welsh M: **Resilience and responsibility: governing uncertainty in a complex world.** *The Royal Geographical Journal*. March 2014; **180**(1): 15–26.
- Werner EE, Smith RS: *Overcoming the Odds: High Risk Children from Birth to Adulthood*. Cornell University Press; 1992. [Publisher Full Text](#) | [Reference Source](#) Assessed December 18, 2021.
- Williams CC, Krasniqi B: **Explaining informal sector entrepreneurship in Kosovo: An institutionalist perspective.** *Journal of Developmental Entrepreneurship*. 2018; **23**(02): 1850011. [Publisher Full Text](#)
- Williams N, Vorley T, Ketikidis PH: **Economic resilience and entrepreneurship: a case study of the Thessaloniki city region.** *Local Economy*. 2013; **28**(4): 399–415. [Publisher Full Text](#)
- Windle G, Bennett KA, Noyes J: **A methodological review of resilience measurement scales.** *BMC Health and Quality of Life Outcomes*. 2011; **9**: 8. Assessed on December 17, 2021. [PubMed Abstract](#) | [Publisher Full Text](#)
- World Bank: *Doing Business 2010: Reforming through Difficult Times*. World Bank Publications; 2009. [Publisher Full Text](#)
- Yufeng S, Nengquan W, Xiang Z: **An entrepreneurial process model from an institutional perspective a multiple case study based on the grounded theory.** *Nankai Business Review International*. 2017.

Comments on this article

Version 1

Reader Comment 28 Mar 2022

Habibullah Habibullah, National Research and Innovation Agency (BRIN), Jakarta, Indonesia

Very interesting study with resilience and entrepreneurship with a systematic literature review. Very open in terms of presenting the literature used.

Competing Interests: There is no conflict of interest between me and the results of this research, the author or the institution

The benefits of publishing with F1000Research:

- Your article is published within days, with no editorial bias
- You can publish traditional articles, null/negative results, case reports, data notes and more
- The peer review process is transparent and collaborative
- Your article is indexed in PubMed after passing peer review
- Dedicated customer support at every stage

For pre-submission enquiries, contact research@f1000.com

F1000Research