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Abstract

The current entrepreneurial resilience research is a mixed bag—ranging from simply applying the construct of psychological resilience to entrepreneurs to focusing on the entrepreneur-specific aspect of resilience. This highlights three issues. First, the difference between psychological resilience and entrepreneurial resilience is not yet clear. Second, as observed in several previous studies, this ambiguity leads to the fallacy of directly correlating individual psychological resilience to business performance. Third, the extent to which entrepreneurial resilience as a trait affects firm performance remains unclear. These issues blur the essence of why resilience is important for entrepreneurial activity. To advance the literature, this article reconceptualizes entrepreneurial resilience as consisting of four elements: traits, processes, outcomes, and external factors, and argues that entrepreneurial resilience research should include and analyze all these elements. We also propose a methodology based on the reconceptualization, which paves the way for finding the significance of entrepreneurial resilience research.

Keywords: resilience, entrepreneurial resilience, four factors of resilience, multi-level approach

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The development and reconceptualization of entrepreneurial resilience

With the spread of COVID-19 and Russia's invasion of Ukraine, people around the world are now in desperate situations. This is even more so for entrepreneurs, who must take the wheel or sink. Looking back on the postwar period, Japan's resurgence has been remarkable. Konosuke Matsushita, an entrepreneur who played a leading role in Japan's economic revival, was once expelled from his own company and was deprived of even the right to manage it by GHQ. Nevertheless, he regained control of his company after great hardships and created a global company. This story tells us that the character of entrepreneurial resilience is essential for entrepreneurs to achieve success.

This kind of resilience seems to be slightly different from the nature that someone overcomes childhood traumatic experiences discussed in developmental psychology or the nature that some employee gets over project failures discussed in organizational behavior. However, some scholars applied psychological resilience to entrepreneur and call it entrepreneurial resilience, which raised three major issues, that is, the ambiguity of the definition, logical leap, and unclear roles of resilience.

To address these concerns, we reconceptualize entrepreneurial resilience as consisting of four elements: traits, processes, outcomes, and external factors, and insist that entrepreneurial resilience research should include and analyze all these elements.

Typical entrepreneurial resilience research

There have been many studies focusing on entrepreneurial resilience. For example, these topics—(a) gender differences, (b) experiences such as mentoring, education, and coping, (c) application of psychological measurement to entrepreneurs, (d) environmental factors, and (e) interactions with other psychological factors—have been discussed.

(a) Concerning gender, Ayala and Manzano (2014) found that the influence of resilience (including optimism) on entrepreneurs' business success was higher for women

than for men. Martin, Wright, Beaven, and Matlay (2015) surveyed female science engineering and technology entrepreneurs and suggested that in a male-dominated environment, women's resilience could be due to their acceptance of established male models for doing business and their willingness to prove themselves by male standards. Male practitioners might be accepted directly as skilled entrepreneurs, while women had to overcome the rarity of being female entrepreneur.

(b) In terms of experiences, St-Jean and Audet (2012) argued that novice entrepreneurs could develop cognitive and affective learning and even increase resilience through mentoring. Duening (2010) also insisted on including the resilient mind in the curriculum design for entrepreneurial education and recommended nascent entrepreneurs to experience the emotions associated with entrepreneurial failure and recovery from it in advance.

(c) As for measuring individual traits, Manzano-Garcia and Calvo (2013) applied the Connor and Davidson Resilience Scale (CD-RISC) to Spanish entrepreneurs, and concluded that the CD-RISC was a reliable and valid tool for measuring the resilience of entrepreneurs.

(d) About external factors, Branzei and Abdelnour (2010) studied the relationship between terrorism conditions and enterprise resilience. Mzid, Khachlouf, and Soparnot (2019) investigated four family firms in Tunisia after the political revolution that took place between 2011 and 2014 (which led to economic instability and business disruptions) and looked at the relationship between individual-level resilience development and family business resilience. In addition, the recent outbreak of Covid-19 prompted a discussion of resilience from a crisis perspective (Castro and Zermeño, 2021; Ratten, 2021).

(e) In the studies dealing with psychological capital (PsyCap) constructing resilience as one of its components, comparisons have been made between entrepreneurs and non-entrepreneurs, too. Baron, Franklin, and Hmieleski (2016) pointed out that founding

entrepreneurs had lower levels of stress compared to participants in a larger study on perceived stress. The reason was that entrepreneurs had high levels of PsyCap, and these relationships resulted in their subjective well-being. Roche, Haar, and Luthans (2014) investigated the direct effects of the level of mindfulness and the mediating effects of PsyCap on well-being among organizational leaders. The authors found that for entrepreneurs, mindfulness was negatively related to burnout (emotional exhaustion and cynicism), and PsyCap could mediate the relationship between mindfulness and dysfunctional outcomes. Jin (2017) compared young Chinese and Korean startup entrepreneurs and found that when considering a startup business, young Chinese entrepreneurs considered resilience and self-efficacy more important than hope and optimism among PsyCap, whereas young Korean entrepreneurs rated hope and optimism more important than other factors.

Three issues in previous research

Of course, many of these studies were done at the dawn of entrepreneurial resilience research, so their contributions to the development of the research in this field should be appreciated. We can also confirm the development from review articles. For example, Korber and McNaughton (2018), through a systematic review, summarized entrepreneurial resilience research broadly in terms of micro- and macro-levels, characteristics, processes, and failures. Hartmann, Backmann, Newman, Brykman, and Pidduck (2022) then conducted a systematic review focusing on individual entrepreneurial resilience. Hartmann et al. (2022), in particular, provided a clear overview of individual entrepreneurial resilience, which has not been uncovered to date and has the potential to dramatically advance research in this field. However, prior research contains the following three issues.

The ambiguity of entrepreneurial resilience

First, researchers had not made a clear distinction between psychological resilience and entrepreneurial resilience. They couldn't answer the question – what is entrepreneurial

resilience? To put it boldly, most of the prior literature in the former section just chose entrepreneur as the sample, so if replacing the sample with stressful occupations or general employees, it might be probable that the same results were shown. If these studies intended to reveal phenomena specific to entrepreneurs, they should examine what the differences would emerge when entrepreneurs are exclusively selected as the subjects.

In addition, we can't assert that the entrepreneur-specific aspect of resilience has been fully clarified from the reviews of Korber and McNaughton (2018) and Hartmann et al. (2022). For example, to adopt only entrepreneurial behavior and mindset in entrepreneurial resilience research (Korber & McNaughton, 2018) is still insufficient in distinguishing from the research simply applying the concept of resilience to entrepreneurs. Besides, although Hartmann et al. (2022) also provided an inclusive review of entrepreneurial resilience, it included even the studies that examined students with little entrepreneurial experience (Johnmark, Munene, & Balunywa, 2016; Perez-Lopez, Gonzalez-Lopez, & Rodriguez-Ariza, 2016). In these mixed bag situations, it is difficult to identify *entrepreneurial* resilience.

Insert Figure 1 about here

Logical leap

The second problem is that previous studies committed the error of connecting individual resilience directly to business performance by simply applying the concept to entrepreneurs. They overlooked the fact that this topic entailed multi-level analysis.

For example, Branicki Sullivan-Taylor, and Livschitz (2018) pointed out that it was not sufficient to consider only individual resilience, because entrepreneurial resilience ranged from individuals to organizations. So far, however, few studies have elaborated on the relationship between entrepreneurial resilience and organizational resilience, furthermore,

between entrepreneurial resilience and enterprise success. The examination by Branicki et al. (2018) into the relationship between entrepreneurial resilience and SME resilience, separating the individual and organizational levels, posed an important direction for the future development of resilience research. Nevertheless, in terms of logic between individual and organizational levels, their study briefly mentioned employee relationships as an unofficial support mechanism, but this is not a sufficient explanation of the effect of individual characteristics on organizational characteristics, which requires further investigation.

On the other hand, when referring to the point that resilience of entrepreneur results in startup business performance (except in the case of no employees), resilience at the individual level should not be directly linked to the organizational level discussion. This is because when a startup business is composed of an entrepreneur and several employees, the company's performance is influenced not only by the entrepreneur's resilience but also by the interaction with its members. To use an analogy, as we cannot simply assume that if some team's manager in Major League Baseball has high resilience, the team would win the League Championship Series, a meso-level approach, such as the psychological spillover effect from the manager to the players, is needed.

In this regard, there remains potential for many studies to be explored. Hmieleski, Carr, and Baron (2015) surveyed founding CEOs in the United States and found that PsyCap was positively related to firm performance in dynamic industry conditions characterized by uncertainty. However, the fact that the entrepreneurs in the study had an average of about 23 employees, and that they used revenue and employment growth as indicators of firm performance, requires additional studies that consider the interaction between entrepreneurs and employees to conclude with the enterprise performance.

Chadwick and Raver (2020) investigated nascent entrepreneurs for more than 2 years and found that entrepreneurs with higher resilience better evaluated difficult start-up

situations as feasible challenges and this allowed entrepreneurs to increase proactivity to continuously create favorable conditions for their businesses, which consequently enhanced their possibilities of business survival compared to low-resilience entrepreneurs. Ayala and Manzano (2014) characterized hardiness, resourcefulness, and optimism as the three dimensions of resilience and explained that resilience helped predict entrepreneurial success. However, while recognizing that entrepreneurial success depended on the resilience of the team, they left it as a challenge for the future. Hallak, Assaker, O'Connor, and Lee (2018), on the contrary, also surveyed the effect of resilience on performance with the participation of upscale restaurant owners/managing directors, but they didn't get the data to support it, though they mentioned the effects of resilience on innovation.

To further develop these studies, the analysis should be conducted after reconfirming the levels of the indicators or the number of employees. Though the lack of multi-level discussions in this field has been pointed out (Branicki et al., 2018; Fisher, Maritz, & Lobo, 2016; Hartmann et al., 2022; Santoro, Messeni-Petruzzelli, and Del Giudice, 2021), few research has offered solutions to this misconception yet.

The meaning of entrepreneurial resilience research

Third, even though researchers analyzed entrepreneurial resilience at a multi-level (Santoro et al., 2021), the extent to which entrepreneurial resilience as a trait affects company performance remains unclear. The current literature had not answered the question—why resilience is important for entrepreneurial activities?

Our paper, therefore, intends to continue the discussion which has been focused on by Korber and McNaughton (2018), and Hartmann et al. (2022), and to get to the heart of entrepreneurial resilience with a narrower scope. Specifically, we highlight two specific aspects of entrepreneurial resilience—performance (i.e. sustainable business, serial entrepreneurship, and business failure) and processes (i.e. social and financial resilience, and

company foundation), and conceptualize it comprehensively covering outcomes and processes in entrepreneurial activities. Through the conceptualization, we present a method for identifying entrepreneurial resilience to offer perspectives for future research.

The Entrepreneurial Resilience: Conceptual Framework

Duchek's (2018) entrepreneurial resilience model and resilience factors unique to entrepreneur proposed by Hayward, Forster, Sarasvathy, and Fredrickson (2010) would help us to conceptualize entrepreneurial resilience as depicted in Figure 2.

Insert Figure 2 about here

From figure 2, entrepreneurial resilience can be defined as comprehensive struggling processes for entrepreneur to bounce back or even return to a better state after facing difficulties, and attain business success. Above all, this paper concludes that the act or phenomenon that represents processes and outcomes, as well as traits and external factors, is essential to describe entrepreneurial resilience.

Duchek (2018) offered a model of entrepreneurial resilience based on Cooper, Flint-Taylor, and Pearn (2013). The author attempted to scrutinize the resilience factors peculiar to entrepreneur with the biographies of eight successful people such as entrepreneurs, billionaires, and financial moguls. This research implied the impacts of situational factors (i.e. parents' behavior and parents' experience) and process-related factors (i.e. entrepreneurial learning and experience and entrepreneur's work attitudes and behaviors) on the development of entrepreneurial resilience and success. However, Duchek's (2018) model has limitations in explaining the whole concept of entrepreneurial resilience because it was mainly built on the entrepreneurs' background, experience, behavior, and parental influences. For example, about the relationships between situational factors and individual factors, not

only parents but also other external factors like societal conditions also have great impacts on individual resilience (e.g. Shepherd, Saade, & Wincent, 2020). Therefore, situational factors can be expanded into external factors and cover not only family (including parents) but also society. On the other hand, processes referred to learning and experience, or, work attitudes and behaviors (Duchek, 2018), but these are common to ordinary workers. Regarding outcomes, mental health and well-being were chosen (Duchek, 2018), but they are general psychological states. Although we understand that these factors are important components of *psychological* resilience, we'd like to make a clear distinction to define *entrepreneurial* resilience rigidly. To develop Duchek's (2018) entrepreneurial resilience model, it is required to supplement these two phases.

With respect to this, Hayward et al. (2010) made suggestions to complement these arguments. They showed why entrepreneurs with high confidence were better suited to start and succeed in subsequent ventures. In particular, confidence engendered positive emotions and resilience, which in turn enabled them to found new ventures. Resilience here included emotional, cognitive, social, and financial resilience. In particular, for social resilience it was explained that "more confident entrepreneurs who exert greater effort may attract more motivated co-workers or more risk-tolerant teammates" (Hayward et al., 2010: 573), and for financial resilience "more confident entrepreneurs are more attractive to venture investors" (Hayward et al., 2010: 575). Especially, the characteristics to attract risk-oriented teammates and facilitate fundraising from VCs are not typical of general employees. Then confidence makes them socially and/or financially resilient, and social and financial resilience can be interpreted as the unique characteristics to entrepreneur. Moreover, according to their statement—"more confident founders can develop emotional, cognitive, social and financial resilience to their *failure* [emphasis added]; and, therefore, become better equipped to *start another venture* [emphasis added]" (Hayward et al., 2010: 569), the ultimate results of being

resilient can be regarded as serial entrepreneurship. On the contrary, on the way to founding subsequent ventures, even confident entrepreneurs may experience venture failures. This type of adversity is peculiar to entrepreneur, too. Thus, serial entrepreneurship and venture failure are also specific factors of entrepreneurial resilience. However, the model of Hayward et al. (2010) itself also has difficulty explaining entrepreneurial resilience holistically. The scope of the description is limited because it presupposed the entrepreneur's hubris.

From figure 2 constructed on both research, it follows that the critical factors of entrepreneurial resilience lie in outcomes and/or processes, and only with a multilevel analysis that integrates individual-level (*traits*) and organizational-level (*processes and outcomes*) discussions, entrepreneurial resilience research beyond the realm of psychology can be realized.

To summarize, we propose that entrepreneurial resilience is a distinctive phenomenon of entrepreneur captured from the perspective of traits, external factors, and especially outcomes and processes—we call them *the four factors of resilience*. This reconceptualization answers the first issue and makes it clear that some traditional entrepreneurial resilience research simply applying resilience to entrepreneurs isn't sufficient.

Discussion

In this section, we demonstrate prior literature corroborates our reconceptualization.

Outcomes & processes

Fisher et al. (2016) and Santoro et al. (2021) handled this topic carefully and showed potential for development for future research. Fisher et al. (2016), expanding on Manzano-Garcia and Calvo (2013) and Ayala and Manzano (2014), surveyed entrepreneurs employing three or more full-time employees and found that resilience predicted individual entrepreneurs' success but there was no relationship between firm performance and individual-level resilience. Although the study's attention to these relations is not

dramatically different from the other studies, we believe that their research design to emphasize the premise of distinguishing between individual and firm-level resilience, made wave to entrepreneurial resilience research. After that, Fisher, Merlot, and Johnson (2018), in the investigation of Australian entrepreneurs, described how two types of passion (harmonious and obsessive passion) contributed directly and indirectly to entrepreneurs' perception of success through resilience. Unlike firm performance, if it is the perception of success, we can measure even when individual entrepreneurs are surveyed. We expect further progress in this area by improving the measurement method.

Since Fisher et al. (2016, 2018), research that expanded their work has emerged. Santoro et al. (2021) also pointed out the scarcity of research on the relationship between the different levels of analysis and Santoro, Bertoldi, Giachino, and Candelo (2020), through a survey of 117 entrepreneurs, explained that if their network of stakeholders was extensive, the relationship between the resilience of entrepreneurs and entrepreneurs' perceived success was strengthened. Santoro et al. (2021) surveyed 195 entrepreneurs who managed small family firms and found that the employee-level resilience dimensions had a positive impact on performance when entrepreneurs had a strong stance toward personal resilience. (Entrepreneurial resilience here served as a moderator between employee-level resilience and performance, and performance referred to entrepreneurs' perceived performance.) However, they did not conduct direct surveys of employees. Some parts of their research have the potential to explore.

On the other hand, sometimes entrepreneurial failure can be an advantage for entrepreneurial activity. As we mentioned above, the failure of the prior venture occasionally looked attractive to investors because of its potential to lower the price of entry (Hayward et al., 2010).

Outcomes & traits

As we say, failure is a stepping stone that leads to success, business failure brings some feedback to entrepreneurs, though, it is up to the individual's resilience whether or not they can revenge and finally get all the glory. Corner, Singh, and Pavlovich (2017) interviewed entrepreneurs who had experienced venture failure and explained that most of them showed a resilient trajectory in emotional and psychological functioning after failure. Jenkins, Wiklund, and Brundin (2014), highlighting two individuals in the same situation after job loss who evaluated their situation in different ways, found that appraisals of loss of self-esteem influenced grief most strongly. They also alluded to the possibility that among PsyCap, resilience, in particular, could be seen as a moderator of the relationship between appraisals and emotions, as well as personality traits such as locus of control and hardiness.

Processes

Processes activated by resilience. Entrepreneurial activity creates resilience, and resilience also facilitates entrepreneurial processes. Shepherd et al. (2020), in doing a study of Palestinian refugee entrepreneurs in Lebanon facing long-term adversity, explained that their motivation to generate income and to help others led to entrepreneurial activity, which drove them to integration activities into Lebanon, and dedication to avoid adversity. These processes generated their resilience, which in turn, also promoted entrepreneurial activity.

PsyCap also facilitates the processes in entrepreneurial activities. For example, in a study of crowdfunding campaigns on Kickstarter, a rewards-based crowdfunding platform, it was reported that entrepreneurs' positive PsyCap, moderated by human capital, led to superior fundraising performance (Anglin et al., 2018). This suggests that resilience may also enhance the entrepreneurial processes.

Enhanced resilience through the processes. Entrepreneurial actions including proactive ones work on resilience. Doern (2016) interviewed entrepreneurs directly affected by the 2011 London riots and found evidence that some had invested in social coping

strategies before the riots. They had cultivated relationships with local people and industry associations, and the financial and emotional support they received from the communities after the riots was an important part of their resilience. Conversely, owner-managers without insurance were more vulnerable because they received little financial support from the community and had fewer community ties.

Williams and Shepherd (2016) analyzed survivors who launched new ventures immediately after a disaster. Noting that the creation of ventures to relieve the suffering of others increased entrepreneurs' resilience to adversity and thereby positively impacted their post-disaster functioning, they found that the creation of such ventures mediated the positive relationship between human capital and post-disaster functioning, and for those who did not establish ventures, human capital was negatively related to post-disaster functioning.

Following the discussion here, the concept of Hayward et al. (2010) becomes more concrete and the entrepreneurial processes refer to broader phenomena, including social networks, financial support, fundraising, and founding startups.

External factors surrounding entrepreneurs

Just as external factors were considered when discussing children's resilience, they also play major roles in discussing entrepreneurial resilience. In the case of entrepreneurs, due to the wide range of their activities, external factors include not only families but also society. Needless to mention, the following literature includes *processes*, the specific factor of resilience.

Family. Family, the closest external factor, can also affect the entrepreneur. The role of the family is not limited to one generation. Families that had been transgenerational entrepreneurs had an entrepreneurial legacy, which served as a motivator and infused meaning into entrepreneurship for them. Entrepreneurial legacy referred to rhetorically reconstructed narratives about a family's past entrepreneurial performance or resilience. The

legacies were imprinted in children through active participation in the family business and by handing down stories in the context of large and cohesive families (*processes*). These instilled entrepreneurial legacies would motivate the current and next-generation owners to engage in three strategic activities (strategic education, entrepreneurial bridging, and strategic succession) that went beyond usual succession and fostered entrepreneurship across generations. Jaskiewicz, Combs, and Rau (2015) clarified them by interviewing owner-managers and potential successors of family-owned and managed German wineries.

The negative side of external factors. Social adversity may fall on the entrepreneur during their economic activities. The place of birth might be a combat zone, or a disaster might suddenly strike. As discussed previously, Shepherd et al. (2020) focused on refugees' long-term adverse conditions and described the recursive relationship between their identity, entrepreneurial behavior, and resilience (*processes*).

Individual traits—resilience, self-efficacy, and intention

Individual's psychological resilience interacts with other psychological factors. Resilience and self-efficacy (confidence) are strongly related. For example, as we mentioned above, Hayward et al. (2010) implied confidence led to resilience. On the contrary, Hallak et al., (2018), who surveyed upscale restaurant owners/managing directors, found the effects of resilience on creative self-efficacy.

Besides, both resilience and self-efficacy are associated with entrepreneurial intentions. By investigating over 400 business owners, aspiring entrepreneurs, and non-entrepreneurs in Afghanistan and over 100 American MBA students some of whom wanted to start businesses in the future and others didn't, Bullough and Renko (2013) showed that self-efficacy and resilience had positive and significant impacts on entrepreneurial intentions in the difficult circumstances. Bullough, Renko, and Myatt (2014) also indicated that even in the context of war, if an individual's resilience and self-efficacy were higher, they developed

entrepreneurial intentions. Jin (2017) found that hope, resilience, and self-efficacy in PsyCap had positive effects on start-up intention through a comparison of Chinese and Korean start-up entrepreneurs.

Resilience also functions as a moderator among other psychological factors. Bullough et al. (2014) examined the effects of perceived danger, entrepreneurial self-efficacy, and resilience under adverse conditions among individuals in Afghanistan who were in a position to start new businesses. They suggested that perceived danger was negatively related to entrepreneurial intentions, but the relation was slightly lower for individuals with high resilience. On the other hand, a study by Obschonka, Hahn, and Bajwa (2018) with newly arrived refugees from Syria to Germany showed a relationship among personality factors (including self-efficacy and resilience), entrepreneurial intentions, entrepreneurial alertness, and career adaptability. The results demonstrated that resilience and self-efficacy were background factors for entrepreneurial alertness, and that they were related to entrepreneurial intentions while mediated by entrepreneurial alertness.

However, we should be careful of arguments about entrepreneurial intentions. The reason is that including the spelling of *entrepreneurial* could make us confused as if it is always a specific phenomenon to entrepreneurs. Bernard and Barbosa (2016), for example, referred to an individual's past encounters and experiences of success as a resilience dynamic and suggested that this triggered them to become entrepreneurs. Like their research, without confirming the performance or processes of entrepreneurial activities, it is difficult to identify entrepreneurial intentions. Just as in the history of psychology, behaviorism challenged conventional introspection and focused on the behavior of organisms, it is better to discuss entrepreneurial intentions by making sure of the results of entrepreneurial behavior.

This article argues that these studies cannot be considered entrepreneurial resilience research if each study remains in the realm of traits or external factors. In contrast, we regard

the discussion that proceeds to business performance in terms of success or failure, or the entrepreneurial resilience processes which can be confirmed as the actual behavior of entrepreneurs, as a phenomenon of resilience distinctive to entrepreneurs that is not observed in other people. Therefore, including outcomes or processes is needed to discuss *entrepreneurial* resilience, which avoids logical leap—the second issue.

Entrepreneurial resilience as a derivative of resilience

We would like to add here that the framework presented in this paper does not negate traditional resilience research, but demonstrates one derivative form. This section provides a brief overview of resilience originating in psychology and PsyCap research that introduced the concept of positive psychology into management research.

The origin of resilience. In the field of psychology, tracing back to its origin, resilience became the object of research in the 1970s (Masten, 2001). Early studies focused on “the paradigm shift from looking at the risk factors that led to psychosocial problems to the identification of strengths of an individual (Benson, 1997)” (Richardson, 2002: 309).

They called those who were doing well despite multiple risks invulnerable. The term was confusing because it inferred that risk aversion was absolute and unchangeable. However, what became clear as research developed was that positive adaptation under adversity involved developmental progression in which new vulnerabilities and/or strengths appear as life circumstances changed. Around this, the concept of resilience began to be substituted for invulnerable (Luthar, Cicchetti, & Becker, 2000). On the other hand, resilience research involving children also played an important role.

Initially, children’s resilience research mainly concentrated on personal qualities such as autonomy or high self-esteem. However, as research in this area developed, researchers gradually recognized that resilience often stemmed from external factors of the child (Luthar et al., 2000). At that time, resilience research entered another transformation

period.

Since the 1980s, researchers had shifted their focus from identifying protective factors to understanding protective processes. The work was not simply concerned with studying which child, family, and environmental factors were involved in resilience, but rather focused on trying to figure out how these factors contributed to positive outcomes (Luthar et al., 2000). Resilience research had been developed in this way.

Nevertheless, it has been exposed to criticism that it had little consensus on definitions, and there were substantial differences in how key constructs were operationalized and measured. It began to be pointed out that there were also differences in the conceptualization of resilience as a personal trait or as a dynamic process (Luthar et al., 2000). After that, Fletcher and Sarkar (2013) summarized its definitions from frequently cited literature, as most definitions were based on adversity and positive adaptation.

The discussion of the definition continued thereafter. Masten (2014) defined resilience broadly as “the capacity of a dynamic system to adapt successfully to disturbances that threaten system function, viability, or development” (Masten, 2014: 6) and referred to “social scientists intrigued with understanding how some people escape the harmful effects of severe adversity, cope well, bounce back, or even thrive, eventually settled on this word to label the focus of their research” (Masten, 2014: 7), but the essence is consistent with Fletcher and Sarkar’s (2013) statement.

To summarize what we've introduced so far, resilience can be defined as positive adaptive traits or processes against adversities. This definition is simple and captures the essence of the concept, but we cannot apply psychological resilience to management phenomena, because it is still difficult to discern the difference between psychopathological and management matters.

Application to the workplace. Around 2000, in management studies, movements to

incorporate positive psychology into organizational behavior began. Luthans (2002) attempted to apply resilience to the workplace, with other psychological factors (confidence and hope). In his early research, he defined resilience as “the positive psychological capacity to rebound, to ‘bounce back’ from adversity, uncertainty, conflict, failure or even positive change, progress and increased responsibility” (Luthans, 2002: 702). Then, F. Luthans, K. W. Luthans, and Luthans (2004) constructed the concept of PsyCap comprising resilience, hope, self-efficacy, and optimism. Besides, Luthans, Vogelgesang, and Lester (2006) focused on resilience itself and clearly expressed the difference from other PsyCap facets. After that, Luthans, Youssef, and Avolio (2007) defined resilience as follows; “When beset by problems and adversity, sustaining and bouncing back and even beyond (resiliency) to attain success” (Luthans et al., 2007: 3).

The distinguishing point of their definition is that it includes success. With this concept, they showed positive relationships between PsyCap and job performance, and between PsyCap and job satisfaction (Luthans, Avolio, Avey, & Norman, 2007), which conveys that PsyCap is a concept specialized in the workplace. Like their definition, considering work performance (success) as a result of or through the processes of overcoming adversities would enable us to explain not only psychological resilience but also resilience phenomenon in the workplace.

We regard their definition as the derivative of resilience specialized in management studies. According to psychological and PsyCap research, employees’ resilience can be defined as positive adaptive traits or processes against adversities *to attain success*. Based on this definition, this paper extended the concept of resilience to entrepreneurs by distinguishing it as *the four factors of resilience*.

Although “the construct of resilience has variously been defined as a trait, process, or outcome” (Fletcher and Sarkar, 2013: 13), outcomes in psychological research assume the

transition of individual psychology rather than work performance. Incorporating the findings of Luthans (2002), Luthans et al. (2004), Luthans et al. (2006), and Luthans et al. (2007), this study also treated outcomes as a *work-related* result of being resilient and narrowed it more to the performance of entrepreneurial activities. We consider this definition is a secondary derivative of resilience.

Implications

We have discussed the specific factors of entrepreneurial resilience and conceptualized them. However, the third issue—how entrepreneurial resilience as a trait affects company performance, which is the mission of entrepreneurial resilience research—is still unsettled. Then in this section, we will consider some solutions by developing the research of Santoro et al. (2021).

Santoro et al. (2021) indeed examined the moderating effects (*processes*) of entrepreneurial resilience (*traits*) between employee-level resilience and perceived firm performance (*outcomes*), but their study left several challenges.

First, the influence of confounding factors remains unclear. They didn't include other psychological factors such as other PsyCap factors or entrepreneurial intentions. These factors might have some effects on the firm performance. Specifically, if we continue to take an entrepreneur's perceived success as the indicator of the firm performance, it is important to verify the impact of optimism because the optimistic way of thinking might interpret the firm performance distortedly.

Next, we must confirm these factors at both entrepreneur and employee levels. Though Santoro et al. (2021) selected entrepreneur only as respondents in their survey, it is preferable to conduct research including team members to illuminate more details.

Lastly, while their research took entrepreneurial resilience as a moderator, we should choose severe external factors which obviously demand resilience for entrepreneur and

employees because resilience and difficulties are two sides of the same coin. In order to satisfy these requirements, it is appropriate to utilize natural experiments like a crisis (Bullough & Renko, 2013; Bullough et al., 2014; Doern, 2016; Obschonka et al., 2018; Shepherd et al., 2020; Williams & Shepherd, 2016). Gender is also applicable in choosing indicators because female entrepreneurs sometimes overcome the difficulty of being entrepreneur, especially in male-dominant societies (Martin et al., 2015). Taking these implications into account, we can deduce the modified framework as follows.

Insert Figure 3 about here

So far, we have not reached the conclusion regarding the third question—why resilience is important for entrepreneurial activities? Therefore, to identify the effects of entrepreneurial resilience, we are eager to perform research with this framework considering confounding factors and making use of natural experiences for future research.

Conclusion

By selecting prior literature strictly, this research presented the conceptual framework arguing that outcome and/or process factors were essential to entrepreneurial resilience. Then this reconceptualization supported some scholars' statements that multi-level analysis was necessary for entrepreneurial resilience research (Branicki et al., 2018; Fisher et al., 2016; Hartmann et al., 2022; Santoro et al., 2021). For future research, we suggested that we include additional elements such as other psychological and external factors as well as the interaction between entrepreneur and employees (Santoro et al., 2021) in our framework to find the meaning of entrepreneurial resilience research.

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Figure 1

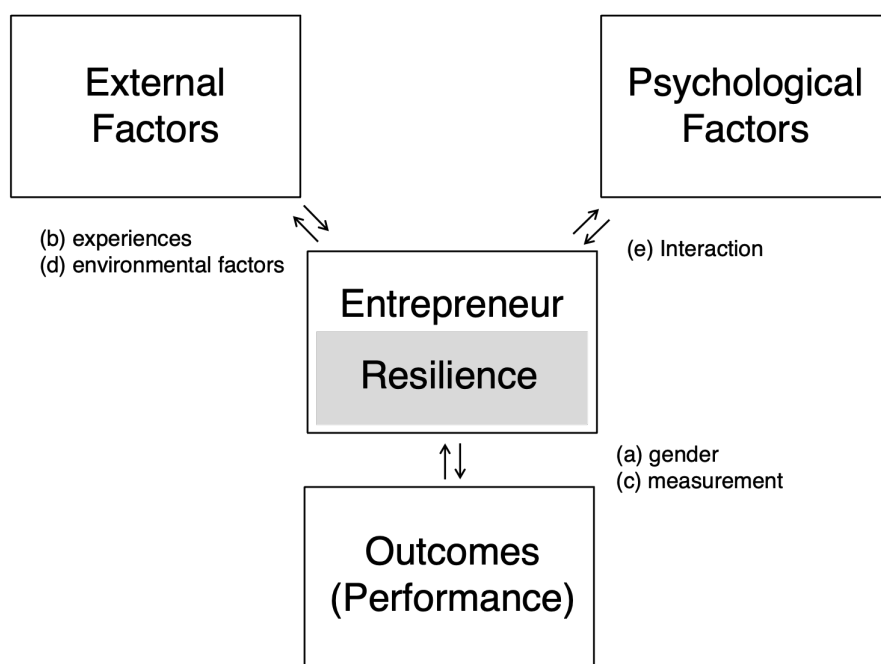


Figure 1. Prior literature that simply applied the construct of psychological resilience to entrepreneurs and discussed in each topic.

Figure 2

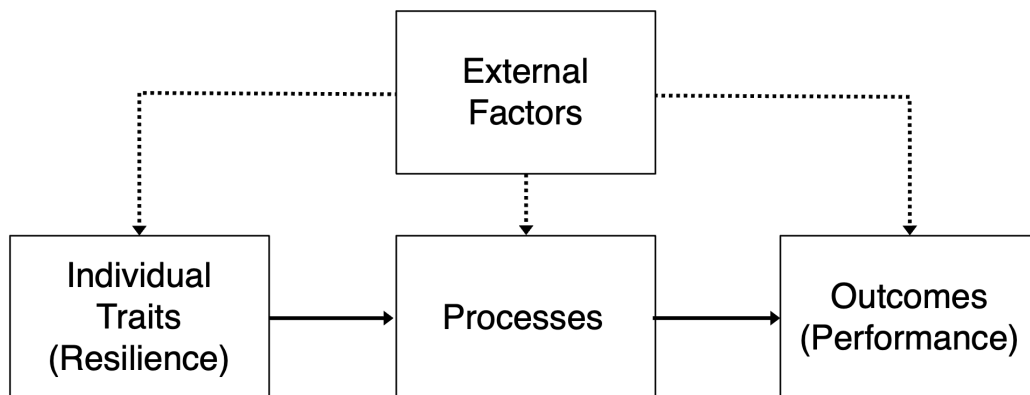


Figure 2. Conceptual framework of entrepreneurial resilience—the four factors of resilience.

Figure 3

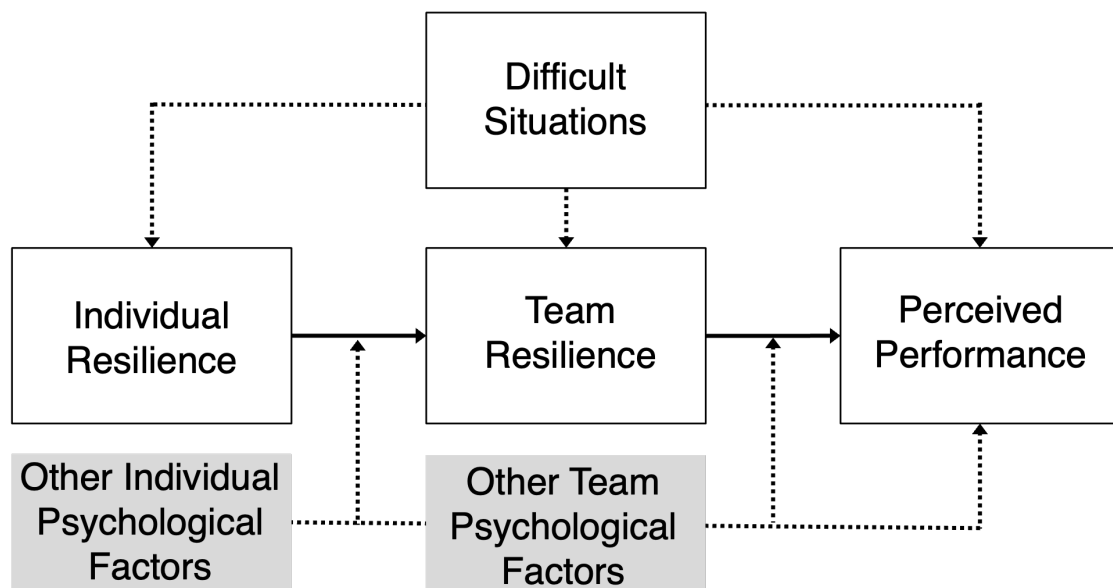


Figure 3. Modified framework—future directions.