

ENTREPRENEURSHIP UNDER ADVERSE CONDITIONS: GLOBAL STUDY OF INDIVIDUAL RESILIENCE AND SELF-EFFICACY

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ABSTRACT

We examine the effects of an adverse society, resilience, and self-efficacy on entrepreneurial intentions. Survey data from eight countries shows that adverse social conditions in the country impede the development of entrepreneurial intentions among its citizens. Furthermore, adversity changes the ways in which self-efficacy and resilience relate to entrepreneurial intentions.

INTRODUCTION

In 2015, wars, conflict, and persecution had forced more people than at any other time to flee their homes and seek refuge and safety elsewhere, and sometimes find new ethnic and religious violence and discrimination in the host communities in which they sought refuge (UNHCR, 2015). These adversities wreak havoc on the individuals, communities, and economies affected. Around the world, violent conflict has been found to negatively impact entrepreneurial activity (Brück, Llussáf, & Tavares, 2011) because of conditions such as reduced economic momentum, lack of resource availability, and socially irresponsible behaviors, even when entrepreneurial activity is needed for growth (Solymossy, 2005). Scholars and world leaders do not know enough about the ways in which the far-too-prevalent challenges of the 21st century impact people's entrepreneurial decisions and aspirations, and how these adversities are overcome by individuals who wish to pursue new businesses.

To understand these phenomena better, we explore answers to the following research questions: how is societal-level adversity related to people's interest in new business development, and how are the cognitive resources of resilience and self-efficacy related to these entrepreneurial intentions? To address these research questions, we collected individual-level survey data in eight countries—Afghanistan, Iraq, Tunisia, Peru, Ghana, Tajikistan, the United States, and Finland—from 2,591 individuals between 2009 and 2012. These countries represent a whole spectrum of adversity, from some of the safest to some of the most fragile countries in the world. We find that in addition to its immediate impact on individuals' entrepreneurial intentions, societal-level adversity also influences the ways on which the cognitive resources of self-efficacy and resilience contribute to the development of entrepreneurial intentions.

THEORY AND HYPOTHESES

Overall, a review of research on societal adversity and entrepreneurship suggests that various forms of adversity (e.g. institutional) are likely to negatively impact people's willingness to exert long-term effort and invest resources in risky endeavors, such as business ownership. Next, we extend this nascent body of work by examining how macro-level aspects of adversity impact individual-level entrepreneurial decisions. As no established theory or literature deals specifically with how individuals' entrepreneurial intentions develop in adverse environments, we draw on related arguments from the entrepreneurial cognition literature, and research on cognitive appraisals in particular, to theorize on adversity, entrepreneurial cognition, and entrepreneurial intentions.

Cognitive structures are networks of associations that organize and drive people's appraisals (Estes, 1975). Entrepreneurial cognitions are defined as "the knowledge structures that people use to make assessments, judgments, or decisions involving opportunity evaluation, venture creation, and growth" (Mitchell et al., 2002: 97). The entrepreneurial cognition lens is used to understand how entrepreneurs think, and why they behave the way they do (Mitchell et al., 2002). The inclination to partake in entrepreneurial activity is a function of cognition (Busenitz & Lau, 1996) and most entrepreneurial decisions are affected by how founders perceive and decipher the environment (Bird, 1988).

Fear and the perception of danger indeed impact individual activities, and we want to explore how these cognitive appraisals affect individuals' business decisions. Conflict and war have been known to constrain the economy and access to resources, and contribute to socially-destructive behaviors (e.g. drug and arms trade, kidnapping), and therefore strangle the entrepreneurial activity that is so badly needed for economic growth and social survival (Solymossy, 2005). In addition, political, regulatory, and economic institutions that are weak and ineffective can stifle the ability of people to create the prosperous and functioning business linkages that are needed for venture growth (Batjargal et al., 2013).

Individuals differ in their responses to living in highly adverse environments. One's cognitive appraisal of, and resulting response to, an adverse environment occurs when a person considers both 1) the threatening nature of the environment, and 2) the resources required to handle or eradicate the adversities and the associated stresses they produce (Lazarus and Folkman, 1984). Adversity in the entrepreneur's operating environment (natural disasters, violence, discrimination, infrastructural deficiencies, or internal conflict, for example) can give rise to feelings of powerlessness, fear, and helplessness. An individual assessing a highly adverse environment is likely to conclude that they simply cannot start a firm because they are certain to fail, fearful of the consequences for themselves, their family and their personal finances, and are discouraged by the long-term prospects for business activity in general. Given these likely negative appraisals of situations involving adverse operating environments, we first hypothesize:

Hypothesis 1: Country-level adverse living and working conditions are negatively related to the intent to start and own a business.

However, even under conditions of adversity, individuals' appraisals of the situation differ between harmful and threatening, on one hand, and a challenge on the other (Lazarus & Folkman, 1984). For example, when an individual living under conditions of adversity perceives

this adversity as a threat, they view it as something that will cause harm, such as damage to their property or personal health. Yet when one looks at the same environment as a challenge, one can develop a positive response because of the expectation that such a challenge can be overcome. For example, one may decide that pursuing entrepreneurship in such an environment can lead to personal financial gain for oneself and one's family. In other words, one type of cognitive appraisal of an adverse environment could lead to the development of intentions to pursue entrepreneurship, but only when one perceives the stressful environment as a challenge, not a source of threat or harm. For this to happen, we suggest that two individual-level cognitive resources are particularly important: resilience and self-efficacy.

Resilience involves an ability to maintain relatively stable, healthy levels of psychological and physical functioning in response to loss, violence, or life-threatening events, and the capacity for generative experiences and positive emotions (Bonanno, 2004). Following previous scholars (e.g. Richardson, 2002; Sinclair & Wallston, 2004), we conceptualize resilience as an ability to recover and positively adapt within the context of adversity and then pursue personal growth. Resilience is seen as a cognitive ability that develops overtime through the process of continually handling risk, trauma, fear, and hardship (Masten, 2001; Sutcliffe & Vogus, 2003). While resilience is not fixed and individuals cannot be expected to rebound from every instance of adversity in the same positive way, conceptualizing it cognitively as a developmental ability helps us understand how individuals can have the ability to adapt to the next period of adversity (Sutcliffe & Vogus, 2003).

The notion that resilient individuals employ positive emotions and pursue personal growth, harmony, and a better life (Richardson, 2002; Sinclair & Wallston, 2004) explains how individuals might see entrepreneurship as emancipatory—breaking free from perceived constraints in pursuit of dreams and efforts to create change in the world (Rindova, Barry & Ketchen, 2009). We propose that in order to do this, entrepreneurs need resilient abilities to access essential cognitive resources for dealing with the adversity, adapting, and looking for creative opportunities (Fredrickson, 2001; Fredrickson et al., 2003; Sinclair & Wallston, 2004). Under adversity, resilient individuals may engage in entrepreneurial activity to purposefully target their energy toward something positive, like distracting themselves from the adverse environment and providing for their family.

This all shows us that resilience is important for the intent to start a business, and it is particularly important for entrepreneurship in adverse environments. For individuals to be interested in forming the intent to start a new business under conditions of constant threat, violence, and insecurity, they need to work through adversity, look for creative options in adverse situations, and believe in their ability to rebound and grow. Therefore, we hypothesize that:

Hypothesis 2a: Higher levels of adversity in the operating environment corroborate a positive relationship between an individual's resilience and his / her intentions to start and own a business.

While resilience facilitates cognitive appraisals that can lead to the development of intentions to pursue entrepreneurship under any circumstances (e.g. Bullough et al., 2014), the role of resilience is particularly significant when the "objective" business environment is very challenging. However, another key cognitive resource for entrepreneurs, namely self-efficacy,

shows different patterns under severe adversity. Self-efficacy is defined as a person's confidence in his or her ability to implement all the actions required to perform well (Bandura, 1977, 1997). Self-efficacy specific to a given activity domain is instrumental in predicting performance in that domain (Bandura 1986). Accordingly, entrepreneurial self-efficacy (ESE) is the degree to which an individual believes that (s)he is capable of performing the roles and tasks of an entrepreneur (e.g. McGee, Peterson, Mueller and Sequeira 2009). ESE has been consistently related to an individual's intent to engage in entrepreneurship; it is a key antecedent of entrepreneurial intentions (e.g. Boyd and Vozikis 1994; Zhao et al., 2005; Zellweger et al., 2011).

In addition to the well-established direct relationship between ESE and entrepreneurial intent, some recent research has also uncovered that self-efficacy works in concert with other forces—like adversity, both individual and societal—to influence entrepreneurship (Hmieleski and Baron, 2008; Lee, Wong, Foo & Leung, 2011; Tumasjan and Braun, 2012). This focus on interactive effects is reflective of Bandura's (1997, p. 23) suggestion that “[t]here is no single relationship between efficacy beliefs and outcome expectancies. It depends on how tightly contingencies between actions and outcomes are structured, either inherently or socially, in a given domain of functioning”. In other words, it is important to consider the possibility that high levels of self-efficacy may lead to different goals and outcomes for entrepreneurs, depending on the context (Hmieleski & Baron, 2008).

Relevant for our discussion of self-efficacy and adversity, self-efficacy's motivational force may actually be diminished when the consequences of one's actions are unclear, such as under conditions of severe societal adversity and uncertainty. In such environments, potential entrepreneurs remain unmotivated to engage in entrepreneurial actions even if they believe in their abilities to do so—in other words, their entrepreneurial intentions will not develop even if they have the self-efficacy. Thus, people's entrepreneurial intentions depend less on self-efficacy under adversity:

Hypothesis 2b: Higher levels of adversity in the operating environment attenuate a positive relationship between an individual's entrepreneurial self-efficacy and his / her intentions to start and own a business.

METHOD AND RESULTS

Data

Primary survey data were collected in 2009-2012 in the following countries: Afghanistan (n=489), Iraq (n=441), Tunisia (n=300), Peru (n=308), Ghana (n=129), Tajikistan (n=310), United States (n=330) and Finland (n=284) (Total n=2,591). We chose these countries because of the dispersion of adverse conditions they represent, with Afghanistan having the most adversity and Finland having the least. The surveys targeted adults ages 18-50 in more than one city/province in each country, in order to obtain the most representative sample possible. In cases where participants were not literate, the survey collectors were trained to read the survey to them and fill in the responses.

To measure entrepreneurial intent, our dependent variable, we used Liñán and Chen's (2009) 6-item scale ($\alpha = .867$). To measure resilience, we used Sinclair and Wallston's (2004) 4-item scale ($\alpha = .712$). For entrepreneurial self-efficacy, we used Zhao, Seibert, and Hills (2005)

4-item scale ($\alpha = .817$). To measure the adversity of the operating environment, for each of our eight countries, we used the 2012 Fragile States Index (FSI) score, developed and provided to the public by partnership between the Fund for Peace and Foreign Policy. The FSI is based on twelve indicators of state vulnerability, organized into social (4 indicators), economic (2 indicators), political and military categories (6 indicators), developed from a wide review of the relevant literature (Fund for Peace, 2016). Since the economic environment of a country is more of a consequence of the social, military, and political aspects of the state, because there is an inherent economic aspect of entrepreneurial activity, and because the two-way economic development-entrepreneurship relationship is complex (e.g. van Stel et al., 2005; Wennekers et al., 2005), we chose to use only the non-economic dimensions of the FSI to operationalize adversity, and we control for the two economic dimensions of the FSI. By doing this, we can isolate the non-economic elements of adversity and study their relationship to the intent to start a business. Out of the countries in our sample, Iraq and Afghanistan had the highest scores on the Failed States index, indicating vulnerable states, with the United States being deemed very stable and Finland ranked as the most stable country in the world.

Our analyses were controlled for gender, age, college education, number of businesses previously owned, necessity versus opportunity motivation, and experience level at the individual level, and gross domestic product (GDP) growth and economic development (based on the FSI) on the country level.

Results

We followed Steenkamp and Baumgartner (1998) in testing measurement invariance and showing that our measurements are comparable across cultural contexts. We addressed common method bias in two ways: through the design of the study's procedures, and through statistical controls (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Beyond survey design and implementation, common method bias in our study should not be a severe issue since our main independent variable, adversity, comes from a secondary data source (FSI). Construct validity was assessed based on the composite reliability (CR), factor loadings, and average variance estimates (AVE). The results indicate good discriminant validity of latent variables and construct independence.

We use partial least squares (PLS) approach to analysing the data, and used Smart PLS software to carry out the analyses (Ringle, Wende, & Will, 2005). In our models we find full support for H1: the adversity of the environment (FSI) is significantly and negatively related to people's entrepreneurial intentions. Our interaction results provide full support to our hypotheses H2a and H2b. The interaction shows that resilience has little impact on entrepreneurial intentions in benign environments, but in adverse environments its relationship with entrepreneurial intentions is significant and positive. While self-efficacy is positively related to entrepreneurial intentions, this relationship is weaker under adverse societal conditions. The interaction results were further corroborated by our *post hoc* multi-group analyses.

DISCUSSION

Many, if not most, of the world's aspiring entrepreneurs face an operating environment characterized by significant adversities related to rule of law, public services, security apparatus,

refugees, human rights, terrorism, and even war. Despite their potential impact on people's involvement and interest in entrepreneurship, previous entrepreneurship research has not paid much attention to such non-economic adversities. In this study, we have started to theorize about these adversities, their direct impact on people's entrepreneurial intentions, as well as the ways in which they influence the relationships between two key cognitive factors driving entrepreneurship—resilience and self-efficacy—on one hand, and entrepreneurial intentions on the other.

The impact of entrepreneurial self-efficacy, which may be the most widely studied cognitive antecedent of entrepreneurial intent and action, is diminished among our survey respondents from adverse societal environments. This suggests that other factors may have a more important role to play in such societies. Here, we have shown that the importance of entrepreneurial resilience is elevated when the operating environment for businesses is very challenging. As such, this research adds to the developing body of scholarship on the importance of resilience in entrepreneurship (Branzei & Abdelnour, 2010; Bullough, Renko & Myatt, 2014; Hayward, Forster, Sarasvathy & Fredrickson, 2010).

Our findings align with the social cognitive theory (Bandura 1986) as well as the theory of planned behavior (Ajzen 1991), both widely applied in previous entrepreneurship research. Both of these theories suggest that exogenous factors influence entrepreneurial intentions through their effect on how individuals think, which is what we find here. However, the more nuanced findings from our study provide distinct contribution to the use of these theories in entrepreneurship. For the theory of planned behavior, which suggests that entrepreneurial intentions develop from perceptions of desirability and feasibility (Krueger 2000), our findings suggest that an adverse operating environment would disrupt those perceptions and therefore any potential entrepreneurial intent (and subsequent action). In terms of social cognitive theory, our findings suggest that the importance of self-efficacy is not uniform across contexts. Hence, future researchers would be well advised to incorporate higher-level effects (team-, firm-, or country-level) into their models of self-efficacy's outcomes in entrepreneurship.

In sum, we know that entrepreneurship is vital for economic development efforts and for peace-building, yet we still know relatively little about the thinking of entrepreneurs in adverse conditions: Why do some individuals, and not others, pursue entrepreneurship even when the operating environment is less than optimal? Our study shows that to answer this question, we need to look at both the level of those dangers that exist in the operating environment, as well as individuals' cognitive resources that allow them to persist in the face of such dangers (resilience) while believing in their entrepreneurial skills (self-efficacy). In particular, our findings show that individual resilience is an important factor that contributes to people's entrepreneurial intentions across environments, and it may be particularly salient in challenging, adverse environments.

REFERENCES AVAILABLE FROM THE AUTHORS