

Entrepreneurial Resilience: Locus of Control and Well-being of Entrepreneurs

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Abstract

For entrepreneurs, financial adversity is one of the most dominant causes of stress. Such entrepreneurial adversity can, on the one hand, lead to successful coping or, on the other hand, to maladaptive coping, helplessness, and desperation. In this study, author explores locus of control as psychological capital that contributes to entrepreneurial resilience in the face of prolonged economic adversity. Findings from a sample of 135 entrepreneurs show that entrepreneurial adversity is negatively associated with job satisfaction and self-reported health. Secondly, results reveal a significant moderating effect of locus of control on the adversity-well-being relationship.

Keywords: Entrepreneurship; Resilience; Locus of control; Well-being; Entrepreneurial adversity

Introduction

Entrepreneurial resilience: Locus of control and well-being of entrepreneurs

Entrepreneurs are often thought of as an important asset for the economy [1]. They create wealth and growth for the society as a whole. For entrepreneurs, however, the risk of starting a business and the repercussion of failure are great. While on the one hand, entrepreneurs are depicted as passionate and enthusiastic about their businesses [2-4], they are also highly exposed to negative affective states such as anxiety, fear, and stress [3]. Affect, in turn, influences entrepreneurial judgment and opportunity recognition, decision-making, and creativity.

The fact that entrepreneurs choose to face the adversity, risks, and stress involved in entrepreneurial activity suggests that they have certain dispositional characteristics and psychological capital that enables them to endure high levels of uncertainty and other types of entrepreneurial adversity [5-9]. Nevertheless, the topic of psychological capital and entrepreneurial resilience is understudied. Specifically, in this study author is interested in the application of attribution theory to predict entrepreneurial resilience. Direct application of attribution theory to the theory of entrepreneurship has been made only recently.

Moreover, while entrepreneurial stress and uncertainty constitutes a conceptual cornerstone for most theories on entrepreneurs [1], less is known about actual entrepreneurial experiences of adversity [10]. There is a need for empirical evidence on the entrepreneurial phenomenon [11] and specifically on phenomena related to entrepreneurial resilience and adversity [12,13]. If we will know more about entrepreneurs' resilience and psychological capital, we will also, indirectly, learn about entrepreneurial success, effectiveness, effort, and eventually venture growth and performance [14,15].

Literature Review

The entrepreneurial activity is an extreme case, where individuals are exposed to high risks and high rewards, in contrast to regularly paid workers who have lower stakes in the success or failure of their business. Self-employment involves increased levels of stress, role ambiguity, heightened emotional energy, as well as higher risks and potential rewards [16]. The entrepreneurial process is filled with uncertain and adverse circumstances where the individual has relatively little control [17]. One main source of entrepreneurial adversity is financial conditions or income from the business. Economic decline may be the single largest factor associated with entrepreneurial stress [18]. Income level among entrepreneurs was positively associated with their well-being and health [16].

In this study, author tests the association between entrepreneurial adversity conceptualized as a financial setback and entrepreneurs' well-being (Figure 1).

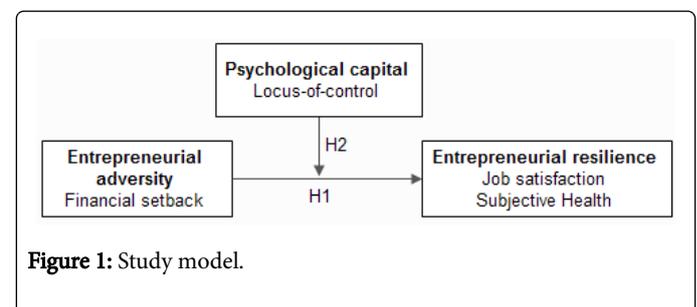


Figure 1: Study model.

Resilience is the characteristic of individuals who overcome setbacks related to their life and careers [19]. Despite its use for more than 50 years in the field of psychology [20], it received little empirical attention in the entrepreneurship literature. Resilience is an especially important quality of entrepreneurs [21] since the entrepreneurial environment is associated with extreme highs and lows [22].

Entrepreneurial resilience refers to the entrepreneur's capacity to overcome particularly difficult circumstances. It is a dynamic

adaptation process that allows entrepreneurs to look forward into the future despite harsh financial setbacks [23]. Through this process, entrepreneurs are able to face an uncertain future with a positive attitude rather than with feelings of helplessness, fear, apathy, and desperation [12,18,24]. Resilience indicates positive adaptation within the context of significant adversity [25]. Hence, sustained well-being in the face of adversity can be seen as an indication of entrepreneurial resilience. The lower the influence of adverse entrepreneurial conditions on entrepreneurs' well-being, the greater their resilience. Positive affect is considered an indication for coping abilities and for tolerance for high levels of stress.

Hypothesis 1: Entrepreneurial adversity will be negatively associated with entrepreneurs' well-being.

Entrepreneurial resilience is an outcome of person-entrepreneurial fit, namely the interaction between entrepreneurs and their environment [12,26]. We would expect that the outcome of resilience would depend on specific psychological qualities in the face of adversity. Certain psychological capital was shown to be positively associated with subjective well-being and negatively associated with perceived stress [14]. In this study, author looks at locus of control as psychological capital that can contribute to entrepreneurial resilience and coping.

Locus of control involves the perception of having personal control and not being at the mercy of external circumstances or fate. It is linked with issues of responsibility and blame [20]. People with a high internal locus of control tend to be more persistent, to respond more to challenge, and to see themselves as a source of their success [27]. Internal locus of control is associated with higher levels of work satisfaction and general health [27]. Locus of control was demonstrated to account to a large portion of the variance in work satisfaction among small business owners [28]. Furthermore, Owens et al. [28] found positive associations between locus of control and emotional resilience, risk-tolerance, as well as tolerance for financial insecurity [28].

At the same time, high internal locus of control can be problematic. Self-employment involves significantly more work hours and effort, which also means additional stress and strain, and these can lead to potentially serious stress-related physical health consequences [16]. More so, there is only a small positive relationship between internal locus of control and business success among self-employed [28,29].

Since the direct effect of locus of control on entrepreneurial well-being and success is not straightforward, moderation effects can be used to improve our understanding of the effects of locus of control on entrepreneurial outcomes. In terms of the interaction effect, a study by Hmieleski and Carr shows that psychological capital reduced the negative effects of work tension on job satisfaction among entrepreneurs. Also, a significant moderating effect of locus of control on the stress-strain relationship among managers was found [30].

Hypothesis 2: The effect of entrepreneurial adversity on entrepreneurial resilience will be moderated by locus of control.

Method

Sample and database

In this study, author used the General Social Survey (GSS), which has studied the American society since 1972. Author used responses of

individuals who either are starting a new business or are currently the owners of a business that they help manage. Multiple logistic regression analysis was conducted and background variables of age, gender, and marital status were controlled in all regressions. Out of 201 entrepreneurs in total in the 2008 GSS survey, the sample of this study includes 135 individuals who answered the question on locus of control.

Measures

The dependent variables

Cardon et al. [6] define persistence as those who enjoy a prolonged state of well-being. Well-being was associated with openness to opportunities, increased motivation, and improved ability to cope with stress and adversity [31]. In this study author uses two indices of entrepreneurial resilience as dependent variables, these are job satisfaction and subjective health.

Job Satisfaction: Answers the question "On the whole, how satisfied are you with the work you do would you say you are very satisfied, moderately satisfied, a little dissatisfied, or very dissatisfied?" The responses range (1) very dissatisfied to (4) very satisfied.

Subjective health, Answers the question "Would you say your own health, in general, is excellent, good, fair, or poor?" The responses range (1) poor to (4) excellent.

The independent variables

The main goal of this study is to test the interaction effect of entrepreneurial adversity and locus of control to predict entrepreneurial resilience.

Locus of control: Indicates the extent to which individuals believe that they control events affecting them [32]. Author used an dichotomous indicator of locus of control which responses to the question "Some people say that people get ahead by their own hard work; others say that lucky breaks or help from other people are more important. Which do you think is most important?" To create more equal groups of comparison, 1-indicates internal locus of control (hard work most important), and 0-else.

Entrepreneurial adversity: To operationalize entrepreneurial adversity author used the indicator: "During the last few years, has your financial situation been getting better, worse, or has it stayed the same?" Worsening financial situation indicates the highest entrepreneurial adversity [33,34].

Results

Table 1 presents the correlations between the study variables. Means and standard deviations for all study variables are also included. Table 1 shows that the average age of those who start and own a business is 39.7, about equal number of entrepreneurs for males and females, and 64 percent of the entrepreneurs report internal locus of control.

	M	SD	1	2	3	4	5	6	7
Job satisfaction	3.35	0.77	-						
Subjective health	3.05	0.72	0.19*	-					
Age	39.7	12.93	0.15	-0.06	-				
Gender	1.61	0.49	0.04	-0.09	0.07	-			
Marital status	0.46	0.5	0.17	-0.03	0.35***	0.01	-		
Financial satisfaction	1.82	0.76	0.23*	0.26**	0.07	0.17*	0.06	-	
Locus of control	0.64	0.48	0.04	0.01	-0.07	-0.22*	0.22*	0.11	-
Entrepreneurial adversity	2.02	0.81	-0.21*	-0.13	0.05	0.01	0.01	-0.39***	-0.04

Note: N ranges 119 to 135. *p < 0.05, **p < 0.01, ***p < 0.001.

Table 1: Means, standard deviations, and correlations of the study variables.

In terms of adversity, an almost equal number of entrepreneurs reported their financial situation getting better (N = 43), worsening (N = 46), or staying the same (N = 46). This shows the high prevalence of situational adversity among entrepreneurs.

Eyeballing the correlations shows in Table 1, it is notable that for entrepreneurs job satisfaction and subjective health are significantly correlated (r = 0.19, p < 0.05). Entrepreneurial adversity is significantly and negatively associated with job satisfaction (r = -0.21, p < 0.05), and has a similar trend, although not significant one, with self-reported

health. The control variable of present financial satisfaction is positively correlated with both well-being indices as well as with entrepreneurial adversity (r = -0.39, p < 0.001) demonstrating the expected association between long-term economic adversity and present financial conditions. The former is interesting for the study of entrepreneurial resilience, which is the focus of this study, whereas the latter is used as control for present financial situation which may indicate the present situation of the business.

Dependent Variable: Job Satisfaction [95% CI]			
Predicting Variables /Step	1	2	3
Step 1: Background variables (B)			
Age	0.015 [-0.017, 0.48]	0.012 [-0.021, 0.045]	0.011 [-0.022, 0.045]
Gender	0.049 [-0.713, 0.810]	-0.010 [-0.778, 0.758]	0.019 [-0.756, 0.794]
Marital status	-0.632 [-1.427, 0.162]	-0.620 [-1.419, 0.179]	-0.599 [-1.408, 0.210]
Financial satisfaction			0.577* [0.026, 1.127]
Step 2: Main effects (B)			
Entrepreneurial Adversity	-0.538* [-1.012, -0.064]	-1.188** [-1.993, -0.383]	-1.085** [-1.895, 0.275]
Internal locus of control	-0.114 [-.881, 0.652]	-2.312* [-4.574, -0.050]	-2.534* [-4.819, 0.249]
Step 3: Interaction (B)			
Adversity X locus of control		1.034* [0.058, 2.009]	1.110* [0.126, 2.094]
Nagelkerke R2	0.095*	0.135*	0.171**
ΔR2		0.04	0.036
Chi-Square	10.267	14.841	19.168

Notes: Reported are results after a list-wise deletion of missing data; N = 119, 16 participants did not complete specific variables. *p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001

Table 2: Results of steps 1-4 in hierarchical multiple regression analyses predicting job satisfaction (Entrepreneurial resilience index) with background variables, locus of control, and entrepreneurial adversity.

In a separate correlation analysis, when examining the correlations of entrepreneurial adversity and resilience, separately (split) for those who report internal and external locus of control, we find support for Hypothesis 2. For those with external locus of control, there is a significant negative correlation between entrepreneurial adversity and job satisfaction ($r = -0.437, p < 0.01$) as well as self-reported health ($r = -0.325, p < 0.05$). In contrast, for those with internal locus of control these effects are marginal and non-significant ($r = -0.047$ and 0.000 , NS, for job satisfaction and subjective health respectively).

The outcome of the regressions

Tables 2 and 3 presents the results of multiple regression analysis. Step 1 shows in Table 2 provides support for Hypothesis 1. There is a significant main effect for entrepreneurial adversity ($B = -0.538, p < 0.05$) and there is no significant effect for locus of control as main effect ($B = -0.114$, NS). Steps 2 and 3 confirm Hypothesis 2, and demonstrate significant interaction effect ($B = 1.034$ and 1.110 respectively for Steps 2 and 3, $p < 0.05$) between entrepreneurial adversity and locus of control. The addition of present financial satisfaction as control variable did not meaningfully change the significance or effect size of the results. The effects of age, gender, and marital status remained non-significant.

Figure 2 presents the interaction effect between entrepreneurial adversity and locus of control. It demonstrates that while individuals with external locus of control decrease their job satisfaction under conditions of entrepreneurial adversity, individuals with internal locus of control do not decrease their satisfaction. Notably, under conditions of adversity, job satisfaction is higher for those with internal locus of control. Under conditions of no entrepreneurial adversity, individuals with external locus of control report higher job satisfaction. This finding is consistent with the mixed findings on the effect of locus of control on entrepreneurial resilience and success. The finding suggests that only under the condition of entrepreneurial adversity, internal locus of control is useful for entrepreneurial resilience. Otherwise, high locus of control may mean additional stress and strain [16], which in turn result in lower job satisfaction and self-reported health.

Table 3 (below) provides a more limited support for Hypothesis 1. There is a marginally significant effect for entrepreneurial adversity on self-rated health ($B = -0.397, p < 0.1$) and there is no significant effect for locus of control as main effect ($B = 0.024$, NS). Steps 2 and 3 in Table 3 support Hypothesis 2 and demonstrate significant interaction effect ($B = 0.784, p < 0.1$ and $B = 0.875, p < 0.05$, respectively for Steps 2 and 3). The control variable of present financial satisfaction ($B = 0.747, p < 0.01$) did not affect much the interaction effect outcomes.

Predicting Variables/Step	Dependent Variable: Subjective Health [95% CI]		
	1	2	3
Step 1: Background variables (B)			
Age	-0.008 [-0.035, 0.19]	-0.011 [0.38, 0.017]	-0.016[-0.044, 0.012]
Gender	0.567 [130, 1.264]	0.531 [-0.169, 1.231]	0.598* [-0.111, 1.307]
Marital status	0.041 [669, 0.751]	0.053 [-0.661, 0.767]	0.094 [-0.628, 0.815]
Financial satisfaction			0.747** [0.259, 1.236]
Step 2: Main effects (B)			
Entrepreneurial Adversity	-0.397* [-0.817, 0.023]	-0.873* [-1.534,-0.212]	-0.693* [-1.372, -0.014]
Internal locus of control	0.024 [-0.672, 0.719]	-1.551 [-3.397, 0.295]	-1.890* [-3.770, -0.009]
Step 3: Interaction (B)			
Adversity X locus of control		0.784* [-0.056, 1.624]	0.875* [0.024, 1.727]
Nagelkerke R2	0.042	0.069	0.140*
ΔR2		0.027	0.071
Chi-Square	5.027	8.417	17.759
Note: N = 135. 0 participants did not complete specific variables. * $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.			

Table 3: Results of steps 1-4 in hierarchical multiple regression analyses predicting job satisfaction (entrepreneurial resilience index) with background variables, locus of control, and entrepreneurial adversity.

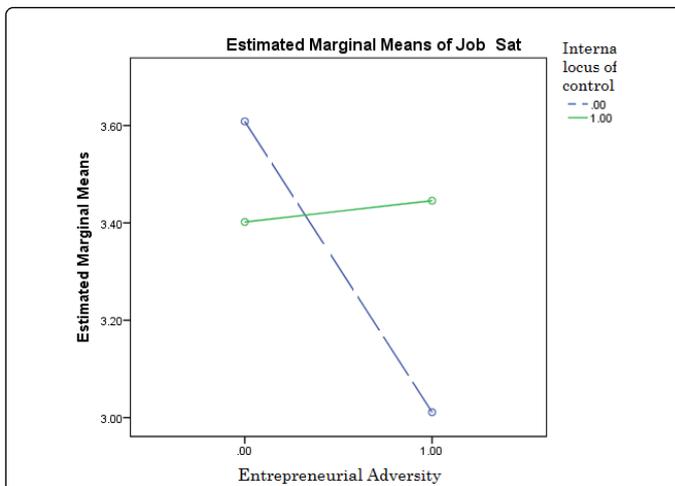


Figure 2: Job satisfaction interaction effect of entrepreneurial adversity and locus of control.

Figure 3 shows similar trends to those depicted in Figure 2. There is a clear interaction effect for entrepreneurial adversity and locus of control. Whereas under adverse entrepreneurial conditions individuals with external locus of control have decreased self-reported health, individuals with internal locus of control do not have decreased self-reported health (the figure even suggests a small increase). Similarly to job satisfaction, under conditions of adversity, self-reported health is higher for those with internal locus of control whereas under conditions of no adversity, individuals with external locus of control report higher self-reported health, as proposed by Cardon and Patel [16].

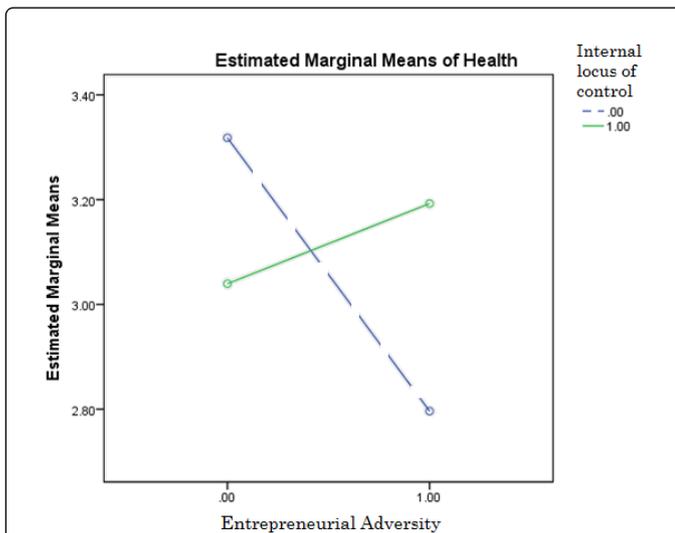


Figure 3: Subjective health interaction effect of entrepreneurial adversity and locus of control.

Discussion

The question of research in this study was—does internal locus of control, as psychological capital, contribute to entrepreneurial

resilience in the face of prolonged economic adversity? The study findings above demonstrate the moderating effect of locus of control on entrepreneurial adversity. Under conditions of adversity, entrepreneurs with high internal locus of control are more resilient and report higher levels of well-being. The well-being for those with internal locus of control is similar in conditions of economic adversity, economic stability, and economic growth. In contrast, entrepreneurs who report external locus of control are sensitive to the situation, and show decreased resilience under the financial adversity condition.

However, while under conditions of adversity those with internal locus of control report higher well-being than those with external locus of control, under non-adverse conditions, those with external locus of control report higher levels of well-being than those with internal locus of control. Thus, while individuals with internal locus of control may be more resilient to adverse conditions due to their belief in their own capability to successfully engage with the difficult situation, individuals with external locus of control may demonstrate higher longevity under non-adverse conditions. Entrepreneurs with high internal locus of control may experience more stress and strain, and may invest more work hours and effort as a result of believing the success of the business depends only on their own performance [16].

Conclusions and Implications

The significant interaction effect and the non-significant main effect of locus of control strengthen the position that locus of control does not tell us much, by itself, on the well-being and longevity of entrepreneurs. Therefore, entrepreneurial resilience can be understood as the result of the fit between entrepreneurs and their environment. If resilience can be developed and encouraged (Brewer and Hewstone), then entrepreneurial fit can be achieved by shifting the salience of internal and external locus of control, depending on the situation. Future research should look at mediated moderation effects which can help to explain the interaction effects found in this study. Namely, studies should look at related consequences such as work hours, helplessness, and optimism which may underlie the interaction effect found between entrepreneurial adversity and locus of control. Secondly, improved measures of resilience and personal characteristics can be used to further exploration of person-entrepreneurial situation fit. Thirdly, in addition to actual adversity and resilience measured in this study, scholars can look at perceived adversity and resilience as mediating factors.

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