The Effect of entrepreneurial self-efficacy on University of Tehran Students’ Entrepreneurial Intention

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Abstract

The self-efficacy is an important and popular research subject in the psychology and the management study. The self-efficacy have been well examined in relation to positive functioning, however, less is understood about the contributions that self-efficacy can make towards entrepreneurial intention. The main purpose of this study was to explore the relationship between Entrepreneurial Self Efficacy (ESE), and entrepreneurial intention. Statistical sample of this study included 186 students of Tehran University, which were selected by applying random and proportional stratified sampling method. The results show that between self efficacy \( (r = 0.683, p < 0.001) \), was positively related to entrepreneurial intention. Limitations- one limitations were identified only one universities participated, which indicates the results are not generalized.

Keywords: psychological capital, self-efficacy, entrepreneurial intention.

Introduction

Bandura (2001) uses the term self-efficacy to refer to “beliefs in one’s capabilities to organize and execute the courses of action required producing given attainments” According to Bandura (1997), self-efficacy beliefs constitute the key factor of human agency. Bandura states that self-efficacy beliefs influence the courses of action people choose to pursue, how much effort they put forth in given endeavors, how long they will persevere in the face of obstacles and failures, their resilience to adversity, whether their thought patterns are self- hindering or self-aiding, how much stress and depression they experience in coping with environmental demands, and the level of accomplishments they realize (Bandura, 2001). Self-efficacy beliefs can influence an individual to become committed to successfully execute the behaviors necessary to produce desired outcomes. Self-efficacy theory states that the level and strength of self-efficacy will determine.
Whether or not a behavior will be initiated, how much effort will result, and how long the effort will be sustained in the face of obstacles. According to Bandura (1993), humans make life decisions based on our perceived self-efficacy by undertaking activities and choosing situations we deem to be within our capabilities for success.

Additionally, activities associated with failure are avoided. When humans have a strong sense of perceived self-efficacy, they put forth a greater effort to accomplish a task despite the obstacles they encounter than those who have a weak sense of self-efficacy. It is believed that students who have a higher degree of self-efficacy will have a higher intention to remain enrolled in college and will be more likely to persist in the face of external obstacles.

**Self-efficacy**

Self-efficacy is a useful construct in explaining the dynamic process of evaluation and choice that surrounds the development of entrepreneurial intentions and the subsequent decision to engage in entrepreneurial behavior. In order to understand this process, however, it is first necessary to define and describe self-efficacy as a construct.

Self-efficacy relates to the general belief in one’s ability to produce high levels of performance in tasks undertaken in life (Bandura, 1977). It is considered a state-like characteristic that generally increases with experience (Phillips & Gully, 1997). People with high levels of self-efficacy tend to set challenging goals; persist toward the achievement of their goals, even under difficult and stressful circumstances; recover quickly from failure, even in the face of conditions that would appear to be overwhelming to the average person; be more satisfied with their jobs; and experience greater levels of life satisfaction (Bandura, 1997). Further, studies by Baum et al. (2001) have identified a positive relationship between the self-efficacy of entrepreneurs and the growth of their firms. Similarly, Forbes (2005) has found a positive relationship between entrepreneurial self-efficacy and subjective measures of new venture performance. The findings of these studies suggest that entrepreneurs high in self-efficacy are likely to set challenging growth expectations for their firms and persist in their leadership efforts toward the accomplishment of those goals. In sum, our proposition stems from Bandura’s (1977) original idea that the effects of self-efficacy depend on the particular social system’s response to the intended action. Applying Bandura’s (1977) concept to entrepreneurship, the effects of self-efficacy should manifest as an antecedent to the intention to start a business only in a particular country or society where entrepreneurship is culturally legitimate. We argue that a positive association between entrepreneurial self-efficacy and entrepreneurial intentions is to be found across all countries; yet counter-intuitively the association is weaker in countries where entrepreneurship is more culturally legitimate. Three observations motivate our approach.

While Bandura’s (1977) original research called for examining how self-efficacy functions in different social or political systems, implying the need for multilevel analysis, few researchers have taken up this challenge. Mauer (2009) for example in a recent review of the concept of entrepreneurial self-efficacy claim that research is rare, if it exists at all, on the effects of the environment’s positive responsiveness for self-efficacious action.

Second, considerable research shows that as organizational behavior is increasingly institutionalized or legitimated it may be susceptible to a decoupling of organizational actors’ intentions and actions (Meyer et al., 1977; Orton et al., 1990), resulting in institutional explanations overwhelming the effects of economic explanations. These —myth and ceremony findings have been consistently shown at the organization-level of analysis (Tolbert and Zucker 1983; Westphal and Zajac, 2001) as well as at the
country-level of analysis (Meyer, et al., 2009; Weber et al., 2009). The strength of these findings prompts us to ask if a similar pattern will hold for the individual-level of analysis and for psychological explanations. Third, considerable research indicates that self-efficacy impacts entrepreneurship participation at the individual level and significant research shows that institutional pressure at the macro level impacts behavior through actors’ attempt to conform to legitimate actions. However, we know little about how self-efficacy and institutional pressure together influence entrepreneurship participation. Integrating and applying these two theories meets both old and recent calls for multi-level entrepreneurship research (Low and MacMillan, 1988; Davidsson and Wiklund, 2001). In a review of entrepreneurship articles published in top journals from 1989 to 1999, Chandler and Lyon (2001) found that 91% focused on only one level of analysis. Davidsson and Wiklund (2001) followed Low and MacMillan’s (1988) original call for multi-level analysis in their path breaking article by arguing that entrepreneurship should be examined on a multi-level basis given that entrepreneurship is dependent on both the individual and structural levels of analyses.

Both management (Gist, 1987) and entrepreneurship (Boyd and Vozikis, 1994; Krueger and Brazeal, 1994) researchers have applied the concept of self efficacy to a task-specific understanding of entrepreneurship which they term entrepreneurial self-efficacy. Broadly defined, entrepreneurial self-efficacy concerns individuals’ belief in their own competence to discover and exploit opportunities during the process of starting and developing a new business. Many different scales have been developed and used to measure entrepreneurial self-efficacy. Yet, according to Mauer et al. (2009), the study by Chen et al. (1998) has become the cornerstone.

Prior research consistently shows a main effect of entrepreneurial self-efficacy on entrepreneurial output including entrepreneurial intention (Krueger and Brazeal, 1994; Krueger et al., Reilly and Carsrud 2000; Zhao et al., 2005; Wilson et al., 2007) and the entry decision (Chen et al., 1998; Townsend et al., 2010, Koellinger et al., 2007). Less consistent results are found concerning performance (Anna and Chandler, 2000; Forbes, 2005; Chandler and Jansen, 1997; Hmieleski and Baron, 2008). The inconsistent performance results often have been explained by hubris theory, arguing that individuals’ over-confidence increases the likelihood that individuals decide to start a business while simultaneously increasing the likelihood of their failure at running the business (Hayward et al., 2006; Townsend et al., 2010).

In addition to studies on the main effect of self-efficacy on entrepreneurial output, there is considerable research investigating different moderating variables. Several factors have been shown to moderate the efficacy-entrepreneurial output relationship including supportive environments (Chen et al., 1998), social networks (Sequeira et al., 2007), optimism (Hmieleski and Baron, 2008), and industry dynamics (Hmieleski and Baron, 2008). Still other studies have focused on how self-efficacy moderates other relationships. Hmieleski and Corbett (2008), for example, interestingly found a positive moderating effect of self-efficacy on the improvisation-performance relationship, however, a negative moderating effect on the improvisation-work satisfaction relationship. Moreover, other studies have failed to find moderation effects. Wilson et al. (2007) did not find a significant moderating effect of gender on the self-efficacy-intention relationship and Townsend et al. (2010) did not find a joint effect of ability expectations (efficacy expectations) and outcome expectations on the start-up decision. Zhao et al. (2005) found self-efficacy to mediate the effect of formal learning, entrepreneurial experience, and risk propensity on entrepreneurial intentions. While this research suggests that those individuals with entrepreneurial self-efficacy are more likely to have entrepreneurial intentions, these prior studies have been largely
conducted in homogenous samples in Western societies. Given the heterogeneity of our data set across diverse countries we test if the expected relationship holds.

**Entrepreneurial Intention**

Previous contributions show that intentions have the ability to predict both individual behaviors (Ajzen, 1991), and organizational outcomes such as survival, development and growth (Mitchel, 1981). Hence, the capability to understand and to predict intentions becomes a point of interest for both managers and entrepreneurs (Tubbs & Ekeberg, 1991). In the entrepreneurship literature many scholars have focused on intentions (Bird, 1988; Krueger et al., 2000). Intentions have been proved to be the best predictors of individual behaviors particularly when the behavior is rare, hard to observe or involves unpredictable time lags (Krueger & Brazeal, 1994). The establishment of new ventures and the creation of new value in existing ones, which have been identified by Bird (1988) as the two outcomes of entrepreneurial intentions, are good examples of such behaviors. According to cognitive approaches, intentions occupy a central position in the study of human behaviors (Tubbs & Ekeberg, 1991). As Ajzen and Fishbein (1980) argue in their seminal contribution: most behaviors of social relevance, such as health-related behaviors or the establishment of new organizations, are under volitional control. Several scholars, sharing this view and questing for theoretical and empirical evidence, have proved that intentions are the best single predictor of such volitional behaviors (Bagozzi et al., 1989; Ajzen, 1991; Sutton, 1998). On the basis of this emerging theoretical foundation for Self-efficacy and Entrepreneurial Intention, we derive our study hypothesis as follows:

**Hypothesis:** Self-efficacy is related with Entrepreneurial Intention.

**Research Methodology**

This study is a descriptive correlational research. The Statistical population of this study consists of 360 students. Using a random sampling for study consisted of 186 students were selected the Cochran formula. In this study, two standardized questionnaires to collect information Luthans et al. (2007) and standard questionnaires Krueger (2009) was used. Face and content validity of the test and the questionnaire was confirmed by experts. The reliability of the questionnaire, Cronbach's alpha was used to measure the self-efficacy Alpha 0.83 Entrepreneurial intention Alpha 0.85 respectively.

**Results**

Table 1 shows Gender frequency distribution of respondents in the sample 60.2 % of respondents were male and 39.8 % are female.

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Valid</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>male</td>
<td>112</td>
<td>60.2</td>
<td>60.2</td>
</tr>
<tr>
<td>female</td>
<td>74</td>
<td>39.8</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>186</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Table 2 shows Descriptive statistics of self-efficacy variable.
Respondents rated the maximum 33 and minimum 17; and The mean score of respondents is 25.31.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-efficacy</td>
<td>186</td>
<td>17</td>
<td>33</td>
<td>25.31</td>
<td>3.648</td>
</tr>
<tr>
<td>Valid N</td>
<td>186</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 1 shows that the mode is 23 and is less than mean.

**Figure 1**- histogram of self -efficacy

Table 3 shows Descriptive statistics of intention variable.
Respondents rated the maximum 38 and minimum 18; and The mean score of respondents is 29.45.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>intention</td>
<td>186</td>
<td>18</td>
<td>38</td>
<td>29.45</td>
<td>4.408</td>
</tr>
<tr>
<td>Valid N</td>
<td>186</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
figure 2 shows that the mode is 29 and is less than mean.

![Histogram of intention](image)

The proposed relationship self-efficacy with intention can be seen in table 4

Table 4 shows the means, standard deviations, and correlations for study variables. As indicated self-efficacy ($r= 0.683$, $p < .001$) was positively related to entrepreneurial intention, consistent with hypothesis.

| Table 4. Means, Standard Deviations, and Bivariate Correlations of Study Variables |
|--------------------------------|-----|-----|-----|
| Mean                          | S.D | 1   | 2   |
| 1-Self Efficacy               | 25.31| 3.64| 1   |
| 2-intention                   | 29.44| 4.40| 0.683*|

All relationships significant at * $p < .001$; N = 186

Compute and interpret the coefficient of determination, $r^2$.

Table 5 shows the coefficient of determination is 0.484; therefore, about 48.4% of the variation in the intention data is explained by self-efficacy. The regression equation appears to be useful for making predictions.
Table 5. Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.697</td>
<td>.486</td>
<td>.484</td>
<td>3.167</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), self-efficacy

b. Dependent Variable: intention

Table 6 shows determine the regression equation for the data

From above, the regression equation is:

Entrepreneurial intention = -.467 + (1.176) (entrepreneurial self efficacy (ESE)).

Table 6. Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>-.467</td>
<td>2.278</td>
<td>-.205</td>
<td>.838</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>1.176</td>
<td>.089</td>
<td>.697</td>
<td>13.202</td>
</tr>
</tbody>
</table>

a. Dependent Variable: intention

Figure 3- clearly shows how the association between self-efficacy and entrepreneurial intentions are highest in societies with the lowest level of status and respect associated with entrepreneurship.

Figure 3. Graph of Interaction Effect

Figure 4. Histogram of Interaction
Conclusion

The aim of this paper was to give a bird’s eye view of the research that has been conducted in the field of Psychological capital and The Effect of self-efficacy on Entrepreneurial Intention. Research in entrepreneurial self efficacy (ESE), is its early years. Given its importance in the students, extensive research would take place in the years to come. Self-efficacy or simply ESE refers to individual’s positive psychological state of development characterized (Luthans et al., 2007). Psychological capital represents how hopeful, resilient, confident and optimistic an employee is. These ESE are very relevant in today’s business context and Entrepreneurial Intention which is characterized by heavy competition and uncertainty.

The Results showed that a significant positive impact on people's self efficacy in the entrepreneurial intention and had been matched lining it with the results, Greene and Crick (1998) in which the impact of self manage tasks and to entrepreneurial intentions of students.

With our opinions and Bloom (2004), Krueger and Brazyl (1994) have emphasized the key role of self-esteem in entrepreneurial behavior is consistent.

Limitations

Results of our study should be viewed within the study’s limitations. Some limitations to this study exist, particularly with the sample size and a study design that does not allow for interpretations of causality we recognize that the cross-sectional and self-reported nature of our data precludes us from drawing casual inferences about the relationship between the variables. To draw better inferences on how self-efficacy and entrepreneurial intentions, a longitudinal diary or multi-wave study is necessary, We hope that our findings serve to fuel interest in this topic and encourage other scholars to adopt a longitudinal research design in examining these issues. We have to acknowledge the challenge we faced in adapting prior
validated scales, in particular, self-efficacy to our study. To adapt self-efficacy to our scale, we have to modify the items to measure entrepreneurial intentions. We did not examine actual entrepreneurial intentions outcomes. This is an important future research agenda that will help establish the theoretical relevance of self-efficacy to entrepreneurial intentions research.

**Suggestions**

1. The inclusion of positive psychology-oriented topics (self) educational resources and training institutions and responsible entrepreneurship.

2. Same study as in with other government agencies or other educational institutions should be investigated.

3. Psychological counseling centers and institutions working in development and social welfare agencies to promote confidence and self-esteem in staff.

4. It is suggested that the effect of self-efficacy on entrepreneurial intentions of students of qualitative research methods to be used.

**References**


