Entrepreneurial Intentions of Tourism Students: An Integrated Structural Model Approach

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Introduction

Entrepreneurship is considered a crucial economic activity in employment generation, new product development, and economic decentralizing in developed, developing and underdeveloped countries (Echtner 1995; Guerrero, Rialp, and Urbano 2008; Hisrich 1990; Lordkipanidze, Brezet, Backman 2005; Linan, Rodriguez-Cohard, Rueda-Cantuche 2005; Turker and Selcuk, 2009). Notably, entrepreneurship is a key for tourism development as it helps meet and enrich growing demands of tourists’ goods, services, and experiences; making destinations be competitive in the marketplace (Ball, 2005; Fayos-Sola, 1996; Lordkipanidze et al. 2005; Russell and Faulkner, 2004; Yang and Wall, 2008). According to World Travel and Tourism Council (2015), 9.4% of world employments in 2014 was directly related to the tourism industry and is forecast to reach 10.7% by 2025. This match between tourism industry and entrepreneurship has subsequently contributed to great enthusiasm for the relevant researchers being devoted to the topic in the academic arena (Ateljevic and Page, 2009; Low and MacMillan, 1988; Mottiar, 2007; Morrison, 2006; Szivas, 2001; Thomas, Shaw, and Page, 2011).

Although tourism scholars have recognized and responded to tourism SMEs and demand side of new business creation, the literature has been poorly limited to the supply side namely entrepreneurs. In particular, few researchers (see Altinay, Madanoglu, Daniele, and Lashley, 2012; Soliman, 2011) had addressed the pre-business creation decision-making, which is significant in terms of starting up new business activities.

As researchers suggest, the intention of new businesses formation is one of the best predictors of an entrepreneurial planned behavior (Frank & luthje, 2004; Krueger, Reilly, and Carsrud, 2000; Krueger & Carsrud, 1999; Linan et al. 2005), which can be conceptualized as a function of environmental structures and motivated entrepreneurs (Aldrich and Zimmer, 1986). Yet, few empirical studies have examined the influence of these factors in the tourism field.

In line with an attempt to fill up the above void, the present investigation aims to shed further light on entrepreneurial intention concept and its psychological antecedents. To this end, Iranian graduate and undergraduate tourism management students’ perceptions of several factors (i.e., desirability, social norms, self-efficacy, collective efficacy, entrepreneurial opportunity, propensity to act and entrepreneurial intention) are analyzed in a structural model borrowed from Krueger (2009) Integrated Model of Entrepreneurial Intention (hereafter referred to as KEI).

While a significant body of literature is devoted to entrepreneurial intention concept (Guerrero, Rialp, and Urbano, 2008; Krueger et al. 2000; Linan et al. 2005; Tkachev and Kolvereid, 1999; etc.), there is a paucity of research focusing on the concept in tourism industry and more specifically on tourism students. It is expected that the results of the investigation give rise to some managerial implications for the education policy makers and educators. In general, education offered by universities affects the career selection of students (Etzkowitz, 2002; Turker and Selcuk, 2009) and their aspiration towards entrepreneurship (Li, 2008, Wang & Wong, 2004). As such, the results will determine how well positioned the Iranian students are in terms of entrepreneurial intention and psychological factors and on other hand, how they can be improved by education either by universities or other related societal organizations and units.
Literature Review

Early entrepreneurship research has focused merely on the personality traits (e.g., risk-taking propensity, locus of control, need for achievement, tolerance of uncertainty) and/or demographic characteristics (e.g., age, gender, religion, income) to explain the entrepreneurial behavior (Gartner, 1988; Low and MacMillan, 1988). This approach was mainly criticized for the lack of theoretical perspective (Ajzen 1991; Shapero and Sokol 1982) and consequently for the low explanatory power in terms of the methodological analysis (Linan et al., 2005). Boyd and Vozikis (1994) argue that most of these characteristics are not viewed as unique to entrepreneurs, but rather they are assumed to be parts of all successful people such as managers. Low and MacMillan (1988) also conclude that a mere focus on personality and demographic traits fundamentally appears ineffective to profile the typical entrepreneurs. As a result of these oversights, a new perspective focusing on the cognitive concept of “a more contextual and process-oriented focus” (Low and MacMillan, 1988, p.146) based on intentions models were offered. The intentions-based models acknowledge that the entrepreneurial intention is the result of the dynamic interaction between the individual and environment and that the higher the intensity of intention, the higher the likelihood of entrepreneurial activity (Ajzen and Madden, 1986).

The first widely accepted model of predicting future behavior belongs to Martin Fishbein (1984). He developed an attitude-behavior approach that relationship between the two is mediated by individuals’ intentions believing that it increases significantly explanatory power of the model. Martin Fishbein and Icek Ajzen (1975) further refined the attitude-intention-behavior model by adding a more contextual influence of perceived social norms i.e., people have a strong impact on each other’s behavior. Ajzen (1991) then identified a third critical antecedent of perceived behavioral control, which finally led to the theory of planned behavior (TPB). Perceived behavioral control refers to the extent to which a behavior is within the decision maker’s control. The previous studies in the literature provide significant robustness for this theory (Krueger et al. 2000; Angle et al., 2008).

Another accredited intentions based model is Shapero’s (1982) Entrepreneurial Event (SEE) one that is somehow conceptually similar to the Ajzen’s TPB. Based on the model, a decision maker should perceive feasibility (self-efficacy) and desirability (TPB’s attitude and social norms) of the opportunity so as to have a propensity to act and become intent (Krueger, 2009). In fact, the model of entrepreneurial event states that entrepreneurial decision is the result of the impacts of contextual factors on the individual’s perception. According to Linan et al. (2005, p.4), “external circumstances would not determine firm-creation behaviors directly, rather they would be the result of the (conscious or unconscious) analysis carried out by the person about the desirability and feasibility of the different possible alternatives in that situation.”

Both models of the TPB and SEE have gone tested empirically and presented a high level of robustness (Krueger et al. 2000). However, according to Elfving, Brännback, and Carsrud (2009), despite a large number of studies on understanding entrepreneurial behavior, the model that has greatly influenced on the entrepreneurial cognitions is the one developed by Krueger (2009). This model is highly drawn from the SEE and TPB as well. According to Krueger (2009, p. 57), “a comparative test found support for both models and post hoc analysis suggested that the optimal model would include propensity to act from Shapero’s SEE and social norms from Ajzen’s TPB.” In addition, Krueger (2009) added a new variant named collective efficacy to the newly combined model. The rationale behind incorporating collective efficacy is the assumption that although one might perceive rich personal abilities, this is of a relative frail persuasion in the broad sense of entrepreneurship where collectivism is vital if he or she is to be successful in launching a venture. This implies that perception of high abilities of other colleagues one is working with is an influential issue in explaining entrepreneurial intentionality as well (Shepherd and Krueger, 2002; Elfving et al. 2009). Adding these variables to a new model (Figure 1) would
increase explanatory power but to the best knowledge of the authors to the date, this integrated model has not been tested before.

Figure 1. Model of Entrepreneurial Intention (KEI) Adapted from Krueger’s (2009)

**Research hypotheses**

**H1:** There is a positive relationship between personal desirability and perceived desirability of a venture.

**H2:** There is a positive relationship between perceived social norms and perceived desirability of a venture.

**H3:** There is a positive relationship between perceived desirability and perceived feasibility of a venture.

**H4:** There is a positive relationship between perceived collective efficacy and perceived feasibility of a venture.

**H5:** There is a positive relationship between perceptions of desirability and opportunity of a venture.

**H6:** There is a positive relationship between perceptions of feasibility and opportunity of a venture.

**H7:** Propensity to act moderates positively the relationship between perceived opportunity and entrepreneurial intention.

**H8:** There is a positive relationship between perceived opportunity and entrepreneurial intention.

**Methodology**

The self-reported questionnaire was developed using items and scales validated in previous entrepreneurship-related research (Linan and Chen 2009; Shook & Bratianu 2010; Turker and Selcuk 2008; Shapero and Sokol 1982; GEM 2008) and were slightly modified to adapt to a tourism context. All the constructs used a 5-point likert scale response that ranged from strongly disagree (1) to strongly agree (5) to measure the perceptions of graduate students. We requested the academic experts to review the appropriateness of each item to ensure clarity of wording and thus face validity of the constructs. The final questionnaire was pre-tested with 30 graduate and undergraduate levels of tourism and hospitality students. This helped us to validate the translated
English to Persian questionnaire through investigating the equivalence of concepts, appropriateness of wording and potential misinterpretation. The final survey was conducted in May 2012 by simple random sampling method to 196 graduate and undergraduate students of tourism management in tourism and hospitality schools in Iran. There are a number of reasons to employ student subjects, of which one is to study entrepreneurial intentional process before a venture actually starts up. The second reason lies in the fact that the student sample allows us to include intending along with non-intending subjects to see how different they are in terms of the variables under study, while as Krueger and Carsrud (1993) note investigating a mere group of entrepreneurs brings about bias in the results. The sampling resulted in 66% response rate i.e. 130 usable questionnaire. Of the respondents, 41.6% and 58.5% were male and female respectively with an average age of 26 years old. The sample age is in line with recent research on the entrepreneurial intention domain (Linan and Chen, 2009; Bosma, Acs, Autio, Couduras and Levie, 2008).

Results
Measurement analysis

PLS path model analysis shows that all measures meet the commonly suggested criteria for measurement model assessment (Chin 1998; Hair et al. 2012). As shown in Table 1, all the constructs’ average variance extracted (AVE) values are well above the minimum threshold of 0.50 (Bagozzi and Yi 2012). Also, most of the indicators exhibit significant standardized loadings above 0.50 ($p < 0.05$), demonstrating indicator reliability. Similarly, the model constructs attained high Cronbach’s alpha ($\alpha$) and composite reliability ($\rho$) values greater than 0.75 and 0.80 respectively, implying satisfactory internal consistency. Thus, the measurement model parameter estimates offer strong evidence for the reliability and validity of construct measures.

Table 1. Results of the measurement model

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
<th>Loading</th>
<th>Cronbach’s Alpha ($\alpha$)</th>
<th>Composite Reliability ($\rho$)</th>
<th>AVE</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Desirability (Attitude)</td>
<td>AT-1</td>
<td>0.568</td>
<td>0.749</td>
<td>0.822</td>
<td>0.598</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AT-2</td>
<td>0.589</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AT-3</td>
<td>0.662</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AT-4</td>
<td>0.637</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AT-6</td>
<td>0.660</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AT-7</td>
<td>0.667</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AT-8</td>
<td>0.628</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Social Norms</td>
<td>PSN-1</td>
<td>0.739</td>
<td>0.747</td>
<td>0.812</td>
<td>0.525</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PSN-2</td>
<td>0.766</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PSN-3</td>
<td>0.747</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PSN-4</td>
<td>0.509</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PSN-5</td>
<td>0.577</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PSN-6</td>
<td>0.520</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Self-efficacy</td>
<td>PSE-1</td>
<td>0.546</td>
<td>0.788</td>
<td>0.837</td>
<td>0.505</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PSE-2</td>
<td>0.540</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Evaluation of the Structural Model

The essential criterion in PLS path models for the assessment of the structural model is the coefficient of determination ($R^2$) of the endogenous latent variables (Henseler, Ringle, and Sinkovics 2009). $R^2$ values of 0.19, 0.33, and 0.67 in PLS path models are described by Chin (1998, p. 323) as, respectively, weak, moderate, and substantial. The percentages of explained variance ($R^2$ values) for perceived desirability, perceived feasibility, perceived opportunity, and intention are 27.4, 25.1, 31.2, and 36.9, respectively. Table 2 displays the outcome of the structural model test. As depicted in Table 2, the study proceeded with the path analysis to
evaluate the direct effects between the variables. The eight direct paths were significant at $p<0.01$ except the hypothesis 2 that was not confirmed.

**Table 2. Path coefficient and hypothesis testing**

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Relationship</th>
<th>Path Coefficient</th>
<th>t-value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Personal desirability $\Rightarrow$ Perceived desirability</td>
<td>0.484</td>
<td>5.411**</td>
<td>Supported</td>
</tr>
<tr>
<td>H2</td>
<td>Perceived social norms $\Rightarrow$ Perceived desirability</td>
<td>0.106</td>
<td>1.638</td>
<td>Rejected</td>
</tr>
<tr>
<td>H3</td>
<td>Perceived self-efficacy $\Rightarrow$ Perceived feasibility</td>
<td>0.315</td>
<td>3.540**</td>
<td>Supported</td>
</tr>
<tr>
<td>H4</td>
<td>Perceived collective efficacy $\Rightarrow$ Perceived feasibility</td>
<td>0.290</td>
<td>3.628**</td>
<td>Supported</td>
</tr>
<tr>
<td>H5</td>
<td>Perceived desirability $\Rightarrow$ Perceived opportunity</td>
<td>0.386</td>
<td>4.235**</td>
<td>Supported</td>
</tr>
<tr>
<td>H6</td>
<td>Perceived feasibility $\Rightarrow$ Perceived opportunity</td>
<td>0.285</td>
<td>3.519**</td>
<td>Supported</td>
</tr>
<tr>
<td>H7</td>
<td>Perceived opportunity $\Rightarrow$ entrepreneurial intention</td>
<td>0.324</td>
<td>3.463**</td>
<td>Supported</td>
</tr>
<tr>
<td>H8</td>
<td>Propensity to act $\Rightarrow$ entrepreneurial intention</td>
<td>0.391</td>
<td>3.627**</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Note: These significance levels are determined via bootstrapping analysis

* $p < 0.05$; ** $p < 0.01$

**Conclusion and Discussion**

Entrepreneurship decision-making has been extensively studied and various models and theories have been proposed to explain an individual’s entrepreneurial behavior. Researchers have suggested that intention-based models offer a significant opportunity toward a better understanding of predicting individual’s entrepreneurial activities. Taking a new approach, this study applied Krueger's intention untested model to explain entrepreneurial intentions of tourism management students so as to empirically test the relationship between entrepreneurial intention’s psychological antecedents. To this end, the influences of students’ perception of personal desirability, social norms, self-efficacy, collective efficacy, and propensity to act on tourism student’s entrepreneurial intention were analyzed. Based on eight hypotheses in a structural model, other than hypothesis 2, all other hypotheses were accepted, revealing a significant direct relationship between entrepreneurial intention and the antecedents (see Table 2).

Hypothesis 1 suggested that perceived desirability was positively influenced by personal desirability but not by the perceived social norms construct. That is, the second hypothesis was not confirmed. This implies that perceived social norms construct does not affect behavioral intention of tourism students. This result was also found in many other entrepreneurial intention studies that social norms have not always had a significant impact. For example, Ajzen (1991) found that this is frequently the weakest element and it has been non-significant in a number of different studies, which applied the theory of planned behavior to various actions. Likewise, Krueger et al. (2000) showed that the social norms construct does not affect individualistic society such as the USA while Peng et al.’s (2012) results showed that the perceived subjective norms construct has significantly positive influence on Chinese Students’ entrepreneurial intention being considered as collectivistic society. Regarding Iranian community, societal norms reflect a multitude of contradictions. Similar to China society, Iranians are also collectivistic, anticipating the same result. This shows Iranian tourism student community may tend to be more individualistic and social norms are not supportive of entrepreneurial activity in tourism field in
Iran. Hence, more research on this construct in Iran needs to be undertaken particularly in terms of individualism-collectivism.

This study extends the implications of the intentions model to the context of tourism entrepreneurship. Education planners may able to utilize this model to interpret the factors influencing students’ intention to start a tourism business. Practitioners may also use this framework to diagnose causes for the reluctance of tourism students to create their own tourism business and to implement strategies accordingly to alleviate their concerns.

The review of entrepreneurship related research review suggests that entrepreneurial activities have a great impact on the economy and accordingly, the need for entrepreneurial graduates are increasing. Recognizing that starting a tourism business is an intentional act holds substantial implications for the research. By understanding tourism students’ entrepreneurship perceptions in this study’s context, we can design platforms that support effective entrepreneurship utilization for tourism education planning. Based on the current findings, the strong influence of attitude on entrepreneurial intention, for instance, suggests that tourism education managers and practitioners should pay attention more to tourism entrepreneurship in the academia.

References


World Travel & Tourism Council, Travel & Tourism Economic Impact (2015). Online available at [www.wttc.org](http://www.wttc.org)