Factors Affecting Entrepreneurs’ Intention to Start a New Venture: An Empirical Study

Alexandros G. Sahinidis¹,a, Evangelos E. Vassiliou², Alina B. Hyz³

¹Department of Business Administration, Technological Educational Institute of Athens, Athens, Agiou Spyridonos 2, Egaleo, 12210, Greece
²Department of Financial and Management Engineering, University of the Aegean, University of the Aegean, School of Management, Kountouriotou 41, Chios, 82100, Greece
³Department of Accounting and Finance, Technological Educational Institute of Piraeus, Thivon 250, AIGALEO 12244, Greece

a)Corresponding author: asachinidis@teiath.gr

Abstract: Most entrepreneurial intention studies focus on the intention of people who might become first-time entrepreneurs. A considerable number of people, however, who are already in business, can and do think of the possibility of starting new enterprise, creating new value. The purpose of this study is to record these people’s attitudes toward new venture formation, because, having the experience of self-employment and small business ownership differentiates this group from the remaining population, which may be considering a start-up as a move into unchartered territory vis-à-vis the experienced individuals. Structural Equation Modeling was used in examining the relationship between Entrepreneurial Intention and the independent variables-antecedents of it, Personal Attraction, Perceived behavioral Control and Social Norms and Valuations. The role of demographic variables has also been examined in the study. The findings indicate that, there is a strong link between the Personal Attraction and Entrepreneurial Intention (EI), similar to the literature findings with other types of samples and also a strong relationship between Perceived Behavioral Control or Self-Efficacy and (EI). Finally, again as previously found in several studies Social Norms and Valuations are expected to affect both directly and indirectly EI. The main limitations of the study include the sample non-randomness and the cross-sectional nature of the research. The findings of this study can be useful to policy makers in finding ways to promote business growth among active entrepreneurs, using the tools available to them more effectively.

Keywords: Entrepreneurial Intention, Self-employed, Theory of Planned Behavior, Greece.

1. Introduction

The small and medium size businesses (SME) are considered crucial to competitive development. It employs the majority of the European labor force and commands two thirds of sales volume in the non-primary sector [1]. SMEs play also a very important role in transition states, where the importance of this sector is correlated
with social stability, economic development, innovative activity, creation of significant number of new jobs etc. [2]. In the last decades, SMEs are considered with an increasing interest by European policy makers, public authorities and economists [3] [4], who are trying to support them in an effort to help them remain viable and competitive. Greek SMEs represent a very important share of the economy, accounting for a far larger share of total employment and value added than the EU average. Although the role of the Greek small and medium enterprises is vital to the Greek economy, the existing literature on this topic is rather limited. In contemporary developed countries the SME sector is practically the only sector of the economy, which generates net jobs. New job creation takes place both through setting up new economic units and through developing already operating firms. The SME sector is also a major source of inventions [5]. Small innovative firms are frequently fast-growing firms creating new jobs [6]. In this context we can say that the driving force in the modern economy for the past years and the foreseeable future is entrepreneurship. Job creation and economic growth have become the domain of the new ventures and entrepreneurs who create them.

Entrepreneurial intention is a widely researched topic, approached from a variety of angles, investigating numerous types of behavior, with the use of various methodologies [7] [8]. One of the prevalent theories used in predicting behavior through studying intention, is the Theory of Planned Behavior (TPB) proposed by Ajzen [9]. In spite of the plethora of studies on the subject of intention and entrepreneurial intention (EI), the majority of the studies have reported findings explaining about 40% of the variance in predicting intention and less than 30% in predicting behavior as reported by Armitage and Conner [7] in their meta-analysis of 185 relevant studies. Although the bulk of the studies on intention have examined health related behaviors, the studies on entrepreneurial intention are anything but scant [10] [11]. One issue that has evaded the attention of researchers is the intention of entrepreneurs to add new value to their concerns, or, to expand their operations [10] [12]. This is the gap in the relevant literature that this study wishes to close, by exploring the dynamics behind the entrepreneur’s intention to undertake more entrepreneurial action. In this sense, this study, in contrast to traditional research methodologies, used a new approach to survey entrepreneurial intention. It studied self-employed individuals and entrepreneurs. The main concept is based on the conviction that, in explaining the entrepreneurship it is not sufficient enough to approach only those who for the first time undertake entrepreneurial action. In order to gain a right picture of entrepreneurship and variables likely affecting small ventures formation it is necessary to study also the second group. Those who are already in business [12].

The objective of this paper is to explore potential and realized entrepreneur intention among entrepreneurs and self-employed individuals. Business set up by these so-called habitual (serial or portfolio) entrepreneurs differ in many ways from business led by novice entrepreneurs [13] [14]. Novice, serial and portfolio entrepreneurs should therefore be considered separately; all the more since the later two groups are growing in number [15]. The difference between this study and those in intrapreneurship is both qualitative and quantitative. Qualitative in the sense that, the sample studied, includes very small businesses (mom and pap store type) and self employed individuals. Quantitative, in terms of the size of the operations. The issue addressed in this paper is an important one, considering that the vast majority of the jobs and wealth created are by the dynamic start-ups, a subset of the opportunity –based new companies. To that effect, we have set out to find out the intention of entrepreneurs to expand and create more value.

2. Literature Review and Hypotheses

The analysis of the phenomena, which is entrepreneurship, is not an easy task. Because of its variety of forms, it is not possible to analyze it in sufficient and satisfactory way using only one approach / method. According to the definition
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made for the needs of GEM, the enterprise means activities undertaken by units, teams and companies in order to establish new companies or develop already existing ones. The multitude of the studies on entrepreneurial intention, is justified, considering the diverging methodologies, the variety of definitions, the differences in scope and in scale, between the scholars’ work. This diversity led to a remarkable difference in findings reported, often conflicting in fundamental ways [16] [17] [7]. To overcome the comparability issue, many researchers turned to the use of instruments of proven validity, across situations, such as the TPB and the SEE [18] [8]. The two of the frequently cited meta-analysis, by Armitage and Conner [7] and Sheeran [16], concur on the overall usefulness of the TPB model, in predicting Entrepreneurial Behavior and EI. Armitage and Conner [7] found that EI variance was explained by 39% when using TPB and also 27% of Behavior variance. Sheeran [16], in a meta-analysis of other meta-analyses, found an overall correlation of 0.53 between intention and behavior. These findings provide legitimacy to the claims on the validity of the TPB.

2.1. The Variables included in the Study and the Theory of Planned Behavior

2.1.1. Gender

Vecciana, Aponte and Urbano [19] and Zhao, Seibert and Hills [20] among others, found that males have greater desirability towards a new venture creation. This is in line with the GEM findings in 2007, reporting a two to one ratio, in favor of males, as far as business ownership is concerned [21], also corroborated by other scholars’ findings [22]. Another study, conducted in a Greek university, demonstrated an indirect effect of gender on entrepreneurial intention [23]. Nevertheless, other researchers found no significant relationships between gender and EI [18] [24]. Based on the reality presented by the GEM, the findings of Shinnar et al., [22], about the effect of gender on subjective norms, Sheerer et al., [25] report that women tend to have lower self-efficacy (similar to the PBC) concerning entrepreneurial behavior and the findings of Shook and Bratianu [26], reporting a greater personal attraction of males to entrepreneurship than that of females, we propose that,

H1: There is a significant relationship between gender and the intention to start a new venture and/or to add new value to an existing one.

H2: There is a significant relationship between gender and the Personal Attraction (PA) to starting a new venture and/or to add new value to an existing one.

H3: There is a significant relationship between gender and the Subjective Social Norms and Valuations with regard to starting a new venture and/or to add new value to an existing one.

H4: There is a significant relationship between gender and Perceived Behavioral Control concerning the intention to start a new venture and/or to add new value to an existing one.

2.1.2. Education

Another demographic parameter, also studied in depth in the extant literature, is education. Education usually is measured by the study and possession of a university degree. In some research this variable is describe as entrepreneurship education understanding as the building of knowledge and skills either “about” or
“for the purpose of” entrepreneurship generally, as part of recognized education programs at any level of education [27] (Global Entrepreneurship Monitor, 2010). There are a number of studies showing a significant link between education and intention to start a new venture. Diaz-Casero, et al., [28] and Edwards, et al., [29] found a significant effect of education on subjective norms and valuations, although no direct relationship was found with EI. Peterman and Kennedy [30] found a positive relationship of education with PA and PBC, while their findings were confirmed in a study by Guerrero, et al. [31]. Similar findings are reported by Dolinsky, et al. [32] claiming that the education level affected the individual’s likelihood of being self-employed. This leads to the following hypotheses:

H5: There is a significant relationship between Education and the intention to start a new venture and/or to add new value to an existing one.

H6: There is a significant relationship between Education and the Personal Attraction (PA) to starting a new venture and/or to add new value to an existing one.

H7: There is a significant relationship between gender and the Subjective Social Norms and Valuations with regard to starting a new venture and/or to add new value to an existing one.

H8: There is a significant relationship between Education and Perceived Behavioral Control concerning the intention to start a new venture and/or to add new value to an existing one.

2.1.3. Father’s Occupation

Parents are frequently very effective role models for their off-springs. Due to the extensive socialization the children receive from their being part of the family, major decisions in their lives, such as starting a new venture, are likely to be affected by other family members and especially the father. Several studies documented the impact of the father’s occupation on the career choice of the child and there is research pointing out that children of self employed fathers, or small business owners, show a greater proclivity to follow their father’s career [17]. Still there are some researchers proposing that there is no significant relationship between parents’ being self employed and entrepreneurial intention of children [33]. The strong evidence however, provided by Sheerer et al., [25], reporting that 65% of entrepreneurs had at least one parent self employed and the compelling case made by Krueger and Karsrud [34] and Venkataraman, 2004 [35] that business owners and the self employed impact in a positive way the desirability of the starting of a new venture as well as the self efficacy of their children, lead to the hypotheses that

H9: There is a significant relationship between Father’s self employment status and the intention to start a new venture and/or to add new value to an existing one.

H10: There is a significant relationship between Father’s self employment status and the Personal Attraction (PA) to starting a new venture and/or to add new value to an existing one.

H11: There is a significant relationship between Father’s self employment status and the Subjective Social Norms and Valuations with regard to starting a new venture and/or to add new value to an existing one.
H12: There is a significant relationship between Father’s self employment status and Perceived Behavioral Control concerning the intention to start a new venture and/or to add new value to an existing one.

2.1.4. The Theory of planned behavior

One of the most popular approaches to studying entrepreneurial intention is the Theory of Planned Behavior. The underlying assumption of the theory is that behavior is under volitional control and therefore, the latter can predict the former. Ajzen [8] and Krueger et al. [18], proposed that the antecedents of intention, namely, personal attraction to the behavior, subjective norms and perceived behavioral control explain much of the variance in Entrepreneurial Intention and EI, in turn, explains a significant amount of behavioral variance. Personal attraction (PA) to entrepreneurship refers to the degree the person desires to follow an entrepreneurs’ career, or, in this paper, to the desirability of creating new value in an existing business [10]. Perceived behavioral control (PBC) is the perception of how easy it is for the person to become an entrepreneur [36], or, to create new value [10], a concept similar to self-efficacy and to perceived feasibility [18]. The third antecedent of intention, the Social Norms and Valuations (SNV) is a basic element of the TPB, aiming to assess the impact of the social surroundings of the individual on his/her intention to start a business, although several researchers did not use it. The focus in this case is on the parents, the friends and important others (such as mentors) who may promote, or disapprove of the idea of the individuals taking entrepreneurial action. Some studies found support for that notion of social norms directly affecting EI [17] [24] [37]. Shook and Bratianu [26], found a negative relationship between social norms and EI, while Krueger et al. [18] and Armitage and Conner [7] found a weak link between the two variables. A large number of studies investigating intention concluded that personal attraction is significantly related to entrepreneurial intention [7] [36] [37]. In a similar vein, Kim and Hunter [38] in their meta-analysis, reported a correlation of 0.65 between PA and EI. On the other hand, Engle et al., [24], in their 12 country study, reported no significant relationship between PA and EI, in six of the countries they studied. Nevertheless, the evidence of a strong relationship is overwhelming and most researchers attest to that. Contrary to expectations, Engle et al.’s [24] study, found a significant relationship between subjective norms and EI. This was rather surprising, considering, many scholars avoid including the SN in studying EI, given the numerous reports of no significant relationship between the two variables [36] [18] [7]. However, Autio, et al. [39] and Tkachev and Kolvereid [40], reported significant relationships between SN and EI. Guerrero et al., [31] reported an indirect link between Social Norms and Valuations (SNV) with EI. SNV was reportedly affecting EI through its effect on PA and PBC. Similar findings were reported also by Sahinidis et al. [23], in a study of University students, where SNV played a statistically significant, however less important role in predicting EI. Finally, Perceived Behavioral Control, also studied as self-efficacy is reported in most studies of EI as a major predictor of it [7] [18] [36] [8]. Based on the discussion of the extant literature findings we propose the following hypotheses:

H13: Social Norms and Valuations are represented as a second-order construct having Social Norms (H1a) and Social Valuations (H1b) as its sub-dimensions.

H14: The Personal Attitudes toward entrepreneurship affect Entrepreneurial Intention.
H15: Perceived Behavioral Control affects Entrepreneurial Intention.

H16: The Social Norms and Valuations affect the Entrepreneurial Intention of students.

H17: The Social Norms and Valuations affect Personal Attraction toward entrepreneurship.

H18: The Social Norms and Valuations affect Perceived Behavioral Control.

3. Methodology

3.1. The Study

A survey was carried out through an online questionnaire, completed by small business owners and self-employed individuals, located in Athens, Greece. An online questionnaire was posted on the internet using Google_Docs facilities. To reach the participants a ‘snowball’ data collection technique was used. 20 appropriately trained people were used to approach 50 individuals each. The data were collected during November and December 2012. During the field study period, 1000 persons were randomly approached by the interviewers. Finally, 696 usable, complete responses were obtained. The sample size is considered adequate. The demographic characteristics of the respondents are as follows: of the 696 respondents, 52 per cent were female, 6.9 per cent were in the 18-24 age group, 28.7 per cent were in the 25-34 age group, 31.3 per cent were in the 35-44 age group and 23.4 per cent were in the 45-54 age group.

3.2. Measures of the Constructs

A questionnaire was employed to collect data from Greek small business owners and self-employed persons. Likert scales (1–7), ranging from “strongly disagree” to “strongly agree” were used for all belief items to ensure statistical variability among survey responses for all items measured. The scale for measuring entrepreneurial intention (EI) was taken from Krueger et al., [18] and Kolvereid and Isaksen [41] and it was measured with a one item scale. Personal attitude (PA), perceived behavioral control (PBC) and perceived social norms (SN) were adapted from the instrument developed by Linan and Chen [36] while perceived social valuations (SV) were adopted from the study of Guerrero et al. [31].

3.3. Data Analysis and Results

The entrepreneurial intention model to be tested is presented in Figure 1. It can be concluded that all the factors presented have an integral impact on the
researched phenomena. Structural equation modeling was used to test its empirical validity [42]. However, as a first step, an exploratory factor analysis [43] [44] was carried out to check the correspondence or the indicators used with our theoretical constructs. The Kaiser-Meyer-Olkin measure of sampling adequacy is notably high (0.857). Similarly, Bartlett’s test of sphericity is highly significant (p = 0.000). Both measures suggest factor analysis to be an adequate instrument to use. Cumulative variance explained was 63.1%. Results were generally satisfactory, all items loaded heavily in their respective factor only (using 0.5 as the cut-off level) with no high saturations on other factors, and the four expected factors corresponding to the five intended constructs clearly emerged. Finally, all factors’ Cronbach’s alpha values were well above the commonly accepted threshold value of 0.70.

According to the theory, external variables exert their direct influence not only on the antecedents of intention but on intention, too. For this reason, control variables were included as explaining Personal Attraction (PA), Perceived Behavioral Control (PBC), Social Norms and Valuations (SNV) and Entrepreneurial Intention (EI). Age, work experience (in WorkExper) and self-employment experience (in SelfEmlExper) was measured in years, while the value 1 means male in the gender dichotomic 1/2 variable. The other three demographic variables (education, mother’s occupation, father’s occupation) are categorical and the categorization have been made in such a way that positive relationship is expected for education and negative relationships are expected for mother’s and father’s occupation (in MotherOccup and FatherOccup respectively) with the antecedents of intention and intention.

The data analysis employed a two-phase approach suggested by Anderson and Gerbing [45] in order to assess the reliability and validity of the measures before using them in the research model. The first phase includes the analysis of the measurement model, while the second phase examines the structural relationships among latent constructs.

The statistical analysis was carried out with IBM SPSS Statistics 20.0 and IBM SPSS AMOS 20.0. After running the statistical software on our data, a number of non-significant path coefficients were found. A recursive method was used to eliminate the path with the lowest t-statistic in each iteration, until all coefficients were significant at least at the 95% level (p < 0.05). As may be observed, the core entrepreneurial intention model is generally supported by this analysis.

3.4. Validation of the Measurement Scale

The test of the measurement model involves the estimation of internal consistency reliability as well as the convergent and discriminant validity of the study constructs, which indicates the strength measures used to test the proposed model [46].

For our sample, reliability and validity statistics are quite satisfactory. In the first place, Table 1 shows that loadings for all indicators (except one) in the final measurement model are above 0.701, which is a common cut-off point for retaining them [47]. The indicators PBC3-PBC5 were excluded from the analysis because first, their loadings were found to be between 0.5 and 0.6 and second, the proportion of the indicators variance explained by the PBC construct retaining these indicators in the model was not significant higher. Similarly to indicators standardized loadings, composite reliability indexes are also very high (0.83 and above). For comparison purposes, the more common Cronbach’s alphas have also been calculated, confirming the adequate reliability of these constructs [48].
Convergent and discriminant validity of the constructs may be assessed through both the Average Variance Extracted (AVE) and the correlations among the constructs [42]. In the first case, the AVE of each construct measures the proportion of the variance in the indicators explained by the construct. Fornell and Larcker [49] and Gefen et al. [42] suggest this value to be higher than 0.50, indicating that more than half the variance of the indicators is explained by their construct. In our case, this condition is fulfilled for all constructs (Table 1).

Table 1. Descriptive statistics of items and psychometric properties of the constructs

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
<th>Mean</th>
<th>Std. dev.</th>
<th>Std. Loadings</th>
<th>Cronbach's alpha</th>
<th>Composite reliability</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SN</td>
<td>SN1</td>
<td>4.94</td>
<td>1.45</td>
<td>.657</td>
<td>0.80</td>
<td>0.83</td>
<td>0.59</td>
</tr>
<tr>
<td></td>
<td>SN2</td>
<td>5.22</td>
<td>1.52</td>
<td>.803</td>
<td>0.83</td>
<td>0.83</td>
<td>0.62</td>
</tr>
<tr>
<td></td>
<td>SN3</td>
<td>5.30</td>
<td>1.42</td>
<td>.890</td>
<td>0.83</td>
<td>0.83</td>
<td>0.62</td>
</tr>
<tr>
<td></td>
<td>SV1</td>
<td>4.78</td>
<td>1.49</td>
<td>.762</td>
<td>0.83</td>
<td>0.83</td>
<td>0.62</td>
</tr>
<tr>
<td>SV</td>
<td>SV2</td>
<td>4.70</td>
<td>1.45</td>
<td>.735</td>
<td>0.83</td>
<td>0.83</td>
<td>0.62</td>
</tr>
<tr>
<td></td>
<td>SV3</td>
<td>4.90</td>
<td>1.44</td>
<td>.857</td>
<td>0.83</td>
<td>0.83</td>
<td>0.62</td>
</tr>
<tr>
<td>PBC</td>
<td>PBC1</td>
<td>5.15</td>
<td>1.34</td>
<td>.867</td>
<td>0.83</td>
<td>0.84</td>
<td>0.73</td>
</tr>
<tr>
<td></td>
<td>PBC2</td>
<td>5.28</td>
<td>1.31</td>
<td>.837</td>
<td>0.83</td>
<td>0.84</td>
<td>0.73</td>
</tr>
<tr>
<td></td>
<td>PA1</td>
<td>4.74</td>
<td>1.44</td>
<td>.700</td>
<td>0.83</td>
<td>0.84</td>
<td>0.73</td>
</tr>
<tr>
<td>PA</td>
<td>PA2</td>
<td>5.15</td>
<td>1.42</td>
<td>.777</td>
<td>0.83</td>
<td>0.84</td>
<td>0.73</td>
</tr>
<tr>
<td></td>
<td>PA3</td>
<td>5.42</td>
<td>1.38</td>
<td>.842</td>
<td>0.83</td>
<td>0.84</td>
<td>0.73</td>
</tr>
<tr>
<td></td>
<td>PA4</td>
<td>5.06</td>
<td>1.53</td>
<td>.793</td>
<td>0.83</td>
<td>0.84</td>
<td>0.73</td>
</tr>
</tbody>
</table>

On the other hand, the use of the AVE to assess discriminant validity is carried out by comparing it with the correlations among the constructs. For discriminant validity to be adequate, the square root of AVE of each indicator has to be higher than the correlation of this construct with all others [47] [49]. In this sense, Table 2 shows the correlations among the constructs and, on the main diagonal, the square root of AVE values. As may be observed, the established criterion is fulfilled in all cases and, therefore, it may be said that the discriminant validity of those constructs is adequate.

Discriminant validity may also be assessed looking at loadings and cross loadings matrix. Items should load more strongly with their own construct than with any other, indicating that they are perceived by respondents as belonging to their theoretical construct. In this sense in Table 3, a matrix with loadings and cross loadings has been computed. As may be observed, cross loadings of each item to other constructs are always below the loadings with their own construct.

Table 2. Discriminant validity assessment

<table>
<thead>
<tr>
<th>Construct</th>
<th>PBC</th>
<th>PA</th>
<th>SN</th>
<th>SV</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBC</td>
<td>.852</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PA</td>
<td>.544</td>
<td>.78</td>
<td></td>
<td>.789</td>
</tr>
<tr>
<td>SN</td>
<td>.382</td>
<td>.49</td>
<td>.789</td>
<td></td>
</tr>
<tr>
<td>SV</td>
<td>.423</td>
<td>.57</td>
<td>.741</td>
<td>.789</td>
</tr>
</tbody>
</table>

Table 3. Matrix of loadings and cross-loadings
Finally, the values of the well known goodness of fit measures GFI, AGFI, RMSEA and PCLOSE are 0.971, 0.947, 0.059 and 0.97 respectively.

3.5. Assessments of higher-order construct

In Table 4, the composite reliability (CR) and AVE measures of the second-order construct named Social Norms and Valuations (SNV) are indicated. Both values (CR = 0.855, AVE = 0.747) are well above the recommended thresholds of 0.7 and 0.5 respectively, providing evidence of reliable second-order construct. In addition, second-order constructs loadings on first-order constructs of SNV are equal to 0.81 and 0.92 and are significant at \(a=0.001\).

Finally, Table 5 shows the correlations among the constructs and, on the main diagonal, the square root of AVE values. As may be observed, the square root of AVE of each indicator is higher than the correlation of this construct with all others, and therefore, it may be said that the discriminant validity of those constructs is adequate. All these support the validity of hypotheses H13a and H13b that SNV is represented as a second-order construct having SN and SV as its sub-dimensions.

<table>
<thead>
<tr>
<th>Construct</th>
<th>SN</th>
<th>PBC</th>
<th>SV</th>
<th>PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>SN1</td>
<td>.657</td>
<td>.251</td>
<td>.487</td>
<td>.326</td>
</tr>
<tr>
<td>SN2</td>
<td>.803</td>
<td>.307</td>
<td>.595</td>
<td>.399</td>
</tr>
<tr>
<td>SN3</td>
<td>.890</td>
<td>.340</td>
<td>.660</td>
<td>.442</td>
</tr>
<tr>
<td>SV1</td>
<td>.565</td>
<td>.322</td>
<td>.762</td>
<td>.435</td>
</tr>
<tr>
<td>SV2</td>
<td>.545</td>
<td>.311</td>
<td>.735</td>
<td>.420</td>
</tr>
<tr>
<td>SV3</td>
<td>.635</td>
<td>.363</td>
<td>.857</td>
<td>.490</td>
</tr>
<tr>
<td>PBC1</td>
<td>.332</td>
<td>.867</td>
<td>.367</td>
<td>.471</td>
</tr>
<tr>
<td>PBC2</td>
<td>.320</td>
<td>.837</td>
<td>.354</td>
<td>.455</td>
</tr>
<tr>
<td>PA1</td>
<td>.348</td>
<td>.381</td>
<td>.400</td>
<td>.700</td>
</tr>
<tr>
<td>PA2</td>
<td>.386</td>
<td>.422</td>
<td>.444</td>
<td>.777</td>
</tr>
<tr>
<td>PA3</td>
<td>.419</td>
<td>.458</td>
<td>.481</td>
<td>.842</td>
</tr>
<tr>
<td>PA4</td>
<td>.394</td>
<td>.431</td>
<td>.453</td>
<td>.793</td>
</tr>
</tbody>
</table>

3.6. Structural Analysis Results

The maximum likelihood estimation method was used to confirm the hypothesized relations between constructs in the proposed model. The significance of paths included into the proposed model was tested using a bootstrap re-sample
procedure with 500 replications. In assessing the SEM, the squared multiple correlations (R²) of all endogenous latent variables and EI as well were initially examined and the significance of the structural paths was evaluated.

The assessment of the proposed SEM is presented in Table 6 where the standardized path coefficients, representing the direct effects of the constructs, their statistical significance, and the proportion of explained variance for each endogenous construct are given.

Based on the structural equation model estimation results, the entrepreneurial intention is influenced by all its antecedents. However, PA and PBC present stronger influence on EI followed by SNV, as indicated by model's coefficients of =0.508 (s.e.=0.043) for PA, =0.326 (s.e.=0.034) for PBC and =0.111 (s.e.=0.050) for SNV. Therefore, hypotheses H14, H15 and h16 are confirmed. Furthermore, SNV is also exerting its indirect influence on EI through both PA and PBC, since the relevant path coefficients are statistically significant ( =0.660, s.e.=0.040; =0.519, s.e.=0.049), confirming the validity of proposed hypotheses H17 and H18.

The influence of Gender on SNV and PBC is small in magnitude ( =-0.139, s.e.=0.042; =-0.066, s.e.=0.037), but it is significant and the signs of the coefficients are as expected. Based on that, both proposed hypotheses, concerning the impact of gender on the two belief elements (H3 and H4), are confirmed. In addition, the impact of gender on PA is not significant and the relevant hypothesis (H2) is not confirmed.

Finally, the impact of father’s occupation on SNV and the impact of education on PA and SNV are also small in magnitude ( =-0.078, s.e.=0.037; =0.065, s.e.=0.033; =0.104, s.e.=0.044), but significant. Based on that, the proposed hypothesis H11, H6 and H7 are confirmed.

<table>
<thead>
<tr>
<th>Path</th>
<th>Standardized Coefficient</th>
<th>S.E.</th>
<th>P</th>
<th>R²</th>
<th>Hypotheses Validation*</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNV -- Gender</td>
<td>-.139</td>
<td>.042</td>
<td>.005</td>
<td></td>
<td>H3 confirmed</td>
</tr>
<tr>
<td>SNV -- Education</td>
<td>.104</td>
<td>.044</td>
<td>.019</td>
<td>.035</td>
<td>H7 confirmed</td>
</tr>
<tr>
<td>SNV -- FatherOcc</td>
<td>-.078</td>
<td>.037</td>
<td>.047</td>
<td></td>
<td>H11 confirmed</td>
</tr>
<tr>
<td>PA -- SNV</td>
<td>.660</td>
<td>.040</td>
<td>.003</td>
<td>.448</td>
<td>H17 confirmed</td>
</tr>
<tr>
<td>PA -- Education</td>
<td>.065</td>
<td>.033</td>
<td>.034</td>
<td></td>
<td>H6 confirmed</td>
</tr>
<tr>
<td>PBC -- SNV</td>
<td>.519</td>
<td>.049</td>
<td>.005</td>
<td>.283</td>
<td>H4 confirmed</td>
</tr>
<tr>
<td>PBC -- Gender</td>
<td>-.066</td>
<td>.037</td>
<td>.057</td>
<td></td>
<td>H18 confirmed</td>
</tr>
<tr>
<td>EI -- PA</td>
<td>.508</td>
<td>.043</td>
<td>.005</td>
<td></td>
<td>H14 confirmed</td>
</tr>
<tr>
<td>EI -- SNV</td>
<td>.111</td>
<td>.050</td>
<td>.023</td>
<td>.606</td>
<td>H16 confirmed</td>
</tr>
<tr>
<td>EI -- PBC</td>
<td>.326</td>
<td>.034</td>
<td>.004</td>
<td></td>
<td>H15 confirmed</td>
</tr>
</tbody>
</table>

* Hypotheses H1, H2, H5, H8, H10 and H12 are not confirmed

The model explains 61% of the variance in entrepreneurial intention based on PA, PBC and SNV. This result is highly satisfactory since most previous researches using linear models typically explain substantially lower amounts of variance. Besides, the model also serves to explain 45% of the variance in PA and 28% of the variance in PBC, thanks to the important contribution of SNV.
4. Discussion of the Results, Limitations and Research Implications

The study provided strong support to the theory of planned behavior, corroborating the findings of many other studies, albeit with a quite different sample, since most studies used student samples while here the respondents were self-employed and small businesspeople. As reported in studies mentioned in the literature review, a strong significant relationship was found between PA and EI, as well as between PBC and EI [7] [18] [26] [37]. A weaker but, nevertheless significant relationship was found also between SNV and EI, both direct and indirect, through PA and PBC, contributing thus in the prediction of EI, in line with previous findings by Guerrero et al., [31] and Sahinidis et al., [23]. Most of the hypotheses proposed were accepted with the model explaining 61% of the variance in entrepreneurial intention. The hypotheses concerning the demographics, gender, education and father’s employment status, contributed also in the analysis, to a lesser extent nonetheless. Although the findings reported in several studies considered these demographics of no value in the EI analysis (Franco et al., 2010; Krueger et al., 2000), the results of this studies point to the opposite direction and in line with those reported by others such as the European Commission Report [50], Sahinidis [51] and Peterman and Kennedy [30].

One possible limitation that may have affected the results of our study is the use of one item to measure EI. Although this has been used previously with satisfactory results by Krueger et al., (2000) [18] and by Kolvereid and Isaksen (2006) [41], multi-item scales tend to be more accurate measures of perceptual concepts. For reasons of parsimony however, we employed the one – item scale. Another limitation is the cross-sectional nature of the study. It is however very difficult, to find a large sample of entrepreneurs and to have them participate in a longitudinal study. Finally, we did not include in our analysis personality variables which play an important role in explaining EI according to Zhao et al., (2005) [20]. Future studies may address these issues and provide greater insight in the task of explaining and predicting EI. Another one, exciting challenge for future research is in depth follow-up of the entrepreneurs that start a new venture. The issue of the relationship between EI and subsequent behavior, remains a salient one and unless researchers come up with more conclusive evidence of the connection between the two concepts, Intention studies in the field of entrepreneurship will not be considered as valuable means able to predict the founding of new businesses.

The implications of this study for policy makers are significant. Given that the entrepreneurial climate is not always favorable for entrepreneurs, many of them resort either to sticking to what they know, rather than innovating and expanding, or they may leave business, preferring to work as employees. Greece is a country with a particularly unfriendly policies toward entrepreneurs, specifically towards small business owners, not allowing thus for their expansion and growth, not to mention the problems that may be created due to bureaucracy for many sectors [52]. Given the fact that nowadays innovative tools can be employed to communicate businesses’ messages with the public, online communities may boost small business’ marketing communications [53], [54].

Firms in different sectors may employ social media in their marketing strategies [55], [56], [57], [58], [59]; the creation of networks and synergies may also enhance their communication [60]. Educators also, have a major role to play in training small business owners, helping them set higher goals and guiding them in their effort to achieve them.
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References


