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## **ANALYSE OF FACTORS AFFECTING THE DEVELOPMENT OF AN ENTREPRENEURIAL INTENTION AMONG FRESH GRADUATED STUDENTS IN ISLAMIC AZAD UNIVERSITY, SAHNEH, IRAN**

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### **ABSTRACT**

This study seeks to assess, empirically, factors which impact on the entrepreneurial intention and, therefore, seeks to test the hypothesis that which factors significantly influence on the entrepreneurial intention among fresh graduates in sahneh, iran. We draw a sample of 250 fresh graduated students, selected from a target population of 572 students using the Cochran formula. using a simple random sampling technique. With the aid of the primary data collected, our findings are quite revealing. the preliminary conclusions drawn from this study, are presented and we offerd suggestions for further studies. The research tested the suggestion that risk taking propensity may act as a potential mediator. Environmental factor such as supportive environment may have a moderating influence on the relationship between psychological traits and entrepreneurial orientation and family entrepreneurial background and innovation, influence the intention to start a new business; and there is positive relationship between tolerance of ambiguity and risk taking propensity; and a negative relationship between locus of control and risk taking propensity and also a significant positive relation at the significance level of 0.05 between the level of education and age with the creation of entrepreneurial spirit amongst students. Furthermore a significant positive relation was observed between educational and academic factors, propensity to achievement, risk taking and ambiguity toleration, control source and family with entrepreneurial spirit at the significance level of 0.01. Also the results of multiple regression analysis showed that 79.7% of entrepreneurial spirit (the dependent variable) variance was explained by such independent variables as educational and academic factors, achievement propensity, being innovative, risk taking and ambiguity toleration, control source and family. Also the research validates a positive relationship between the family's financial capital and higher education intention of students. The study found no influence of family's financial capital (measured as father's annual income), manpower capital (measured as family size) and human capital (measured as father's occupation) on career intentions of students. The paper emphasizes the importance of taking a more holistic approach when researching the factors that influence entrepreneurial intention.

**Keywords:** *Personal Values, Socio-Demographic, Social and Family Capital, Personality Traits, Motivation, Providence and Achievement Propensity, Internal Control, Exception Ability and Having Systematic Attitude, Enterpruneourship Intention*

### **INTRUDUCTION**

Over the last decades, studies within the field of entrepreneurship have started to include University students with the aim to predict their entrepreneurial behaviors in the future (Korkmaz, 2000; Kenan, Temurlenk & Başar, 2008; Ellen, 2010; Bilge & Bal, 2012). One such an antecedent of entrepreneurial behavior is entrepreneurial intention, i.e. their intentions to start up their own businesses in the future. Several studies highlighted the role of entrepreneurial intention to be a valid predictor for future entrepreneurial activities (Covin & Slevin, 1991; Krueger & Carsrud, 1993; Lumkin and Dess, 1996; Elenurm et al., 2007).

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The unemployment of post-graduates is one of the most consequential issues that many of the developing countries are nowadays dealing with. This could be caused by heterogenic educational planning in terms of market needs and also miscalculation of befitting human resources for the future labor market not with standing that the aim of the higher education system is to provide graduates with necessary skills to play an active role in the society's affairs.

The study of entrepreneurship is a multidimensional process that calls for further and continuing research studies. Prior research studies have been filled with inconsistency and controversy relative to the appropriate definition of an entrepreneur and the relevance of personality traits study in entrepreneurship (Beugelsdijk, 2007; Jaafar & Abdul-Aziz, 2005; Aldrich and Martinez, 2001; Gartner, 2001; Lee and Peterson, 2000; Lyon *et al.*, 2000; Shane & Venkataraman, 2000; Aldrich and Kenworthy, 1999; Busenitz & Barney, 1997; Lumpkin & Dess, 1996; Gartner, 1988, Carland *et al.*, 1984; Cole, 1969; Knight, 1921). The personality traits approach to entrepreneurship has been criticized by a number of researchers as unsatisfactory and questionable (Gartner, 1988; Aldrich & Zimmer, 1986, Low & Macmillan, 1988) in explaining entrepreneurial behavior and performance. They concluded that there are no personality characteristics that predict who will attempt to, or be, a successful entrepreneur. As Low and MacMillan (1988) stressed, entrepreneurs tend to defy aggregation. They reside in the tails of the population distribution; and though they are expected to differ from the mean of the society, the nature of their differences is not predictable. As a result, it seems that any attempt to profile entrepreneurs solely along the personality characteristics may be overly simplistic. In light of the aforementioned criticism including the suggestion made by Gartner (1988) and Vesper (1980) that entrepreneurship should be analyzed from the perspective of what an entrepreneur does and not what he is, and that creation of an organization is a complex process and the outcome of many influences. Thus, this research revisits the question of whether psychological traits -need for achievement, locus of control, and tolerance for ambiguity are useful predictors by investigating their relationship to entrepreneurial orientation whether supportive environments moderate the relationships between entrepreneurial orientation and psychological traits. Together with personality traits, additional variables such as entrepreneurship education and family tradition need to be included into the research domain. As argued by Learned (1992) “ some individuals have a combination of psychological traits in interaction with background factors that make them more likely candidates to attempt to found businesses”. In particular, we suggest that self-esteem influences the entrepreneurial orientation of university students. Furthermore, we hypothesize that this relationship is moderated by entrepreneurial education as well as by entrepreneurial family tradition. More importantly, the family play three key roles in venture creation decision making; a source of financial and human resources (Zhang *et al.*, 2003), a source of information and credible values (Renzulli *et al.*, 2000), and a source of role models (Krueger, 1993; Pruett *et al.*, 2009). Hence, the family is considered to be influential, especially, in the early stages of the life cycle of a business venture (Klyver, 2007). However, earlier empirical studies (Moore and Unwalla, 1964; Shapero, 1982; Scott and Twomey, 1988; Scherer *et al.*, 1989; Katz, 1992) have argued that there is more to the role of family background than just family members or family business in the decision making process of a new venture creation.

During recent decades there has been growing attention towards entrepreneurship and its education. The objective of teaching entrepreneurship is to plenish students with creativity and incumbent skills like management and marketing. Hence it's necessary that students be trained in such a way that their entrepreneurial characteristics be developed (Gibb, 2012). As Pacheco (1998) suggests, entrepreneurial characteristics from university students' point of view are providency power, high level of imagination, hardworking, motivation, self-belief, strong will, teamwork skills and network building whereas negative characteristics include cruelty in market and unpredictability.

In particular, the decision to become an entrepreneur is a complex one that may be influenced by the personal values structure. Up until now, research on the psychological factors affecting the start-up decision has frequently concentrated on personal traits as predictors of entrepreneurial activity. In this paper, instead, the role of personal values in explaining intention will be tested. Based on the theory, a

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significant relationship between certain individual values and entrepreneurial intention is expected. In this sense, recent research has underscored the value of understanding the cognitive mechanisms leading to the decision to start up a venture (Baron, 1998; Busenitz & Lau, 1996; Katz & Shepherd, 2003; Kolvereid, 1996; Kolvereid & Isaksen, 2006; Krueger, 2000, 2003; Liñán *et al.*, 2002; Simon *et al.*, 2000; Zhao *et al.*, 2005).

Thus the main question of the present research is that what factors influence the students' entrepreneurial spirit and what is the weight of each of these factors?

### **Lerature Review & Hypothesis**

Rajman (2001) posited that financial resources in the family have direct bearing on entrepreneurial intentions. A lot of studies have shown that family income influences the career development of youth (Alibaygi & Pouya, 2011; Mortimer, 1992) and self-employment of youth (Hundley, 2006; Henley, 2005). The financial status of the family has been observed to have an impact on the child's choice of entrepreneurship (Hsu *et al.*, 2007). Study by Millman *et al.*, (2010) also confirmed that household incomes are positively related to their entrepreneurial Intentions. A recent study done by Nandamuri and Gowthami (2013) tested 11 competencies related to entrepreneurial orientation of management students and found that the household income significantly influences nine out of eleven competencies. Accordingly we propose the first hypothesis.

#### **H1: Annual Income of the Family has an Influence on the Career Intentions of Students**

According to Schulenberg *et al.*, (1984), family size appears to influence adolescent career aspirations because parents with large families tend to have less money to aid the older children in attending college, while younger children may receive more financial assistance since the financial strain is less once the older children leave home. A recent study by Cetindamar *et al.*, (2012) at Turkey found that family size was positively associated with the likelihood of engaging in entrepreneurship only when family size is more than seven people.

#### **H2: Size of the Family has an Influence on the Career Intentions of Students**

UK (Altinay *et al.*, (2012)) and Malaysia (Tong *et al.*, 2011) found that entrepreneurial families or parents positively influence entrepreneurial career intentions in their children. Lindquist *et al.*, (2012) found that having an entrepreneur for a parent increases the probability that own-birth children become entrepreneurs by 60%. Davidsson showed that the average of 40% of small business owner managers in Sweden have had a self employed parent(s) (Davidsson, 1995). The impact of family business background has been proven in several other studies as well (White *et al.*, 2007; Hout & Rosen, 2000). On the basis of the above discussion, the following next hypothesis is proposed.

#### **H3: Father's Occupation has an Influence on the Career Intentions of Students**

Social capital refers to the relationships, either formal or informal, generated by individuals in their interaction with other individuals trying to obtain an expected reward in the market, a capital captured in the form of social relationships (Lin, 2003). Social capital comprises of a person's social connection in family, professional and social networks, friends, entrepreneurial role models and other known supporting networks comprising of investors, potential customers, bankers etc. Social capital has been linked to a variety of positive social outcomes, such as better public health, lower crime rates, and more efficient financial markets (Adler & Kwon, 2002).

According to Davidsson and Honig (2003) bridging and bonding social capital, consisting of both strong and weak ties, was a robust predictor regarding who became a nascent entrepreneur as well as for advancing through the start-up process. A recent study by Kreiser *et al.*, (2013) found that an increase in network tie strength is negatively associated with founding activities whereas an increase in the number of ties is positively associated with founding activities. Many other authors (Tararko & Schmidt, 2013; Bauernschuster *et al.*, 2010, Linan, 2007) have also emphasized upon the positive role of social capital in facilitating entrepreneurship. Social capital helps in opportunity identification (Bhagvatula *et al.*, 2010), establishment of business (Birley, 1986) as well as in firm performance (Stam *et al.*, 2014). Another recent study by Light and Dana (2013) suggests that social capital promotes entrepreneurship only when supportive cultural capital is in place. Similarly Malecki (2009) has also argued that people living in

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different regions have different levels of trust and interaction among themselves so regional outcomes with regard to social entrepreneurship will vary. As such we formulate our next hypothesis.

### H4: The social capital network span of student has an influence on the career intentions of students.

In the last three decades, the functions, activities, and actions that are associated with opportunity identification and exploitation, as well as the creation of organization have consistently dominated discussions in the field of entrepreneurship. In the middle of these discussions, however, lies the concept of entrepreneurial intention. Specifically, we have witnessed the emergence of intention-based models in the eighties and nineties, even though discussions on new venture creations have been in existence long before then. These models are summarized in Table 1 below.

**Table 1: Evolution of entrepreneurial intention models**

	Models	Author(s)	Explanatory Factors
1980s	Entrepreneurial Event Model (EE)	Shapero & Sokol (1982)	Perception of Desirability
			Perception of Feasibility
			Tendency to act
			Precipitating events
1990s	Theory of Planned Behaviour (TPB)	Ajzen (1991)	Subjective norms
			Behavioural control
			Subjective attitude towards behaviour
	Entrepreneurial Orientation (EO) Attitude	Robinson et al (1991)	Self-esteem
			Achievement
			Innovation
	Entrepreneurial Potential Model (EPM)	Krueger & Brazeal (1994)	Desirability
			Feasibility
	Davidsson's Model	Davidsson (1995)	Propensity to act
			General attitudes & domain attitudes
			Current situation

Source: Guerrero, Rialp and Urbano (2008)

On the basis of these, Krueger *et al.*, (2000) conclude that even though the models are different, the proportion of the variations in intention to start a business explained is minimally different. The perception of venture feasibility can be explained as the probability of being able to start a new venture that will provide the un-served or under-served market needs. It describes the degree to which one feels about his/her capability of starting a new business (Boyd and Vozikis, 1994; Krueger *et al.*, 2000). On the other hand, the perception of venture desirability is the degree to which one feels attracted to becoming an entrepreneur (Linán *et al.*, 2011). This is very similar to attitude and social norms (Krueger *et al.*, 2000; Guerrero *et al.*, 2008). In fact, Shapero and Sokol (1982) considered perception of desirability specifically due to social and cultural influences in the environment. In view of these, we propose that: perception of feasibility and desirability has significant relationship with the intention of fresh graduates to become entrepreneurs in sahnah, iran.

### H5a: The relationship between the perception of venture feasibility and the intention of fresh graduates to become entrepreneurs in sahnah is positive and significant.

### H5b: The relationship between the perception of venture desirability and the intention of fresh graduates to become entrepreneurs in sahnah is positive and significant.

Entrepreneurial self-efficacy emerged from the concept of self-efficacy. Self-efficacy is a cognitive variable that is required to successfully complete a given task or behaviour.

The choice of entrepreneurial self-efficacy, as a concept, came to life in the field of entrepreneurship after the clarion call by Gist and Mitchell (1992). They voiced the need to identify the “triggering factors” of the type of entrepreneurial behaviour that scholars of entrepreneurship would like to improve. Despite the



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support given by Boyd and Vozikis (1994), entrepreneurial self-efficacy became popular only after Chen *et al.*, (1998) showed, empirically, that it has a consistent and significant positive effect on the likelihood of being an entrepreneur. This outcome has also been confirmed by DeNoble and Ehrlich (1999), Krueger *et al.*, (2000), and Zhao *et al.*, (2005) respectively.

Entrepreneurial self-efficacy may be related to family background; it has a positive and significant impact on the entrepreneurial intention of fresh graduates in Nigeria.

Based on the afore mentioned, the following hypothesis suggests that;

**H6a: The relationship between entrepreneurial self-efficacy and the perception of venture feasibility of fresh graduates in sahnahiran is positive and significant.**

**H6b: The relationship between entrepreneurial self-efficacy and the perception of venture desirability of fresh graduates in sahnahiran is positive and significant.**

**H6c: There relationship between family background and entrepreneurial self-efficacy of fresh graduates in sahnahiran is positive and significant.**

**H6d: The relationship between entrepreneurial self-efficacy and entrepreneurial intention of fresh graduates in sahnahiran is direct and significant.**

Five dimensions of EO autonomy, innovativeness, risk taking, proactiveness, and competitive aggressiveness were identified. These dimensions represent distinct constructs that may vary independently of each other in a given context. Linking the relationship between psychological traits and entrepreneurial orientation is imperative for theoretical and empirical reasons, because entrepreneurs with a certain psychological traits may have a tendency to exhibit certain degree of entrepreneurial orientation and showing this tendency may provide benefits to the organization.

In prior research studies, achievement need, tolerance for ambiguity, risk taking and locus of control were analyzed with respect to entrepreneurial characteristics and were identified as correlates of being or desiring to be an entrepreneur (Ahmed, 1985; Begley & Boyd, 1987; Bonnett & Furnham, 1991). Prior research findings related to psychological traits have been corroborative and thus this research is aimed at providing additional insights and understanding to the relationship between psychological traits and entrepreneurial orientation. In the subsections that follow, some of the most researched psychological traits will be discussed and how they are related to entrepreneurial orientation.

A number of studies suggest that need for achievement is higher in company founders, compared to managers (Begley & Boyd, 1987; Miner *et al.*, 1989). It is also related to company growth (Miner *et al.*, 1989). Such findings that relate the level of need for achievement of the founders and the financial growth of the organization may come from a relationship between the psychological traits of founders and the levels of entrepreneurial orientation they exhibit.

Rotter (1966) defined Locus of Control as an individual's perception about the underlying main causes of events in his/her life.

Or, more simply: Individual believes that his/her behaviour is guided by his/her personal decisions and efforts (internal); or as unrelated to his or her actions and is guided by fate, luck, or other external circumstances (external). People with internal locus of control believe that they can control what happens in their lives. On the other hand, people

with external locus of control tend to believe that most of the events in their lives result from luck, being at the right place at the right time, and the behaviors of powerful people. Research indicates that individuals with internal locus of control often have a more expressed need for achievement (Brockhaus 1982; Lao 1970; Gurin *et al.*, 1969).

Budner (1962) defined tolerance for ambiguity as the “tendency to perceive ambiguous situations as desirable,” whereas intolerance for ambiguity was defined as “the tendency to perceive ... ambiguous situations as sources of threat” (p. 29). An ambiguous situation is one in which the individual is provided with information that is too complex, inadequate, or apparently contradictory (Norton, 1975). The person with low tolerance of ambiguity experiences stress, reacts prematurely, and avoids ambiguous stimuli. On the other hand, a person with high tolerance of ambiguity perceives ambiguous situations/stimuli as desirable, challenging, and interesting and neither denies nor distorts their complexity of incongruity.

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Aldrich and Wiedenmayer (1993) suggest that the sociopolitical environment may be so powerful to create or destroy entrepreneurship in a country. Covin and Slevin (1989) also consider environmental factors to be a reasonable start point for any analysis of entrepreneurship. They alleged that external variables moderate the relationship between entrepreneurial posture and firm performance. Covin and Slevin (1989) also pinpointed the idea that the external environment can be operationally defined in terms of forces or elements that are too numerous to incorporate in a specific sense into a single model.

**H7a Need for Achievement is positively related to Entrepreneurial Orientation.**

**H7b Internal locus of Control is positively related to Entrepreneurial Orientation.**

**H7c Tolerance for Ambiguity is positively related to Entrepreneurial Orientation.**

**H8a Supportive Environment moderates the relationship between Need for Achievement and Entrepreneurial Orientation.**

**H8b Supportive Environment moderates the relationship between Internal Locus of Control and Entrepreneurial Orientation.**

**H8c Supportive Environment moderates the relationship between Tolerance for Ambiguity and Entrepreneurial Orientation.**

Many authors began looking for the existence of certain personality features or traits that could be associated with the entrepreneurial activity (Kets, 1977; McClelland, 1961). Later on, other works have been carried out pointing to the importance of different demographic variables such as age, gender, origin, religion, level of studies, labour experience, etc. (Reynolds *et al.*, 1994; Storey, 1994). Both lines of analysis have allowed the identification of significant relationships among certain traits or demographic characteristics of the person, and the fulfilment of entrepreneurial behaviours. As regards the study of entrepreneurs' values, little research has been done up to now. Nevertheless, the few studies that have been carried out indicate a significant relationship between certain values of an individualistic nature and entrepreneurial behaviour.

Thus, Kecharananta and Baker (1999) found significant differences between the values of Thai entrepreneurs and company employees using the SYMLOG instrument (Polley *et al.*, 1988). Specifically, entrepreneurs scored higher in individualism, independence and resistance to authority. Similarly, in an exploratory study carried out in Spain, Moriano *et al.*, (2001) observed a tendency for entrepreneurs to be inspired by individualistic values, such as hedonism (i.e. pleasure and enjoying life). Furthermore, Moriano *et al.*, (2007) found that individualist values (i.e. power, achievement, hedonism, stimulation and self-direction) positively predict entrepreneurial intention of Spanish university students. Differences in background characteristics represent differences in the life circumstances that affect value priorities (Schwartz, 2006). Therefore, based on the review of theory and research, we propose the following four hypotheses:

**H9: Openness to change (stimulation, hedonism and self-direction values) will be positively related to the entrepreneurial intention.**

**H10: Conservation (tradition, conformity and security values) will be negatively related to the entrepreneurial intention.**

**H11: Self-enhancement (achievement and power values) will be positively related to the entrepreneurial intention.**

**H12: Self-transcendence (universalism and benevolence values) will be negatively related to the entrepreneurial intention.**

Empirical studies investigating the implications of locus of control for entrepreneurship related activities, and in particular for the intention to start up a business, have produced contradictory results. In a study of university students in Singapore, Ang and Hong (2000) found that the internal locus of control was a determinant of entrepreneurial intentions. In a study of university students in Singapore, Ang and Hong (2000) found that the internal locus of control was a determinant of entrepreneurial intentions. Supporting this, Gurol and Atsan (2006) also found a significant relationship between higher locus of control and the intention to start up a business. Finally a study by Khanka (2009) looking at entrepreneurial performance found that entrepreneurs with an internal locus of control tended to achieve a

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higher performance, as measured by profitability, than those with an external locus of control. It is interesting to note that both entrepreneurship education and actual entrepreneurial activity can have an effect on and change the locus of control orientation. Hansemark's research (1998) investigating the effects of participation in an entrepreneurship programme showed that participants developed a higher level of need for achievement and a greater internal orientation of locus of control. Likewise a longitudinal study by Littunen (2000) found that the actual experience of entrepreneurship had a profound effect on entrepreneurs, increasing their internal orientation of locus of control. Given these arguments, the first hypothesis is:

#### **H13. There is a positive relationship between internal locus of control and intention to start up a business.**

The increasing importance of innovation to entrepreneurship is reflected in the significant increase in literature that examines the role and nature of innovation (Drazin and Schoonhoven, 1996; Drucker, 1985). Innovation is such an important antecedent of entrepreneurship that Schumpeter (1990) simply sees an entrepreneur as an innovator. There is considerable endorsement of the view in the extant literature that entrepreneurs are more innovative than nonentrepreneurs (Gurol and Atsan, 2006; Koh, 1996; Robinson *et al.*, 1991). In Mueller and Thomas's (2001) study, innovative-ness has been identified as an important antecedent of starting a business venture. Similarly, both Koh (1996) and Gurol and Atsan (2006) found a positive relationship between innovative-ness and entrepreneurial intention. Confirming these studies, Gurel *et al.*, (2010) found that there is a positive relationship between innovation and British and Turkish students' intention to start up a business. Innovation has also been found to have a positive effect on venture performance (Baum, 1995; Rauch and Frese, 2000; Wiklund, 1998). In a study by Utsch and Rauch (2000) innovativeness and initiative were found to be moderating factors between achievement orientation (a construct which includes locus of control and need for achievement) and entrepreneurial success. Therefore, the second hypothesis is:

#### **H14. There is a positive relationship between innovativeness and intention to start up a business.**

When there is scarcity of information to structure a situation, an ambiguous situation is said to exist. The way a person perceives such a situation and organises the available information to manage the data is a reflection of his or her tolerance of ambiguity (Koh, 1996). Tolerance of ambiguity in an individual determines the extent to which one could bear and live with these situations (Begley and Boyd, 1987). Entrepreneurs usually make decisions with insufficient information and invest a vast amount of time and effort into venture creation with the outcome uncertain (Cromie, 2000). Therefore entrepreneurs have to cope and live with uncertainty on a daily basis.

Tolerance of ambiguity is seen as so important for entrepreneurship that McMullen and Shepherd (2006) closely associate entrepreneurial intent and success with tolerance of ambiguity of entrepreneur. However, in their empirical study of British and Turkish students, Gurel *et al.*, (2010) found no relationship between tolerance of ambiguity and intention to start up a business; these findings were surprising given that a new business start up inevitably involves uncertainty. Similarly Babb and Babb (1992) found no significant differences in tolerance of ambiguity between founders and nonfounders of rural businesses in Northern Florida. In contrast to such findings, both Pillis and Reardon (2007) and Koh (1996) in their studies of Irish and Hong Kong students, respectively, found that tolerance of ambiguity does affect entrepreneurial intentions positively. Given these arguments, the third hypothesis is:

#### **H15. There is a positive relationship between tolerance of ambiguity and intention to start up a business.**

Risk taking propensity is an important element of entrepreneurship and refers to the propensity of an individual to exhibit risk taking or risk avoidance, when confronted with situations which might involve an element of risk (Gurol and Atsan, 2006). Research by Koh (1996) and Gurol and Atsan (2006) found that students with more risk taking propensity are more entrepreneurially inclined. In their study of students from Hong Kong and Singapore, Ang and Hong (2000) showed that entrepreneurial intention is higher in those students with higher propensity to take risks. Supporting these views, Gurel *et*

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al., (2010) also found that there is a positive relationship between propensity to take risks and intention to start up a business. Given this, the fourth hypothesis is:

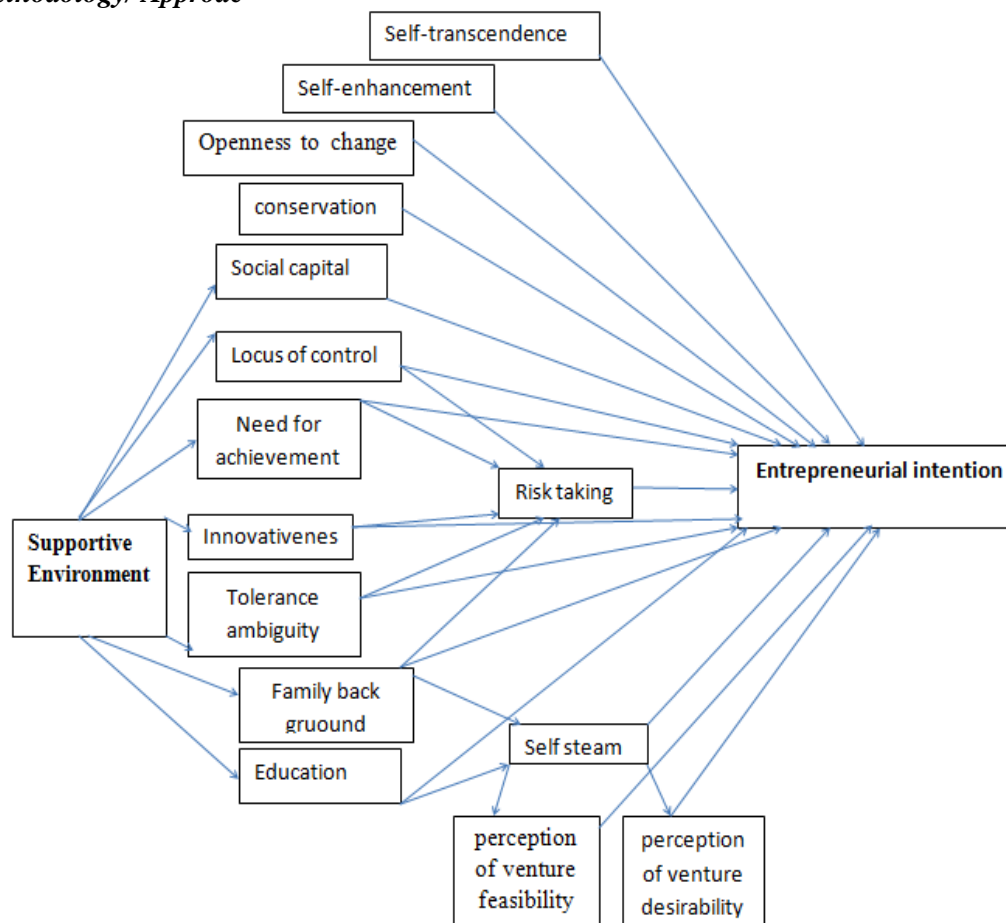
**H16. There is a positive relationship between propensity to take risks and intention to start up a business.**

Within the research domain of personality traits, achievement motivation or the need for achievement is one of the most prominent theoretical arguments related to entrepreneurship (McClelland, 1961; Gurol and Atsan, 2006). It is posited that the need for achievement is one of the key drivers behind individuals who behave entrepreneurially. Among all psychological characteristics studied to date, need for achievement is the one that has the longest history (Koh, 1996; Shaver and Scott, 1991). In a meta-analysis of 105 studies (Spangler, 1992), the need for achievement was identified as a determinant of various out-comes such as career success, school grades and firm performance. When employed specifically in entrepreneurship context, Johnson (1990) reported that regardless of how it was operationalised, need for achievement had a significant relationship for entrepreneurship in 20 of the 23 studies reviewed. Based on the findings from the studies discussed above, the fifth hypothesis is:

**H17. There is a positive relationship between need for achievement and intention to start up a business.**

## MATERIALS AND METHODS

### Design/ Methodology/ Approach



**Figure 1: Proposed Research Model of the Study**

Quantitative research was used to conduct this study. The quantitative approach has helped us to prevent bias in gathering and presenting research data and the discussion and experimentation involved in the



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process are more objective. A self-administered questionnaire was developed & used as the main data-gathering instrument for this study. The sample of this study was comprised of university students in Iran, sahnesh. The major reason for using students as a sample was to study the intentional processes before phenomena occur and inclusion of intending and non-intending subjects should be considered (Krueger and Carsrud, 1993). The second reason for employing a student sample was because whilst some students are also potential entrepreneurs some other students do not intend to start their own business. Last, surveying university students allows us to control for level of education which may have an influence on entrepreneurial intention. The conceptual model includes seventeen independent variables. As it was discussed before, risk-taking propensity and supportive environment are potentially mediating variables (see Figure 1). The scales for personality traits included a total of 40 items from a number of instruments. Risk-taking propensity measure consisted of ten items (Jackson, 2007), innovativeness of eight items (Mueller and Thomas, 2001), tolerance of ambiguity of four items (Acedo and Jones, 2007) & Budner (1962), locus of control of ten items (Mueller and Thomas, 2001) and need for achievement of eight items (Kahl, 1965) and Edwards (1959) and Rotter (1966) to measure generalized expectancies, self-esteem by using (Rosenberg's self-esteem scale, 1965); this scale is attributed to be unidimensional but some studies extracted two separate factors as Self-Confidence and Self-Depreciation factors (Rosenberg, 1965; Gray-Little *et al.*, 1997). Entrepreneurial Intention was measured by the scale developed by Yılmaz and Sümbül (2009) and measured using 6-point Likert-type scale. This scale originally is in Turkish and consists of 36 items and has a Cronbach Alpha reliability of 0.90 (Yılmaz & Sümbül, 2008). All trait items are measured using a five-point Likert scale ranging between "1" (strongly disagree) and "5" (strongly agree). To minimise response-set bias and the halo effect, some statements are reverse-scored and intermingled with other statements. The dependent variable in this study (entrepreneurial intention) is measured on a nominal scale (1 = yes, 0 = no). This variable is based on the question whether the individual intends to engage in entrepreneurial activity or not. The questionnaire that was developed for this study measurement is composed of three parts. The first part consists of demographic questions of the student measured by nominal and categorical scales including family business related questions and ask whether they have taken entrepreneurship courses or not. The second part measures independent variables that is commonly used self-report instrument to evaluate them.

## Data Analysis

**Table 1: Descriptive Statistics of Variables**

States	Mean	Median	Mode	Std.dev
Entrepreneurial orientation	4.15	4.46	4.46	1.41
Supportive environment	5.61	5.67	6.30	1.38
Self-transcendence	4.50	5.50	6.30	1.60
Self-enhancement	4.36	5.40	6.50	1.40
Openness to change	5.00	4.50	5.45	1.30
conservation	5.54	5.66	6.50	1.24
Social capital	5.67	5.76	6.90	1.98
Locus of control	5.70	6.00	6.00	1.09
Need for achievement	5.88	6.00	6.30	1.27
Innovativeness	4.00	5.89	4.99	1.00
Tolerance ambiguity	5.24	5.33	5.33	1.18
Family background	4.23	5.45	5.00	1.90
Family background	4.67	6.00	5.45	1.43
Education	5.00	5.00	5.36	1.45
Risk taking	5.00	6.00	5.38	1.34
Self-esteem	5.90	5.99	5.00	1.23
perception of venture feasibility	4.90	6.00	4.98	1.00
perception of venture desirability	4.98	5.89	4.88	1.60

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**Table 2: Regression Results**

States	Beta	SE	F	R <sup>2</sup>
Supportive environment	0.170			0.12
Self-transcendence	0.365			0.23
Self-enhancement	0.245			0.32
Openness to change	0.345			0.123
conservation	0.366			0.125
Social capital				0.165
Locus of control	.081	.106	10.46	0.30
Need for achievement	.369***	0.093	13.74	0.13
Innovativeness	0.94			0.214
Tolerance ambiguity	.305**	.091		0.324
Family background	0.345			
Family background	0.356			
Education	0.346			
Risk taking	0.324			
Self esteem	0.234			
perception of venture feasibility	0.265			
perception of venture desirability	0.347			
changes				32

Adjusted R<sup>2</sup> 0.30, N = 94, \*\*\* P < 0.001, \*\* P < 0.01, Change R<sup>2</sup> = .15

## RESULTS AND DISCUSSION

### Results

#### Hypotheses

	Supported/not supported
H1:	supported
H2:	Supported
H3:	supported
H4:	supported
H5a:	supported
H5b:	Supported
H6a:	Supported
H6b:	supported
H6c:	supported
H7a:	Supported
H7b:	supported
H7c:	supported
H8a:	supported
H8b:	supported
H8c:	supported
H9:	supported

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<b>H10:</b>	<b>supported</b>
<b>H11:</b>	<b>supported</b>
<b>H12:</b>	<b>supported</b>
<b>H13:</b>	<b>supported</b>
<b>H14:</b>	<b>supported</b>
<b>H15:</b>	<b>supported</b>
<b>H16:</b>	<b>supported</b>
<b>H17:</b>	<b>supported</b>

## Conclusion

we concur that there are several, even hundreds of, variables that may influence students' inclination towards setting up their own business. Nevertheless, our multiple model, achieved a good fit based on the rigorous theoretical variables we employed. We recommend that future studies employ more multiple (i.e., competing) models in order to further investigate factors that explain entrepreneurial intention of students.

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