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**STUDY OF THE RELATIONSHIP BETWEEN ENTREPRENEURIAL CHARACTERISTICS AND STUDENTS' ACADEMIC ACHIEVEMENT
(CASE STUDY: ISLAMIC AZAD UNIVERSITY, VARAMIN- PISHVA BRANCH)**

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ABSTRACT

This is an applied research with descriptive-correlation method. The main purpose of the study is to Study the relationship between entrepreneurial characteristics and students' academic achievement at Islamic Azad University. Statistical population consisted all students studying at the Varamin-Pishva branch of Islamic Azad University in 2013. The sample size was 175 students which were selected by stratify sampling from the whole 11065 students. Questionnaire used for data collection. Collected data analyzed with the SPSS/21 software. The results showed that the university GPA of studied students had a positive and significant relationship with perseverance and creativity at the 95% level and had a positive and significant relationship with need for achievement and locus of control at the 99% level.

Keywords: *Entrepreneurship, Academic Achievement, Entrepreneurial Characteristics, GPA, Varamin*

INTRODUCTION

There are various definitions of entrepreneur and entrepreneurship drawing from the varied fields of study, such as business, economics and psychology, which illuminate different dimensions of entrepreneurship. One of the earliest definitions was by Adam Smith in 1776 that saw an entrepreneur as an economic agent who transforms demand to supply. Richard Cantillon in the eighteenth century, described an entrepreneur as someone who takes risk by making decisions in uncertain economic environment in order to seek the best opportunities. Joseph Schumpeter in 1934 described entrepreneurship as a process of creative destruction through which an entrepreneur dismantles existing patterns or structures in order to come up with new combinations thus new commodities and systems (Holt, 2003).

Entrepreneurship is considered as one of the 3rd millenniums' necessity which is nominated as the age of Knowledge, information and globalization. The worldwide demand is to learn, create and apply the newer, modified and up-to-date- or possibly invent new technology in the world race of communication and trading competition development to open more job opportunities. At this such inconsiderate world Entrepreneurship offer could be the effective elements of faster growing efforts to chase and set as world advances process race which by itself is seen as an important factor that affects and challenges the post-modern people (Badri, 2005).

Knowledge has positive effect in the society and human life in case it is applied. The existence of a gap between knowing and applying does not lead to the value creation by knowledge; as a result, the knowledge that is not applied, does not grow and develop. For reducing the gap between knowledge and application, there is a need for entrepreneurship. Entrepreneurs make the application of knowledge possible by innovation, so the universities, as the producers of knowledge, not only should think about its application, but also should arrange the knowledge production priority based on the applicable uses and the society's demands. In other words, the knowledge production increases the potential of innovation; moreover, in order to change the existing potentials to economic values, there is a need for the entrepreneurship of the universities. The university entrepreneurship reduces the gap between knowledge

Research Article

and innovation; as a result, the gap between knowledge and application reduces too. Therefore, the entrepreneur's duty is to execute brilliant ideas and make the existing knowledge applied (Hornaday and Abound, 1971).

The importance of entrepreneurship education has increased due to the need to prepare students for coping in the contemporary work and living environment. In addition to entrepreneurship courses taught for business students, sense of initiative and entrepreneurship have become more widely viewed as key competences necessary for all students (and society at-large) regardless of their specialty (Küttim *et al.*, 2014).

Although research investigating alumni from entrepreneurship education programs in the USA (Webb *et al.*, 1982), Norway (Kolvereid and Moen, 1997) and Sweden (Johannisson *et al.*, 1998) all show that graduates from entrepreneurship programs more often become self-employed by starting new businesses compared to business graduates with a general business degree, it is unclear whether this is attributable to selection and self-selection to these programs of students with entrepreneurial potential, or if the programs actually foster entrepreneurship.

In terms of entrepreneurial intentions it has been argued that there is no clear and consistent definition of the term. Entrepreneurial intentions have been used in previous studies as a reference to owning a business or becoming self-employed (either by setting up an own firm or taking over an existing one), as a set of broader personal orientations, dispositions, desires, or interests that might lead to venture creation, and also as nascent entrepreneurship including those who have only thought about establishing an own business and those who have taken more specific steps towards that (Thompson, 2009).

Studies that have focused on how students perceive entrepreneurship whether amongst pre-university students or among undergraduate students have concluded that social groups and the school have the greatest influence on whether students perceive entrepreneurship as a career option. Kelly *et al.*, (2011) through a survey of fifty- nine countries point out indicators of attitudes towards entrepreneurship. These indicators include the extent to which people think there are opportunities for starting business, their perceived capability of doing so, their fear of failure and the level of risk one is willing to take. They further note that these attitudes are largely shaped by societal perceptions such as through media images of entrepreneurship.

In another research run by Babae *et al.*, (2010), the factors that are effective for the students at the university to be entrepreneurs were investigated. In this study, which was conducted in distance Education University and among the girl students in Iran, it was indicated that family's and especially mothers' higher education can play an important role for their daughters to be an entrepreneur.

It was revealed that there is a positive relationship between the parents' education and the entrepreneurship and entrepreneurship profile. In addition, in that study, it was mentioned that marital status among women can have an impact on their being entrepreneurs. It was revealed that married women have more tendencies to entrepreneurship activities in comparison to singles.

Furthermore, in another study which was conducted by YaaKub *et al.*, (2011), it was noted that universities should transform themselves to the entrepreneurial enterprises. In that study, the challenges for commercialization of the university research for agricultural based inventions was analyzed, which subsequently develop the economic on one hand and providing many new jobs to the society on the other hand. It was noted that although commercialization of these university research takes a longer time, more case studies should be conducted in this regard to formulate the propositions. The challenges that are listed in this study include: timeliness which means the long time which is needed for commercializing which in turn needs a big money, lack of incentives and reward system and university-industry interactions.

According to the study of Sharifzadeh and Zamani (2005), students scored relatively low on the competitiveness and risk taking propensity despite their high scores on need for achievement and need for power, and there is no significant difference between discipline and sophomore/senior. While there is statistically positive correlation between grade point average and need for achievement, this relation is

Research Article

negative for risk taking propensity, i.e., the more risk taking trait an individual shows in his/her behavior, the less attempt he/she makes to gain better grade point averages.

The main purpose of this paper is to study of the relationship between entrepreneurial characteristics and students' academic achievement at Islamic Azad University, Varamin-Pishva branch.

MATERIALS AND METHOD

The research design for this study employed descriptive and analytical methods. The target population was students in Varamin-Pishva Branch of Islamic Azad University in Iran. Proportional stratified sample of 175 students were selected out of a total population of 11065. A questionnaire was developed from a review of literature, and interviews with some specialists who have good knowledge about entrepreneurship. The questionnaire used fixed-choice questions. Face and content validity of the instrument were established using an expert panel, consisting of faculty from the department of agricultural extension and education. A pilot study was conducted with 30 students to determine the reliability of the questionnaire for the study. A Cronbach's alpha reliability coefficient of 73% to 89% was calculated. Dependent variable of this study was grade point average (GPA) of students, Independent variables of the research were entrepreneurial characteristics which to assess each characteristic, some statement were examined in the form of a five-point Likert scale (from very little to very much). To examine the relationship between variables, correlation analysis was used. Statistical analysis was done through SPSS Version 21.

Findings

The demographic data collected from the subjects of this study is summarized in table 1. As shown in this table, the frequency distribution showed that most respondents were in the age category 21 to 25. The final sample included students of two levels: 78.3% of the students were studying in bachelor, and 21.7% in master. Of 175 students who were studied in this research, 34.9% were male and 65.1% were female.

Table 1: Summary of students' demographic characteristics

Characteristics	n	%	
Age	21-25	97	55.4
	26-30	42	24.0
	31-35	20	11.4
	≥ 36	16	9.2
Gender	male	61	34.9
	female	114	65.1
Marriage status	Married	73	41.7
	single	102	58.3
Education level	Master	38	21.7
	Bachelor	137	78.3

Based on the results obtained in this study, the mean of grade point average (GPA) of students was 16.7. Also the results show that 21.2% had a GPA above 18.1 out of 20. Meanwhile, the least amount of students' GPA 13 and the highest amount of students' GPA was 19.25 out of 20 (table 2).

Research Article

Table 2: Frequency distribution of students based on GPA

GPA	Frequency	percent	valid percent	cumulative percent
≤15	26	14.9	20.5	20.5
15.1 – 16	23	13.1	18.1	38.6
16.1 – 17	25	14.3	19.7	58.3
17.1 - 18	26	14.9	20.5	78.8
≥18.1	27	15.4	21.2	100
missing	48	27.4	-	-
Total	175	100	100	-

Mean: 16.7 Mode: 15 SD: 1.6 Min: 13 Max: 19.25

Table 3 displays the ranking of entrepreneurial characteristics based on the coefficient variation. As can be seen the highest rank refers to perseverance (CV= 12.69) and the lowest rank refers to ambiguity tolerance (CV= 19.56). Other results can be seen in the table 3.

Table 3: Ranking of entrepreneurial characteristics in students

characteristics	Mean	SD	CV	Rank
perseverance	4.02	0.51	12.69	1
self-confidence	3.48	0.48	13.79	2
need for achievement	3.89	0.54	13.88	3
foresight	3.62	0.53	14.64	4
risk taking	3.47	0.57	16.43	5
creativity	3.28	0.56	17.07	6
locus of control	2.91	0.54	18.56	7
ambiguity tolerance	3.22	0.63	19.56	8

In this research to examine the relationship between students' GPA and their entrepreneurial characteristics, Pierson coefficient was used. Results of Pearson correlation coefficient showed that the university GPA of studied students had a positive and significant relationship at the 95% level with perseverance and creativity. According to the same findings, there is a positive and significant relationship at the 99% level between students' GPA with need for achievement and locus of control. So, the students with higher GPA had higher level of these entrepreneurial characteristics. On the other hand, the students' GPA had no significant relationship with self-confidence, foresight, risk-taking, and ambiguity tolerance (table 4).

Table 4: The relationship between students' entrepreneurial characteristics and students' GPA

Independent variables	Dependents variable	r	p
perseverance	University GPA	0.189*	0.033
self-confidence		0.068	0.543
need for achievement		0.228**	0.002
foresight		-0.102	0.178
risk taking		0.096	0.389
creativity		0.175*	.049
locus of control		0.258**	0.001
ambiguity tolerance		0.099	0.219

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

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CONCLUSION

Entrepreneurship is a process that leads to satisfaction or new demands and is a process in which the values are made by the creation of a unique collection of resources to exploit the opportunities. Nowadays the role of entrepreneurship in higher education is clear. Many higher education institutes have recognized that entrepreneurship courses could indeed be an effective tool for them to stimulate the economy through their graduates. In this study, we tried to examine the relation between entrepreneurial characteristics with academic achievement which evaluated by university grade point average (GPA).

The findings showed that the mean of grade point average of students was 16.7. Also according to the coefficient variation, the highest of entrepreneurial characteristics in studied students were perseverance, self-confidence, and need for achievement. On the other hand, based on the results of correlation analysis, the university GPA of studied students had a positive and significant relationship with perseverance, creativity, need for achievement, and locus of control.

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