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Entrepreneurial drives, organizational function, and success of Iranian entrepreneurs

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Abstract

Scholars and practitioners constantly report on the significance of research on entrepreneurship in upholding the performance of small industries. Nevertheless, little has been established in the literature on entrepreneurial studies in the Iranian context. Hence, this has induced the present research to explore the relationship between personal qualities and organizational functions on the success of entrepreneurs in small manufacturing firms in Iran. To fulfil the aims of the research, a quantitative research design with self-administered questionnaire was employed. The respondents were selected from the directory of small manufacturing firms provided by Iran Small Industries & Industrial Parks Organization (ISIPO). Based on the probability sampling design, 600 entrepreneurs were chosen throughout the country to participate in the study. The mail survey yielded 240 completed responses, which were included in the final analysis. The results of the analysis revealed that entrepreneurs with high need for

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achievement, high level of risk taking, and high locus of control were more successful than those with low level of these qualities. On the other hand, this study found a significant positive linear relationship between personal qualities and entrepreneurs' success in terms of growth and survival. Interestingly, the relationship between organizational function and entrepreneurs' success was found to be significant, positive, and linear. This study supports previous research findings that small entrepreneurial companies' success is a multi-dimensional construct.

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Keywords: Entrepreneurial drives, Organizational Function, success, entrepreneurship

1 Introduction

The causal relationship between entrepreneurship and economic growth has been a subject of debate from the theoretical and practical grounds by many researchers (Benzing, Chu, & Kara, 2009; Poh, Yuen, & Erkko, 2005). Based on their observation in 16 developed economies, Zacharakis, Bygrave, and Shepherd (2000) state that, a majority of the differences in the Gross Domestic Product (GDP) growth between countries are explained by entrepreneurial movement. This shows the strength of entrepreneurs in inducing employment opportunities while helping to swell the wealth of the nations. In addition to the importance of entrepreneurship as mentioned above, the past two decades have seen increasingly rapid advances in the growth of manufacturing industries on a small scale (Carree & Thurik, 1998). Besides large companies, small manufacturing firms also play a vital role in augmenting the economic growth and employment. It is also noticeable that the discussion on small manufacturing firms is gaining attention in

developing countries, particularly in Iran, which gives the fact that 99.4% of all companies belong to the small manufacturing firms (Dehdashti & Naderifar, 2007). Evidently, this great number of small companies in Iran reveals the importance of them to the Iranians' economical advances. Thus, following the importance of the study on entrepreneurship and the scarcity of literature available in the Iranian context, this study is expected to narrow down the gap and enrich the literature by exploring the relationship between personal qualities and organizational functions on the success of entrepreneurs in small manufacturing firms in Iran.

The role and importance of small manufacturing firms (Baldwin & Picot, 1995; Birch, 1987) as well as entrepreneurs (Carree & Thurik, 2003; Wennekers & Thurik, 1999) can clearly be traced in the literature and views of other scholars. Despite such vital role, the failure rate for these companies remains a serious and important issue for planning authorities (Erofeev, 2002). The key objective of this research is to understand the factors involved in the Iranian small firms owners' entrepreneurial success. According to Mollahosseini and Mostafavi (2009), although identifying successful national entrepreneurs can play a key role in the expansion of small industries; analyzing influential factors that can deeply affect their success is inevitable. In other words, turning a blind eye on this impact can lead to overlooking the effects of individual and behavioural factors on entrepreneurs' success. Research in this area is significant in influences the economy of Iran, not to mention the millions of people who start small manufacturing firms and those who work in them. According to a survey carried out by Iran's Statistical Centre in 2009, 449596 industrial sectors in Iran (99.8%) had less than 50 employees. Furthermore, the number of people employed in these sectors was 2.15 million while the employment rate for the small manufacturing firms was 63.4%. It is worth mentioning that the overall number of industrial sectors with operation license was 78928 in 2009, in which 92% had fewer than

50 workers. Overall, 2.13 million people (43%) were employed in these small industries.

2 Theory and Hypotheses development

Busenitz et al. (2003), who wrote the last 20 years the results of entrepreneurship studies in different positions of history, have shown that entrepreneurship science is in its childhood stage. There are some facts related to this phenomenon, and they are much more important compared to theoretical framework and methodology. In addition, Cunningham and Luncheon (1991) have pointed out that research activity in the field of entrepreneurship seems to fall within six schools of thought, and each is with its own underlying set of beliefs. In order to assess personal qualities, the researchers introduced two schools of thought, namely, the "Great Person" school of entrepreneurship and the psychological characteristics school of entrepreneurship. The description of entrepreneurs in the first school pictures them as people who must be able to present thoughts, concepts, and attitudes that others find interesting, exciting, or inspiring. In this discipline, a successful entrepreneur is also described as having strong drives for success. The second school of thought focuses on personal qualities. This school believes that entrepreneurs have rare values and attitudes toward work and life, which are less common among other people. According to Cunningham and Luncheon (1991), three personality characteristics, which have received extensive attention in a number of research studies, are: (a) the personal values such as honesty, duty, responsibility, and ethical behaviour, (b) risk taking propensity, and (c) the need for achievement. The researchers further delineate that personal qualities differentiate entrepreneurs from non-entrepreneurs.

The management school of thought outlines that, as in most fields of organizational study, entrepreneurship is drawn closely related to management theory. This management school deals with the technical aspects of management and seems to be based on the belief that entrepreneurs can be improved or taught trained. Since many entrepreneurial ventures fail each year, a significant proportion of these failures can be traced to poor managing and decision making, as well as to financing and marketing weaknesses. According to Cunningham and Lischeron (1991), this school of entrepreneurship is in line with the early management traditions originated by Fayol (1950), Taylor (1911), and Mill (1984) who believe that the functions of an entrepreneur include supervision, control, and providing direction to a firm.

2.1 Entrepreneurial Drives

According to Owens (2003), the cited studies provide substantial evidence of the utility of trait research in predicting who is likely to become an entrepreneur; however, there is less evidence that shows personality helps to explain why some entrepreneurs are successful and others are not. The researcher also clearly stresses that the majority of the research has sought to determine who becomes an entrepreneur, whereas relatively little research has focused on the impact of personality on entrepreneurial performance. Thus, the question that needs be raised is that, do the same characteristics need to exist in one to become an entrepreneur and successful performance? Owens argues that this distinction is an important one to notice. He continues to claim that it is most probable that the degree to which personality inserts an influence on vocational choice differs from the case in which the same personality trait will influence job performance.

Mischel and Shoda (1998) demonstrate that personality characteristics are useful in explaining the generation of behaviour when the situation is considered. In other words, the power of personality characteristics to predict a particular

behaviour is dependent upon the fit between these personality characteristics and the environment, in which the behaviour is shown. Despite the inconsistent findings among some traits studied, strong evidence has emerged around certain factors. In particular, three traits have been consistently linked with entrepreneurship, the need for achievement, risk taking propensity, and locus of control (Duchesneau & Gartner, 1990). Similarly, Brockhaus (1980) have also suggested that these three characteristics have been widely used many studies and may have some validity in differentiating among the types of entrepreneurs. McClelland's (1961) theory of the need for achievement and Rotter's (1966) locus of control theory are the most frequently applied theories in research on entrepreneurship to explain entrepreneurial qualities and motivation. Besides, much of the entrepreneurship literature has included risk taking as a main entrepreneurial characteristic (Cunningham & Lischeron 1991). In this study, three separate traits were used to define the entrepreneurial profile. These were chosen from a number of alternative traits because they could capture different facets of entrepreneur, as defined by the literature. Although these specific traits do not necessarily represent a comprehensive or definitional description of entrepreneurs, they do appear repeatedly in economics, psychology, sociology, and entrepreneurship research, and are also representatives of the personal characteristics necessary to meet the entrepreneurs' tasks and challenges. On the basis of this comprehensive review, three of the most common traits in entrepreneurs' success, including the need for achievement, risk taking, and locus of control, were chosen for this study.

2.2 Organizational Functions

Organizational function, which is capable of influencing success within a firm, was taken from a prior research and they have been addressed by several scholars (e.g., Miner, Smith, & Bracker, 1994; Ostgaard & Birley, 1996; Peters &

Brush, 1996). This function appears as the second dimension of the present study and it is discussed in this section. These scholars studied the characteristics of strategy and structure, network utilization, competitive orientation, and technical orientation. Moreover, several years later, Erofeev (2002) reported the effects of other organizational parameters, such as the level of technology, business planning, organization size, as well as company's resources and strategy.

As discussed earlier, an extensive literature has been published to support this point of view that personal characteristics alone is not sufficient to measure entrepreneurial activity suggested that organizational elements should also be taken into account (e.g., Box , Watts, & Hisrich, 1994; Gasse , 1982; VanderWerf & Brush, 1989). In most fields of organizational study, entrepreneurship normally derives from management theory and many management skills such as planning, organizing, stuffing, budgeting, coordinating, and controlling originated from Fayol's tradition (Cunningham & Lischeron, 1991). The management school of entrepreneurship assumes that an entrepreneur is a person who organizes or manages a business by taking risks for the purpose of profit. In addition to personal qualities, Mill (1984) believes that the functions of an entrepreneur include supervision, control, and providing direction to a firm. Supporting his opinion, Stevenson (1988) pointed out that an entrepreneurial firm needs the different tools for managing, and thus, a single discipline cannot be enough. In the management school of entrepreneurship, Cunningham and Lischeron (1991) delineated that many entrepreneurial firms fail each year, and a significant part of these failures is related to poor managing, financing, and marketing weaknesses. Besides the individualistic aspects, the present study also aimed at studying other effective factors, including financial issues, managerial subjects, marketing concerns, and human resource elements. These factors were already studied in the past and they could make results out of the present study as generalizable findings.

2.3 Success

Several studies have investigated entrepreneurship, yet there is still limited literature and empirical research reports on the determinants of entrepreneurial success. It is probably reflecting the complexity of such research and the time required to carry out more significant longitudinal studies (Rogoff et al., 2004). Sun (2004) believed that entrepreneurial success as a concept has evolved through the past, and these days, institutions such as banks and venture capitalists use financial facts as a measure of success. Riquelme and Watson (2002) have highlighted that most venture capitalists know the return on investment as a success. Besides, profitability (Devine, 2002; Sirinivasan, Woo, & Cooper, 1994), survival (Devine, 2002; Duchesneau & Gartner, 1990; Ibrahim, 1986; Jenssen & Koenig, 2002; Reid, 1991), growth in employees (Chandler & Hanks, 1994; Covin & Covin, 1990), and sales growth (Smith et al., 1987) are crucial criteria for entrepreneurial success.

According to Aldrich and Martinez (2001) and Devine (2002), there is a close relationship between success and survival. As shown by some empirical studies such as Small Business Administration (2001), most small firms' failures occurred within the first five years of their operation. Therefore, the term success, as it relates to entrepreneurs, refers to owners of small firms who have been in business for five or more years and have had an increase in either the number of employees or revenue. Other studies also tie survival to success for entrepreneurs (e.g., Devine, 2002; Jenssen & Koenig, 2002). Thus, both financial and non-financial factors including sales growth, employee growth, profit growth, and survival, are used in this study as definitions of success. Figure 1 represents theoretical framework of our research.

Based on the variables identified throughout the literature and also the literature on entrepreneurship, as factors affecting the success of entrepreneurs, the following hypotheses are formulated:

Figure 1: Theoretical Framework

Hypothesis 1: There is a positive linear relationship between the personal qualities and entrepreneurs' success in small manufacturing firms in Iran.

H1a: There is a positive linear relationship between the personal qualities and entrepreneurs' success in terms of growth in small manufacturing firms in Iran.

H1b: There is a positive linear relationship between the personal qualities and entrepreneurs' success in terms of survival in small manufacturing firms in Iran.

Hypothesis 2: There is a positive linear relationship between organizational functions and entrepreneurs' success in small manufacturing firms in Iran.

H2a: There is a positive linear relationship between the organizational functions and entrepreneurs' success in terms of growth in small manufacturing firms in Iran.

H2b: There is a positive linear relationship between the organizational functions and entrepreneurs' success in terms of survival in small manufacturing firms in Iran.

3 Methodology

A quantitative research design found to be a more appropriate choice than conducting a qualitative study to determine the knowledge associated with entrepreneurial success. Postal questionnaire was used for this research and the sample size requirement for the present study is confirmed by using G-Power, the rules of thumb. The sample of 377 derived from Krejcie and Morgan (1970) seems sufficient; however, to eliminate risk of low response rate, involving the postal questionnaire survey, it was decided to increase the sample size of the present study from 377 to 600 entrepreneurs. As a result, out of the 18485 small manufacturing firms in the list, a target of 600 respondents to the survey was calculated by means of a probability sampling design, using a simple random sampling, and a random numbers table.

In this study, Cronbach's alpha was used to assess the reliability. The initial questionnaires were administered to a small sample of 38 industry owners and managers. The reliability coefficient for each variable is listed in the following table.

Table 1: Cronbach's Alpha Scores for the Variables for the Pilot Study and Actual Survey Instrument

Variables	Alpha (Pilot Test, *n*=38)	Alpha (Actual Survey, *n*=240)	Alpha (Actual Survey, *n*=240)*
Risk Taking	0.83	0.82	0.82
Need for Achievement	0.75	0.78	0.81
Locus of Control	0.74	0.76	0.78
Financial Elements	0.75	0.80	0.80
Financial Elements	0.75	0.80	0.80
Marketing Concern	0.76	0.82	0.82
Human Resource Issue	0.74	0.79	0.79
Success	0.85	0.88	0.88

* Cronbach's Alpha Scores after factor analysis (removing three items)

A pre-test survey of the questionnaire, comprising 10 entrepreneurs, was carried out in order to identify and plan the enquiry. Therefore, after completing the pre-test session and satisfactorily accepting the questionnaire, a pilot study was carried out to ensure that the questions are suitable and easy to be understood by the respondents, as well as can be completed within a reasonable time period. In order to determine the content and face validity a panel of experts, consisting of the management, entrepreneurship, and statistician experts, reviewed the survey.

On the other hand, construct validity is used to ensure that the respondents' answers correlate with the intended purpose of the study. Although the focus group approved the variable categorization, the number of items per variable and the validity of each question item of the daily sessions were held with the experts to anticipate and remove any problem or ambiguity that might be encountered in the questionnaire. All question items were taken from well-referenced resources.

Despite the above-mentioned methods, the researcher also conducted an Exploratory Factor Analysis (EFA) to ensure each question item belongs to the correct category. The researcher's decision regarding the results of the factor analysis was based on two measures. The first one is the Bartlett's test of sphericity, whereas the second one is the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy. The second indicator was factor loading, or communality among scale items. According to Pallant (2007), this gives the information about how much variance in each item is explained. Low values (less than 0.3) could indicate that the item does not fit well with the other items in its component. She states that, this depends on the researchers' interests in improving or refining the scale (p.196). Furthermore, the examination of the factor loadings revealed that out of the 58 items, three items (i.e., NA_5 and LC_5) were flagged for their low loading below 0.30 as demonstrated by Pallant (2007), and thus, these items were removed. Appropriate descriptive and inferential statistical procedures were utilized. Before initiating the hypothesis testing, it was essential for the researcher to run the Exploratory Data Analysis (EDA) on every variable to inspect for the assumptions of normality and homogeneity of variances, linearity and any outliers or extreme values in the data set. This was to allow for an appropriate analysis of parametric or non-parametric tests. The hypothesis testing for the Normality test (Kolmogorov-Smirnov) with the Normal Probability Plots (Normal Q-Q plots) for all variables, Levene's test of Homogeneity of Variance for all the variables and other visual representation measures, such as histograms, spread versus level plots, box plots, as well as stem and leaf diagrams were observed carefully. The researcher applied the simultaneous analysis approach to multiple regression, whereby all the independent variables were examined at the same time with the aim of determining the unique effect of each variable in the set, as demonstrated by Cohen and Cohen (1983). Hence, to predict the entrepreneurs' success in order to find out the best set of predictors of success, the standard multiple regression model was proposed.

4 Results

4.1 Test Result for Hypothesis 1

The prediction of entrepreneurs' success (in terms of growth and survival) to find out the best set of predictors of success, and for the purpose of this research question, a three-predictor standard multiple regression model was proposed. The three predictor variables were risk taking (RT), need for achievement (NA), and locus of control (LC). The equations of the proposed multiple linear regression models are as follows:

$$GR= b_0 + b_1 (RT) + b_2 (NA) + b_3 (LC) + ε \quad (1)$$

$$SU= b_0 + b_1 (RT) + b_2 (NA) + b_3 (LC) + ε \quad (2)$$

Where:

GR: Growth, SU: Survival, b_0: Constant, b_{1-3}: Estimates (regression coefficients)

RT: Mean of risk taking, NA: Mean of need for achievement, LC: Mean of locus of control, ε = Error

Table 2 illustrates the results of the regression analysis for Hypothesis 1.

Table 2: Result of Regression Analysis (Coefficients) (H1a) [(a)]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	.007	.329		.022	.982	-.643	.658		
	Risk taking	.220	.147	.164	1.499	.136	-.070	.511	.334	2.990
	Need for Achievement	.340	.132	.281	2.574	.011	.079	.601	.337	2.969
	Locus of control	.289	.096	.233	2.999	.003	.099	.479	.664	1.506

a Dependent Variable: GR Growth

4.2 Test Result for H1a:

Based on the enter method used, only two variables (i.e., need for achievement and locus of control) were found to be of significance in explaining the entrepreneurs' success in terms of growth. As depicted in the coefficients table, the estimates of the model coefficients for b_0, b_1, b_2, and b_3 were 0.007, 0.22, 0.34, and 0.289, respectively. Therefore, the estimated model is as follows.

$$GR= 0.007 + 0.22\ (RT) + 0.34\ (NA) + 0.289\ (LC) + \acute{\varepsilon} \qquad (3)$$

The table above shows 0.281 as the largest Beta coefficient, which was for the need for achievement. This means that, this variable made the strongest unique contribution to explain the dependent variable (i.e., success of entrepreneurs in terms of growth) when the variance explained by all other predictor variables in the model was controlled. It suggests that, an increase in the standard deviation in the need for achievement was followed by 0.281 increase in the standard deviation in the success of entrepreneurs. Furthermore, the Beta value for locus of control was the second highest (0.233), followed by risk taking in the third place (0.164), which was the smallest, indicating that it made the least contribution.

Table 3: Model Summary for Regression Analysis (H1a) (b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.590(a)	.348	.336	.78126	.348	28.967	3	163	.000

a Predictors: (Constant), LC Locus of control, NA Need for Achievement, RT Risk taking

b Dependent Variable: GR Growth

In addition, the multiple regression analysis also provided an adjusted coefficient of determination R^2. This coefficient was used to measure how well the

multiple regression equation fits the population sample (Triola, 2001). The adjusted coefficient of determination (R^2) was between one and zero, with one being a perfect fit. One of the flaws to keep in mind is that, a perfect fit can be achieved by using all variables. In addition to the adjusted R^2, the overall significance of a variable is defined by the *p*-value (Triola, 2001). An ideal significance for *p*-value is 0.000. This value, in combination with the adjusted coefficient of determination (R^2), was used to determine the best multiple regression equation.

It is apparent from the model summary table that the obtained adjusted R^2 value of 0.336 identified the relative okay fit of the regression equation, since a medium fit is 50%. Yet, a *p*-value of 0.000 indicated a good overall significance of the equation and a good overall predictor of overall success. The adjusted coefficient of determination (R^2) was 33.6%, while the *p*-value was 0.000. Both indicated a good overall significance and a somewhat good fit for determining the overall success. That means, the above model was a good descriptor of the relationship between the dependent variable and the predictor variables. According to this table, the R^2 of 0.348 implies that the three predictor variables explained about 34.8% of the variance/variation in the success of entrepreneurs in terms of growth. This was quite a good and respectable result in social science. It can be seen from the data in the ANOVA table that the slope of the estimated linear regression model was not equal to zero, confirming that there was a linear relationship between the success of entrepreneurs in small manufacturing firms in terms of growth and the three predictor variables, risk taking, need for achievement, and locus of control.

4.3 Test Result for H1b

Besides, in terms of the survival, the two variables (i.e., locus of control and risk taking) were found to be of significance in explaining the entrepreneurs' success. As depicted in the coefficients table, the estimates of the model

coefficients for b_0, b_1, b_2, and b_3 were -4.673, 1.791, 599, and 932, respectively. Therefore, the estimated model is as follows:

$$SU= - 4.673 + 1.791 (RT) +.599 (NA) +.932 (LC) + ε \quad (4)$$

Table 4: Result of Regression Analysis (Coefficients) (H1b) (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	-4.673	1.414		-3.305	.001	-7.461	-1.886		
	RT Risk taking	1.791	.617	.294	2.903	.004	.575	3.008	.356	2.812
	NA Need for Achievement	.599	.552	.111	1.085	.279	-.489	1.687	.345	2.895
	LC Locus of control	.932	.413	.167	2.256	.025	.118	1.746	.662	1.512

a Dependent Variable: SU Survival

According to the above table, the largest Beta coefficient was 0.294, which was for risk taking. This means that, this variable made the strongest unique contribution to explain the dependent variable (i.e., success of entrepreneurs in terms of survival) when the variance explained by all other predictor variables in the model was controlled. It suggests that one standard deviation increase in risk taking was followed by 0.294 standard deviation increase in the success of entrepreneurs. Meanwhile, the Beta value for locus of control was the second highest (0.167), followed by the need for achievement in the third place (0.111), which was the smallest, indicating that it made the least contribution.

Table 5: Model Summary for Regression Analysis (H1b) (b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.503(a)	.253	.242	3.77545	.253	23.143	3	205	.000

a Predictors: (Constant), LC Locus of control, RT Risk taking, NA Need for Achievement

b Dependent Variable: SU Survival

With reference to the model summary table obtained, a *p*-value of 0.000 indicated a good overall significance of the equation and a good overall predictor of the overall success. The adjusted coefficient of determination (R^2) was 24.2%, while the p-value was 0.000. Both indicated a good overall significance and a somewhat good fit for determining the overall success. This indicated that the above model was almost a good descriptor of the relationship between the dependent variable and predictor variables. As the table shows, R^2 was 0.253, thus, this model was almost a good model for explaining the relationship between the dependent and predictor variables. According to this table, R^2 of 0.253 implied that the three-predictor variables explained about 25.3% of the variance/variation in the success of entrepreneurs in terms of survival. This was an almost good and respectable result. The ANOVA table reveals that the *F*-statistic (F=23.143) was large and the corresponding *P*-value was highly significant (p-value =0.0001) or lower than the alpha value of 0.05. This indicated that the slope of the estimated linear regression model was not equal to zero, confirming that there was a linear relationship between the success of entrepreneurs in small manufacturing firms in terms of survival and the three-predictor variables.

4.4 Test Result for Hypothesis 2

To find out the best set of predictors of success in terms of growth and survival, and for the purpose of this research question, a four-predictor standard multiple regression model was proposed. The four-predictor variables were managerial subjects (MN), financial issues (FI), marketing concerns (MI), and human resource issues (HR). The equations of the proposed multiple linear regression models are as follows:

$$GR= b_0 + b_4 (MN) + b_5 (FI) + b_6 (MI) + b_7 (HR) + \acute{\varepsilon} \quad (5)$$

$$SU= b_0 + b_4 (MN) + b_5 (FI) + b_6 (MI) + b_7 (HR) + \acute{\varepsilon} \quad (6)$$

Where: MN: Mean of managerial subjects, FI: Mean of financial issues, MI: Mean of marketing concern, HR: Mean of human resource issues

Table 6 provides the results obtained from the regression analysis.

Table 6: Result of Regression Analysis (Coefficients) (H2a) (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	-.187	.354		-.529	.598	-.886	.512		
	Managerial Subjects	.196	.140	.142	1.405	.162	-.080	.472	.396	2.525
	Financial Elements	.186	.110	.139	1.682	.095	-.032	.404	.588	1.701
	Marketing Concern	.347	.131	.266	2.649	.009	.088	.606	.399	2.505
	Human Resource Issues	.183	.148	.133	1.239	.217	-.109	.476	.346	2.886

a Dependent Variable: GR Growth

4.5 Test Result for H2a

Based on the enter method used, only one variable (marketing concerns) was found to be significant in explaining the entrepreneurs' success in terms of growth. As depicted in the coefficients table, the estimates of the model coefficients for b_0, b_4, b_5, b_6, and b_7 were -0.187, 0.196, 0.186, 0.347, and 0.183, respectively. Therefore, the estimated model is as follows:

$$GR= - 0.187 + 0.196 (MN) + 0.186 (FI) + 0.347 (MI) + 0.183 (HR) + \acute{\varepsilon} \quad (7)$$

From the data in Table 6, it is noticeable that the largest Beta coefficient was 0.266, which was for marketing concern. This means that, this variable made the strongest unique contribution to explain the dependent variable (success of entrepreneurs in terms of growth) when the variance explained by all other predictor variables in the model was controlled. It suggests that, one standard deviation increase in marketing issues was followed by 0.266 standard deviation increase in the success of entrepreneurs. Meanwhile, the Beta value for managerial subjects was the second highest (0.142), followed by financial issues (0.139), whereas human resource elements revealed the smallest (0.133), indicating that this variable made the least contribution.

Table 7: Model Summary for Regression Analysis (H2a) (b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.587(a)	.345	.328	.79363	.345	21.421	4	163	.000

a Predictors: (Constant), HR Human Resource Issues, FI Financial Elements, MI Marketing Concern, MN Managerial Subjects,

b Dependent Variable: GR Growth

With reference to the model summary table obtained, the above model was almost a good descriptor of the relationship between the dependent variable (in terms of growth) and the predictor variables. As the table shows, R^2 was 0.345; hence, this model was a good model for explaining the relationship between the dependent and predictor variables. According to this table, R^2 of 0.345 implied that the four-predictor variables explained about 34.5% of the variance/variation in the success of entrepreneurs in terms of growth. This was an almost good and respectable result. The ANOVA table exposes that that there was a linear relationship between the success of entrepreneurs in small manufacturing firms in terms of growth and the four-predictor variables, i.e., managerial subjects, financial issues, marketing concern, and human resource elements.

4.6 Test Result for H2b

In terms of survival, only one variable (marketing concerns) was found to be of significance in explaining the entrepreneurs' success. As depicted in the coefficients table, the estimates of the model coefficients for b_0, b_4, b_5, b_6, and b_7 were 4.665, 0.743, 0.806, 1.573, and 0.20, respectively. Therefore, the estimated model is as follows:

$$SU= - 4.665 + 0.743\ (MN) + 0.806\ (FI) + 1.573\ (MI) + 0.20\ (HR) + \acute{\varepsilon} \qquad (8)$$

From the table above, we can see that the largest Beta coefficient was 0.258, which was for marketing concerns. This means that, this variable made the strongest unique contribution to explain the dependent variable (success of entrepreneurs in terms of survival) when the variance explained by all other predictor variables in the model was controlled. It suggests that, one standard deviation increase in marketing concerns was followed by 0.258 standard deviation increase in the success of entrepreneurs.

Table 8: Result of Regression Analysis (Coefficients) (H2b) (a)

Model		Unstandardized Coefficients		Standardized Coefficients			95% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	-4.665	1.564		-2.983	.003	-7.748	-1.581		
	Managerial Subjects	.743	.605	.120	1.228	.221	-.450	1.936	.401	2.491
	Financial Elements	.806	.505	.130	1.595	.112	-.190	1.803	.574	1.743
	Marketing Concern	1.573	.596	.258	2.639	.009	.398	2.747	.398	2.513
	Human Resource Issues	.200	.609	.032	.328	.743	-1.000	1.400	.392	2.554

a Dependent Variable: SU Survival

The Beta value for financial issues was the second highest (0.130), followed by managerial subjects (0.120), whereas human resource issues revealed the smallest (0.032), indicating that this variable made the least contribution.

Table 9: Model Summary for Regression Analysis (H2b) (b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.471(a)	.222	.207	3.91514	.222	14.566	4	204	.000

a Predictors: (Constant), HR Human Resource Issues, FI Financial Elements, MN Managerial Subjects, MI Marketing Concern,
b Dependent Variable: SU Survival

According to the model summary table obtained, the above model was almost a good descriptor of the relationship between the dependent variable (in terms of survival) and predictor variables (i.e., managerial subjects, financial issues, marketing concerns, and human resource elements). As the table shows, R^2 was 0.222, thus, this model was a good model for explaining the relationship between the dependent and predictor variables. According to this table, R^2 of 0.222 implied that the four-predictor variables explained about 22.2% of the variance/variation in the success of entrepreneurs in terms of survival. This was a respectable result. As the ANOVA table shows that, there was a linear relationship between the success of entrepreneurs in the small firms in terms of survival and the four predictor variables.

5 Findings of the Study

The analysis of the data supports the hypothesis that entrepreneurs have specific bodies of knowledge that have a statistically significant positive impact on entrepreneurial success. The multiple regression analysis also supports the hypotheses, i.e., H1, H2 by determining three variables of significance, such as the need for achievement, locus of control, and marketing issues in terms of growth, and variables, such as risk taking, locus of control, and marketing concerns in terms of survival. Within the body of the study, a few variables did not show a statistically significant impact on entrepreneurial success. The variables include risk taking (in terms of growth), need for achievement (in terms of survival), managerial subjects, financial issues, and human resource elements.

6 Conclusions, Contributions, and Limitations

The conclusions initiated from this study on clarification of entrepreneurs' success include the objective and subjective measures, which are as follows:

1. According to the study, the profile of successful entrepreneurs shows different factors for the objective and subjective success indicators. The most subjectively successful entrepreneur seems to be one who has high need for achievement and high locus of control. Furthermore, having high locus of control, which makes entrepreneurs subjectively successful, also contributes to their objective success. Thus, it is interesting to note that the variables that contribute to the objective definition of success are not essentially the same as those that contribute to the subjective definition of success and vice versa. Besides, the findings of this study suggest that entrepreneurs' success is a multiple function of individual and organizational factors. Entrepreneurs' success depends on many influencing factors that are clearly noted in the literature and previous studies. While personal qualities remain as having the strongest explanatory power, the data in this study have highlighted some of the organizational factors to entrepreneurs' objective and subjective success.

At the individual level and in terms of growth, the need for achievement and locus of control must be taken into account. According to this analysis, if an entrepreneur was to have these personal qualities, his or her possibilities of subjective success would increase. The significance of the marketing concerns variable to entrepreneurs' objective and subjective success is due to the importance of this skill for entrepreneurs in small manufacturing firms. Entrepreneurs should equip themselves with these practices of personal characteristics and organizational functions. The findings lend support to the work of several researchers who suggest that small entrepreneurial companies' success is a multi-dimensional construct (Brandstaetter, 1997; Buttner & Moore, 1997; Dreissen & Zwart, 1999; Frese et al. 2000; Mehta & Cooper, 2000; Rauch & Frese, 1997; Solymossy, 1998).

The findings of this study have remarkable implications for both theory and practices. Studying the entrepreneurs' characteristic features along with their success elements is of immense significance in view of their crucial roles in societies and their strong association with the economic development and job creations, as previously discussed in detail. Besides personal features, this study looks at other elements at the organizational level. Based on the study's results and in view of the fact that the science of entrepreneurship can be learned and taught, it is essential to take such features into serious consideration when studying entrepreneurship, and to appreciate that personal and organizational elements play significant roles in entrepreneurs' success. This study examines success in the context of Iranian small manufacturing firms from both the subjective and objective perspectives, which have been considered in the relevant literature related to entrepreneurship. These include the following:

(a) taking into account the multi-dimensionality of research in entrepreneurship and reviewing them from both the subjective and objective perspectives,

(b) entrepreneurs' characteristic features that are important variables, which show a significant weight for the success of entrepreneurs,

(c) in addition to characteristic features, organizational variables play important roles in both aspects of entrepreneurs' success,

As mentioned earlier, entrepreneurship studies seek to investigate new facts regarding this newly established branch of science, whereas theory and methodology come next in importance. While appreciating such a theory and being multi-dimensional, the present study reviews the simultaneous application of some theories in the success of entrepreneurs in Iran's small companies and shows how to apply such theories in reviewing entrepreneurs' success. More importantly, the society in which the study was carried out is not from the western community and lacks the growth for entrepreneurship studies. In addition, the significance of personal qualities in this study (i.e., especially need for achievement and locus of control), is consistent with the research's findings of

Hisrich and Peter (1992), who found that entrepreneurs usually have a similar personality and it can be generalized to the world, as discussed in problem statement. As this research was done in the Asian context, the findings fortify the status of these personal qualities in entrepreneurship literature. The findings of this study have important implications for entrepreneurship researchers, entrepreneurs, and the governments in which small companies operate. The study's findings can serve as a resource for efficient and effective management and handling of numerous small manufacturing firms by owners and also the ISIPO managers to support and sustain entrepreneurs through programmes and financing. In addition, ISIPO can be enhanced through the development of tools, methods, and programmes that are needed by today's entrepreneurs and future entrepreneurs to achieve and maintain a competitive advantage, create wealth and maximize job creation. For entrepreneurs launching small firms, the results of this study indicate that both the individual level and national level factors will influence their success. The current study sheds light on numerous essential concerns for them; they are expected to appreciate that personal features cannot be sufficient for their company's success. In fact, they are required to achieve a sound understanding of managerial issues, the approach in running their businesses and building financial resources. They are also expected to develop a full awareness of human resource issues and consider marketing parameters.

This study contributes to the body of knowledge from several aspects. First, it adds to the current body of knowledge on entrepreneurship in general and entrepreneurship of small firms' owners in specific, the critical barriers, success factors and the entrepreneurial journey. Therefore, one of the most crucial contributions to the body of knowledge made by this study is its independent variables through the collection of most pertinent studies conducted within the past 30 years. The specific variables assessed are selected because they have an empirical relation with small firms (Schneider, Hough, & Dunnette, 1996). As mentioned in the significance of the study, to date, no research has been done on

these concepts in Iran and no empirical study has explored the effects of multi-dimensional factors on the success of entrepreneurs particularly in small manufacturing firms. In this study, the hypotheses were empirically tested where many conjectures exist.

Second, another major contribution of this study, contrary to the majority of existing studies that concentrate on the business sector, is the extension of the existing research on personal and organizational factors to the industry, namely, the small manufacturing firms in Iran. Third, this research study calls the attention of researchers, entrepreneurs, and policy makers to focus on several areas of interest. Furthermore, this study may provide the basic data for future studies and stimulate further research on how to advance multi-dimensional studies in developing countries.

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