The Relationship between Time Management, Self-efficacy and Entrepreneurship among Students

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Abstract
Manpower is nowadays addressed as an infinite resource and the drive of any development. Meanwhile, entrepreneurs, in particular, play a significant role in the economic development process. The present study aims at investigating the relationship between time management, self-efficacy and entrepreneurship among Technical School students. The population under study is comprised of all the students majoring in the Female School of Technical Arts in Ramsar in the academic year 2011 – 2012. 150 of which were selected through cluster random sampling as the research sample. The participants responded to the Time Management, general Self-efficacy and Entrepreneurial questionnaires enjoying the validity of 86%, 680% and 90%, respectively. The obtained data were analyzed employing multivariate regression analysis and Pearson correlation coefficient. The findings indicated a positive significant relationship between time management, self-efficacy and entrepreneurship among students (p<0.01). Time management and self-efficacy could explain 8% of the variance occurred in entrepreneurship.

Keywords: Time management, self-efficacy, entrepreneurship

Introduction
Changes and evolutions of today’s rapid world in the realm of science and technology, successive challenges of socio-economic system, reduction of groundwater reserves, and the rise of poverty and unemployment have led the deep interest of policymakers and scholars to the concept of entrepreneurship as far as the latest pattern of development has been considered as the entrepreneurial-based development (Zahiri, 2007). Entrepreneurship means the identification and efficiency of opportunistic thoughts to create and develop small enterprises (Moin, 2004). Entrepreneurship is a process of innovation and taking advantage of opportunities with effort and persistence along with the acceptance of financial, psychological and social risks motivated by financial gain, success-seeking, self-fulfillment and independence (Ghaed Mohammadi, 2011).

The ability to provide goods and services people are in need of in the right time, right place and with an affordable price to the right people is called entrepreneurship and the person who is able to gather various factors of production and to meet those needs with his creative efforts, innovation, creativity, risk-taking, self-esteem and self-management is called entrepreneur (Ghaed Mohammadi, 2011). Along with unfolding the role and the impact of entrepreneurship on employment trend and economic growth in developed countries, the attempt to instruct and generalize knowledge and entrepreneurial spirit among managers, businessmen, students and potential entrepreneurs has been intensified (Ahmad pour Daryani, 2009).

Beginning with the Third five-year plan from 2000, the comprehensive plan for the development of entrepreneurship was launched in Iran in several ministries including the Ministry of
Science, Research and Technology (Behian, 2007). Accordingly, entrepreneurship centers have been set up at universities to provide services to the students in the areas of education, research, promotion and consulting (SabbaghYazdi, 2006) so that they learn to be innovative and creative and also learn initiative and independent thinking (Gibba& Hannon, 2007). Training programs can provide the participants having internal center of control with more positive attitudes toward entrepreneurship (Rezai, 2009).

Processes and specific training programs could convert a potential entrepreneur to a de facto one by changing the outlook and attitudes of individuals and equipping them with knowledge and skills (Kia& Ahmad zadeh, 2007). In addition to training, there exists a strong correlation among entrepreneurial attitude, personality dimensions and job variables and the variables listed are strong predictors of entrepreneurial attitude (Wyk.Boshoff&Bester, 2003). Entrepreneurs have the characteristics of self-reliance by the aid of which they can struggle with adversities. The need to do and to gain is other features of such people. Success complacency and pleasance, power to overcome the difficulties, hard-work, work complacency and pleasance, fostering quality, compliance of responsibility, reward orientation, optimism, excellence orientation and profit-orientation are distinguishing features of entrepreneurs. These people constantly need to create a product or service. Using the ultimate productivity is another feature of an entrepreneur. They would like to get the best use of their time and have a high risk tolerance. Entrepreneurs are the hunters of the moments. Having high self control and consistently looking at their objective, they take step forward with high internal motivation, courage and optimism (Rezai, 2009). The psychological profile of an entrepreneur is full of self-efficacy components. Self-efficacy is the beliefs people hold of their own competency in order to exercise control over events affecting their lives (Shams Esfandabad, 2011). Self efficacy is dependent on the individuals’ sense of self control over the environment and their behavior. It is a cognitive belief which determines whether the behavior can make the necessary changes and how long it is possible to resist against setbacks and failure. Self-efficacy is directly associated with healthy behaviors and indirectly influences healthy behaviors to achieve goals. Self efficacy affects the challenges people face. People with high self-efficacy choose more difficult goals. They pay attention to the situations and circumstances rather than caring about barriers (Schwarzer & Luszczynska, 2007) and pursue challenging activities (Shamaizadeh, 2005).

Self efficacy affects the level of endurance, commitment and effort to achieve the goal (Schultz, 1998) and the fact that how much we have properly met the standards of our behavior define our self-efficacy. Self-efficacy influences the behavior based upon the pattern of mutual causality of interactive determinant and prepares individuals to achieve technical efficiency (Shamaizadeh, 2005). Technically, efficiency is defined as the output achieved in practice i.e. the desired standard output (Bani Rad, 2004).

By improving and increasing the efficiency of staff, it is meant to efficiently utilize their talents and potential abilities en rout personal development and improving organizational efficiency (Taheri, 2003).Parenting style, family status, occupation and parent literacy (Mashayekh, 2004), direct and indirect education (Gibba, 2007), career counseling through socio-cognitive techniques have a positive impact on the sense of entrepreneurial self-efficacy (Shamaizadeh, 2005). Self-efficacy as the psychological variable is in a close interconnection with motivation and time management and has an important influence on the entrepreneurship debate.

The issue of time use and time management is nowadays a crucial subject. Time management is not the control of every second of it rather it includes the ways through which people use the time to improve their lives (Mackenzie, 1990). One of the common features shared in the definitions of time management is behavior planning (Claessens, van Eerde, Rutte & Roe, 2004: 2007). According to the Macan’s model (1990), time management arises from three types of
behavior: 1-setting goals and priorities; 2 - Mechanics of time management; 3- organizing preferences. In addition to these behavioral aspects, (Britton and Tesser, 1991) and (Macan-1994) proposed that time management encompasses individual perceptions and attitudes toward it which are respectively known as perceived control of time and attitudes toward time. Perceived control of time refers to the amount of influence an individual might feel they have over how to spend time and it is positively related with time management behaviors (Claessens, et al, 2004). The time attitudes factor brought up by Britton and (Tesser, 1991) is similar to the factor of perceived control of time raised by Macan. To Britton and Tesser, such attitudes demonstrate a sense of self-efficacy. According to (Usunier and Valette-Florence, 2007), people hold their own particular attitudes toward time and time management that is derived from their personality traits. There also exist differences among individuals in terms of motivational aspects of time i.e. how people deal with time as a binding exterior economic resource. Such motivational aspect is called tenacity time. High tenacity indicates willingness to undertake tasks even if the rewards are offered after a long period passed by. Some people are assumed to be better at accomplishing tasks that require longer time. Such people are in a high level regarding motivational aspect of tenacity (Bouffard,&Lens, 1983; Raynor & Entin, 1983). Preferring a disciplined and planned life is another outcome of time management. According to ( Claessens et al, 2004), it is possible that certain personality traits function as prior to time management; meaning that by studying personality traits and determining some of its components it could be possible to predict time management features among the individuals. In the five-factor model of personality, conscientiousness is more related with time management. Organization preference and tenacity are other important features of a dutiful person (MacCann, Duckworth &Robert, 2009). Time management, self-efficacy, creativity, tenacity and loyalty are obvious features of an entrepreneur. The purpose of the present study was to investigate the relationship between time management, self-efficacy and entrepreneurship among students. To this end, the following question was raised as whether time management and general self-efficacy could be a predictor of entrepreneurship among students.

Methodology
The present study was of a correlational type conducted in the fieldwork. The population under study included all the students majoring in Technical school of Ramsar in the academic year 2012-2013. Two Technical schools, one female and one male branch, were chosen from all other Technical schools of Ramsar among each branch of which three classes were randomly selected. A total of 162 students formed these 6 classes who responded to the survey questionnaires. At the end, 150 questionnaires were completed; the data of which were analyzed and 12 of them were excluded from further analyses due to being distorted or lack of response.

Instruments
The data was obtained employing three questionnaires.

a) Time management scale: this questionnaire was developed by Barling et al (1996) into a Likert-type scale. It includes 7 items. 4 of them deals with short-term planning and 3 items treat long-term planning. Participants are expected to respond on a 5-point Likert scale ranging from 1 (never), 2 (rarely), 3 (sometimes), 4 (often) and 5 (always). The test developers reported a reliability of 0.73 for long-term planning section and 0.85 for short-term planning using Cronbach alpha coefficient. The validity of the instrument was also confirmed through structural equation analysis. In this study, the reliability of long-term planning minor scale estimated to be 74.0 using Cronbach alpha. (Hajloo, 2011).

b) General self-efficacy scale: it was developed by Shere et al. (1982). It includes 23 items; 17 of which deal with general self-efficacy and 6 of them evaluate self-efficacy experiences in social
situations. The questionnaire includes 5-point Likert type items and every item is followed by five alternatives ranging from absolutely disagree to absolutely agree. The present study gets advantage of the 17-item form of this questionnaire. Grading practice goes in the way that the questions 3, 8, 9, 13 and 15 are scored 1 to 5, respectively and the rest of the questions receive reverse grading. The scores are summed up and the result will be an overall score. In a study done by Keramati, Cronbach alpha was estimated to be 0.86 and it was computed 0.80 for the psychology students majoring in Islamic Azad University of Marvdasht.

Entrepreneurship scale: it is developed by Ghaed Mohammadi with the supervision and verification of masters and includes three separate sections. The first part consists of 1 to 28 of the items. In order to calculate the points, a score is considered for each of the responses as a variable and contains 2 items of “agree” and “disagree”. The second part of the questionnaire contains a 5-point likert scale that includes items of 29 to 39 which fall within the value of always to never. The scores range from zero to 5. The third section consists of 50 statements among which the testees choose 12 statements best describe their attributes. Some of the statements are given the value of 2 and some other the value of 1. The scores are then summed up given a total score of the results. The reliability using Cronbach alpha was estimated to be 0.8. (GhaedMohammadi, 2011).

Results
Regression analysis was applied in order to investigate the research question as whether time management and self-efficacy could be a predictor of entrepreneurship.

The descriptive results of the variables (mean and standard deviation) are presented in Table 1:

<table>
<thead>
<tr>
<th>variables</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>entrepreneurship</td>
<td>101.39</td>
<td>17.17</td>
</tr>
<tr>
<td>Time management</td>
<td>23.42</td>
<td>4.58</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>57.48</td>
<td>9.81</td>
</tr>
</tbody>
</table>

As seen in the table above, the mean of entrepreneurship is 101.39 with SD equal 17.17 And the highest mean between the predictor variables belongs to self-efficacy that is 57.48 having SD equal 9.81 The lowest mean belongs to time management that is 23.42 with a standard deviation of 4.58 The results of correlation coefficient between predictor and criterion variables are presented in Table 2.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Entrepreneurship</th>
<th>Time management</th>
<th>Self-efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurship</td>
<td>1</td>
<td><strong>0.229</strong></td>
<td><strong>0.201</strong></td>
</tr>
<tr>
<td>Time management</td>
<td><strong>0.229</strong></td>
<td>0.216</td>
<td></td>
</tr>
<tr>
<td>Self-efficacy</td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

As demonstrated in table 2, there is a positive significant relationship between time management, self-efficacy and entrepreneurship among students. That is an increase in students’ time management and self-efficacy results in a rise in entrepreneurship. Regression analysis and regular set of simultaneous and partial correlation were employed in order to predict entrepreneurship based upon self-efficacy and entrepreneurship. The results are presented in table 3.
According to the results presented in the above table, there exists a significant relationship between time management, self-efficacy and entrepreneurship \((F= (2, 147) = 6.101, P=0.003)\). Therefore, linear combination of linear values is significantly associated with entrepreneurship. The multiple correlation coefficient of the sample is 0.28 which indicates nearly 8% of the variance occurred in entrepreneurship could be explained by time management and self-efficacy \((R^2=0.077)\).

**Table 4. Standard and nonstandard regression analysis coefficients for prediction of entrepreneurship**

<table>
<thead>
<tr>
<th>Criterion variable</th>
<th>Statistical index of the predicted variable</th>
<th>Non-standardized ß Ratio</th>
<th>Standard error (SE)</th>
<th>Standardized ß Ratio</th>
<th>T</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>entrepreneurship</td>
<td>Fixed number</td>
<td>68.267</td>
<td>9.707</td>
<td>-</td>
<td>7.033</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Time management</td>
<td>0.730</td>
<td>0.304</td>
<td>0.195</td>
<td>2.397</td>
<td>0.018</td>
</tr>
<tr>
<td></td>
<td>Self-efficacy</td>
<td>0.279</td>
<td>0.142</td>
<td>0.159</td>
<td>1.965</td>
<td>0.051</td>
</tr>
</tbody>
</table>

Regarding the above results and significance of \(F\) in the ANOVA table and significance of \(t\) in the above table, the regression equation predicts that time management and self-efficacy is significantly correlated with entrepreneurship. Due to the slope coefficients (column B) the regression equation is as follows.

\[
y = a + b_1 x_1 + b_2 x_2
\]

Therefore, by replacing the coefficients in the above formula and based on the time management and self-efficacy values, the entrepreneurship prediction equation is obtained as follows: Entrepreneurship prediction = 68.267 + 0.73 (time management) + 0.279(self-efficacy)

According to the slope value, the greater the time management values, the greater value predicted for entrepreneurship. Parameters presented in table 5 demonstrate the relative strengths of each predictor.

**Bivariate correlation:** The correlation of each predictor and entrepreneurship

**Partial correlations:** the correlation of each predictor and entrepreneurship by control of other predictors

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Table 5 - Bivariate and partial correlations of predictors with entrepreneurship

<table>
<thead>
<tr>
<th>Variable</th>
<th>Bivariate correlation</th>
<th>Partial correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time management</td>
<td><strong>0.229</strong></td>
<td><strong>0.194</strong></td>
</tr>
<tr>
<td>Self-efficacy</td>
<td><strong>0.201</strong></td>
<td><strong>0.160</strong></td>
</tr>
</tbody>
</table>

As it could be observed, time management and general self-efficacy of students is significantly able to predict their entrepreneurship $p<0.01$ Also, partial correlation is significant between time management, self-efficacy and entrepreneurship. According to the correlation analysis, the conclusion could be derived that time management and self-efficacy as two predictor variables could predict 077.0% ($R^2$) of the variation occurred in entrepreneurship.

**Discussion and conclusion**

The findings of the present study revealed a significant positive relationship between time management and entrepreneurship. The result is in line with the findings reported by Rezai (2009) and Ghaed Mohammadi (2011). Moreover, there exists a positive significant relationship between self-efficacy and entrepreneurship. High self-efficacy is effective in increasing the level of entrepreneurship. These findings correspond with the results obtained by Shamaizadeh (2005), Schwarzer and Luszczynska (2007). Therefore, it could be stated that entrepreneurship is not an innate construct rather it is enhanced by discerning and heightening the sense of efficacy and how to manage time and creative and entrepreneurial thinking in an individual. In line with its effectiveness, time management relies on three cases: planning, organizing and time monitoring. It could be declared that time management is establishing a common ground for any person or organization in order to obtain result from designated plan associated with evaluation and monitoring objectives. Self-efficacy provides individuals with the opportunity to judge doing things in a certain situation and explore their strengths and weaknesses. In fact, they gain control over their behavior and environment. It is to come to the understanding that what part of the behavior must be removed or what realm of the environment should be strengthened in order to facilitate the path to achieve the goal. To achieve an innovative integration in social and professional areas, holding a different attitude toward time is needed. Time management encompasses personal perceptions and attitude toward time. Time attitude arises from personality traits. An entrepreneur owns a motivational type of attitude toward time i.e. they know how to utilize their time as a binding external economic resource. Such motivational aspect of time is called tenacity. Tenacity, creativity, and preferring a planned and disciplined life, conscientiousness are integration point of time management and self-efficacy. Creative people are equipped with and motivated by high levels of tenacity (Rancho, 2007) and they overcome the obstacles by applying the behavioral time pattern which maximizes the effect of time scale (Macan, 1994).

The question is what circumstances and trainings seed the sense of self-efficacy and time management among individuals. Except for inheritance, instructions such as prioritizing tasks, commitment to carry out and finishing a task, valuating time as a precious economic resource, accepting delay in receiving bonuses and rewards could transfer self-efficacy and time management first into a value then an attitude and lead the individual to entrepreneurship and creativity (Hajloo, 2011).

In the meantime, the factor analyses of the benchmarks demonstrate that factors influencing reduced efficiency of managers could be summarized in four categories: personal – individual discipline, environmental factors – workforce, inappropriate working measures, and personality – individual spirit. In order to improve the criteria influencing the efficacy reduction in the managers’
workplace, distinct look must be given to each of the criteria in the context of the above stated factors and also to consider those criteria placed in the subset categories in line with each other. To this end, if we mean to work out on the improvement of the impatience and haste criteria, which are a subset of the factor “personality – individual spirit”, we need to study its relationship with the two criteria of that factor i.e. lack of self-confidence and weakness in listening skills; then, take appropriate measures (Bagheri, 2012). At the end, self-efficacy is an important factor in determining success or failure throughout our entire life.

Suggestions
The findings yet raise new questions and hypotheses regarding the variables under study and their possible relationships. For instance, is the proposed model of the relationships between variables also applicable to subjects other than students and to environments as workplace and organizations? What impact does other personality, social and environmental traits have on the variables studied? What dawdling factors exist among students? And what could be done to prevent it? What type of parenting style could assist parents to raise innovative, efficient children having motivational approach toward time? Independent research is required to find answer to these questions.

References

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