Investigating the Relationship between Emotional Intelligence and Entrepreneurship Competencies of Third Year High Schools Students in the City of Langarod

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Abstract
The purpose of this study is to investigate the relationship between emotional intelligence and entrepreneurship competencies of third year high schools students in the city of Langarod in 2012-2013 academic years. The research method is correlation. The statistical population of this study includes third year high school students in the city of Langarod. The population consists of 409 members. A sample of 300 students has been selected from this population through simple random sampling method. The questionnaires of entrepreneurship personality characteristics and emotional intelligence have been used for collecting the research data. The first questionnaire has been developed and standardized by Kordnaiieh et al. in 2007. They reported reliability coefficient of the questionnaire 0.92 and its validity coefficient 0.74. On the other hand, emotional intelligence of Shirking (1999) has been used for measuring emotional intelligence. They reported reliability of the questionnaire 0.85 and its validity coefficient 0.63. In order to analyze the research data and test the hypotheses, SPSS has been used. The results of this study revealed that there is a significant relationship between emotional intelligence and entrepreneurship competencies (r= 0.148, p=0.019). Another part of the results revealed that there is a significant relationship between self-conscious and entrepreneurship competencies (r= 0.152, p= 0.016). But any significant relationship has not been observed between self-regulatory and entrepreneurship competencies (r= 0.188, p= 0.083). In addition, the relationship between motivation and entrepreneurship competencies was significant (r= 0.557, p= 0.037). Based on another part of our findings, there is a significant relationship between empathy and entrepreneurship competencies (r= 0.222, p= 0.000). Finally, a significant relationship was observed between social skills and entrepreneurship competencies (r= 0.806, p= 0.016).

Keywords: entrepreneurship, entrepreneurship competencies, emotional intelligence, third year high school students

1. Introduction
Entrepreneurship is considered as one of the main effective factors on creating economic value and is an efficient instrument in effective employment. It also can be considered as an effective factor on the unemployment rate. In addition, entrepreneurship is considered by governmental officers as an effective factor on economic development rate, live standards, and tax incomes. This is why that many countries have attempted to develop entrepreneurship spirit and entrepreneurial behaviors. The reason is that its development results in sustainable development. Review of literature indicated that emotional intelligence is one of the main effective factors on the entrepreneurship development.

Emotional intelligence
Review of literature revealed that the conceptual radicals of emotional intelligence have been suggested by Plato and Darwin for first time. But Golman (1995) is the first one who introduced emotional intelligence in its scientific manner across the world. He also introduced this concept in its applied manner across the world. According to Goleman (1995), emotional intelligence is a set of hereditary and acquired abilities, capabilities, and skills. He believes that promotion of emotional intelligence not only depends on the age, but also its development requires especial educational policies. Maiel and Salouy refer to emotional intelligence as ability of evaluating person’s emotion regulation express and its efficient use (Khaefallahi and Dostdar, 2003). Based on another definition, Vesinger (2000) refers to emotional intelligence as the use of emotions in accordance with directing behavior, thought, efficient relation with coworkers, the use of time, and promotional methods. Goleman et al. (1999) indicate that emotional intelligence consists of five components including self-conscious, self-regulatory, motivation, empathy, and social skills. They presented and described the relationship between these components and leadership as following:

1. Self-conscious: it is the cognition and recognition as a main part in emotional intelligence. Ability of controlling and administrating emotions comprehensively is a sign of self-perception and mental foresight.
2. **Self-regulatory**: it is the ability of controlling and administrating skillful emotions which is formed based on the self-conscious. Indeed, self-regulatory managers and leaders able to create an environment with trust and justice.

3. **Motivation**: it refers to emotions directing in accordance with an especial goal for focusing on self-motivation. Self-control paves the ground for any skill and success.

4. **Empathy**: it is a general type of skill based on emotional self-regulatory. Indeed, leaders with empathy are able to satisfy all people. They consider consideration and though and thereby consider employees’ emotions and other effective factors on decision making.

5. **Social skill** (regulating relations with others): it is the skill of relating others which derives from persons’ ability of emotions control and administration. Such a skill is a type of ability that reinforces popularity, leadership power, and individual influence.

**Entrepreneurship**

The concept of entrepreneurship derives from France concept of “Entreprendre” and means commitment. This concept has been entered to English by Mill in 1848 (Ahmadpor Dariani, 2005). Although concept of entrepreneurship has been defined by Cantillion (1700) for the first time, but Schumpeter (1934) believes that Mill (1848) is the first author who used entrepreneurship in economics (Boromand Nasab, 2002). Mill (1848) indicates that entrepreneurship consists of different parts including direction, supervision, control, and risk-taking (Ahmadpor Dariani, 2005). On the other hand, Schumpeter (1934) focused on the innovative entrepreneurship and its importance in dynamic economic systems (Boromand Nasab, 2002). Indeed, Schumpeter (1934), in his theory of economic development, introduces critical role of entrepreneurs and indicates that entrepreneur is the main stimulus factors in economic development. He points out that the role of entrepreneur is to create new combinations (Caisson, 1982). Based on Webster dictionary, entrepreneur is one who has commitment to organize, administrate, and undertake risks of a business (Ahmadpor Dariani, 2005). Sikeston and Cassata (1992) defines entrepreneurship as ability of creating new thing, improving higher performance in production process, taking risk, and recognizing opportunities as the main skills of an entrepreneur (Duren and Niemen, 2005). Drucker (1985) believes that there is a mutual relationship between creativity, innovation, and entrepreneurship. In other words, it is not possible to being entrepreneur without creativity and innovation. On the other hand, Dolan (1994) refers that innovation skill of an entrepreneur is more important than his/her knowledge. In this regard, Burch (1998) points out that needs of societies are changing and it is the function of a creative person to recognize such needs and wants and then attempt to satisfy it. In other words, an entrepreneur attempts to recognize new opportunities through new ideas and creativity and then organize necessary resources for creating new businesses and organizations in societies (Stevenson and Jarilo, 1990), (Zabihi and Maghadasi, 2006). It can be said that entrepreneurship implies risk and uncertainty. In this regard, Kurski (1995) believes that economic development of countries depends on their performance in creating new businesses through entrepreneurship. As a result, successful entrepreneurship requires educated entrepreneurs who undertake new businesses (Ahmadi, 2004). The results of different studies revealed that entrepreneurship spirit is the most effective factor on movement of entrepreneurship from potential to actual step. This results in more employment rate (Razavi Neematallah et al., 2005). In this regard, findings of Brick (1979) show that small businesses play a considerable role in the performance of USA through entrepreneurship educations (Geri et al., 2003), (Feyzi and Moghadasi, 2003). As a result, it is possible to develop entrepreneurship through educating entrepreneurship behaviors and reinforcing and improving emotional intelligence.

**Emotional intelligence**

The results of different studies revealed that personality traits and emotional intelligence plays an important role in entrepreneurship (Herman et al., 2007: 227). Also the results of recent studies revealed that perceived managerial feelings of employees influence their satisfaction in terms of entrepreneurship (Broundian et al., 2008: 221). It can be said that emotional intelligence has an important effect on the entrepreneurship development. In this regard, Abbaspor et al. (2010) found that there is a significant positive relationship between entrepreneurship and emotional intelligence. On the other hand, Kamalian and Fazel (2011) found that there is a significant correlation between entrepreneurship and emotional intelligence. The results of the study of Neghabi and Bahadori (2012) indicated that the relationship between entrepreneurship and emotional intelligence in positive. Emotional intelligence consists of three components including emotional evaluation of others, emotions regulation, and the emotions applications. Generally, emotional intelligence influences employees’ behavior through two key processes. In the first process, emotional intelligence is an affective influencer. People with higher levels of self-evaluation have more emotional intelligence and tolerance of undertaking problems and difficulties (Nikola et al., 2002). This is why that they have more qualified in evaluating and regulating their emotions. For example, employees with higher levels emotional intelligence have more tolerance in environmental pressures (Testavsis et al., 2005). They also are able to recognize unfavorable emotions and then regulate their emotions for decreasing these pressures. As a
result, emotional intelligence results in higher levels of entrepreneurship behaviors (Zampetakis et al., 2009: 168). In the first process, emotional intelligence is a perceptual process and people with more emotional intelligence show more affective positions, creativity, and pioneer. Indeed, such factors facilitate entrepreneurship behaviors (Zampetakis et al., 2009: 168). For example, the empirical findings showed that positive affects result in more creativity and entrepreneurship development (Amiable et al., 2005), (Kamalian and Fazel, 2011). Since, entrepreneurship behaviors are focused in the societies as a social phenomenon and emotional intelligence influences its development, it can be said that there is a significant relationship between entrepreneurship and emotional intelligence. As a result, it is valuable to study entrepreneurship and its relationship with emotional intelligence.

Entrepreneurship in schools

Nowadays, it is accepted widely that educational system is the main focus of development in economic, social, cultural, and even political issues. Educating professional and qualified human resources if one of the main goals of educational systems in any country. Since everybody has different competencies in terms of creativity, innovation, and risk-taking, sound educational periods can be used for developing such competencies. Entrepreneurship is considered as a long-term ongoing process which requires planning in educational systems and its implementation across the societies such as family, school, and universities. This is why that school is considered as the main educational institute along with family that plays an important role in development of entrepreneurship, creativity, and innovation. Indeed, school not only educates students in terms of creativity and innovation, but paves the ground for their entrepreneurship behaviors progress. For example Japan started entrepreneurship development from high schools in 1950s and then educational officers developed entrepreneurship development in different areas in 1958 (Ahmadpor Dariani, 2001: 41-44).

Indeed, schools should pave the ground for student that they can believe their abilities and attempt to actualize it in practice. Teachers and educational managers have to recognize students’ interests and reinforce them through recognizing their attitudes and beliefs. There are several solutions for developing and reinforcing entrepreneurship culture in school that some of them have been presented and described in the following section.

1. Introducing the concepts and implications of entrepreneurship in educational books
2. Developing scientific surveys of entrepreneurship for students in entrepreneurial centers and units
3. Developing entrepreneurship workshops by famous entrepreneurs in schools
4. Developing entrepreneurship associations in schools for informing students with effects and benefits of entrepreneurship in the society.
5. Developing educational periods for teachers in terms of creativity, innovation, and entrepreneurship in schools
6. Developing financial and scientific supports for students’ ideas, innovations, and entrepreneurship activities.

Based on results of different studies and researches, entrepreneurship is considered as one of the main effective factors on the economic development and progress and employment across the world. As the review of literature and results of recent studies revealed, a large part of entrepreneurship capabilities are acquirable. On the other hand, students are considered as one of the most important classes in societies who have considerable role in process of development. Also technical high schools are determined to educate technical skills and competencies to the students. So it is necessary to educate entrepreneurship competencies and capabilities in high school students as the future valuable capitals. As a result, effective employment and economic development will be possible. In this regard, education of emotional intelligence among students can be effective in creating entrepreneurship personality and reinforcing entrepreneurship behaviors. This is why that the present study was determined to investigate the relationship between entrepreneurship and emotional intelligence among high school students. For this purpose, the following questions have been developed.

2. Research questions

1. Is there any significant relationship between students’ emotional intelligence and their entrepreneurship competencies?
2. Is there any significant relationship between students’ self-conscious and their entrepreneurship competencies?
3. Is there any significant relationship between students’ self-regulatory and their entrepreneurship competencies?
4. Is there any significant relationship between students’ motivation and their entrepreneurship competencies?
5. Is there any significant relationship between students’ empathy and their entrepreneurship competencies?
6. Is there any significant relationship between students’ social skills and their entrepreneurship competencies?
3. Research methodology
The purpose of this study is to investigate the relationship between entrepreneurship and emotional intelligence among high school students in the city of Langarod. In this study, correlation method has been used. The statistical population of this study includes third year high school students in the city of Langarod. The statistical population consists of 409 members. A sample of 300 students has been selected from this population through simple random sampling method. The sample size has been calculated through Morgan sampling table. In order to analyze the research data and test the hypotheses, SPSS has been used. In order to collect the research data, two questionnaires have been used including questionnaires of entrepreneurship personality characteristics and emotional intelligence.

1. Questionnaire of entrepreneurship personality characteristics
The first questionnaire has been developed and standardized by Kordnaeich et al. in 2007. The questionnaire consists of 95 items which was developed in four-point scale. They reported reliability coefficient of the questionnaire 0.92 and its validity coefficient 0.74. The construct reliability of different components of the coefficient has been presented in this section. The components include risk-taking (0.32), focus of control (0.81), need to progress (0.86), need to activation (0.80), ambiguity tolerance (0.20), deeming (0.81), challenging (0.79), and temporal validity (0.74). Raadi Afsooran (2010) found that reliability of the questionnaire is 0.93 and its construct validity is 0.83 (through factor analysis).

2. Questionnaire of emotional intelligence
The questionnaire of emotional intelligence has been developed Shiring (1999) has been used for measuring emotional intelligence. Emotional intelligence questionnaire consists of five components including self-conscious, self-regulatory, motivation, empathy, and social skills. They reported reliability of the questionnaire 0.85 and its validity coefficient 0.63. In order to analyze the research data and test the hypotheses, SPSS has been used.

4. Findings
The findings of this study in terms of research question have been presented in this section. It is claimed in the first question that is there any significant relationship between students’ emotional intelligence and their entrepreneurship competencies? In order to answer this question, Pearson correlation coefficient has been employed. The results of this test have been presented in table 1.

<table>
<thead>
<tr>
<th>Variables</th>
<th>entrepreneurship competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional intelligence</td>
<td>Correlation coefficient</td>
</tr>
<tr>
<td></td>
<td>0.148</td>
</tr>
</tbody>
</table>

As the results of table 1 showed, the correlation coefficient between students’ emotional intelligence and their entrepreneurship competencies is 0.148 (p≤0.05). It can be said that increase in emotional intelligence results in more entrepreneurship competencies of students.

It is claimed in the second question that is there any significant relationship between students’ self-conscious and their entrepreneurship competencies? In order to answer this question, Pearson correlation coefficient has been employed. The results of this test have been presented in table 2.

<table>
<thead>
<tr>
<th>Variables</th>
<th>entrepreneurship competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-conscious</td>
<td>Correlation coefficient</td>
</tr>
<tr>
<td></td>
<td>0.152</td>
</tr>
</tbody>
</table>

As the results of table 2 showed, the correlation coefficient between students’ self-conscious and their entrepreneurship competencies is 0.152 (p≤0.05). It can be said that increase in self-conscious results in more entrepreneurship competencies of students.

The third question of this study indicates that is there any significant relationship between students’ self-regulatory and their entrepreneurship competencies? In order to answer this question, Pearson correlation coefficient has been employed. The results of this test have been presented in table 3.

<table>
<thead>
<tr>
<th>Variables</th>
<th>entrepreneurship competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-regulatory</td>
<td>Correlation coefficient</td>
</tr>
<tr>
<td></td>
<td>0.083</td>
</tr>
</tbody>
</table>

As the results of table 3 showed, the correlation coefficient between students’ self-regulatory and their entrepreneurship competencies is not significant (p≥0.05). It can be said that there is not any significant
relationship between students’ self-regulatory and their entrepreneurship competencies. The fourth question of this study indicates that is there any significant relationship between students’ motivation and their entrepreneurship competencies? In order to answer this question, Pearson correlation coefficient has been employed. The results of this test have been presented in table 4.

**Table 4: The results of Pearson correlation coefficient (the relationship between students’ motivation and their entrepreneurship competencies)**

<table>
<thead>
<tr>
<th>Variables</th>
<th>entrepreneurship competencies</th>
<th>Correlation coefficient</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivation</td>
<td></td>
<td>0.037</td>
<td>0.555</td>
</tr>
</tbody>
</table>

As the results of table 4 showed, the correlation coefficient between students’ motivation and their entrepreneurship competencies is not significant (p≥0.05). It can be said that there is not any significant relationship between students’ motivation and their entrepreneurship competencies.

It is claimed in the second question that is there any significant relationship between students’ empathy and their entrepreneurship competencies? In order to answer this question, Pearson correlation coefficient has been employed. The results of this test have been presented in table 5.

**Table 5: The results of Pearson correlation coefficient (the relationship between students’ empathy and their entrepreneurship competencies)**

<table>
<thead>
<tr>
<th>Variables</th>
<th>entrepreneurship competencies</th>
<th>Correlation coefficient</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathy</td>
<td></td>
<td>0.222</td>
<td>0.000</td>
</tr>
</tbody>
</table>

As the results of table 5 showed, the correlation coefficient between students’ empathy and their entrepreneurship competencies is 0.222 (p≤0.05). It can be said that increase in empathy results in more entrepreneurship competencies of students.

The sixth question of this study indicates that is there any significant relationship between students’ social skills and their entrepreneurship competencies? In order to answer this question, Pearson correlation coefficient has been employed. The results of this test have been presented in table 6.

**Table 6: The results of Pearson correlation coefficient (the relationship between students’ social skills and their entrepreneurship competencies)**

<table>
<thead>
<tr>
<th>Variables</th>
<th>entrepreneurship competencies</th>
<th>Correlation coefficient</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social skills</td>
<td></td>
<td>0.016</td>
<td>0.806</td>
</tr>
</tbody>
</table>

As the results of table 4 showed, the correlation coefficient between students’ social skills and their entrepreneurship competencies is not significant (p≥0.05). It can be said that there is not any significant relationship between students’ social skills and their entrepreneurship competencies.

5. Discussion and conclusion

Entrepreneurship results in more employment, better life quality, appropriate income distribution, less social stresses, and more productivity (Feyz and Safayi, 2009). This is why that entrepreneurship is considered as an effective factor on economic value and is an efficient instrument for countries. Industrial and developed countries attend entrepreneurship education as one of the most important and comprehensive activities in terms of educational and academic issues. In this regard, schools and universities can influence individuals’ abilities, skills, and characteristics through education. They also can use education for reinforcing entrepreneurship attitudes in the society. In this regard, emotional intelligence is considered as one of the effective factors on entrepreneurship competencies. Indeed, emotional intelligence improvement is an effective factor on entrepreneurship competencies of students. On the other hand, emotional intelligence plays an important role in mental and technical skills. Some scientists believe that organizational performance could be improved through reinforcing employees’ intellectual quotient and emotional intelligence. Indeed, emotional intelligence is perception, description, and control of emotions. So it is expected that employees with lower levels of emotional intelligence have less adaptability with life conditions. It results in their stress and depression. On the other hand, employees with higher levels of emotional intelligence respond life realities adaptably. In addition, people with more emotional intelligence able to regulate their life so much that experience less negative conditions in their life.

The results of this study revealed that there is a significant relationship between students’ emotional intelligence and their entrepreneurship competencies. This part of our findings is in consistency with findings of Zampetakis (2009), Brundin (2008), Rhee (2007), Porkiani et al. (2013), Neghabi and Bahadori (2012), Kamalian and Fazel (2012), and Abbaspor Esfadan et al. (2010). Also Lonndidas et al. (2009) found that people with more tendency toward entrepreneurship, show more signs of emotional intelligence and believe that they are able to recognize...
others’ emotions successfully and then regulate, control, and evaluate them in action. It can be said that emotional intelligence along with cognitive intelligence is effective on the efficiency and success. It also can be helpful on people’s behavior in establishing new businesses, its management, adapting with variable and new conditions, and so on. Based on this part of our findings, it is suggested that governmental officers attempt to introduce and reinforce emotional intelligence skills in courses. As a result, the students’ success in both individual and work life will be improved.

Another part of our findings revealed that there is a significant relationship between components of emotional intelligence and entrepreneurship competencies. For example, the relationship between self-conscious and entrepreneurship competencies is significant. This finding is in consistency with findings of Zampetakis (2009), Cross (2003), and Abbaspor Esfadan et al. (2010). But our findings are not supported by findings of Kamalian and Fazel (2012). In this regard, Karami et al. (2005) indicate that entrepreneurs face different emotional conflicts in their entrepreneurship efforts. It results in their enthusiasm from one hand and their stress and anxiety on the other hand. If entrepreneur is strong from self-conscious, it is not possible to recognize his/her enthusiasm and failure source. As a result, probability of his/her success is rare. On the other hand, people with more emotional intelligence able to recognize their enthusiasm and failure source and. Based on this part of our findings, it is suggested that self-conscious is considered as a main principle in recognizing emotions which is important in both individual and family life. So, it is should be attended in educational courses.

Based on another part of our findings, the relationship between self-regulatory and entrepreneurship competencies is not significant. This finding is in consistency with findings of Abbaspor Esfadan et al. (2010). But our findings in this area is not supported by Zampetakis (2009), Cross (2003), and Kamalian and Fazel (2011). It can be said that there are many problems and difficulties and even critical conditions in entrepreneurship efforts. In such conditions, entrepreneurs with good self-regulatory conditions will be able to maintain their relaxation, avoid negative thoughts, and also achieve better performances. The results also showed that the relationship between motivation and entrepreneurship competencies is not significant. This part of our findings is in consistency with findings of Abbaspor Esfadan et al. (2010) and Kamalian and Fazel (2011). The reason is that Karami et al. (2005) reasoned that motivation is more necessary than technical knowledge and skills in entrepreneurship. In this regard, Copper (1998) indicate that entrepreneurs should have higher levels of self-motivation, as there are rare external motivations in entrepreneurship path. So development and improvement of internal motivations does not result in better entrepreneurship success.

Another part of our findings revealed that there is a significant relationship between empathy and entrepreneurship competencies. This part of findings is in constancy with findings of Cross (2003), Zampetakis (2009), Abbaspor Esfadan et al. (2010), and Kamalian and Fazel (2011). It can be said that empathy is an effective factor on the effective communications and participation in entrepreneurship efforts. Indeed, an entrepreneur pays attention to others’ emotions and feelings and understands them and then thereby paves the ground for their participation and cooperation in entrepreneurship efforts.

Based on another part of our findings, there is not any significant relationship between social skills and entrepreneurship competencies. This part of our findings is not in consistency with findings of Abbaspor Esfadan et al. (2010), and Kamalian and Fazel (2011). The reason is that having social skills is one of the main necessities of success in entrepreneurship. For successful entrepreneurs, the effective social relations help them in using shortcut methods for achieving results.

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