

Effect of international entrepreneurship indicators on innovative performance: the mediating role of motivation

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Abstract: Although many studies have been done on the components of international entrepreneurship, so far little attention has been paid to the mediating role of motivation in Iranian businesses in this field. Therefore, the aim of this paper is the effects of global entrepreneurship indicators on innovative performance with mediating role of motivation in the field of international trade of Iran. For data collection, the standard questioners of Global Entrepreneurship Monitor (GEM) and its report during 2017 were used. The statistical society was eliminated based on age, business and export rate higher than 25%. About 2,543 samples were extracted, which is based on Cochran formula and an estimate of 333 samples were analysed by using SmartPLS3 software. The findings confirmed the hypothesis. The findings provide for policymakers, a feasible path of the effect of international entrepreneurship indicators on innovative performance in an international business.

Keywords: international entrepreneurship; entrepreneurial opportunity perception; innovative; performance.

Reference to this paper should be made as follows: Tajpour, M., Hosseini, E. and Brahmi, M. (2022) 'Effect of international entrepreneurship indicators on innovative performance: the mediating role of motivation', *Int. J. Technology Transfer and Commercialisation*, Vol. 19, No. 1, pp.142–162.

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1 Introduction

According to the importance of role of innovation in a successful business marketing, the study of success and innovation factors are so important (Genc et al., 2019). The business faces a competitive, complex and unstable environment in international fields (Franco and Haase, 2013). So, this researchers, innovation as a new product, new service, new technology or new structure (Genc et al., 2019). Also important is that innovation plays a different role and has unlike effects in various countries, depending on their level of

development (Ramadani et al., 2019). Therefore, attention to risk-taking or entrepreneurship desires to success in a competitive field, is so important (Covin and Kuratko, 2010; De La Vega et al., 2016). Speed and intensity of competition based on global changes made business to create more opportunities for innovative productions (Noe et al., 2017; Lakhdar and Brahmi, 2019; Salamzadeh et al., 2020). The entrepreneurship business play an important role in economic development of countries (Brouthers et al., 2015). The entrepreneurship plays an important role in economic development, innovation, competition for reducing of puberty (Hosseini et al., 2020a; Salamzadeh et al., 2021; Ziyae et al., 2021). For a long time researches consider international entrepreneurship (IE) orientation by an active internationalised perspective (Yoon et al., 2018). But IE orientation is not limited to some activities of one person but it is intrinsic property of whole organisation (Schwens et al., 2018). One of the most important ways of development of country is development of scope of activity and accessing the foreign countries' markets (Kuivalainen et al., 2012). The development of international business is one of the developmental tools economic of countries (Gumede, 2006). So based on mentioned factors of IEs, the organisations are so important (Peng et al., 2008). However, the development and implementation of popular projects is not always successful. after experimentation and improvement, the project is scaled-up and launched on the market, facing the competitive pressures determined by the existing socio-technical regime (Dana et al., 2019). Knowledge-based companies are organisations that, with the benefit of knowledge capital, innovation and creative processes, are very valuable factors in today's knowledge-based economy, especially in developing countries such as Iran (Hosseini et al., 2021; Yaghoobi et al., 2018). In this type of companies, entrepreneurial processes include innovation in the design and supply of products, services and strategies through which new and hidden needs and demands of customers can be identified and provided in the best way (Tajpour and Hosseini, 2020; Salamzadeh and Tajpour, 2021). Based on Global Entrepreneurship Monitor (GEM) data, only 13% of entrepreneurs in developing countries have an international business but in developed countries 20% of entrepreneurs have an international business (Evenson et al., 2015). Also, entrepreneurship researches are focused on developed countries, IE follows this way (Kiss et al., 2012). However, to effectively growth collaboration for innovation in knowledge-based companies, not all innovation strategies, policy mechanisms and frameworks may be equally appropriate. Taking into account the fact that some firms, especially smaller ones, face resource and capability constraints or cognitive barriers regarding the adoption of innovation, major benefits such as reaching external knowledge and distant experts with unrestricted scope may be difficult to use (Chesbrough et al., 2014; Khahande Karnama et al., 2017). A locally bound approach can offer advantages in this context. Especially when it comes to research and development, knowledge-based companies rather stay closed, developing internally without benefitting from external input (Leckel et al., 2020).

Also, the entrepreneurship tendency is affected by practical expectations of fundamental scientific innovation. But the political, economic, organisational relations and access to developing countries sources make difference between IE conditions of countries (Terjesen and Wang, 2013). IE research has commonly neglected significant perspectives applied by international business scholars (Young et al., 2003). However, previous experimental studies report mixed indication about the relationship among IE and innovative performance. Some research suggests that there is a positive relationship between innovation and entrepreneurship. Saridakis et al. (2019), the link between

innovation and internationalisation differs allowing to the type of innovation introduced and the degree of novelty of the innovation. Of importance to managerial practice, the combined effects of different types and degrees of the novelty of innovation are grander than their individual effects, creating a synergy or amplified effect. Ramadani et al. (2019), indicate that product innovation has a positive impact on firm performance in transition economies, complemented by significant impact of specific control variables such as size, total labour cost, capital of the firm. Whereas age and competition from the informal sector, have a negative and significant effect on performance. Leckel et al. (2020), Recommending local innovation helps to shape regional innovation policies by strengthening regional networks to efficiently facilitate collaborative innovation. Dana et al. (2019). The role and importance of a comprehensive social approach to the effective deploy of innovation, clarifying the relationship between innovation success and local community participation is important.

In summary, this study contributes to the mainstream literature in three ways: First, it extends the IE literature and relates it to the innovative performance that is innovative in its own right. It also highlights that the international trade of Iran may use motivation to develop in the firms. It also covers the need for relating components of IE to some concepts including the firms. Third, through examining the mediating effect of motivation it contributes to components of IE and innovative performance. As far as the authors know, no research has been done on the contextual factors that can act as mediating in the above-mentioned relationship. Therefore, global entrepreneurship is full of possibility and opportunities which are not perceived, so based on this point; The main question of the research is whether IE has an impact on the role of motivation in the innovative performance of Iranian companies? In the paragraphs to come in this research, attention has been paid to the theoretical foundation and the background of effects of global entrepreneurship indicators on innovative performance with mediating role of motivation in the field of international trade of Iran. After that, the research method and hypotheses will be presented along with the study and analysis of the effect of effects of global entrepreneurship indicators on innovative performance with mediating role of motivation in the field of international trade of Iran. Then, the research design, dataset, and measures are presented and following it, survey results will be provided. The discussion and conclusions will be presented in the final section.

2 Literature review

Internationalisation is considered to be an active element and a boosting factor for the development of a firm, it may also represent an element of risk and such a decision needs to be weighted appropriately (Caputo et al., 2016). Therefore, internationalisation is one of the most important developmental factors (Ziyae et al., 2019b). Also, most of the business can use it to develop their international activities in order to gain goals such as increasing selling, development (Mainela et al., 2018). The business are able to affect the economy, so we need more attention to innovations (Genc et al., 2019; Tajpour et al., 2020). Theories of international business should be employed in conjunction with other approaches (Dabić et al., 2020). In fact, the innovation desire actually is a supportive program for new, creative ideas for foreign markets (Knight and Kim, 2009). Thus, new international opportunity increased job innovation (Ziyae et al., 2019a). It is generally assumed that internationalisation and innovation are an alternative growth strategy that

occurs in the case of innovation and incremental internationalisation (Saridakis et al., 2019). The innovation desire, increases international business (Dimitratos et al., 2012). Innovation is the main part of entrepreneurship and they could be replaced by each other. It shows that entrepreneurship is so important and entrepreneurship has a high level of attention (Tajpour et al., 2018a). In some countries, we can see that the speed of coming back to these groups of goal is so high (Ward et al., 2019). As well as, the innovative desires rise the IE (Dimitratos et al., 2012). Recent studies showed that, innovation is the main element of organisational durability and business progress (Allameh and Khalilakbar, 2018, Nora et al., 2016). So based on this point, we conclude that innovation is a vital element, which is affected by entrepreneurship orientation and progress export (Wu and Fang, 2010).

International business can increase their ability by means of observations, transformation of knowledge and other experience (Banerjee et al., 2015). In the past, internationalisation was a challenging option, usually adopted by large firms. Changes in technology now allow small firms to internationalise more easily than ever (Dana, 2017). Thus, management of effective relations, which are leading to markets, it is able to increase the customer satisfaction so the network ability increased (Bai and Johanson, 2018). Besides the mentioned relations, they can use other factors (such as customers, sellers, producers, transmutation of markets) for providing expert opportunity and working in an active environment (Wu and Fang, 2010). The entrepreneurs are some social products, so their business affected easily by social relations and connections. The entrepreneurial activities are not only decision about opportunity, actually it is also considered as opportunity of shaping and using new ideas (Ahmad et al., 2018). Therefore, the global economy involves enormous internationalisation activities that provide untapped opportunities for entrepreneurs and businesses (Jafari-Sadeghi et al., 2019). Entrepreneurship has become recognised as a major force in global economy and, as internationalisation issue become increasingly to business (Dana, 2004). Known as the most important part of economical develop in societies and plays an important role in occupation and social development. The entrepreneurship is some sort of mental status, which shows commitment to creative actions (Ward et al., 2019). Entrepreneurship actually is a mixture of social, political, economic and cultural behaviours, which is supporting development of innovative-based enterprise (Cunningham et al., 2019). The country members of MENA have two important features: first access to oil sources and second native population, Iran is also a member of Mena countries (Faghih and Zali, 2018).

International competition was largely the domain of large firms, and trade and investment regulations (Acs et al., 2003). The global business environment is changing dramatically. Traditionally competition in international markets was the realm of large companies, while smaller businesses remained local or regional in scope (Dana and Wright, 2009). Investigate the institutional characteristics of different geographic contexts that affect the internationalisation of small and medium-sized enterprises (SMEs). It competitive pressures in international markets, the nature of demands in international markets, domestic resources advantages, and domestic general economic characteristics (Jafari-Sadeghi et al., 2020). Cavusgil and Knight (2015) believe that, the IE includes innovation in reorganisation and using opportunities (Reuber et al., 2018). Some entrepreneurs believe that although IE activities may have needs risk-taking and expense, it is helpful for success of country (Brahmi and Sonia, 2014). In other words, the cost of internationalisation of a product is obvious for them (Deeds et al., 2008). It is

impossible to have entrepreneurial activities in vacuity, so these kinds of activities, so entrepreneurship perspectives (individual and social) may have vast effect on creation of entrepreneurship culture (Ismail et al., 2018).

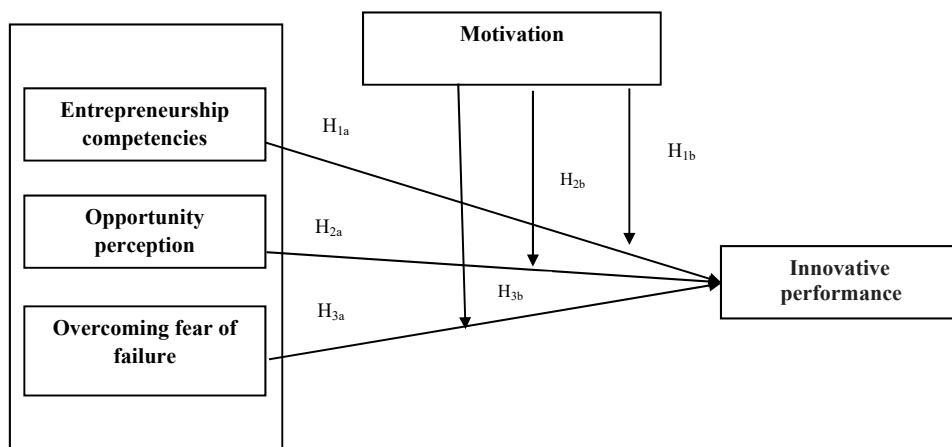
The knowledge-based companies under study had low and medium-sized organisational life that had no international activities (Hosseini et al., 2020b). This inactivity in the international arena can be due to the business conditions of Iran, which has made it difficult to be present in the international arena, or it can also be due to the young companies and their low risk-taking (Tajpour et al., 2021b). Presence in domestic markets, which was measured by local participation, was also less correlated with other components of innovative performance with other variables, which indicates that in the Iranian business environment, innovative performance should be measured with other components to percentage Have less error (Tajpour et al., 2021a). The GEM organisation uses a four-stage categorisation for categorising the internationalisation process. It calculates the rate of foreign customers and categorises them into four groups. This categorisation includes:

- 1 no foreign customers
- 2 25% foreign customers
- 3 25%–75% foreign customers
- 4 75%–100% foreign customers (Evenson et al., 2015).

The entrepreneurship competency is the characteristics of people, who are able to start a business and develop it (Mitchelmore and Rowley, 2010). Researchers believe that improvement of entrepreneurship competency helps people to recognise or provide entrepreneurship opportunities (Lans et al., 2010; Tajpour et al., 2018b). Tang et al. (2012) believe that entrepreneurship competencies include motivation, internal-control, self-esteem, communicative and technical skills. Some of the researchers, consider that the entrepreneurship competencies include technical competency, working with related applications, communicative skills and interpersonal relationship (Grace and Ihuoma, 2013). There is a close relationship between IE orientation and capability of a company (Yoon et al., 2018). So the company guidelines are so important in success of a company (Simon et al., 2015; Tajpour and Hosseini, 2021a). The active capabilities of a business include communication, innovation, which are activating a business. The innovation capabilities include product, design, new production development and job innovations (Camisón and Villar-López, 2014). The entrepreneurial activities do new business and it became an important point in society (Wong, 2014). So, Yoon et al. (2018) emphasising on entrepreneurship orientation and believed that there a direct relation between entrepreneurship desires and organisational ability. Theoretically, emerge opportunities are important in reflected explanation. Even in IE literature, the personal, organisational and industrial indicators were intensely focused, because they tend to follow job opportunities (Zander et al., 2015). When entrepreneurs at the same time diagnose and make decisions, claimed as a big part of opportunity entrepreneurship literature. It is considered that most of the entrepreneurs follow and use the opportunities, which are created because of external shocks such as technological progress and legal changes (Alvarez et al., 2013).

Risk-taking considered a group of actions with unknown consequences or just part of is known (Prabhu, 2011). Also, risk-taking considered as a reflection of some

consequences such as big debts or big resources assurance in order to gain a vast increment by finding opportunities. Besides it shows that organisations support the entrepreneurship projects (Gil-Pechuan et al., 2013). Accepting of failure helps managers, suggests new product based on the customer's new requests (Shan et al., 2016). Fear of failure both inhibits and motivates entrepreneurial behaviour and therefore represents a rich opportunity for better understanding entrepreneurial motivation. Although considerable attention has been given to the study of fear of failure in entrepreneurship, scholars in this field have investigated this construct from distinct disciplinary perspectives. These perspectives use definitions and measures of fear of failure that are potentially in conflict and are characterised by a static approach, thereby limiting the validity of existing findings about the relationship between fear of failure and entrepreneurship (Cacciotti et al., 2016). The innovative performance considered as a role for correcting the performance of organisation (Tajpour and Hosseini, 2021b). Therefore, researchers pay more attention to the relationship between innovation and performance (Tidd and Bessant, 2018). It is easy to see based on the high-speed changes of technology, the life of products in global markets is reducing (Naranjo-Valencia et al., 2016). You can recognise the effect of innovative performance based on the number of productions, improved services, developed products, new services and new method for affecting marketing process (Hacioglu et al., 2012). The innovative performance using modern ideas for solving problems, facing challenges, progress of productions and results and obvious consequences in performance (Löfsten, 2014). Entrepreneurship motivations for starting a new business is important as much as entrepreneurial activities in a country (Ismail et al., 2018). People needs motivation to continue an action, it is right for everybody, even entrepreneurs. So some researchers are trying to analysing and perception the relationship between motivations and entrepreneurs (Ward et al., 2019). Entrepreneurship enthusiasm encourages the entrepreneurial activities. We can analyse them in three aspects: first, invention enthusiasm, second enthusiasm for opening, third enthusiasm for develop (Cardon et al., 2009). The international motivations point to start a process, orienting, energise others (Munro et al., 2014). Motivation has a close relationship to rewards and encouragement of employees (Brahmi and Laadjal, 2015). As well as, these sorts of motivations have relations with opportunity discoveries (Dimitratos et al., 2012). Genc et al. (2019) showed that there a positive relationship internationalisation of business and innovative performance. Innovation shaped by entrepreneurs and markets (Genc et al., 2019). Nasiri and Hamelin (2018) concluded puberty and sexism is a common issue and governments are able to solve these social problems by using entrepreneurship (Nasiri and Hamelin, 2018). Chandra (2017) believes that the decision-making roles which are used by entrepreneurs are so important and they experience global markets base on this role (Thomas et al., 2018; Chandra, 2017). Knight and Liesch (2016) concluded that entrepreneurial orientation affects two groups of business first group are local business which are gradually become international, second group is international business. These groups need innovation to have a successful presentation and they have to take risks of presentation in foreign countries (Knight and Liesch, 2016). Holienka et al. (2016) believed that personal characteristics, opportunities and social perspectives are the most important factors of entrepreneurship (Holiienka et al., 2016). The following model is research model based on literature:

Figure 1 Conceptual model of research

Source: Authors' elaboration

Based on the conceptual model of research, researchers use following hypothesis as subject:

- H1a Entrepreneurship competencies have significant impact on innovative performance.
- H1b Motivation will mediate entrepreneurship competencies and have significant impact on the innovative performance.
- H2a Opportunity perception has a significant impact on innovative performance.
- H2b Motivation will mediate opportunity perception and has a significant impact on the innovative performance.
- H3a Overcoming fear of failure has a significant impact on innovative performance.
- H3b Motivation will mediate overcoming fear of failure and has a significant impact on the innovative performance.

3 Methodology

In this research, at first, we use articles in the field for analysing the research theoretical literature, and we analyse data based on GEM data. It collects data annually and analyses it in order to distinguish the entrepreneurship level of country economy. In first, GEM classified active people in starting new business or management of new company as entrepreneur. So based on this principle, we analyse Iran in the 2017. Indicators help us to distinguish the entrepreneurship motivation, entrepreneurial opportunity perception, using active entrepreneurship competencies and innovative performance. For study of effect of IE on innovative performance with motivation mediate, the data of GEM report about Iran were used, during 2017. The reason for using this data was that data related to 2017 were available in Iran.

The statistical society was eliminated based on age, business and export rate higher than 25%. About 2,543 samples were extracted, which is based on Cochran formula, we estimate 333 samples were analysed. Entrepreneurship competencies, Entrepreneurial opportunity perception and overcoming fear of failure was used as the factors to evaluate international entrepreneurial independent variable. New product rates, low number of business competitors and access to new technologies were used for evaluating dependent variables. For collecting data, the standard questioners of GEM and its report during 2017 were used. For confirming the reliability of construct, the convergent reliability was used; which is include three, different scales. These scales have more than or equal to 0.5 and extracted mean, variance more than or equal to 0.5 and reliability more than or equal to 0.7. For evaluation of reliability, Cronbach alpha and combined reliability were used. For confirming the reliability of construct, the convergent reliability was used; which is include three, different scales. These scales have more than or equal to 0.5 and extracted mean, variance more than or equal to 0.5 and reliability more than or equal to 0.7. For evaluation of reliability, Cronbach alpha and combined reliability were used. The latent variable must be more than or equal to 0.7. For analysis of data, the structural equation model with partial least square attitude and P.L.S 3 were used.

4 Results

The model fitting included three variables such as reliability, convergent and divergent validity.

Table 1 The combined reliability, Cronbach alpha and divergent reliability

	<i>Cronbach alpha</i>	<i>Combined reliability</i>	<i>rho-A</i>	<i>AVE</i>	R^2	R^2 square	Q^2
Entrepreneurship competencies	0.801	0.862	0.814	0.557	---	---	---
Entrepreneurial opportunity perception	0.814	0.891	0.813	0.732	---	---	---
Overcome fear of failure	0.843	0.927	0.848	0.864	---	---	---
Motivation	0.838	0.890	0.868	0.669	0.501	0.463	0.435
Innovative performance	0.832	0.885	0.877	0.659	0.713	0.683	0.625

The reliability was measured by Cronbach alpha and combined reliability and based on Table 1 the amounts of combined reliability and Cronbach alpha are higher than 0.7 and they show the fitting model. The amount of AVE coefficient is comparing with 0.5 and according to this point, that divergent validity model and measurement models are more than 0.5, so the appropriateness of this models are confirmed. Table 2 is meaning root variances of all variables of research are more than their correlation with other variables, so it shows proper divergent validity and fitness for this model.

Table 2 Matrix of divergent validity evaluation by Fernell and Larcker

	<i>Entrepreneurship competencies</i>	<i>Innovative performance</i>	<i>Motivation</i>	<i>Entrepreneurial opportunity perception</i>	<i>Overcoming fear of failure</i>
Entrepreneurship competencies	0.747				
Innovative performance	0.295	0.855			
Motivation	0.689	0.273	0.929		
Entrepreneurial opportunity perception	0.296	0.842	0.320	0.854	
Overcoming fear of failure	0.461	0.310	0.246	0.322	0.812

4.1 Structural model

PLS regression is an extension of the multiple linear regression models. In order to assess the proposed model, R square, t values, predictive relevance (Q^2), and standard beta were examined. The first measure was to study the t values. The t values must have been higher than 1.96, at the 95% confidence level (Thomas, 2003). The findings revealed that all the t values were higher than 1.96 at the mentioned confidence level (Figure 2). Values greater than 0.4 for factor load coefficients, greater than 0.5 for average subscription, greater than 0.7 for combined reliability, and Cronbach's alpha indicate a good fit of the measurement models in terms of convergent reliability and validity. As shown in Figure 2, all coefficients of factor loading of the questions except question 8 are greater than the criterion of 0.4, so by deleting question 8, re-analysis was performed.

The second criteria used in this research was R square. Three values of 0.19, 0.33, and 0.67 were respectively interpreted as weak, mediating, and strong relationships. This criterion is only used for dependent variables, and not independent variables, which were respectively equal to 0.501 and 0.713 for motivation and innovative performance (Figure 3).

4.2 Predictive relevance (Q^2)

This criterion was used for all the dependent variables through the blindfolding procedure. Q^2 must be higher than zero to show good predictive relevance (Kline, 2015). The Q^2 values for motivation ($Q^2 = 0.435$) and innovative performance ($Q^2 = 0.625$) suggested that the model has sufficient predictive relevance.

Figure 2 The model of innovative performance (standardised beta coefficients are presented) (see online version for colours)

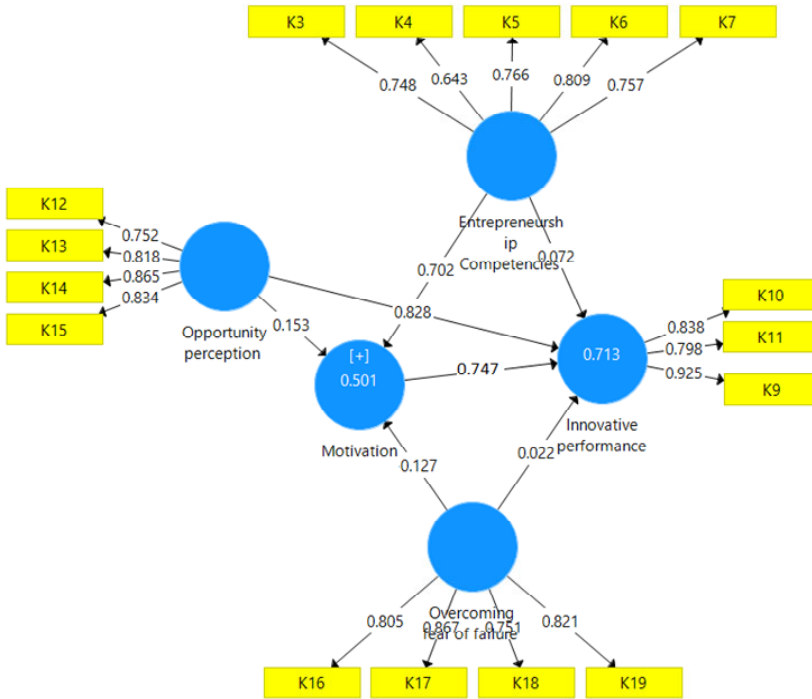
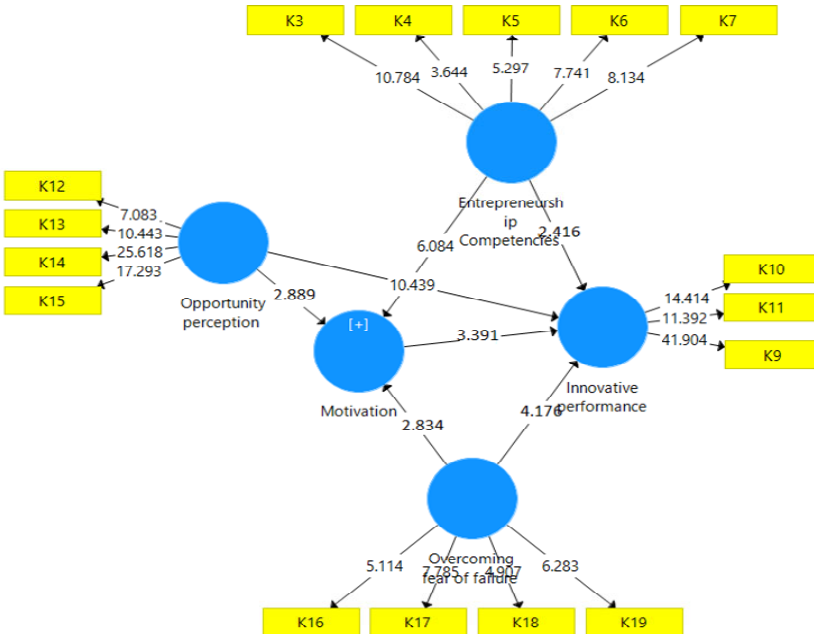


Figure 3 T-values (see online version for colours)



4.3 Goodness of fit

In addition to investigating the measurement and structural models, the goodness of fit (GOF) could let us ensure the quality of our model. This criterion is calculated as follows. Based on our findings, the GOF value was 0.714, which showed the fitness of the model.

$$\text{GOF} = \sqrt{\text{average}(\text{Commonality}) \times \text{average}(\text{R}^2)}$$

Another approximate model fit criterion implemented was the standardised root mean square residual (SRMR). This value had to be lower than 0.1. According to our findings, SRMR was equal to 0.017 (Table 3). Also, Bentler-Bonett index or normed fit index (NFI) was used as another useful approximate model fit criterion. This value is normally between 0 and 1, but it had to be greater than 0.9 (Kline, 2015). Based on the findings, this value was equal to 0.958, which is acceptable (Table 3).

Table 3 SRMR and NFI

	SRMR	NFI
Acceptable value	0.10≤	0.90≤
Calculated value	0.017	0.958

Source: Authors

In order to assess the intensity of the mediating role of motivation in the relationship between IE and innovative performance, the variance accounted for (VAF) was calculated, which takes a value between 0 and 1, and the closer this value is to 1, the stronger the effect of the mediating variable. This value was equal to 0.443, which is considered appropriate.

$$\text{VAF} = (a \times b) / (a \times b) + c$$

- a the amount of the mediator and independent variable pathway coefficient: 0.327
- b the amount of the mediator and dependant variable pathway coefficient: 0.747
- c the amount of the dependant and independent variable pathway coefficient: 0.307.

Finally, Table 4 shows the results of testing the hypotheses.

4.4 Testing hypotheses

At this stage, a t-test was used to analyse the assumed relationships between the variables. Six sub-hypotheses have been proposed to test the main hypothesis, and as stated in Table 4, the t-test of the six existing relationships has been confirmed. For the sake of determining the effect of predictive variables on dependent variables, the standardised factor coefficients related to the pathways of each hypothesis have been examined. These coefficients suggest that changes in the dependent variables are explained by the independent variables just up to a few percent.

The results of the study obtained from PLS3 software showed that the obtained the critical value of paths that are greater than the critical value 1.96 at the 95% confidence level are confirmed. The point is that the paths are meaningful, the appropriateness of the

structural model are confirmed. Based on the results, the highest impact is related to the direct path of the entrepreneurial opportunity perception on the innovative performance.

Table 4 The result of analysing the of research variables

<i>Type of effect</i>	<i>Path</i>	<i>t-value</i>	<i>Coefficients</i>	<i>Hypothesis evaluation</i>
Without mediating variables	Entrepreneurship competencies on entrepreneurship performance	2.416	0.072	Approved
	Entrepreneurial opportunity perception on entrepreneurship performance	10.439	0.828	Approved
	Overcoming the fear of failure on entrepreneurship performance	4.176	0.022	Approved
With mediating variable	Entrepreneurship competencies on entrepreneurship performance with mediating motivation	6.084	0.702	Approved
	Entrepreneurial opportunity perception on entrepreneurship performance with mediating motivation	2.889	0.153	Approved
	Overcoming the fear of failure on entrepreneurship performance with mediating motivation	2.834	0.127	Approved

The fit of the structural model using T-coefficients is such that these coefficients must be greater than 1.96 to confirm their significance at the 95% confidence level. The results of this criterion showed that the values obtained for the path entrepreneurship competencies on entrepreneurship performance equal to (2.416), the path of impact entrepreneurial opportunity perception on entrepreneurship performance equal to (10.439), the path of impact overcoming the fear of failure on entrepreneurship performance equal respectively With (4.176), the path of impact entrepreneurship competencies on entrepreneurship performance with mediating Motivation equal to (6.084), the path of impact entrepreneurial opportunity perception on entrepreneurship performance with mediating motivation equal to (2.889), the path of impact t overcoming the fear of failure on entrepreneurship performance with mediating motivation equal to (2.834), that the critical value of all paths is more than the critical value (1.96) at the 95% confidence level, this indicates the significance of the paths, the appropriateness of the structural model and the confirmation of all research hypotheses.

5 Conclusions

The main hypothesis is the effect of IE with mediating motivation. It was analysed by six hypotheses about Iran were confirmed. The researchers used the statistical society of Iran and analyse the model by PLS software. When the hypothesis without mediating motivations was analysed the entrepreneurship coefficients of Iran was 0.072 with mediating motivation, the effect coefficient in Iran was 0.702. In following of entrepreneurial opportunity perception without mediating of motivation, Iran coefficient is 0.828 and when it is considered by the mediating of motivation the coefficient of Iran

is 0.153, which shows the motivation variable in Iran with both mediating and without mediating have more effective. In following of third hypothesis the effect of overcoming of failure on motivation without mediating, the coefficient of Iran was 0.022 and the results with mediation were in Iran 0.127. So we conclude that e in effect with mediating.

Also, IE using some factors such as introducing a new product-market to the market, a better supplement of consumer requirement and environment, turning the competitor companies with lower productivity by using innovations and invents. The innovation in entrepreneurial activities know newness of product to most or all of consumers and is it introduced by lower number of competitors. As we expected the average of innovation increased by economic development in other word, the innovative activities help to raise the competitiveness. This situation tends to sustainable development. Based on the idea of some researchers, we can measure and analyse the innovative performance based on financial and non-financial aspects (Noe et al., 2017). The products and modern technologies play a crucial role in economics of all countries. But today the developing countries (Brahmi and Adaala, 2014) produce good with lower price and exactly same as the western version.

The entrepreneurship competencies are a vital source and reinforces thought, operation and sustainability in entrepreneurial activities. Voiding starting a risky firm, could postpone an entrepreneurship activity. This indicator is close to business and the results of our research are close to results of Peng et al. (2008) and Zahra and George (2002). Nowadays, in competitive and complex environments, the organisations with organisational capability such as innovation can continue their activities (Salamzadeh et al., 2020). The innovative performance (Brahmi et al., 2014a) is accessible only by creating new field of knowledge for development of production and new process of production. These organisations are using innovation for raising exploitation (Brahmi, 2013) and improvement of economic situation (Brahmi et al., 2014b). Sakhdari (2014) showed in his research that innovative performance has 4 dimensions, which is included: innovation, local participation international risk-taking and strategic modernisation (Sakhdari, 2014). The local participation and strategic modernisation have the lowest correlation with other aspects. The lack of activity in international felids may be pertained to business condition of Iran, which make it hardtop present in international fields either it may have pertained to new companies and lower risk-taking. Zahra et al. (2000) in her research, talk about development of international business by finding new markets and Hacioglu et al. (2012) study about role of entrepreneurship marketing in intermediate markets of Turkey and he concluded forerun and innovation are effective factors of innovative performance.

Regarding the confirmation of the second hypothesis that entrepreneurial opportunity perception on innovative performance and its sub-hypothesis mediated by motivation, it can be said that entrepreneurship is not a process that can be limited to a pre-designed and closed system. Every opportunity can only be used at the right time, so many competing business and new innovation change the need of the market, so the need for process agility is critical, especially in an international environment. Entrepreneurs must also identify opportunities, provide solutions and make decisions with knowledge tools and rely on innovation. The results of this hypothesis are consistent with research (Zander et al., 2015; Alvarez et al., 2013).

Regarding the confirmation of the third hypothesis that the fear of failure affects innovative performance and its sub-hypothesis mediated by motivation, it can be said that an entrepreneur's initial goals have a huge impact on the motivation created to address a

need or concern. Studies show that the stronger these initial goals, the more complex and difficult the entrepreneur can focus on his path and create value. Fear of failure, especially in the field of entrepreneurship and business is a very effective factor; A factor that not only leads to the collapse of a business in the short term, but can even lead to its complete destruction in the long run. Certainly, one should not overlook the fact that all entrepreneurs have somehow overcome the fear of failure before starting their business, but they must be careful that the difficulties of the business do not cause this fear to return to them; If this happens, these entrepreneurs will no longer be able to take advantage of the opportunities that lie ahead and will gradually lose their previous achievements. In fact, it seems that many who are afraid of failure do not necessarily think of success. The results of this hypothesis are consistent with research (Prabhu, 2011; Shan et al., 2016).

The people, who are perception entrepreneurship opportunity as a new business create it. The general belief is that, the people who start a startup, learn more and they are ready to earn more too and this is more than unemployed people, who have to work and be entrepreneurship. For future research we suggest to work on accessing of new companies to adept human resources and complex structures hierarchy replaced by unofficial, flexible structures. It could raise entrepreneurship. Holding courses to increase creativity and entrepreneurship can have a positive effect on improving performance, innovation. Therefore, the need to hold these courses in companies is emphasised.

5.1 Implications

Our findings indicate the effects of global entrepreneurship indicators on innovative performance with mediating role of motivation in the field of international trade of Iran. The concepts of innovative performance and IE are closely related. International entrepreneurs balance the market by introducing a new product-market-to-market mix; Better meeting the needs of consumers and the environment to the same extent; Expelling companies with less productivity is disrupted by expanding production boundaries through the application of innovations and innovations. As expected, the average rate of innovation increases with the level of economic development, or in other words, more innovative activities contribute to higher competitiveness, which ultimately leads to sustainable development. Entrepreneurial motivation is a powerful source of motivation that stimulates thinking, action and perseverance in one's entrepreneurial activities. Fear of failure is one of the most important obstacles to starting a business. Also, avoiding setting up high-risk firms can delay the start of an entrepreneurial activity.

5.2 Limitation

Although this study is new but similar to any research, has some certain limitations. The analysis performed is related to international business of Iran, so, any generalisation should be made with caution, as it may not be valid for different regional conditions. Also, due to the lack of access to the 2020 data, the 2017 data has been used, and the generalisation of the results to the current situation should be done with caution.

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