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Relationship between entrepreneurial self-efficacy and entrepreneurial intention in medical library and information science students: an Iranian perspective

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Relationship between entrepreneurial self-efficacy and entrepreneurial intention in medical library and information science students: an Iranian perspective

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Abstract

Purpose: The main purpose of this study is to investigate the relationship between entrepreneurial self-efficacy and entrepreneurial intention of students in the field of medical library and information science.

Methods: This study quantitatively examined seven hypotheses through Structural Equation Modeling (SEM) techniques. Using the census method, 79 students of medical library and information science of Hamadan University of Medical Sciences, Iran, were studied. Data was collected using the Entrepreneurial Self-efficacy Questionnaire proposed by De Noble et al. (1999) and the Entrepreneurial Intention Questionnaire presented by the Linan and Chen (2011). Descriptive and inferential data analysis was performed using SPSS and SmartPLS2 software at a significance level of 0.05.

Results: The results showed that the variable of entrepreneurial self-efficacy and the components of initiating investor relationships and developing human resources affect the entrepreneurial intention of students, while the components of Understanding market opportunities, building an innovative environment, defining core purpose, and coping with challenges had no effect on entrepreneurship. The entrepreneurial intention of medical library and information science students is positively affected by their entrepreneurial self-efficacy. Greater self-efficacy leads to entrepreneurship.

Practical implications: Considering the positive effect of entrepreneurial self-efficacy on students' entrepreneurial intention, offering training courses to strengthen entrepreneurial behavior in the academic period seems useful.

Originality/value: Entrepreneurship helps communities achieve social and economic growth. Entrepreneurial intention is one of the important factors in the occurrence of entrepreneurial behavior in students. Entrepreneurial Self-efficacy is a key factor in shaping and strengthening entrepreneurial intention. Given the increasing number of library and medical information science graduates and the relatively limited job market in this field, it seems useful to examine their entrepreneurial intention and the impact of social factors affecting it.

Keywords: Entrepreneurial Self-efficacy, Entrepreneurial Intention, Medical Library and Information science

Introduction

Entrepreneurship is a phenomenon that is essential for economic growth and sustainable development of countries as well as job creation and prevention of economic crises (Filser, Kraus, Roig-Tierno, Kailer, & Fischer, 2019; Kiselitsa, Shilova, Liman, & Naumenko, 2018). Entrepreneurship is a process of presenting new ideas, taking advantage of existing facilities and opportunities by relying on knowledge, profession, and related work, and accepting risk, which puts various factors together to exploit resources and their activation in order to be productive and ensure national interests, and to create productive and creative institutions that lead to comprehensive growth and development (sharifi, sozani, & Ahmadvand, 2014). Those who have entrepreneurial characteristics can act in the direction of transformational career developments, know the path of change, become aware of new needs, and play a role in creating new jobs (Fouladi & Baghbani, 2014). The discussion of entrepreneurship is very important, as economists consider entrepreneurs as the engine of growth and economy of society, and management scientists consider them as one of the most important factors of organizational change and innovation in the present era; Therefore, in any environment where people have entrepreneurial thinking and art, there will be a dynamic and diverse economy (Momayez, Ghasemi, & GhasemI, 2013).

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Entrepreneurship intention is an essential research topic in entrepreneurship. Researchers following the cognitive approach argue that intention and intention play an important role in the decision to start a new business (Tsai, Chang, & Peng, 2014). Creating and strengthening the entrepreneurial intention of entrepreneurs is one of the goals of entrepreneurship training programs because entrepreneurial intention is the best and most important variable that predicts the behavior of entrepreneurs. In other words, it is very likely that increasing entrepreneurial intention leads to an increase in entrepreneurial activities and consequently the development of entrepreneurship (Fouladi & Baghbani, 2014).

Recent studies have addressed social psychological factors, such as self-efficacy to better understand entrepreneurial processes. In this regard, the results of various studies indicate that entrepreneurial self-efficacy is a key factor in determining entrepreneurial intention and the emergence of innovative behaviors (Watson, Gatewood, Lewis, Dempsey, & Jennings, 2014). Nwanzu (2019) considers self-efficacy as a belief in a person's ability to do a particular task. Self-efficacy is the belief that one can meet the challenges of life (Nwanzu & Babalola, 2019). In other words, self-efficacy reflects a person's belief in whether or not they can perform a particular behavior (Snyder & Lopez, 2011). People with low self-efficacy think and behave very differently than people with high self-efficacy (Bandura, 1999).

Thousands of college graduates enter the job market each year, but market capacity does not meet that number. On the other hand, the experiences of different countries in the world, both developed and developing, show that the best option to prepare learners of the education system for employment in the labor market is self-employment and entrepreneurship education (Barani & Zarafshani, 2009). In addition, the 2018 Global Student Entrepreneurship report (www.guesssurvey.org) places special emphasis on the essential impact of student entrepreneurship, both economically and socially, making studies on entrepreneurship more crucial. At the university level, students define their future prospects in the short and medium term, and entrepreneurship becomes a career option that is increasingly considered (Oftedal, Iakovleva, & Foss, 2018).

Meanwhile, the number of graduates in library and information science is small compared to the growth rate of libraries and information centers in developing countries. Therefore, many librarians are not employed in the public and private sectors (Tella & Issa, 2013). Evidence from the curricula of many institutions has shown that librarianship and information courses are still traditional and there is no practical curriculum for entrepreneurship and technological innovation (Igbeka, 2008; Soltani-Nejad et al., 2020).

Given that the majority of people who make up the labor market today are students, so the ability to enter this market should be strengthened, so that in addition to having a more dynamic economy, unemployment can be reduced (Fouladi & Baghbani, 2014). Accordingly, this study intends to investigate the relationship between self-efficacy and entrepreneurial intention of students in the field of medical library and information science using self-efficacy indicators.

Literature review and hypotheses development

Entrepreneurial self-efficacy

Self-efficacy was first proposed by Bendora who considered it a basic precondition for the flourishing of individuals' implicit entrepreneurial talents (Mohseni, Mousavi, & Jamali, 2013). In a general sense, this concept is defined as a state of mind that is based on people's perceptions of their skills and abilities. Based on this, entrepreneurial self-efficacy is based on people's inner beliefs and thoughts about whether they themselves have the necessary ability to do an innovative and risky job or whether an individual can organize and implement activities to create specific achievements (Fayolle , Liñán, & Moriano, 2014; Safa & Mangeli, 2015).

Sivarajah, and Achchuthan (2013) believe that entrepreneurial self-efficacy plays a decisive role in creating entrepreneurial intention and turning it into entrepreneurial behavior and activity (Achchuthan & Kandaiya, 2013). According to Bendora theory, self-efficacy is achieved through mastering skills, identifying with role models, social persuasion by others (such as peers, parents, teachers, and role models), and judging one's physiological states (Prabhu, McGuire, Drost, & Kwong, 2012).

Boyd and Vozikis (2003) state that self-efficacy affects the development and strengthening of entrepreneurial intention and thus increases the likelihood of starting a business; In fact, a person will have an entrepreneurial intention to start a new business or do an entrepreneurial activity when he has a high level of self-efficacy and has enough confidence in his abilities and capabilities to take advantage of a particular opportunity (Eshghi Araghi & Ghani Poor, 2017).

Entrepreneurial intention

The French word entrepreneurship means commitment to do something (Mohseni et al., 2013). Various definitions have been proposed for entrepreneurship. In the definition of Irael kirzner, entrepreneurship is defined as awareness of undiscovered profitable opportunities (Bahrami, Sepaseh, Kiani, Yaghouti, & Khanjankhani, 2017). Webster University Glossary also identifies an entrepreneur as someone who commits to organizing and managing the risks of an economic action (Hosseini, Miresmaeili, & Boland, 2013). According to cognitive models, one of the most important predictors of entrepreneurial behavior is individuals' entrepreneurial intention (Karimi, 2016).

Entrepreneurial intention is a state of mind in which a person intends to create a new company or a new value in an existing organization. This intention is the driving force for entrepreneurial activities (Ahmadi Kafeshani & Nazemi, 2014). Nabi G. and Linan (2011) also considers entrepreneurial intention as the conscious awareness of a person who wants to

start a risky business in the future with the aim of increasing value and making a profit. Entrepreneurial intention as one of Behavioral characteristics of individuals is a major factor influencing the formation and emergence of entrepreneurial behavior and is a key element for understanding the entrepreneurial process and creating different businesses, especially small businesses (Nabi & Liñán, 2011).

Lüthje and Franke have argued that students' personalities indirectly influence their goals for starting a new job through their attitudes. Personality traits can be classified into two categories such as general and specific personality traits. General personality traits include receptivity to experience, neuroticism, extraversion, agreeableness, conscientiousness, and specific personality traits include the need for success, independence, risk-taking, initiative, and self-efficacy (Israr & Saleem, 2018).

The Relationship between Entrepreneurial Self-Efficacy and Entrepreneurial Intention

In recent years, various empirical studies have been conducted on the relationship between entrepreneurial intention and entrepreneurial self-efficacy, some of the most important of which are mentioned below.

Qiao and Huang (2019) examined the effect of entrepreneurial self-efficacy on students' 'entrepreneurial intention by considering job adjustment as a mediating variable, and concluded that university students' entrepreneurial self-efficacy had a significant and positive effect on entrepreneurial intention. Entrepreneurial self-efficacy of university students has significantly and positively affected job adjustment (Qiao & Hua, 2019).

Saraih et al. (2017) conducted a study in Malaysia to investigate the effect of self-efficacy on entrepreneurship intention among engineering students and concluded that students of public institutions have a strong interest in entrepreneurship intention and their level of self-efficacy is moderate. Government institutions can also emphasize strategies to increase the degree of self-efficacy among students to increase the level of entrepreneurial intention (Saraih et al., 2018).

In a study conducted in Spain, Rosique-Blasco (2018) examined the impact of personal abilities and self-efficacy on students' entrepreneurial goals. The results showed that the entrepreneurial attitude has a positive effect on the entrepreneur's intention. The results also showed that the individual abilities of creativity, activity, and internal control are positive according to the attitude towards entrepreneurship and entrepreneurship. Creativity and activity directly and indirectly affect entrepreneurial intention, while internal control affects only entrepreneurial intention through entrepreneurial self-efficacy (Rosique-Blasco, Madrid-Guijarro, & García-Pérez-de-Lema, 2018).

Malebana (2014) examined whether students with different levels exposed to entrepreneurship education and entrepreneurial self-efficacy are different from those who have not received such education? And is there a connection between entrepreneurial self-efficacy and entrepreneurial intention? In this study, 355 final year business students from two South African universities in the rural provinces of Eastern Cape and Limpopo were studied. The results showed that there is a statistically significant difference between trained and untrained students and entrepreneurial self-efficacy has a statistically significant relationship with entrepreneurial intention (Malebana & Swanepoel, 2014).

Naktiyok (2010) presented a study entitled Entrepreneurship Self-Efficacy and Entrepreneurship Intention in Turkey. The results of a study of 245 undergraduate students in Turkey showed that entrepreneurial self-efficacy has a significant effect on entrepreneurial intention, but its dimensions are different (Naktiyok, Karabey, & Gulluce, 2010).

Zhao (2005) presented the mediator role of self-efficacy in developing students' intentions to become entrepreneurs. The sample consisted of 265 postgraduate students majoring in business management in five universities. A short-term entrepreneurship self-efficacy training course was provided for these individuals. The results showed that the effect of perceived learning from entrepreneurship-related courses before entrepreneurial experience and willingness to take risks was effective on entrepreneurial goals. Contrary to expectations, gender has nothing to do with self-efficacy; Rather, women reported fewer entrepreneurial career goals (Zhao, Seibert, & Hills, 2005).

Seif et al. (2014) conducted a study aimed at investigating the factors affecting the entrepreneurial intention of university students. The results of the study showed that the variables of mental norms, social norms, entrepreneurial experience, entrepreneurial self-efficacy, and willingness to take risks indirectly through mediating variables have a significant effect on the variable of academic entrepreneurial intention (Seif, Sabet Maharlouei, Rastegar, & Ahmad abadi, 2014).

Ghiasi (2017) studied the effect of belief in self-efficacy and entrepreneurial attitude with entrepreneurial intention of agricultural students. The results showed that the belief in self-efficacy has a significant positive relationship with students' entrepreneurial intention and directly affects it; The mediating role of entrepreneurial attitude in the relationship between self-efficacy belief and entrepreneurial intention was also confirmed (Gheyassi, 2017).

Fooladi and Baghbani (2014), in a study on the effect of entrepreneurial self-efficacy on strengthening entrepreneurship in students of different fields in Bijar city, concluded that self-efficacy has a positive and significant effect on entrepreneurial intention (Fouladi & Baghbani, 2014).

Research hypotheses

H1. There is a positive and significant relationship between entrepreneurial self-efficacy and entrepreneurial intention.

H2. There is a positive and significant relationship between the skills of recognizing market opportunities and new product development and strengthening entrepreneurial intention.

H3. There is a positive and significant relationship between the skill of creating an innovative environment and strengthening entrepreneurial intention.

H4. There is a positive and significant relationship between the skill of initiating investor relationships and strengthening entrepreneurial intention.

H5. There is a positive and significant relationship between the skills of identifying the main goal and strengthening entrepreneurial intention.

H6. There is a positive and significant relationship between the skill of coping with unexpected challenges and strengthening entrepreneurial intention.

H7. There is a positive and significant relationship between human resource development skills and strengthening entrepreneurial intention.

Research Conceptual Model

Based on the mentioned hypotheses, the conceptual model of the present study is presented in Figure 1. The conceptual model of this study examines the relationship between entrepreneurial self-efficacy and entrepreneurial intention of medical library and information science students. Entrepreneurial Self-efficacy variable has the following dimensions: understanding market opportunities, building an innovative environment, initiating investor relationships, defining core purpose, coping with challenges, and developing human resources as predictor variables and Entrepreneurial intention is the outcome variable.
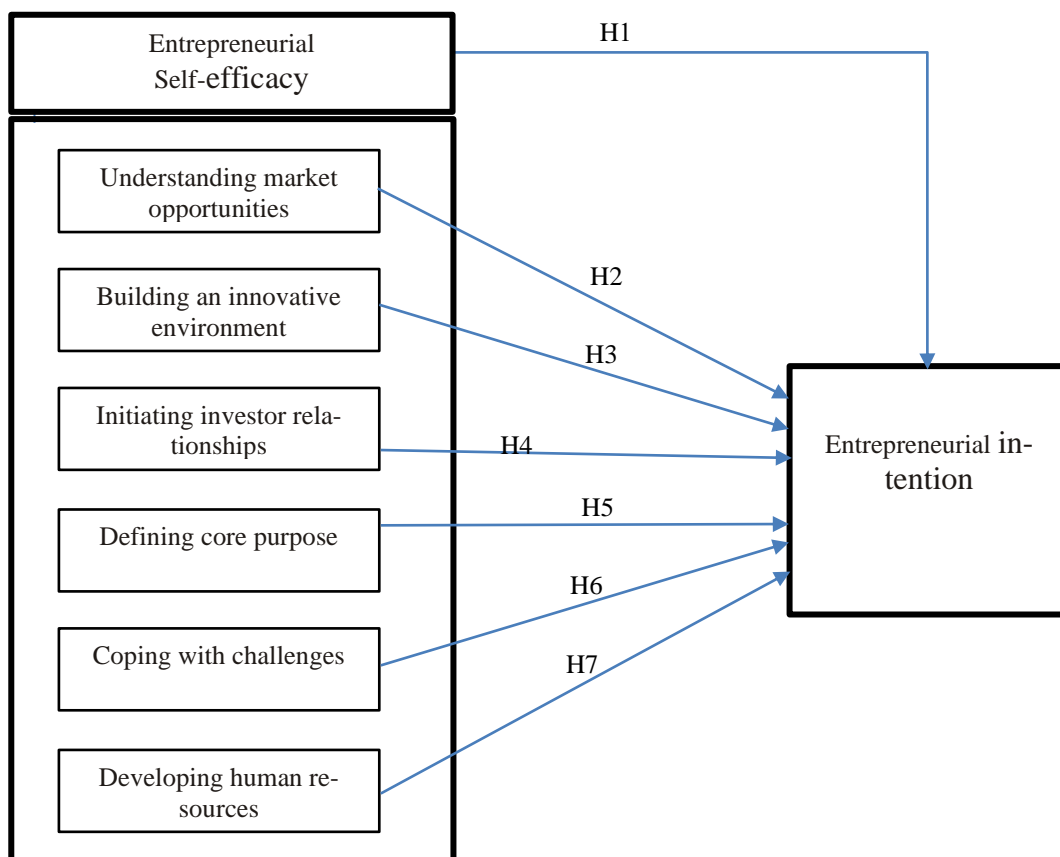

Fig. 1. Conceptual model

Materials and methods

Data collection

This is a descriptive-survey study conducted at Hamadan University of Medical Sciences. The statistical population of the study includes undergraduate and graduate students of medical library and information science at Hamadan University of Medical Sciences, all of whom were included in the study. Guest students and students who did not wish to participate in the study were excluded. Finally, 79 people participated in the study.

Instrument and measurement

Data collection tools of this study included demographic information questionnaire, entrepreneurial self-efficacy and entrepreneurial intention questionnaire. Demographic questionnaire included information on gender (female, male), age (less than 20 years, 20-23 years, 24-27 years and 27 years and older), education (bachelor, master), and work experience (no work experience, self-employed, and governmental jobs). 33-item Questionnaire of entrepreneurial self-efficacy (De Noble et al., 1999) includes six dimensions of opportunity recognition skills, skills of building innovative environment, investor relationship building skills, core goal recognition skills, unexpected challenges and human resource development skills. The questions of the entrepreneurial self-efficacy questionnaire were responded based on the five-point Likert scale, including strongly disagree to strongly agree. The reliability and validity of this tool has been investigated and confirmed in Hosseinpour (2012) study (Hoseainpour, 2012). The six-item Entrepreneurial Intention Questionnaire presented by Li-nan and Chen (2011) was used to assess students' entrepreneurial intention. The items were responded based on a five-point Likert scale from very low to very high. The validity and reliability of this tool was reviewed and confirmed by Safa and Mangeli (Safa & Mangeli, 2015). Data analysis was performed using SPSS and SmartPLS 2 software.

Results

Characteristics of participants

Table 1 shows the characteristics of the study participants. Of 79 medical library and information science students, the majority were female (78.5%). The highest frequency belonged to the age group of 20 to 23 years (74.7%) and the lowest frequency belonged to the age group 27 years and above (5.1%). Survey of education level showed that most students were undergraduates (86.1%). Also, most students had no work experience (62%).

Table 1. Frequency Distribution of Students' Characteristics

Variables	Categories	Frequency	Frequency percent
Gender	Female	62	78.5
	Male	17	21.5
Age	Younger than 20 years	11	13.9
	20-23 years	59	74.7
	24-27 years	5	6.3
	27 years and older	4	5.1
Education	BA	68	86.1
	MA	11	13.9
Work experience	No experience	49	62
	Self-employed	19	24.1
	Governmental job	11	13.9

Structural Equation Modeling (SEM)

Structural Equation Modeling is a type of statistical model that measures the relationships between several variables. Structural equation modeling examines the structure of internal relations in a set of equations, such as a set of regression equations (Hair, Anderson, Babin, & Black, 2010). This method describes all the relationships between constructs (independent and dependent variables) existing in the analysis. Constructs are unexplored or hidden elements and can be represented by several variables. Structural equation modeling is a systematic and dynamic method for calculating interactions between variables in research as well as between items of measurement tools in research. The advantage of this method over the old methods, such as regression, is in calculating the measurement error of the instrument (questionnaire), so that the old methods were not able to calculate the size of this error and declared the values despite the error; In this method, however, the error is calculated and the results are expressed more accurately (Kline, 1998). The structural equation model is a combination of Measurement Model and Structural Model. The measurement model shows how each latent variable is measured and operated by indicators or observed variables, and the structural model shows the relationships between latent variables and determines how much of the variance is not explained (Stoelting, 2002). In SEM, by estimating the values of each relation, these relations can be interpreted correctly. In fact, the estimated values determine the significance of the relationship.

Partial least squares (PLS) model

The PLS method is one of the structural equation modeling approaches developed by Wold (1973). Unlike previous approaches to structural equations, this method starts from the two components of measurement model and structural model for model analysis and ends with the general model. To implement this method, in the present study, SmartPLS 2 software has been used due to the ability to analyze data with small volume and insensitivity to the normality of data distribution. This software is used to check the reliability, convergent validity, divergent validity, and test research hypotheses.

Checking the model fit by PLS method

In the PLS method, three parts are examined to fit the structural equation models: a) the part related to measurement equations; B) the section related to structural equations; C) The section related to the general model.

Investigating the fit of measurement equations

Three criteria of index reliability, convergent validity, and divergent validity are used to evaluate the fit of measurement equations (Hulland, 1999). The reliability of the index in the PLS method is measured by three criteria: factor load coefficients, Cronbach's alpha, and composite reliability.

Higher Cronbach's alpha criterion, composite reliability of 0.7 and the first criterion of 0.4 indicate a good fit of the measurement model. To calculate the criteria for index reliability fit, the general model containing all the constructs and research questions was implemented using SmartPLS 2 software, the result of which contains the standardized coefficients in Figure 2. As shown in this figure, all factor loads are above 0.4, confirming that there is no need to deleteany item.
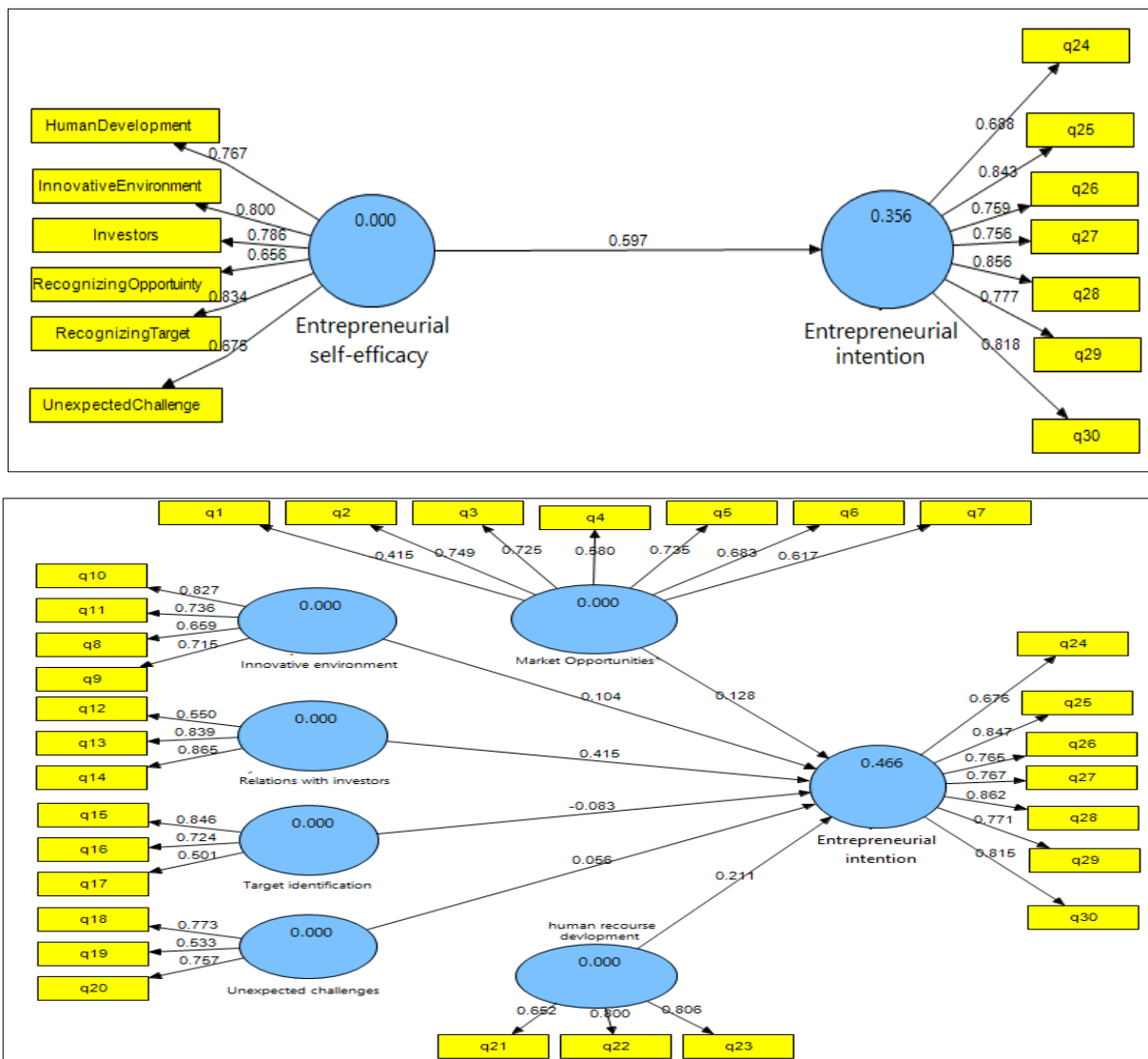

Figure 2. Research model in standard coefficient estimate mode

Figure 2 shows the research model in the case of estimating standard coefficients. All research variables are divided into latent and observed categories. Obvious (rectangular) or observed variables are measured directly by the researcher, while latent (oval) or unobserved variables are not measured directly, but are inferred based on relationships or correlations between measured variables. Latent variables are divided into two types: endogenous variables and exogenous variables. The endogenous variable is a variable that is influenced by other variables in the model. In contrast, the exogenous variable is a variable that does not receive any effect from other variables in the model, but itself is influencing. In this study, the variables of entrepreneurial self-efficacy, skills of recognizing market opportunities, building an innovative environment, initiating investor relationships, defining core purpose, coping with challenges, developing human resources are exogenous, and the variable of strengthening the entrepreneurial intention is endogenous. According to the model, in the coefficient estimation mode, factor loads and path coefficients can be estimated. In this diagram, numbers or coefficients are divided into two categories. The first category is called measurement equations, which are the relationships between latnet and observed variables. These equations are called factor loads. The second category is structural equations, which are the relationships between latent and observed variables and are used to test hypotheses. These coefficients are called path coefficients. The numbers inside the ellipse are the coefficient of determination (R2). The coefficient of determination examines what percentage of the variance of a dependent variable is explained and covered by independent variables. For the variables of strengthening entrepreneurial intention, the coefficient of determination was equal to 0.356 and 0.466. Therefore, all variables of entrepreneurial self-efficacy, understanding market opportunities, building an innovative environment, initiating investor relationships, defining core purpose, coping with challenges, and human resource development have been able to cover as 35.6 and 46.6% of the variance of strengthening entrepreneurial intention. Therefore, the remaining 64.4% and 53.4% are related to forecast error and can include other factors affecting the strengthening of entrepreneurial intention that have not been considered in this study.

Therefore, the first criterion of the reliability of the index, i.e., the coefficient of factor loads, has a suitable fit. To examine the second and third criteria (Cronbach's alpha and composite reliability), the output results of SmartPLS 2 software for the main constructs of the model are given in Table 2.

Table 2. Index relaiblity of research model

Dimensions	Cronbach's alpha	Composite reliability (CR)
Entrepreneurial self-efficacy	0.84	0.84
Strengthening entrepreneurial intention	0.76	0.89

Higher Cronbach's alpha and composite reliability of the main research constructs from 0.7 confirms the appropriate reliability of the model index.

Convergent validity

Convergent validity is the second criterion used to fit measurement models in the PLS method. The criterion for the acceptance level of the AVE (Average variance extracted) criterion is 0.4 (Magner, Welker, & Campbell, 1996). The values for AVE of each construct are given in Table 3. As can be seen from this table, all AVE values are greater than 0.4, which confirms the appropriate convergent validity of the model.

Table 3. Results of Average variance extracted of variables to evaluate convergent validity

Variable	Entrepreneurial self-efficacy	Strengthening entrepreneurial intention
AVE	0.57	0.61

Divergent validity

Divergent validity is the third criterion for measuring the fit of the measurement model in the PLS method. Divergent validity shows the degree of correlation of a construct with its indices. Divergent validity is at an acceptable level when the amount of AVE root for each construct is greater than the variance shared between that construct and the other constructs in the model.

Table 4. Comparison matrix of AVE root and correlation coefficients of constructs

	Entrepreneurial self-efficacy	Strengthening entrepreneurial intention
Entrepreneurial self-efficacy	0.75	
Strengthening entrepreneurial intention	0.59	0.78

As can be seen from the above matrix, the values of the square root of each construct (values of the main diameter) are greater than the correlation coefficients of that construct with other constructs (values of both rows and columns), which indicates the acceptability of divergent validity of validity.

To evaluate the fit of the structural model, three methods including significance coefficients t, R2 method, and goodness of fit (GOF) were used. The most basic criterion for measuring the relationship between constructs in the structural part of the model is the t significance values. If these values exceed 1.96, it indicates the correctness of the relationship between the constructs and thus confirms the research hypotheses. The second criterion for examining the fit of the structural model of the research is the R2 criterion. This criterion indicates the effect that an independent (exogenous) variable has on a dependent (endogenous) variable. The higher the value of this criterion, the better the fit of the model. Three values of 0.19, 0.33, and 0.67 have been introduced as the criterion values for weak, medium, and strong values of R2.

The Goodness of Fit (GOF) criterion is used to evaluate the overall model, which is calculated as follows (Tenenhaus, Amato, & Esposito Vinzi, 2004):

$$GOF = \sqrt{Communalities \times R^2}$$

Values of 0.01, 0.25, and 0.36 have been suggested as weak, medium, and strong values for the goodness of fit of the general model, respectively (Wetzels, Odekerken-Schröder, & Van Oppen, 2009).

Figure 3 shows the significance coefficients in the relationship between the research constructs. As observed, all significant coefficients are greater than 1.96, which confirms the goodness of fit of the structural model, but some of the research hypotheses were not supported.

The R2 value for the endogenous variables of the model is 0.356 and 0.466, which indicates the appropriate fit of the structural model of the research. GOF values for the research model were 0.42 and 0.48, which indicates a strong overall fit of the model.

Table 5 shows the results of the research hypotheses. Accordingly, the variables of entrepreneurial self-efficacy, initiating investor relationships, and developing human resources influence students' entrepreneurial intentions.

Table 4. Summary of research hypotheses

| Effect of variable…	On variable…	Path coefficient	Sig. level	Result
Entrepreneurial self-efficacy	Entrepreneurial intention	0.597	9.143	Supported
Understanding market opportunities	Entrepreneurial intention	0.128	0.768	Rejected
building an innovative environment	Entrepreneurial intention	0.104	0.928	Rejected
initiating investor relationships	Entrepreneurial intention	0.415	3.610	Supported
defining core purpose	Entrepreneurial intention	-0.083	0.617	Rejected
coping with challenges	Entrepreneurial intention	0.056	0.651	Rejected
developing human resources	Entrepreneurial intention	0.211	2.004	Supported
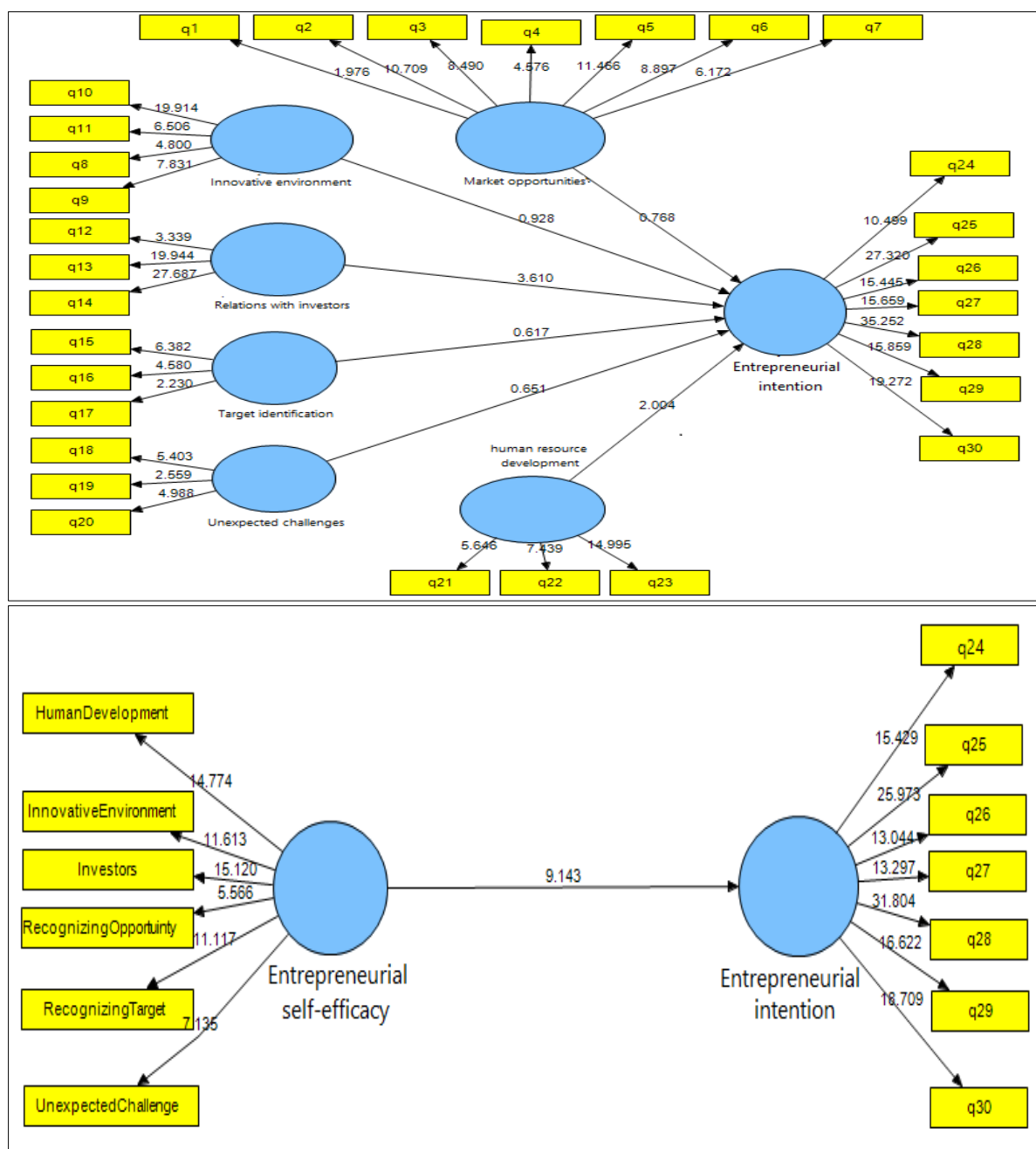
Figure 3. research model at significance coefficient mode (t-value)

Discussion

The aim of this study was to investigate the relationship between entrepreneurial self-efficacy and strengthening the entrepreneurial intention of medical library and medical information science students. There is lack of opportunities for employment and consequently unemployment in postgraduate librarianship students, like many other disciplines, which have many factors and reasons such as poor skills, inability of job-creating courses, or lack of job opportunities, and ... (Saberi, 2017;). Thus, entrepreneurship can be a solution to this issue. Entrepreneurship is important in many ways; Among other things, it leads to employment and exploitation of resources and activation of productivity, and results in economic growth and development.

One of the important results in this study is the significant relationship between entrepreneurial self-efficacy and strengthening entrepreneurial intention. A positive relationship has been found between entrepreneurial self-efficacy and entrepreneurial intention in previous studies. Findings have shown that entrepreneurs need high self-efficacy to do their job (Peterson & Arnn, 2005). Fouladi and Baghbani (2014) showed that entrepreneurial self-efficacy affects entrepreneurial intention and six dimensions of entrepreneurial entrepreneurship explain and predict 36.4% of changes in entrepreneurial intention

(Fouladi & Baghbani, 2014). In a study by Seif et al. (Seif et al., 2014), Qiao & Huang (Qiao & Hua, 2019) and Naktiyok (Naktiyok et al., 2010), a link was found between entrepreneurial self-efficacy and entrepreneurial intention. Ghiasi (2017) also showed that students' belief in self-efficacy directly affects their entrepreneurial intention. In a way, students who believe in clinical self-efficacy also have the clinical entrepreneurship intention (Gheyassi, 2017). The results of the present study are in line with the mentioned studies and indicate that there is a significant relationship between entrepreneurial self-efficacy and strengthening entrepreneurial intention.

According to the model of Davidsson (1995), the belief in self-efficacy is one of the main foundations of entrepreneurial intention (Gheyassi, 2017). Self-efficacy helps students to be more creative and innovative and to take the lead in challenging activities, giving them the feeling that they can take control of their surroundings in an optimal way and exploit it (Barani & Zarafshani, 2009; Chen, Greene, & Crick, 1998). Higher self-efficacy creates a greater sense of confidence in a person's abilities to satisfy a risky job and leads people to choose an entrepreneurial career path (Safa & Mangeli, 2015). Zhao et al. stated that people wanted to become entrepreneurs, or at least intended to shape it because they had an entrepreneurial self-efficacy trait (Zhao et al., 2005).

Therefore, all the researches show that the effect of students' entrepreneurial self-efficacy on entrepreneurial intention is positive and significant. Students with high entrepreneurial self-efficacy have higher confidence, pay more attention to entrepreneurial information, have initiative to acquire entrepreneurial knowledge and achieve entrepreneurship, and promote their participation and competence in entrepreneurship (Qiao & Hua, 2019).

According to this research, the relationship between the skills of understanding market opportunities and new product development and strengthening students' entrepreneurial intention is rejected. While in the study conducted at Allameh Tabatabai University, ta positive correlation has been reported between he variables of new product development skills and market opportunities and entrepreneurial intention (Hoseainpour, 2012).

Based on the findings of the study, there is no significant relationship between the skill of building an innovative environment and strengthening students' entrepreneurial intentions, while in Nahandi and Zarei (2012) study, which examined the entrepreneurship characteristics among Iranian university students, they concluded that entrepreneurial students have a higher capacity for creativity and innovation than non-entrepreneurial students (Badavar Nahandi & Zareii, 2012). This finding contradicts the results of the present study.

In this study, the relationship between the skill of initiating investor relationships and strengthening students' entrepreneurial intent was confirmed. This finding is in line with the findings of Fouladi and Baghbani (2012) who found a relationship between initiating investor relationships and students' entrepreneurial intention (Fouladi & Baghbani, 2014). According to the results of this study, the skill of defining core purpose does not influence strengthening students' entrepreneurial intentions. While in Fouladi and Baghbani research, a positive and significant correlation was reported between these two variables (Fouladi & Baghbani, 2014).

Examining the relationship between coping with challenges and strengthening students' entrepreneurial intention showed that the relationship between them was not significant. Nowinski (2010) in a study examined the effect of entrepreneurship education, entrepreneurial self-efficacy, and gender on students' entrepreneurial goals, and considered the skill of coping with challenges to be effective in achieving entrepreneurial goals, which contradicts the present study. (Nowiński, Haddoud, Lančarič, Egerová, & Czeglédi, 2019).

One of the hypotheses in this study is the relationship between human resource development skills and strengthening students' entrepreneurial intentions, which confirmed the existence of a positive and significant relationship between them, in line with Hosseinpour (2012) study. The ability of the eentrepreneur individual is to identify and attract people and factors that are an important part of the business, and the success or failure of the business depends on them (Hoseainpour, 2012).

Conclusion

The issue of student entrepreneurship is one of the important issues that has been considered in recent years due to the high unemployment rate of graduates. In this study, the effect of entrepreneurial self-efficacy on the entrepreneurial intention of medical library and medical information science students, like many studies, was confirmed. Therefore, it can be said that by holding entrepreneurship courses and strengthening entrepreneurial self-efficacy, the intention of entrepreneurship can be increased in students of medical library and information science. Supporting entrepreneurial behaviors in universities and areas of creativity and innovation in the university can be useful for medical library and information science students. Encouraging students to participate in related training courses and increasing the attractiveness of the courses by doing teamwork, holding symposiums and meetings with entrepreneurs, and due to the lower efficiency of traditional teaching methods, using the experiences of successful people by visiting the workplace can be very helpful.

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Conflict of Interests

The authors declare that they have no competing interests.

Ethical Statement

This study has been ethically approved by the Ethics Committee of Hamadan University of Medical Sciences with code number: IR.UMSHA.REC.1397.659.

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