Journal of

Organisational Studies and Innovation

Vol. 6, no.1, Spring, 2019

The Mediating Role of Self-efficacy in the Relationship between Human Capital and Employee Performance (Case Study University of Mohaghegh Ardabili)

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Abstract: Today, investigating manpower performance and identifying the factors influencing it has become one of the most significant priorities in human resource management research. Human capital and self-efficacy, as emerging organizational concepts, can play an important role in improving staff management. The objective of the present study is to investigate the intermediary role of self-efficacy in the relationship between human capital and staff performance at the University of Mohaghegh Ardabili, Ardabil city, Iran. The study follows a descriptive-correlational procedure. The population of this research consists of all employees who work in departments, schools and various sections of University of Mohaghegh Ardabili whose total number is equal to 330. Sample size in this research considered to be 200 subjects. In order to select the sample members, stratified random sampling method was used. Data were collected through standard questionnaires and analyzed using correlation and regression procedures and the SPSS software program. Results indicate the significant positive effect of human capital and self-efficacy on staff performance. However, the effect of human capital on self-efficacy was not confirmed. Also, it was demonstrated that self-efficacy plays no mediating role in the relationship between human capital and staff performance, and human capital has no effect on self-efficacy.

Keywords: *Human Capital, Staff Performance, Self-efficacy, University of Mohaghegh Ardabili*

Introduction

Performance is the outcome of an individual's activities in fulfilling assigned duties within a given time. Put otherwise, it denotes achieving or surpassing social goals or responsibilities from the perspective of the supervisor (Memarzadeh Tehran et al., 2014). An individual's performance is a yardstick of the degree of his/her success in his/her career and is usually determined based upon the individual's output (e.g. the amount of sales or production) or the assessment of the success rate of his/her behavior in comparison with organizational expectations. Human performance is defined as the result of a series of actions aimed at achieving a goal based upon a particular standard. Actions might include visible behavior or invisible mental processing (e.g. problem solving, decision making, planning, or reasoning). When it comes to performance, the result achieved comes to the fore. Performance is defined by some as the process of working and the manner of performing tasks (Ebrahimpour, 2013). In the framework of the comprehensive plan of staff performance evaluation, performance

refers to both results and process. That is, in evaluating how work is carried out, the process and the results are together considered and judged as the performance (Soltani, 2003).
Human capital, as the most prominent form of intangible assets, includes the knowledge reservoir of members of an organization incorporating the competencies and attitudes of the employees. In the third millennium, skilled and efficient human resources are deemed one of the most important instruments to achieve organizational goals, as they play an important role in increasing and decreasing organizational productivity. That is, if an organization enjoys the highest amount of capital and the most sophisticated technology and facilities but lacks productive and motivated manpower as well as the required skills and knowledge for interaction inside and outside the organization, it is bound to fail to achieve its objectives (Javanmard, 2010). Manpower is an important factor in organizations in terms of the power of thinking and creativity, since any productivity, change, and improvement in technical and organizational systems and processes is carried out by humans. Exploitation of the intellectual capacity and capabilities (latent capital) of the employees necessitates the establishment of structures which are able to direct the capabilities of the employees toward the current and future goals of the organization (Yaghubi et al., 2009). Hence, aware of the importance of this capital, human resource managers can provide a competitive edge for the future of their organization. They can improve organizational, group, and individual performance by training the employees, creating a dynamic organization, and providing the employees with opportunities for growth and development (Shamei & Allama, 2011).

According to Bandura's cognitive-social theory, personal factors (including beliefs, expectations, attitudes, knowledge, strategies, etc.), environmental events (physical and social), and individual behaviors (practical and verbal) mutually influence each other. Self-efficacy is one of the basic concepts in Bandura's theory. Pagares and Valiant point out that self-efficacy and its related findings have application in various areas. Self-efficacy is an individual's faith in his/her ability to organize and effectively carry out assignments in a specific area, which leads to the achievement of specific goals (Kavei et al., 2014). Bandura also believes that self-efficacy is a constructive power which effectively organizes the cognitive, social, emotional, and behavioral skills of a person in pursuit of various goals. He maintains that individuals' previous knowledge, skills, and achievements are not an appropriate predictor of their future performance; rather, it is individuals' faith in their ability to perform the tasks which influences their performance. There is a clear difference between having various skills and the ability to combine skills in appropriate ways to perform tasks in different situations (Asarzadeh et al., 2011).
In view of the importance of manpower in universities and its role in the growth and realization of organizational goals, addressing employee productivity is one of the most important concerns of today's managers. This issue is of great importance to the University of Mohaghegh Ardabili as a center for educating skilled and expert manpower. Human capital and its development are one of the concerns of this university, since enjoyment of the highest amount of capital and the most advanced technology and facilities shall prove insufficient to realize the defined goals in the absence of productive, motivated manpower as well as the necessary knowledge and skills for establishing interaction inside and outside the university. Hence, in order to improve staff performance, appropriate solutions need to be sought. Therefore, the present study seeks to investigate the intermediary role of self-efficacy in the relationship between human capital and staff performance at the University of Mohaghegh Ardabili and to answer the following questions: In what condition is self-efficacy at the university and what is its relationship with human capital and staff performance? Afterwards, based on the answers to these questions, attempts are made to answer the question as to what are the ways to help employees improve their self-efficacy. In general, the main questions of the present study are

how to improve staff efficiency at the university with regard to human capital, and how to ultimately improve staff performance.

Literature Review

Staff performance

The term "performance" denotes a state or quality of functioning. Organizational performance is a general construct referring to how organizational operations are performed. The most famous definition of performance was offered by Neely et al. (2002:8): "the process of determining the quality of effectiveness and efficiency of previous measures." According to this definition, performance is divided into two categories: 1) efficiency, which accounts for how the organization uses the resources in manufacturing products or rendering services, i.e. the relationship between the genuine, optimal mixture of inputs for generating certain outputs, and 2) effectiveness, which account for the degree of achievement of organizational goals (Rahnavard, 2008: 79). Performance can be otherwise defined as the acceptability of the results to the customers, both inside and outside the organization, who receive the products, services, information, and functional decisions or events such as supplies and competitions (Rezaian, 2011). According to Foot and Hook, staff evaluation includes a formal process to measure and provide feedback on employees' characteristics and task fulfillment behavior and to identify their potential talents so as to realize them in the future. Warder and Davis argue that performance appraisal is a process whereby employees' performance is measured, which, if conducted properly, benefits employees, supervisors, managers, and, ultimately, the organization. Cascio defines performance appraisal as a systematic description of the strengths and weaknesses of the performance of an individual or group in relation to the execution of assigned duties (Raeesi Sadati, 2014: 24). Noe et al. view performance as a result of personal characteristics, skills, etc., which are converted into tangible results through employee behavior. In fact, employees can only demonstrate their behavior if they enjoy the knowledge, skills, abilities, and other essential features to perform an occupation. Performance is a main issue in all organizational analyses, making it difficult to conceive of an organization without performance appraisal (Raeesi Sadati, 2014; Raeesi Sadati, 2014; Rahnavard, 2008). They point out that paying attention to organization performance results in the development of organizational theory, and that performance is the main issue in the practical environment as well, hence it has appealed to researchers working in the fields of organization, management, and political science as well as economists and executive directors. Performance appraisal increases system intelligence, motivates individuals toward desirable behavior, and serves as the main component of organizational policy development and implementation. It provides the necessary feedback in the following areas: Tracking progress toward the defined objectives helps to ascertain whether the developed policies have been successfully implemented. Measuring the expected organizational results as well as employee and customer satisfaction determines whether the policies have been correctly formulated. Performance appraisal provides the ground for the identification of the areas requiring greater attention from the management and helps to identify the opportunities and constraints. It provides information for managers in managerial decisions, since a great deal of information required for management decision-making is provided through measuring and evaluating the performance system (Raesi Sadati, 2013: 28). In addition, support and performance support systems provide incentive mechanisms which enhance organizational learning and knowledge in the following manners: providing organizational growth indicators and finding ways to increase the realization of staff talents. In order to have an efficient performance, an executive system requires learning and function measurement, which promotes organizational progress and identifies organizational growth indicators, effective improvement, and continuous progress. The measurement system is able to identify individuals and teams, measure the employees' goodwill in pursuit of the

objectives of the executive system, and promote the employees' trust and competence (Samavati and Nejat, 2009: 26).

Human capital

Skills, ability, and specialized knowledge serve as property and wealth at individuals' disposal. Human capital can be deemed the greatest capital, as it provides the ground for the development of abilities and skills in humans and yields the highest returns. Physical and material capitals are depreciable and their utilization leads to their increased depreciation and decreased generation power. In addition, adapting physical assets to new and changing conditions is very difficult, whereas greater use of human capital promotes its skills and performance quality. Besides, human capital provides more opportunities for investment under various circumstances (Javanmard and Mohammadian, 2010: 68). Put simply, human capital refers to anything other than physical capital, such as property, equipment, and financial capital. Over the past century, the share of physical capital in the GDP in the developed countries experienced a sharp drop, while the share of human capital increased. Increased share of human capital in the GDP of developed country led to the emergence of the concept of knowledge economy. Different forms of capital are considered input entering the process of production of goods and services. However, human capital cannot be regarded as simple input since it play a more complex role in the process of manufacturing goods or providing services. Human capital enjoys an intrinsic ability to transform itself and to change or adjust the input, a characteristic which guarantees permanent economic dynamism. Human capital refers to knowledge, education, professional competency, and psychometric evaluations (Carthik & Basak, 2006: 382).

Self-efficacy

Self-efficacy is a person's belief in his/her ability to perform an action under a certain circumstance. Performance in line with or beyond individual norms maintains or increases self-efficacy, while performance below individual norms reduces self-efficacy. The sense of self-efficacy influences many aspects of life, such as goal selection, decision-making, amount of effort, and the degree of perseverance, stability, and confrontation with challenging issues (Judy, 2013: 92). The social-cognitive viewpoint adopts a positive view toward agency in the formation and transformation of effective beliefs, in which individuals are in charge of producing experiences and shaping events. Of all human agency mechanisms, none is more effective than personal efficiency beliefs, for this belief forms the very basis of human agency (Bakhshayee, 2007). Considering human evolution, adaptability, and transformation, Bandura identified three types of effective factors: 1) Personal agency, which is a function of individual behavior. Based on this factor, humans are partly the product of their environment, but they also generate their environment by choosing, creating, and changing environmental conditions. This ability enables them to influence the sequence of events and contribute to the shaping of their lives. (2) Proxy agency: Effects are exerted through the chooser. In this case, individuals primarily affect the surrounding human environment in order to achieve their goals. In fact, in most activities, people do not have direct control over social conditions and legal activities which influence their lives; therefore, they tackle their problems through another person (proxy). In this category of agency, which serves as a kind of social mediation, people seek their desired outcome through certain effective individual(s). 3) The collective influential agency: This is the third category of agency, in which individuals act in groups to shape their future. It is developed by performance interdependency between individuals. The concept of collective agency stems from shared faith in the effectiveness of collective action. Collective efficacy beliefs foster group commitment and motivation in pursuit of goals, resilience to disasters, and realization of performance (Asarzadeh et al., 2011: 104). Organizational agency is another category, which refers to the targeted activities of the organization in pursuit of the training goals as well as the organizational differences in goal setting. On the other hand,

Goddard et al. (2000) suggested organizational learning for a better understanding of the collective efficacy model. Organizations learn in the same manner as individuals do, and the idea of organizational learning is based upon individual cognitive learning activity. In other words, organizations use processes which are identical to the learning processes of individuals, and organizational performance is dependent upon knowledge, vicarious learning, self-regulation, and individual self-reflection of organization members (Asarzadeh et al., 2011: 105). Self-efficacious individuals choose more challenging tasks, set more ambitious goals, and exhibit greater adherence to their goals. Individuals with a high sense of self-efficacy have faith in their abilities in every activity and are more likely to strive hard for success. They demonstrate great perseverance even in the face of obstacles and negative consequences and are able to overcome failure and hopelessness and pursue their goals more proficiently. They consider failure not as an end result but simply as a temporary retreat. They maintain a confident attitude in the face of stressful situations. They are capable of controlling stress prior to its functioning and exhibit no vulnerability to stress and depression (Rahbaridoust, 2014: 17). Individuals with high self-efficacy are aware of their strengths and weaknesses. They set realistic goals, have reasonable expectations of themselves, and are aware of the benefits of using problem-focused coping as compared to emotion-focused coping. Individuals with high self-efficacy are highly capable and sociable, have high self-esteem, and maintain more control over their lives (Mohammadkhani, 2002). Such individuals enjoy mental health, face rather than avoid challenging tasks, are highly commitment to their goals, and attribute their failure mostly to inappropriate efforts and incomplete, albeit compensable, knowledge and skills. In the face of problems, they experience calm rather than fear and anxiety, have a broad view of problem-solving methods, quickly regain their weakened confidence after failure, engage more profoundly and enthusiastically in their tasks, are self-assured – albeit flexible – about their solutions (Rahbaridoust, 2014: 18).

Empirical Background

Hunagund and Hangal (2014) in a study maintained that self-efficacy is a factor which can predict happiness and can be regarded as one of the intentional activities at the cognitive level based upon a positive attitude. They explored the relationship between self-efficacy and happiness in young individuals by giving specific attention to their age and gender. They used two questionnaires of self-efficacy and happiness scales. The results demonstrated a significant positive relationship between self-efficacy and happiness. Hassannia et al. (2014) investigated the structural relationship of emotional intelligence and happiness with the mediation of self-efficacy and self-regulation using a causal model. In their study, 356 undergraduate students from various universities in the city of Tehran, Iran, were selected through one-stage cluster random sampling. Four valid scales, i.e. the Oxford Happiness Questionnaire, Sherer's Self-efficacy Scale, the Emotional Intelligence Scale Sharing (EISSH), and Magno's Academic Self-Regulation Learning scale (ASRL-S), were used to measure variables in the model. Data were analyzed using path analysis (structural equations modeling), and the results demonstrated relative fitness of the model using the research data, indicating that emotional intelligence, self-efficacy, and academic self-regulation directly predict happiness. Also, emotional intelligence, mediated by self-efficacy and academic self-regulation, predicts happiness indirectly and more strongly than in the direct case. In addition, the direct path of emotional intelligence to self-efficacy and that of emotional intelligence to academic self-regulation were significant as well. Shoja'afrin and Mahmoudpour (2014) examined the impact of technology and human capital management on organizational performance. Their study was based upon a descriptive library survey, in which, in order to convert human resources to human capital, the effect of technology management as well as research and development on organization performance was discussed using Porter's analysis. Kocabacak et al. (2013) studied the relationship between HRM functions and organizational commitment. The study

was aimed at analyzing the relationships between HRM practices and organizational commitment in companies operating in the province of Konya, Turkey. From various previous studies, they adopted 56 HRM practice items, including manufacturing and human resources fit, behavior and attitude, group activities, interaction facilitation, incentives to achieve objectives, training on job skills, training on various functions, communication of strategy, and feedback on performance. They used Pfeffer (1998)'s scale of human resource management practices and Mowday & Steers (1979)'s organizational commitment scale, Ahmad, & Schroeder (2003) version. Data were analyzed using descriptive statistics to project the respondents' profiles and the general patterns of the variations in the HRM variables and organizational commitment. Statistic regression analysis, correlations, and multiple regressions were used to examine the relationship between the variables involved in the study. Analysis of the findings drawn from top, middle, and first-tier managers (n=169) except for "training on job skills" demonstrated a strong and statistically positive significant relationship between other HRM variables and organizational commitment. Confirmed by the results of previous studies, the findings provided support for the variables concerned. Kia et al. (2013) explored the relationship between intellectual capital and organizational entrepreneurship among the employees of the Islamic Azad University of Semnan, Iran. Data were collected using a questionnaire the reliability of which was validated through Cronbach's alpha. Mehraban (2014) adopted a correlational methodology to explore the relationship between business intelligence and organizational performance of employees. In that study, data were collected using a business intelligence questionnaire with a validity coefficient of 83 and an organizational performance questionnaire with a validity coefficient of 88. The SPSS software program was used for data analysis at the two levels of descriptive and inferential statistics. The findings revealed a significant relationship between all components of business intelligence and organizational performance. Bentes et al. (2012) conducted a multi-dimensional analysis of organizational performance. They presented the case of a Brazilian telecom company to illustrate and critically analyze the integration of two methodologies: Balanced Scorecard (BSC) – a multiple perspective framework for performance assessment – and Analytic Hierarchy Process (AHP) – a decision-making tool to prioritize multiple performance perspectives and indicators and to generate a unified metric for the ranking of alternatives (in this case, the performance of functional units). They demonstrated that an iterative and interactive process coupled with an agreement-building approach among managers generates priority values for performance dimensions and respective indicators. Dawson (2012) examined human capital investment in family businesses.The study made three key contributions. First, it raised awareness regarding human capital in family businesses by identifying the underlying dimensions of human capital, involving not only knowledge, skills and abilities, but also individual attitudes and motivation. Second, the study put forth the conditions under which family businesses can achieve and sustain over time an alignment of interests between individual human capital and organizational goals. These conditions vary depending on whether the external environment is static or dynamic. Third, similar to strategic management scholars, the paper focused on the individual level as well as on the (predominant) group and organizational level constructs. Razmi and Nemati (2011) in a study examined the mediating role of self-efficacy in the relationship of job stress to mental health and job satisfaction among employees of Bank Saderat of the city of Tabriz, Iran. In that study, 242 employees of Bank Saderat were selected through cluster random sampling and evaluated by means of demographic, general health -28, OSIPOW job stress, and JSS questionnaires as well as Sherer et al.'s general self-efficacy scale. Data were analyzed using Pearson correlation coefficient as well as simultaneous and hierarchical multiple correlations. It was concluded that self-efficacy influences the relationship of job stress to mental health and job satisfaction.

The Conceptual Model and Hypotheses Development

Human capital is defined as individual knowledge, skills, abilities, and experiences in the employees of an organization used for creating value and solving organizational issues (Nazem and Matlaby, 2011). Self-efficacy is one of the important structures in Bandura's cognitive social theory and refers to one's judgment about one's ability to perform a task or work successfully. On a more general level, self-efficacy means one's confidence and belief in his abilities to control his thoughts, feelings, activities, and performance in stressful situations (Hassannia et al., 2014). The concept of performance goes beyond data or outputs and refers to a set of job-related behaviors that individuals show (Ebrahimpour, 2013).

Based on these explanations, the research hypotheses will be as follows:

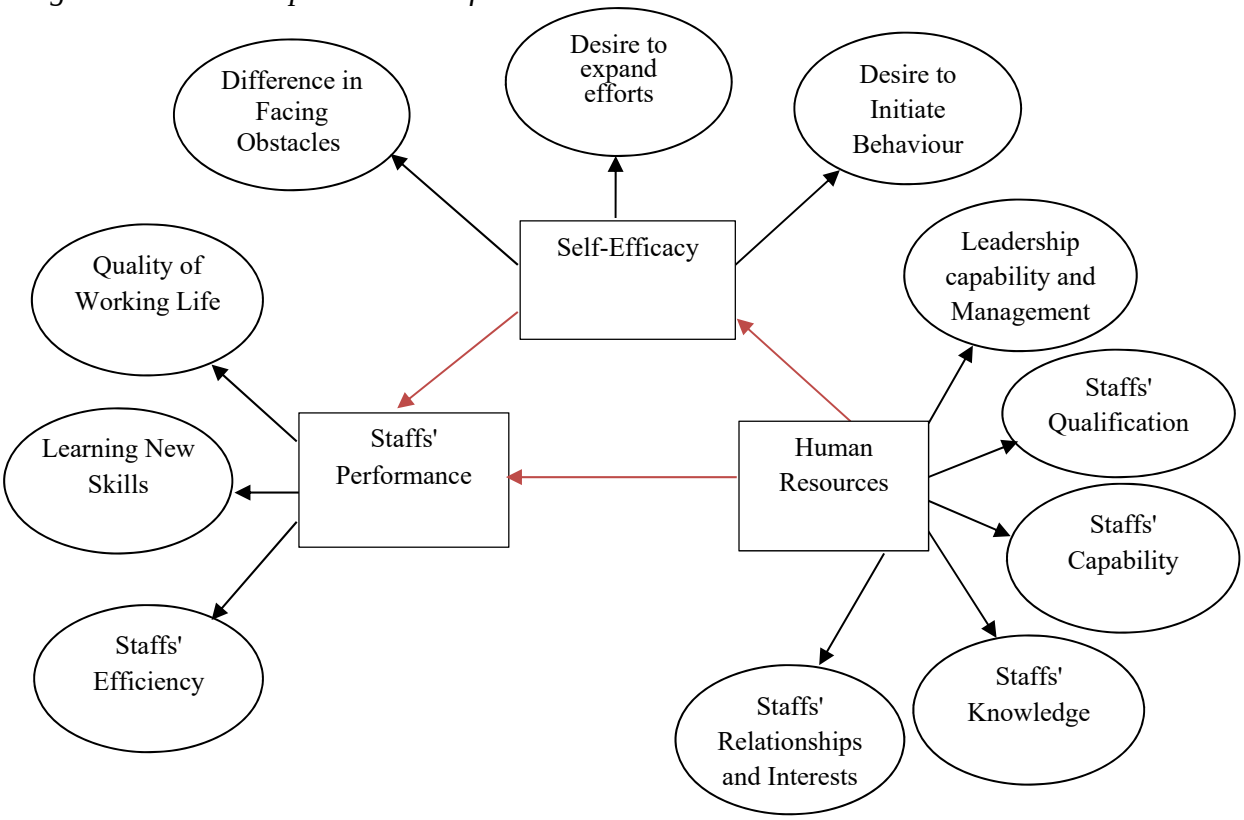
H_1: Human capital influences self-efficacy.

H_2: Self-efficacy influences employee performance.

H_3: Human capital influences employee performance.

H_4: Self-efficacy has a mediating role in the relationship between human capital and employee performance.

Figure 1: The Conceptual Model of the Research



Methodology

Sample size and sampling method

The population of this research consists of all employees who work in departments, schools and various sections of Mohaghegh Ardabili University whose total number is equal to 330. Researchers believe that in structural equation modeling, in order to be sure about the validity and reliability of the results, at least 200 questionnaires should be completed. Accordingly, the sample size in this research considered to be 200 subjects. In order to select the sample members, stratified random sampling method was used and the details of which are shown in Table 1.

Table 1: Stratified random sampling method

University unit	*The number of population members*	*The percent of population members*	*The number of sample members*
Faculty of Humanities	11	3.33	7
Faculty of Basic Sciences	15	4.54	9
Faculty of Education and Psychology	9	2.72	5
Faculty of Mathematics	11	3.33	7
Faculty of Engineering	21	6.36	13
Faculty of Agriculture	15	4.54	9
Faculty of Agriculture and Natural Resources of Ardebil and Moghan	32	9.70	19
Namin Faculty of Literature	19	5.76	11
Security Department	27	8.18	16
Administration Department	16	4.85	16
Department of Education and Postgraduate Education	21	6.36	13
Department of Research and Technology	23	6.97	14
Department of Cultural and Social Affairs	12	3.67	7
Department of Administration and Financial Affairs	59	17.88	36
Department of Students	39	11.82	24
Total	330	100	200

Using stratified sampling method, the frequency of subgroups in the sample was determined to be the same as the population. The sample gender ratio was determined as shown in Table 2.

Table 2: The sample gender ratio

Classes	*Gender*		*Total*
Statistical index	*Male*	*Female*	
The frequency of each class	60	270	330
The ratio of each class to the population	19%	81%	1
The ratio of the sample to the population	36	158	194

As shown in Table 2, out of the total number of 330 members of the population, 60 were men (19%) and 270 were women (81%) that through calculating in the statistical formula, the number of them in the sample (n=194) was determined to be 36 men and 158 women.

Variables m*easurement

After determining the hypotheses, a standard questionnaire was used to measure the variables in the field. To test the research hypotheses, three questionnaires were used in this research that are shown in Table 3.

Table 3: Composition of the research questionnaire

Variable	*Dimensions*	*Number of questions*	*Resource*
Human Capital	1. Leadership and knowledge of managers	3	Bontis Human Capital Questionnaire
	2. Employee competency	2	
	3. Employee capability	3	
	4. Job-related knowledge of employees	2	
	5. Employee interest and communication	2	

Self-efficacy	1. Tendency to initiate behavior	3	Sherer self-efficacy questionnaire
	2. Tendency to expand one's efforts to complete the task	8	
	3. Being different in overcoming the obstacles	6	
Employee performance	1. Working life quality	7	Moghimi & Ramezani Employees Performance Evaluation Questionnaire
	2. Learning new skills	6	
	3. Employee productivity	7	

In order to be sure about the accuracy and precision of the questionnaire, its validity and reliability should be evaluated. By validity it means that the measuring tool can measure the intended characteristic or feature; validity is important as inappropriate and inadequate measurements can make and scientific research worthless and invalid (Rasouli, 2013: 46). In the present research, given the standardization of the questionnaire and with regard to the nature and objectives of the research, the validity of the questionnaire was evaluated through asking the opinions of experts and professors, and after being approved and applying the necessary corrections, its feasibility was confirmed. Cronbach's alpha coefficient was also used to measure reliability. The closer this coefficient to one, the greater will be the reliability of the questionnaire. Calculations showed that Cronbach's alpha coefficient for the whole questionnaire was equal to 0.997, which is quite close to one and indicates that the questionnaire has a considerable reliability.

Data analysis methods

In this research, statistical methods have been used in both descriptive and inferential statistical parts. In order to provide concise but comprehensive information, researchers generally use statistical methods proposed in descriptive statistics (Rasouli, 2013: 49). For data analysis, first, descriptive statistics technique has been used to describe the demographic characteristics of the respondents. In this regard, frequency, percentage, mean, standard deviation and cumulative percent of the people in the target population along with the corresponding graphs are presented. Moreover, in many cases, using the obtained statistics which are the results of the evaluation of the selected samples, decision-makers infer certain characteristics of the population. In this research, for inferential analysis of data and in order to use inferential statistics, inferential tests such as correlation coefficient are used based on the form of hypotheses, the level of variables measurement, and the research method. Additionally, in order to explain the dependent variable and determine the variance percentage of each of the independent variables, Multivariate regression will be used. Data analysis is done using SPSS software version 20.

Results

Analyzing the participants' demographic characteristics of are represented in Table 4.

Table 4: The Participants' Demographic Characteristics

Demographic characteristics	***Classes***	***No.***	***Percent***
Gender	Male	157	80.9
	Female	37	19.1
Marital status	Married	162	83.5
	Single	32	16.5

Age	Younger than 25 years old	8	4.1
	26-35 years old	84	43.3
	36-45 years old	86	44.3
	46-60 years old	16	8.2
Education	Diploma and lower degrees	14	7.3
	Associate diploma	20	10.4
	BA/BSc	107	55.4
	MA/MSc and higher degrees	52	26.9
Work experience	Less than 10 years	77	39.7
	11-20 year	86	44.3
	21-30 year	25	12.9
Employment status	Official employment	87	5.3
	contractual employment	8	4.2
	Temporary employment	84	43.8
	Other	13	6.8

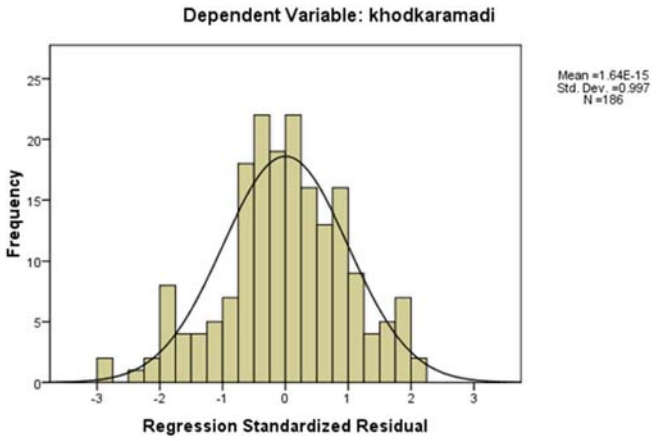
In the following sections, the research hypotheses are to be tested. According to the first hypothesis, human capital is effective on self-efficacy. Before testing this hypothesis, presumptions of the regression model is investigated. In table 5, the results obtained from testing the first hypothesis based on regression estimation with ordinary least squares (OLS) are illustrated.

Table 5: Results of Testing the First Hypothesis

Model	***Beta coefficient***	***Student's t-statistic (sig.)***	***Variance inflation index***
Fixed coefficient	3.693	18.954 (0.000)	-
Human capital	0.052	0.713 (0.477)	1.000
F-statistic (sig.)		0.508 (0.477)	
Adjusted coefficient of determination	-0.003	Durbin-Watson	1.868

Before analyzing the results obtained from the linear regression, firstly classical assumptions of regression for the first hypothesis should be investigated. The results obtained from investigating the error normality assumption of are indicated in Figure 2.

Figure 2.: Testing the Assumption of Error Normality in the Regression Model of the First Hypothesis



Comparing the frequency distribution of errors and normal distribution diagrams, it can observed that the distribution of errors is approximately normal. In addition, the mean value is close to zero and SD is close to 1.

In addition, the results related to investigating autocorrelation and collinearity assumptions are shown in table 4. The value of variance inflation index is close to 1 which indicates the lack of the problem of collinearity. In addition, in relation with the autocorrelation assumption, the Durbin-Watson value is as 1.868 in the interval 1.5-2.5. It indicates the absence of the autocorrelation problem.

Thus with regard to the assumptions of recession, the first hypothesis is investigated based on the results of estimation of the regression model. With regard to the results of table 4, human capital has no significant effect on self-efficacy. T-statistic as 0.713 is smaller than the table value. In addition, the significance level is as 0.477 which is bigger than the table significance level as 0.05. As a result, the null hypothesis is confirmed and the effect of human capital on self-efficacy is rejected.

Moreover, the results obtained from the F-test for investigating total validity of the regression model are illustrated in table 5. Total validity of the regression model, the F-value was obtained as 0.508 which is smaller than the table value. In addition, the significance level was obtained as 0.477 which is bigger than the table significance level as 0.05. Therefore, it can be said that the regression model is not statistically significant. In addition, the coefficient of determination with the value as -0.003 indicates that no significant correlation between human capital and self-efficacy can be found.

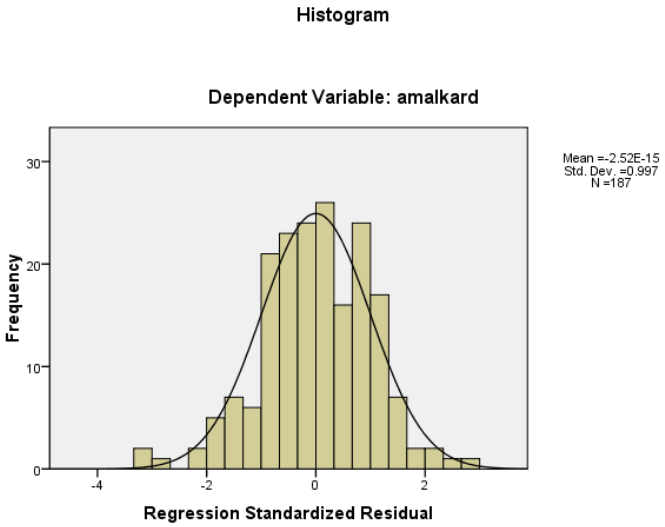
The results of testing the second hypothesis based on regression estimation with ordinary least squares (OLS) are illustrated in table 6.

Table 6: Results of testing the second hypothesis

Model	***Beta coefficient***	***Student's t-statistic (sig.)***	***Variance inflation index***
Fixed coefficient	2.512	6.417 (0.000)	-
Self-efficacy	0.158	2.183 (0.03)	1.000
f-statistic (sig.)		4.763 (0.03)	
Adjusted coefficient of determination	-0.02	Durbin-Watson	1.741

Before analyzing the results obtained from the linear regression, firstly classical assumptions of regression for the second hypothesis should be investigated. The results obtained from investigating the error normality assumption of are indicated in Figure 3.

Figure 3: Testing the Assumption of Error Normality in the Regression Model of the Second Hypothesis



Comparing the frequency distribution of errors and normal distribution diagrams, it can observed that the distribution of errors is approximately normal. In addition, the mean value is close to zero and SD is close to 1.

In addition, the results related to investigating autocorrelation and collinearity assumptions are shown in table 5. The value of variance inflation index is close to 1 which indicates the absence of the problem of collinearity. In addition, in relation with the autocorrelation assumption, the Durbin-Watson value is as 1.741 in the interval 1.5-2.5. It indicates the absence of the autocorrelation problem.

Thus with regard to the assumptions of regression, the first hypothesis is investigated based on the results of estimation of the regression model. With regard to the results of table 5, self-efficacy has a significant effect on employee performance. T-statistic as 2.183 is smaller than the table value. In addition, the significance level is as 0.030 which is smaller than the table significance level as 0.05. As a result, the null hypothesis is rejected and the effect of self-efficacy on employee performance is confirmed. Moreover, the value of self-efficacy as -.158 indicates that self-efficacy has a positive effect on employee performance.

Moreover, the results obtained from the F-test for investigating total validity of the regression model are illustrated in table 7. Total validity of the regression model, the F-value was obtained as 4.763 which is bigger than the table value. In addition, the significance level was obtained as 0.030 which is smaller than the table significance level as 0.05.

Therefore, it can be said that the regression model is not statistically significant. In addition, the coefficient of determination with the value as 0.020 indicates that 2% of the variations in employee performance can be explained via independent and control variables.

The results of testing the third hypothesis based on regression estimation with ordinary least squares (OLS) are illustrated in table 7.

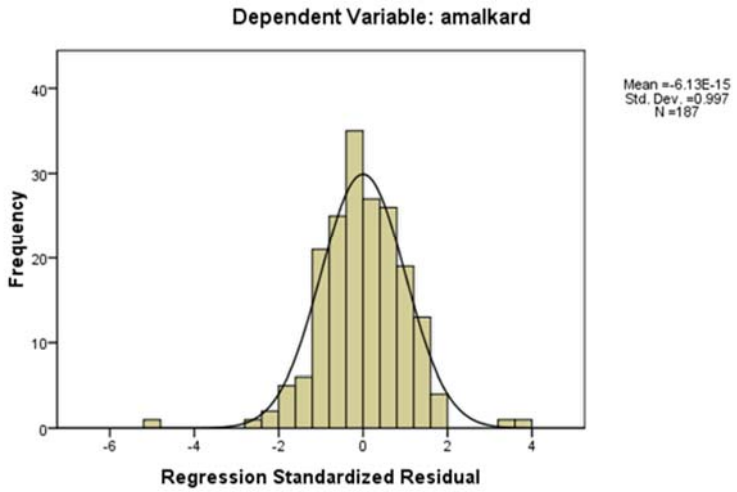
Table 7: Results of Testing the Third Hypothesis

Model	*Beta coefficient*	*Student's t-statistic (sig.)*	*Variance inflation index*
Fixed coefficient	1.18	6.417 (0.000)	-

Human capital	0.597	2.183 (0.03)	1.000
F-statistic (sig.)		102.501 (0.000)	
Adjusted coefficient of determination	0.353	Durbin-Watson	1.686

Before analyzing the results obtained from the linear regression, firstly classical assumptions of regression for the third hypothesis should be investigated. The results obtained from investigating the error normality assumption of are indicated in figure 4.

Figure 4: Testing the Assumption of Error Normality in the Regression Model of the Third Hypothesis



Comparing the frequency distribution of errors and normal distribution diagrams, it can observed that the distribution of errors is approximately normal. In addition, the mean value is close to zero and SD is close to 1.

In addition, the results related to investigating autocorrelation and collinearity assumptions are shown in table 5. The value of tolerance and variance inflation index is close to 1 which indicates the absence of the problem of collinearity. In addition, in relation with the autocorrelation assumption, the Durbin-Watson value is as 1.686 in the interval 1.5-2.5. It indicates the absence of the autocorrelation problem.

Thus with regard to the assumptions of regression, the first hypothesis is investigated based on the results of estimation of the regression model. With regard to the results of table 6, self-efficacy has a significant effect on employee performance. T-statistic as 10.124 is bigger than the table value. In addition, the significance level is as 0.000 which is smaller than the table significance level as 0.05. As a result, the null hypothesis is rejected and the effect of human capital on employee performance is confirmed. Moreover, the value of self-efficacy as 0.597 indicates that human capital has a positive effect on employee performance.

Moreover, the results obtained from the F-test for investigating total validity of the regression model are illustrated in table 9. Total validity of the regression model, the F-value was obtained as 102.501 which is bigger than the table value. In addition, the significance level was obtained as 0.000 which is smaller than the table significance level as 0.05. Therefore, it can be said that the regression model is statistically significant. In addition, the coefficient of determination with the value as 0.353 indicates that 35.3% of the variations in employee performance can be explained via independent and control variables.

According to the fourth hypothesis, self-efficacy has a mediating role in the relationship between human capital and employee performance. To investigate the mediating role of self-efficacy, a set of regression equations were estimated based on studies conducted by Jude and Kenny (1981), Baron and Kenny (1986), McArthur (2000), and James et al. (2006). With accepting three assumptions for the presence of the mediating role of self-efficacy, the fourth hypothesis was investigated:

1. The first stage: Regressioning the mediator, self-efficacy, on the independent variable in such a way that the mediator acts as a dependent variable and the main independent variable act as the independent variable.
2. The Second stage: Regressioning the main dependent variable on the main independent variable.
3. The third stage: Concurrently regressioning the main dependent variable on the main independent variable and mediator in such a way that the main dependent variable acts as the dependent variable and the two main independent variable and mediator act concurrently as independent variables.

The three regressioning processes should be significant in order that self-efficacy can act as a mediator between human capital and employee performance. This state is called partial mediation. But if self-efficacy acts as a significant mediator and human capital is insignificant, this state is called complete mediation. Finally, in case when the mentioned conditions are not available, the mediating role is meaningless.

The first stage has been tested in investigating the first hypothesis and the results have indicated its rejection. The second stage has been probed in investigating the third hypothesis and it has been confirmed. Therefore, in this stage, only the analysis of the concurrent effect of the two mediator and independent variable on employee performance is investigated. The results of testing the fourth hypothesis are presented in table 8.

Table 8: Results of testing the fourth hypothesis

		Stage 1	***Stage 2***	***Stage 3***
Dependent variable / ***Independent variable***		***Self-efficacy***	***Employee performance***	***Employee performance***
Fixed coefficient	**B**	**3.693	**1.180	0.566
	t	18.954	5.41	1.513
Human capital	**Beta**	0.52	**0.597	**0.591
	t	0.713	10.124	10.032
Self-efficacy	**Beta**			*0.118
	t			2.005
F-statistic		0.508	102.501	54.663
Sig.		0.477	0.000	0.000

* & ** represent that the value is significant at 0.05 and 0.01

Considering the results shown in table 8, human capital and self-efficacy have significant effects on employee performance. T-statistic values were obtained as 10.032 and 2.005 respectively. Those values are smaller than the table value. In addition, the significance level

values were 0.000 and 0.046 which were smaller than 0.05. As a result, it can be concluded that the null hypothesis is rejected and the hypothesis assuming the significant effect of human capital and self-efficacy on employee performance is confirmed.

In addition, the results of F-statistic for investigating the total validity of the regression model and coefficient of determination of the model are represented in table 7. According to the results of the table regarding the total validity of the regression model, the F-value is 53.663 which is bigger than the table value. In addition, the significance level is 0.000 which is smaller than 0.05. Therefore, it can be said that the regression model is statistically significant. The coefficient of determination is 0.364 which indicates that 36.4% of the variations of employee performance can be explained via independent variables of human capital and self-efficacy.

Given the three stages, therefore, it has no mediating role and the fourth hypothesis is rejected.

Conclusion, Recommendations, and Limitations

Nowadays, evaluation of performance of human forces and identification of factors affecting each of them are the most important priorities in HRM research. The literature indicates that human capital and self-efficacy are emerging organizational concepts which can have fundamental roles in improving employee performance. The present study tried to investigated the effect of human capital and self-efficacy on employee performance and probe the mediating role of self-efficacy in the relationship between human capital and employee performance. For this purpose, the staff working in University of Mohaghegh Ardabili were selected as participants and the data were collected via a standard questionnaire. Then the data were analyzed via correlation and regression techniques. The results indicated that human capital has no significant effect on self-efficacy and the effect of self-efficacy on employee performance is positive and significant. In addition, the effect of human capital on employee performance is positive and significant as well. Finally, in relation with self-efficacy and regarding the theoretical framework, the mediating role of self-efficacy in the relationship between human capital and employee performance was not confirmed.

According to the results, it is recommended that researchers investigate the role of self-efficacy in discussions related to organizational behavior and human resources in other Iranian universities as well as private and public organizations because the current literature in this subject are mainly based on studies conducted in other countries. Thus it is suggested that this emerging organizational concept and its related factors be investigated in other organizations with regard to the organizational culture and the value system governing domestic firms and companies as well as considering environmental, cultural, and behavioural conditions in organization. Moreover, it is recommended that studies should be conducted to investigate other factors affecting self-efficacy and probable consequences caused by them. According to the results of the present study, self-efficacy is not effective on employee performance and consequently, researchers can investigate the reasons for the absence of the effect of self-efficacy on employee performance more accurately.

Each researcher may face some barriers and problems in terms of legal and moral issues. As in case of other studies, the present study faced some limitations; for example, the present study only focused on university and the generalization of its results to other organizations should be done with cautious. In addition, impossibility of controlling all variables may influence the results of the study. Doubts in possibility of receiving honest answers from the participants are other limitations in terms of using questionnaires. Finally, software and hardware barriers in the administrative system of Iranian companies were among limitations of the study.

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