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Presenting a model for measuring the capabilities of human resource strategy in government organizations

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Abstract

Since human resources are the most valuable factor for manufacturing, and the most important capital of every organization today, human resource planning (HRP) is one of the most underlying organizational plans. Planning to achieve skill and educational needs, and improvement of human resources can be the underlying factor for human resource planning. Over the years, human resources have been changed into the focus point of leading organizations and managers. It can be regarded as the most underlying organizational capital, for which no alternative can be considered. This study is aimed at presenting a model to measure the capabilities of human resources strategies. At first, wide library investigations were done in this field and existing models. Then, a basic model was selected to measure the capabilities of human resources within the governmental organizations to switch the study. Interviews were done with academic, and government experts and other scholars to test the validity and reliability of the model. the qualitative model validation was done using interviews, and the sampling method was snowball sampling. The model revision was done using qualitative methods. For model designation, the interpretive-structural modelling (ISM) technique, and fuzzy approach were used. The research instrument in this study was a questionnaire. According to obtained results, the experts counted essential factors affecting the capabilities of human resource strategy as follows: value, scarcity, being inimitable, without substitution, taking required behaviours, having required competencies, sufficient motivation of personnel, and productivity.

Keywords: human resource strategy, interpretive-structural modeling, organizational planning, human resource planning
2020 MSC: 62B86

1 Introduction

Over the years, human resources have been changed into the focus point of leading organizations and managers. It can be regarded as the most underlying organizational capital, for which no alternative can be considered. Such increasing importance, along with rapid environmental evolutions, has created strategic aspects for the human resource management functions. Hence, the strategic role of human resources is being emphasized in the current world. Human resource strategy can help the sustainable success and profitability when it is provided by scientific logic and based on environmental conditions and organizational capabilities. For effective codification and implementation of human resource strategy, the human resource custodians have to obtain key competencies, so that they can match human

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resource strategies and macro strategies. According to the mentioned, necessity of measuring the capabilities of human resource strategy within the organizations has been highlighted. This study is aimed at providing a model to measure the capabilities of human resource strategies in governmental organizations. The results of this study can help the managers of the said organizations to measure the capabilities of human resource strategy, and determine the strengths and weaknesses, opportunities, and threats of human resource strategy for themselves and the middle managers. The main objective of this study is to measure the capabilities of human resource strategy in governmental organizations. In other words, this study examines the capabilities of strategy by defining the capabilities of human resource strategy. To this end, the title of this study has been defined based on statistical population: a model to measure capabilities of human resource strategy in government organizations.

Price has defined human resource strategy as follows: human resource strategy includes all activities relevant to the management of organizational individuals in the frame of an organized and integrated program to achieve the strategic goals of the organization. Galbraith et al. [7] believe that capabilities show the ability of an organization to use the resource to do things and achieve goals. According to Hamel, et al. [9], human resource capabilities refer to some organizational skills, processes, technologies, systems, and norms, which enable an organization to provide special advantages for the customers and help the development of the organization. The number of axial capabilities of an organization is not usually more than 5 [19].

According to the mentioned, this study as an exploratory work has derived a measurement model for the capabilities of human resource strategy within the government organizations. Also, this study has traced the determinant factors of capabilities of human resource strategy within the said organizations in the form of a measurement model. the results obtained from this study can be applied by the senior directors of government organizations. They can measure the capabilities of human resource strategy in their organizations using the model proposed in this study.

The survival of organizational life is dependent on fields such as creativity, innovation, and other capabilities of human resource strategy in the organizations, which can result in the increasing influence of the organization in the society [14]. The realization of such conditions is dependent on some causes and factors including the capabilities of human resource strategy, and the undeniable role of human resources. Therefore, using the best management strategies and modern technologies in the organizations can be fruitless if the senior managers are unaware of the capabilities of human resource strategy. Without such capabilities, they never can understand the strengths and weaknesses of organizational human resources. Achievement of organizational goals is dependent on the capabilities of human resource strategy within government organizations. The scholars believe that the capabilities of human resource strategy in an organization can affect the foundation, maintenance, and extension of the performance, and completion of the organizational mission more than other factors. Also, the improvement of quality and productivity is dependent on human factors involved in the growth and evolution process of the organization [12].

Nowadays, the lack of a reliable model to measure the capabilities of human resource strategy is one of the most important challenges for managers of government organizations in Iran. The managers can be informed of the strengths and weaknesses of capabilities of human resource strategy using such model even in the smallest detail [4, 8].

2 Research objectives

Main objective: The main objective of this study is to provide a measurement model for the capabilities of human resource strategy in government organizations.
Secondary objectives:

- To determine the capabilities of human resource strategy in the government organizations
- To determine the indices of capabilities of human resource strategy in the government organizations
- Designing model to measure capabilities of human resource strategy in the government organizations

Research questions:

- What are the capabilities of human resource strategy in government organizations?
- What are the measurement indices for capabilities of human resource strategy in government organizations?

3 Definition of concepts

Strategy: Strategy is to set long-term goals and desires for the company and accept some measures, and allocate required resources to achieve those goals [5].

Human resource strategy: human resource strategy is an instruction for a human resource system, in which the mission, perspective, and priorities of the human resource task unit are specified [3].

In a simple definition, planning is the way and method to achieve organizational goals, and strategy refers to the facilities needed to do organizational tasks successfully [18].

Therefore, strategic planning is a process, in which long-term organizational goals are determined. It encompasses decision-making based on methods to achieve organizational goals. In other words, strategic planning is an organized and regular effort for important decisions, and taking fundamental measures, which form the orientation of organizational activities toward other institutions in the legal framework [**?**].
Walker has defined strategic planning as a process to set and apply organizational goals. According to this definition, strategic planning of human resources is an analytical process of the needs of personnel under changing and developing conditions. Such a process covers the activities required to meet these needs. The needs within the organizations include prediction, planning, the executive performance of management, and job management [15].

4 Literature review

One of the most underlying organizational plans is human resource planning. Planning to achieve skills and educational needs, and human resource improvement can be important factors for the existence of human resource planning.

The monetary value of human capital can be measured as well:

$$H = e^{\rho \cdot A} \tag{4.1}$$

h is per capita human capital, A is the average number of years of education per person and profit rate. As a result, if the P is the people over 15 years old, the total human capital is obtained from the following formula:

$$H = h \cdot P \tag{4.2}$$

By integrating the formula (4.3), the exponential growth formula or capital of each human unit is thus obtained.

$$P_s = \int_{t=0}^{r} w.e^{-\delta t} dt \tag{4.3}$$

$$\rho_s = \frac{r}{-\delta}\left[e^{-\delta t} - 1\right]$$

As human resources are strategic resources for organizations, they are an inseparable part of strategic planning. The majority of organizational plans and human resources have strategic nature. The main factors causing new attitudes in strategic planning of human resources can be the technological, social, and economic changes inside and outside the organizations. If the organizations want to change along with these changes, they have to consider the comprehensive and strategic attitude and various requirements.

Rezvani and Moafi Hareh Dashet [16] have studied the relationship between human resource strategic planning and organizational performance. The analyses in this study showed that there was a significant correlation between human resource strategic planning (strategy for attracting, supplying, and employing human resources; Human resource conservation strategy, and Human resource education strategy), and organizational performance.

Hassan Beigi and Jahangir [10] conducted a study under the title of "strategic management of human resources with the approach of high commitment with an emphasis on human resources in Judiciary". The results showed that it is essential to have a strategic human resource model for the optimal use of committed human resources.

Arthur and Boils found in a study that the capabilities of human resource strategy can be used to improve human resource performance; although using that is dependent on recognition and measurement of the mentioned capabilities [2].

Hashim studied the effect of Islamic attitudes on human resource management. The study showed that despite the existence of capabilities of human resource strategy in Islamic countries, the measurement model of capabilities of human resource strategy has not been studied in the government organizations of these countries [11].

In a model presented by Analoui, social, economic, political, and cultural factors, stockholders, associations, unions, and other organizations have been introduced as the components of environmental capabilities affecting human resource management [1].

A model presented by Rees and McBain showed that the external factors affecting human resource management include political, legal, social, economic-technologic, and industrial factors, as well as competitors and beneficiaries, cite14.

5 Methodology

At the first, wide extended library investigations were taken on the studied subject, and exiting models relevant to this issue. Afterwards, a basic model was selected to measure the capabilities of human resource strategy in the government organizations to switch the study. Interviews were done with academic and government experts to test the validity and reliability of the initial model. the method used in this study was the nonexperimental combined method. This is because; the author tends to describe what is considered in the model to measure capabilities of human resource strategy in government organizations with no manipulation given by academic managers and professors and provide a model based on the existing situation and attitude of experts on the one hand. On the other hand, the results obtained from this study can be used in the real world to measure the capabilities of human resource strategy.

6 Statistical population

The statistical population in this study consists of the managers and chairmen of research departments, and the masters of government organizations (N=227) in the quantitative section. In the qualitative section, the statistical population consists of all experts in the field of management (government, human resources), and senior directors in 2018.

6.1 Sample size

Cochran formula and Morgan table were used to determine sample size.

$$n = \frac{\frac{Z^2 pq}{d^2}}{1 + \frac{1}{N}\left[\frac{Z^2 pq}{d^2} - 1\right]}$$

Cochran's formula for a finite (1) and indefinite (2) community is as follows:

$$n = \frac{n_0}{1 + \frac{n_0 - 1}{N}}$$

$$n = \frac{Z^2 \times p \times q}{d^2}$$

Z is the percentile rank of $1 - \alpha/2$ that can be found from a normal distribution table, and α is also the probability of a type one error. The value $1 - \alpha/2$ is called the confidence interval, and N is the community size, and n_0 is the sample size and n is the corrected new sample size.
Cochran's formula can be written in the following way as well:

$$n_0 = \frac{Z^2 p(1-p)}{e^2},$$

According to Cochran's formula and the following, the sample size in this study is formed of 144 managers, deputies, and senior managers.
Simple random sampling was used to select study units. To select the statistical sample, 15 organizations were first selected randomly. Then, the managers, deputies, and senior directors were determined as the subjects.

For purpose of data collection, the relevant information on human resource strategies, and determination of variables, library studies were used. To this end, specialized articles and books, and internet websites were used. The field method was used by distributing questionnaires for the survey and collecting data relevant to the capabilities of human resource strategy.

7 Validity and reliability of the data collection instrument

In the questionnaire used in this study, content validity was used to obtain desirable validity. Also, in the qualitative analysis, face validity was used for the questions. Face validity is a subjective analysis of research questions on the basis that whether the questions cover the content that the study is going to measure or not. The Cronbach alpha coefficient was used to confirm the reliability of this study.

Cronbach's alpha was used to confirm the reliability of the inventory in this study.

$$\alpha = \left(\frac{k}{k-1}\right)\left(1 - \frac{\sum_{i=1}^{k} S_i^2}{S^2}\right),$$

where k is the number of items, S^2 is the variance of the total scores of each respondent, and S_i^2 is the variance related to the ith item.

8 Data analysis method

Descriptive section: in this section, descriptive statistics have been used to discuss the opinions of subjects about the items in the questionnaire.
Inferential section: in this section, SPSS software was used for exploratory factor analysis and exploration of determinant factors of capabilities of human resource strategy in government organizations. Also, structural and behavioural validation of the model was used. To this end, MATLAB was used for the data analysis. Also, a Fuzzy inference system was used to evaluate the capabilities of human resource strategy.

In reviewing the literature, there are various theories to define the expected value for fuzzy variables. The most general definition of the expected value of a fuzzy variable is provided by Liu and Liu (2008); it has some advantages in terms of its application to continuous and discrete fuzzy variables. When $\xi = (a.b.c)$ is considered a triangular fuzzy variable such that $a < b < c$, $E[\xi]$ is obtained by the following equation.

$$E[\tilde{\xi}] = \frac{a + 2b + c}{4}$$

Fuzzy value at risk if $\xi = (a.b.c)$ is a fuzzy variable and $\alpha \in (0, 1]$ is the confidence interval, $VaR_\alpha(\xi)$ is equal to:

$$VaR_\alpha(\xi) = -\inf\left\{x | Cr(\xi \leq x) \geq \alpha\right\}$$

The above equation shows that the maximum loss of "ξ" with confidence interval α is equal to x. Using validity theory, the fuzzy value at risk is expressed as follows.

$$VaR_\alpha(\xi) = \begin{cases} 2(a-b)\alpha - a & \text{if } \alpha \leq 0.5 \\ 2(b-c)\alpha + c - 2b, & \text{if } \alpha > 0.5 \end{cases}$$

The conditional value at risk if $A = (a.b.c)$ is a triangular fuzzy number for each confidence interval $0 < \alpha \leq 1$, the fuzzy conditional value at risk can be expressed using the validity theory as follows.

$$\xi CVaR(\alpha) = \begin{cases} \alpha a + (1+\alpha)b & if\ \alpha \leq 0.5 \\ (\alpha - 1)b - \alpha c, & if\ \alpha > 0.5 \end{cases}$$

Absolute fuzzy descending deviation has been introduced as a measure for risk. If $\xi = (a.b.c)$ is considered a triangular fuzzy variable, the absolute descending deviations are defined as follows:

$$LAD[\xi] = \begin{cases} \dfrac{\left(3(b-a) + (c-b)\right)^2}{64(b-a)} & if\ b - a \geq c - b \\ \dfrac{\left((b-a) + 3(c-b)\right)^2}{64(c-b)} & if\ b - a \geq c - b \end{cases}$$

Semi-Kurtosis if $A = (a.b.c)$ is a triangular fuzzy number for each confidence interval $0 < \alpha \leq 1$, Semi-Kurtosis ξ is defined using the following equation:

$$K_s[\xi] = \frac{1}{10(b-a)}\left[(e-a)^5 + \frac{1}{(b-c)}(b-e)^5 Min(0, (b-e))\right]$$

Semi-entropy has been used as an accepted criterion for measuring the degree of portfolio diversity. If $\xi = (a.b.c)$ is a triangular fuzzy number, the semi-entropy is expressed as follows:

$$E_s(\xi) \begin{cases} (b-a)\rho - (b-a)\zeta(\rho); & if \ \dfrac{a+2b+c}{4} \leq b \quad \rho = \dfrac{2b+c-3a}{8(b-a)} \\ \dfrac{b-a}{2} + (c-b)\zeta(\tau); & if \ \dfrac{a+2b+c}{4} > b \end{cases}$$

9 Results

Descriptive information on gender and marital status of a statistical sample Table 1 show that 57.5% of participants were male, and 42.5% were female. Also, 73.8% of participants were married, and 26.2% were single.

Table 1: Demographic information relevant to gender and marital status

Variable	Demographic information	Frequency	Percent
Gender	Male	92	57.5
	Female	68	42.5
Marital status	Married	118	73.8
	Single	42	26.2

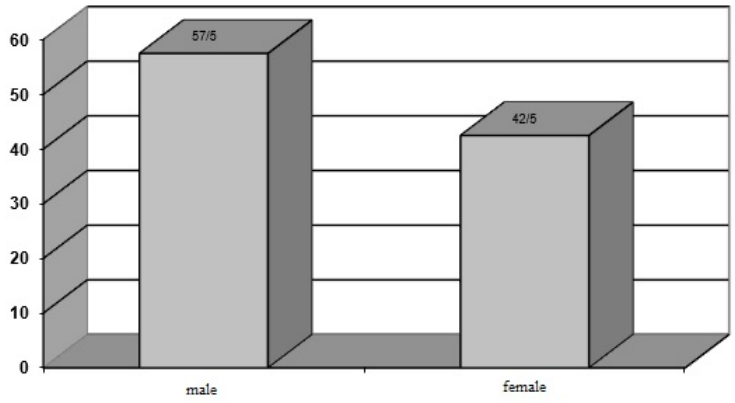


Figure 1: The bar chart of the gender of subjects

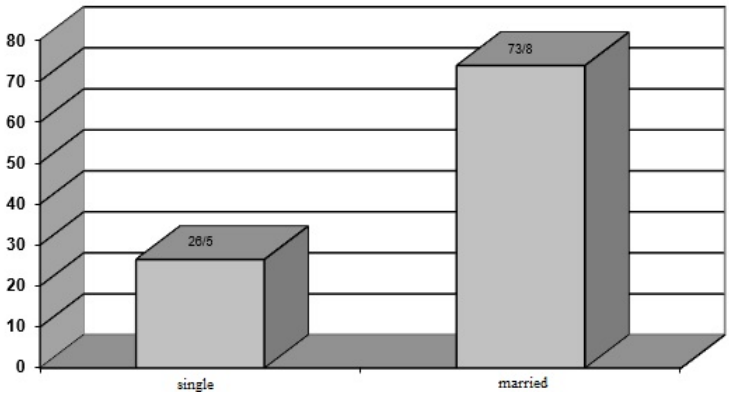


Figure 2: The bar chart for the marital status of subjects

10 Descriptive information of age and working years

Table 2 shows that the mean value and median age of subjects were respectively equal to 41.8 and 37. Standard deviation (SD) and the variance of the said variable were obtained at 1.15 and 132. The mean value and median of working years of subjects were respectively equal to 17.01 and 15. Also, the standard deviation and variance were respectively obtained at 8.2 and 67.9.

Table 2: Demographic information of age and working years of subjects

Variable	Statistics	Value
Age	Mean	41.8
	Median	37.0
	SD	1.15
	Variance	132
Working years	Mean	17.01
	Median	15.0
	SD	8.2
	Variance	67.9

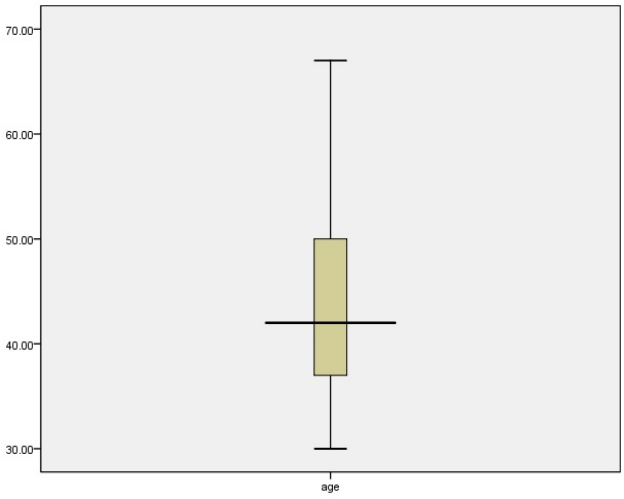


Figure 3: The box chart of the age of subjects

11 Inferential statistics

11.1 Interpretive-structural modeling (ISM)

The interpretive-structural modelling (ISM) approach was used to design the conceptual model. to this end, relevant components of the capabilities of human resource strategy in the government organizations were identified using literature review, interview, and Delphi technique. Then, the ISM method was used to derive the relevant indices.

11.2 Identification of factors affecting the measurement of capabilities of human resource strategy in government organizations and measurement indices

A one-sample test was used to test the significance level of factors affecting the measurement model of capabilities of human resource strategy, and to eliminate the less important factors.

Univariate T-test can be used for the case that obtained mean value for a variable is compared with a constant. An underlying issue in the field of using univariate T-tests is choosing a constant. The compared value gets a median, which is equal to 3 in this study. The data higher than this value are called significant capabilities, and those lower

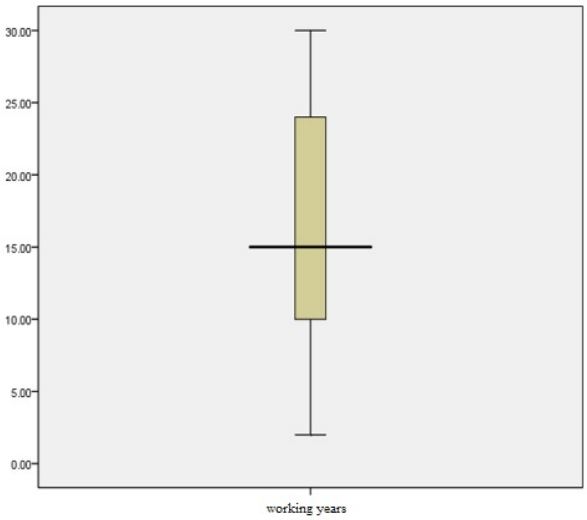


Figure 4: The box chart of working years

than this level are called less significant capabilities. Table 3 has presented the mean value of opinions of experts for each factor.

According to this table, experts found out that 8 out of 14 factors have been the essential and significant factors affecting capabilities affecting the measurement model on capabilities of human resource strategy.

Table 3: The list of factors of measurement model on capabilities of human resource strategy regarding the experts

Factors affecting measurement model on capabilities of human resource strategy	Statistics		
	Mean	T value	Validity
Value features	10.77	5.10	0.001
Scarcity	11.11	4.29	0.001
Being inimitable	10.94	3.22	0.005
Without substitution	10.38	2.25	0.038
Taking required behaviors	10.94	5.07	0.001
Getting used to behaviors	9.55	1.09	0.288
To have required competencies	10.22	2.69	0.015
Sufficient motivation of personnel	10.11	2.55	0.020
Ensuring human resources have capabilities	8.94	-0.091	0.929
Ensuring human resources act along with the strategy	9.66	1.27	0.220
Productivity	10.50	5.09	0.001
Satisfaction	9.33	0.707	0.489
Possibility of performance measurement	8.33	-1.06	0.302
Possibility of appropriate rewards for employees	8.27	-1.06	0.300

T-test formula

$$T = \frac{\bar{x} - \mu_0}{\frac{s}{\sqrt{n}}} \sim t_{(n-1)}$$

$\bar{x}$: Average of the sample
μ_0: Fixed and specified number
s: Standard deviation of the sample being investigated
n: Sample size investigated
$\frac{s}{\sqrt{n}}$: The standard error

12 Using interpretive-structural modeling (ISM) to make measurement model for capabilities of human resource strategy in the government organizations

To implement ISM, the following steps should be taken respectively.

1. Providing Structural Self-Interaction Matrix 2. Providing access matrix

Table 4: Final Structural Self-Interaction Matrix

Requirements affecting electronic preparedness	1 Value features (j)	2 Scarcity	3 being inimitable	4 No substitution	5 Taking required behaviors	6 To have required competencies	7 Sufficient motivation of personnel	8 Productivity
Value features		V	V	V	X	X	O	V
Scarcity			X	X	X	X	O	X
Being inimitable				V	X	A	O	X
No substitution					V	A	O	O
Taking required behaviors						X	A	X
To have required competencies							O	V
Sufficient motivation of personnel								O
Productivity								

In this study, an expert survey was used to adjust the access matrix.

Table 5: Adjusted access matrix

Requirements affecting electronic preparedness	1 Value features (j)	2 Scarcity	3 being inimitable	4 No substitution	5 Taking required behaviors	6 To have required competencies	7 Sufficient motivation of personnel	8 Productivity
Value features	1	1	1	1	1	1	0	1
Scarcity	1*	1	1	1	1	1	0	1
Being inimitable	0	1	1	1	1	0	0	1
No substitution	1*	1	1*	1	1	1*	0	0
Taking required behaviors	1	1	1	1*	1	1	0	1
To have required competencies	1	1	1	1	1	1	0	1
Sufficient motivation of personnel	0	0	0	0	1	0	1	0
Productivity	0	1	1	1*	1	1*	0	1

*: number 1 was obtained after adjustment

3. Determining the influence and dependence

4. Prioritization of the requirements

Table 6: Adjusted access matrix, along with influence and dependence of each factor in the measurement model of capabilities of human resource strategy (variables)

Requirements affecting electronic preparedness	1 Value features (j)	2 Scarcity	3 being inimitable	4 No substitution	5 Taking required behaviors	6 To have required competencies	7 Sufficient motivation of personnel	8 Productivity	9 Influence
Value features	1	1	1	1	1	1	0	1	7
Scarcity	1*	1	1	1	1	1	0	1	7
Being inimitable	0	1	1	1	1	0	0	1	5
No substitution	1*	1	1*	1	1	1*	0	0	6
Taking required behaviors	1	1	1	1*	1	1	0	1	7
To have required competencies	1	1	1	1	1	1	0	1	7
Sufficient motivation of personnel	0	0	0	0	1	0	1	0	2
Productivity	0	1	1	1*	1	1*	0	1	6
Influence	5	7	7	7	8	6	1	6	

Table 7: Leveling the factors relevant to measurement model of capabilities of human resource strategy (level 1)

Variables	Access set	Prior set	Subscription set	Level
Value features	1,2,4,3,6,5,8	1,2,4,6,5	1,2,4,6,5	
Scarcity	1,2,4,3,6,5,8	1,2,4,3,6,5,8	1,2,4,3,6,5,8	1
Being inimitable	2,4,3,5,8	1,2,4,3,6,5,8	2,4,3,5,8	1
No substitution	1,2,4,3,6,5	1,2,4,3,6,5,8	1,2,4,3,6,5	1
Taking required behaviors	1,2,4,3,6,5,8	1,2,4,3,7,6,5,8	1,2,4,3,6,5,8	1
To have required competencies	1,2,4,3,6,5,8	1,2,4,6,5,8	1,2,4,6,5,8	
Sufficient motivation of personnel	5,7	7	7	
Productivity	2,4,3,6,5,8	1,2,3,6,5,8	2,3,6,5,8	

Table 8: Leveling the factors relevant to measurement model of capabilities of human resource strategy (level 2)

Variables	Access set	Prior set	Subscription set	Level
Value features	1,6,8	1,6	1,6	
To have required competencies	1,6,8	1,6,8	1,6,8	2
Sufficient motivation of personnel	7	7	7	2
Productivity	6,8	1,6,8	6,8	2

Table 9: Leveling the factors relevant to measurement model of capabilities of human resource strategy (level 3)

Variables	Access set	Prior set	Subscription set	Level
Value features	1	1	1	3

13 Drawing the diagram of correlations

Finally, the passing correlations were eliminated, and the final model was obtained. The model obtained from the ISM process was provided for the experts, and was corrected through applying their comments.

In this study, input variables applied to measure capabilities of human resource strategy were: observance of required organizational culture and behaviours; having required competencies and skills, rewards to enhance the motivations and competencies; appointing specialized and creative individuals; practical commitment; participation of personnel to measure the capabilities of human resource strategy.

According to obtained results, the research model shows that considering rewards to enhance the motivations and competencies was the most effective factor in the level of capabilities of human resource strategy. Also, an overall analysis of the research model showed that an increase in every variable of more than 70 could not affect the development of capabilities of human resource strategy.

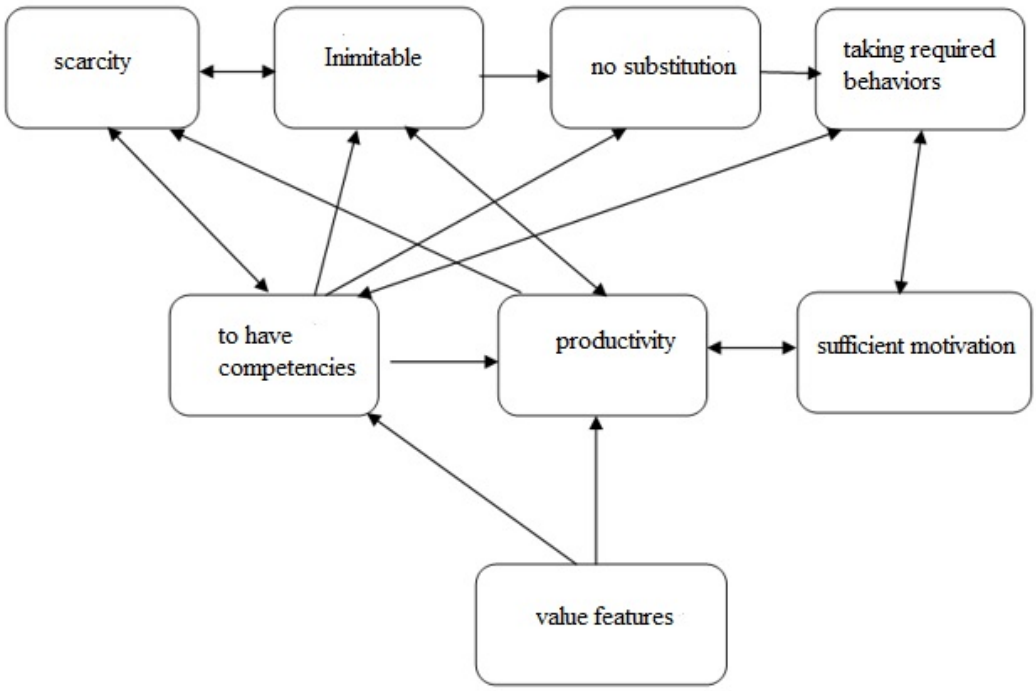
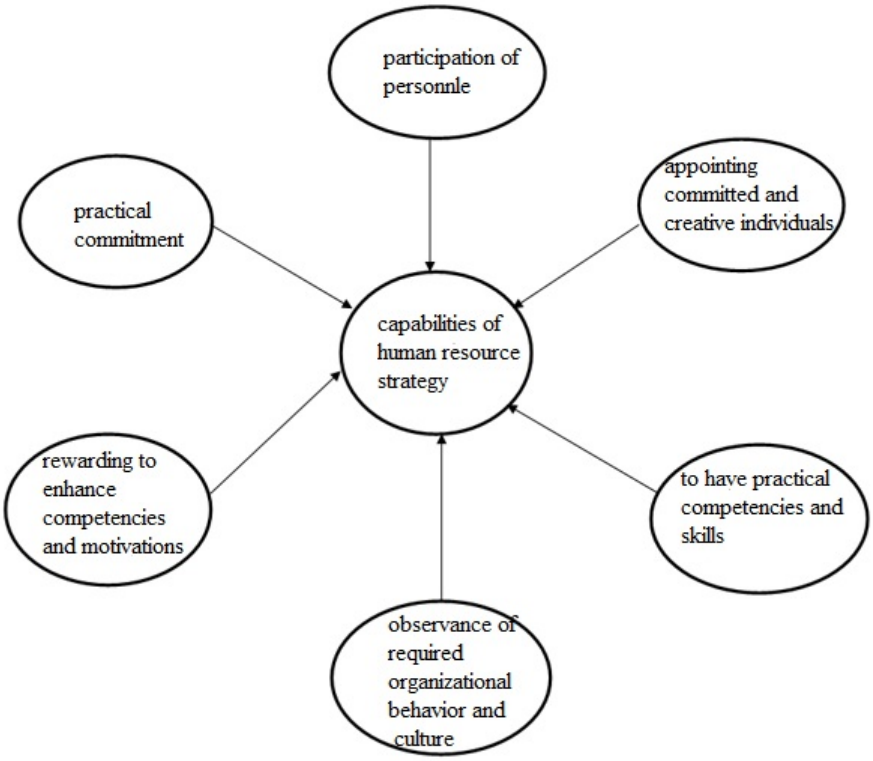


Figure 5: The final model of the structure of correlation between factors relevant to measurement model of capabilities of human resource strategy in the government organizations

14 Conceptual model

The conceptual model of this study based on the opinions of experts who participated in the study is illustrated in the following.



15 Discussion

The results obtained from the study showed that the experts have identified essential and required factors affecting the capabilities of human resource strategies as value features, scarcity, being inimitable, having no substitution, taking required behaviours, having required competencies, and sufficient motivation of personnel, and productivity. In the second step, due to the opinions of experts, the components relevant to the measurement of capabilities of human resource strategy were introduced as the observance of required organizational culture and behaviours; to have required competencies and skills, rewards to enhance the motivations and competencies; appointing specialized and creative individuals; practical commitment; participation of personnel.

In line with this result, Rezvani and Moafi Hareh Dasht [16] studied the correlation between human resource strategic planning and organizational performance. Their findings were consistent with the results of the present study. In this study, 55 governors, deputies, district heads, and administrative and financial officials of governorates were selected as samples. The analyses of the study showed that strategic capabilities of human resources include a strategy to attract, supply, and appoint human resources, and the strategy of maintenance of human resources.

Also, Moshabbaki and Mousavi [13] conducted a study on strategic coordination between commercial strategies, human resource strategy, and organizational structure. They found that organizational structure and required competencies of personnel could be considered capabilities of human resource strategy.

Faraji Khiyavi et al [6] obtained similar results and introduced a rewarding system as an effective factor to enhance the motivation and competencies of personnel as the capabilities of human resource strategy.

16 Conclusion

The results of this study showed that experts introduced the factors affecting capabilities of human resource strategy as value features, scarcity, being inimitable, having no substitution, taking required behaviours, having required competencies, sufficient motivation of personnel, and productivity. Also, the results showed that variables could be classified based on the conducting power (influence and being motivating). The majority of components to measure the capabilities of human resource strategy were interface variables with high influence, conducting power, and dependence. In this study, the factors including value features, required competencies, productivity, scarcity, no substitution, inimitability, and taking required behaviours were considered in the group of interface variables. Also, the variable of personnel motivation was an autonomous variable with weak influence and dependence. Such variables are separated from the system and are in a weak relationship with the system. also, the study showed that a rewarding system can be significantly effective in the enhancement of competencies and motivation as one of the capabilities of human resource strategy.

Suggestions

- The study suggests implementing factors affecting acceptance of E-government among the managers and experts of sport associations
- Conduct the study with the same subject in other regions, and compare the results with the results of this study
- Conduct another study to analyze the effect of electronic preparedness on motivating personnel, and to compare the results with this study
- Conduct the same study in a larger population and sample size

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