

Original Article

Human resource strategic management at the universities: an indigenous model with an emphasis on the role of organizational structure

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Abstract

Background: This study aimed to study the effect of organizational structure and its dimensions including complexity, centralization and formalization on the strategic human resource management (SHRM).

Methods: The study was applied-developmental and descriptive-correlational method. Interviews with experts and library studies were used to determine the dimensions of SHRM. The data were collected randomly using a researcher-made questionnaire whose validity and reliability were confirmed from a sample of 140 official staff of the university, with validity (KMO = 0.729) and reliability (Cronbach's alpha = 0.892) confirmed by the experts was used to conduct the study that had 57 items for SHRM in the Universities and 27 items for organizational structure and randomly distributed among 140 university staff and 95 questionnaires were collected. SPSS24 and AMOS23 software were used for data analysis.

Results: Complexity, centralization and formalization dimensions, respectively, affect the organizational structure by 0.69, 0.69 and 0.82. The effect coefficients of human resource environment, human resource insight, goals, strategy and human resource systems were, respectively, 0.18, 0.34, 0.76, 0.56 and 0.79. The effect coefficients of the organizational structure and its dimensions (complexity, centralization and formalization) on SHRM in the Universities were, respectively, 0.506, 0.118, 0.142 and 0.360.

Conclusion: A lot of attention has to be paid to the level of human resource activity to maintain the Universities in this critical competitive position and upgrade it from administrative duties to aligning with the level of business strategy and as an important decision maker.

Keywords: Iran; Organization and Administration; Workforce.

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Introduction

Human resource management in the Universities is one of the key elements of any organization whose universities management and proper planning has a key role in the success and proper financial performance of the organization (1) that will be a waste of time and money without the required infrastructure (2). One of the critical challenges regarding human resources is to

establish communication and coordination between human resources strategy and upstream strategies. Applied and fundamental studies in the last 20 years for dealing with the above challenges has led to the formation of a new and emerging field including concepts, theories and models of SHRM and human resource strategy (3). Human resources are seen as the most important strategic factor for the

development of countries as this task is somewhat new in the organization; thus, in spite of its known advantages, there are always ambiguities and misinterpretations about the true nature, role and exact role of human resources (4).

Organizational structure shows the method of division of labor and coordination between the individuals and organizational units to perform organizational affairs. Organizational structure as a way of sharing power, responsibilities and work procedures among the members of the organization. Each organizational structure pursues two main goals. Firstly, it shows who gathers to carry out a task effectively. Secondly, it shows who reports to which higher level in the organizational hierarchy (5). Human resources are the main capital of any organization and every organization must take measures in human resources to reach its mission and goals and strategies (6). The human resources of an organization are all the people working at various levels of the organization and the organization means a large or small organization that has been created with a specific intention and to achieve specific goals. The organization may be an industrial and manufacturing company, a private commercial company, a government ministry, a sport and recreation club, a non-profit organization, a university, or an army unit (7). According

to the above description, the intended university is seen as one of the main universities and human force supply require a comprehensive and accurate plan for its human forces to reach its goals to train military forces. Thus, designing an indigenous model for SHRM in the Universities was undertaken and the role of organizational structure was examined to examine the important factors on this issue. The conceptual model of the research is as follows Figure 1.

Methods

The study was applied-developmental and descriptive-correlational method. Interviews with experts and library studies were used to determine the dimensions of SHRM .The data were collected randomly using a researcher-made questionnaire whose validity and reliability were confirmed from a sample of 140 official staff of the university, with validity (KMO = 0.729) and reliability (Cronbach's alpha = 0.892) confirmed by the experts was used to conduct the study that had 57 items for SHRM in the Universities and 27 items for organizational structure and randomly distributed among 140 university staff and 95 questionnaires were collected. SPSS24 by t test, Bartlett, linear regression ((Simple linear regression was used to confirm or reject the studied hypotheses, and the

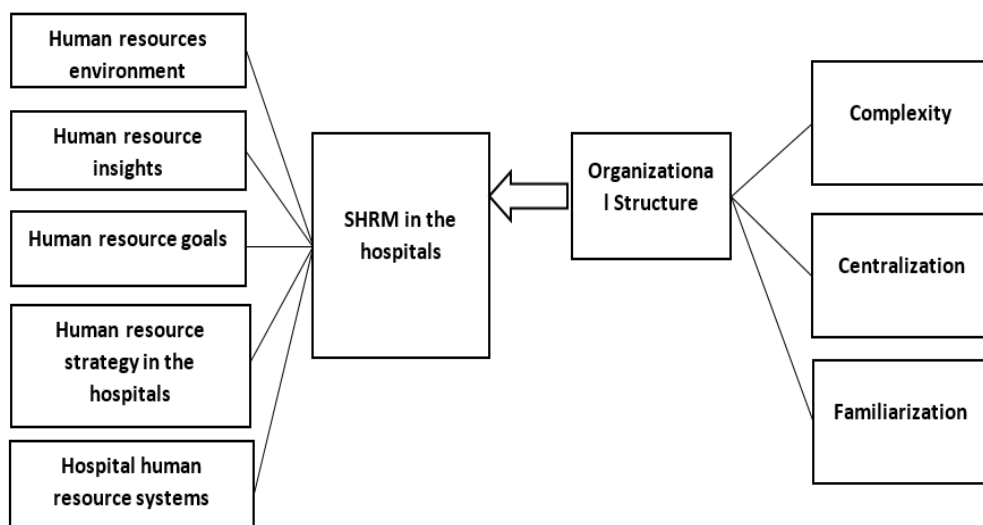


Figure 1. Conceptual model of the study

Table 1. Distribution of the respondents in terms of age, education and service history

Age group	No. (%)	Educational level	No. (%)	Age service	No. (%)
20-29 years	10(10.5)	Diploma and lower	2(2.1)	Less than 5 years	3(3.2)
30-39 years	55(57.9)	Associate degree	8(8.4)	5-10 years	24(25.3)
40-49 years	27(28.4)	Bachelor	50(52.6)	10-15 years	11(11.6)
50-59 years	3(3.2)	Master's degree and higher	35(36.8)	15-20 years	21(22.1)

relationship and impact of the organization's structure on the strategic management of human resources were investigated) and chi square index (to test the relationship between two nominal variables) and AMOS23 software were used for data analysis.

Validity and reliability of the questionnaire

The questionnaire used included strategic management of human resources, organization structure, organizational culture and political environment.

Cronbach's alpha is calculated as the average of the internal correlation between questions that measure a concept. KMO test was used for validity and the Cronbach's Alpha test was used for reliability, Cronbach's alpha value for SHRM in the Universities was 0.924 and for Organizational structure was 0.892.

Results

Describing the variable dimensions of SHRM in the Universities

Descriptive information extracted from SPSS is given in the Table 1.

Descriptive information on management dimensions in the Universities and organizational structure including mean, standard deviation, minimum and maximum is presented in Table 2.

Examining the effect of variables dimensions

Examining the effect of variable dimensions of organizational structure and SHRM on the Universities.

Table 2. Descriptive statistics on the dimensions of SHRM in the Universities and organizational structure among the respondents

Row	Frequency	Mean	SD	Min.	Max.	Dimension level
Human resources environment	95	44.65	4.773	28	55	Very strong
Human resource insights	95	23.19	3.508	15	30	Good
Human resource goals	95	38.69	8.161	20	54	More than satisfying
Human resource strategies	95	44.22	5.871	19	59	More than satisfying
Human resource systems	95	51.01	9.446	20	75	More than satisfying
Complexity	95	35.07	5.176	20	45	Complex
Centralization	95	35.13	4.525	23	45	Centralized
Formalization	95	22.07	2.954	14	29	Formal

As is seen in the following diagrams, the coefficient of the effect of the dimensions of complexity, centralization and formalization are 0.69, 0.69 and 0.82, respectively, and the coefficients of the effect dimensions of the human resources environment, human resource insight, goals, strategy and human resource systems are, respectively, 18.0, 0.34, 0.76, 0.56 and 0.79. As the root mean square error of approximation (RMSEA) is less than 0.1, the models have a good fit Figure 2.

Does organizational structure affect the SHRM in the Universities?

We used simple linear regression and to answer this question and examined the effect of organizational structure on SHRM in the Universities.

As is seen in Table 3, the adjusted coefficient of determination for the structural variable is 0.250, indicating that the independent variable of organizational structure has explained 25% of the changes in the dependent variable of management in the Universities. F value (322.382), significant at the level of error less than 0.01, indicates that the independent variable has a high explanatory power and can well explain the variation and variance of the dependent variable. Moreover, the standardized regression coefficient (B) (0.508) shows that a change in the organizational structure leads to a change of 0.508 in the management of universities.

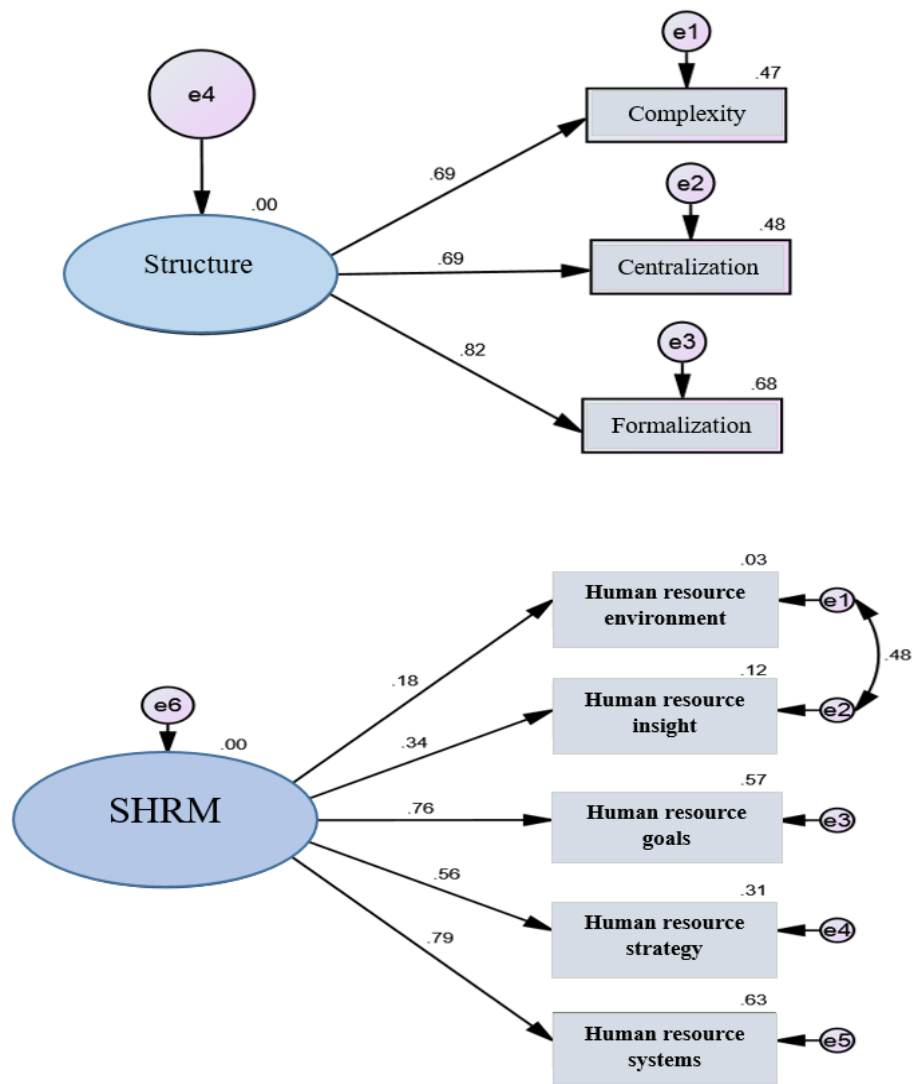


Figure 2. Fitting the dimensions of the variables

Table 3. Examining the effect of organizational structure on SHRM in the Universities

Row	Multiple correlation coefficient (R)	Adjusted coefficient of determination (R^2_{adj})	Std. error of Estimate	f	F sig.	Standardized coefficient of effect beta (B)	T statistic	Sig.
Structure	0.508	0.250	19.261	32.382	0.000	0.508	5.690	0.000

Table 4. Examining the effect of organizational structure on SHRM in the Universities

Row	Multiple correlation coefficient (R)	Adjusted coefficient of determination (R^2_{adj})	Std. error of Estimate	f	F sig.	Standardized coefficient of effect beta (B)	T statistic	Sig.
Complexity						0.118	1.073	0.286
Centralization	0.536	0.263	19.092	12.203	0.000	0.142	1.282	0.203
Formalization						0.360	3.048	0.003

Do the dimensions of organizational structure affect the SHRM in the Universities?

As is seen in Table 4, the adjusted coefficient for determining the dimensions of organizational structure is 0.263, showing that the dimensions of the independent variable of organizational structure could explain 26% of the changes in the dependent variable of strategic resource management. The F value (12.203), obtained significant at the error level less than 0.01, shows that the independent variable has a high

explanatory power and can well explain the variation and variance of the dependent variable. Moreover, the standardized regression coefficient (B) for formalization (0.360) shows that a unit change in the organization's formalization dimension causes a change of 0.360 in the SHRM in the Universities. Other dimensions were insignificant at 0.05 levels.

Model validity review

According to Table 5, chi square index on the degree of freedom, one of the original indices, which is 1.408 and is within the permissible range, confirms the model fit.

Table 5. Model validity review

Index	Acceptable limit	Reported value
Normalized Chi-square (CMIN / DF)	Equal to or less than 3	1.408
Goodness of Fit Index (GFI)	Equal to or greater than 0.9	0.937
Adjusted Goodness of Fit Index (AGFI)	Equal to or greater than 0.9	0.874
Normalized Fit Index (NFI)	Equal to or greater than 0.9	0.894
Incremental Fit Index (IFI)	Equal to or greater than 0.9	0.967
Tucker-Lewis Index (TLI)	Equal to or greater than 0.9	0.946
Comparative Fit Index (CFI)	Equal to or greater than 0.9	0.965
The root means square error of approximation (RMSEA)	Equal to or smaller than 0.8	0.066

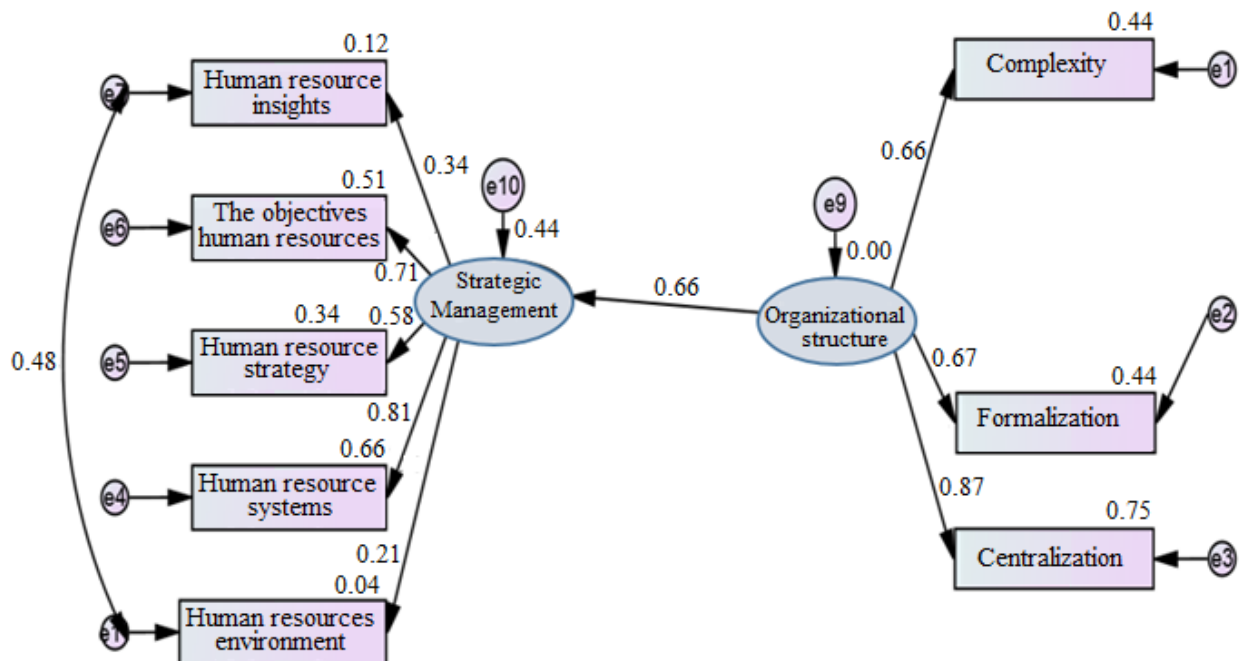


Figure 3. Fitting the research model

As almost all the required indices of model fit are within the acceptable range, the model has a good fit Figure 3.

Discussion

By analyzing the variable components of strategic human resources management, it can be concluded that the internal environment and external environment components are at a strong level and the basic attitude and future dream components are at a good level and the rest of the components are at a more than satisfactory level.

The study evaluated the effect of organizational structure on management in the Universities. In this study, organizational structure dimensions in three dimensions of complexity, centralization and formalization and SHRM in the Universities in five dimensions of human resources environment, human resource insight, human resource goals, human resource strategies and human resource systems were classified in the Universities and the effect of each on each other was examined.

The analysis of descriptive information regarding the dimensions of strategic human resources management showed a very high influence of the human resources environment. Strategic human resource management (strategic HRM) provides a framework linking people management and development practices to long-term business goals and outcomes. It focuses on longer-term resourcing issues within the context of an organisation's goals and the evolving nature of work. It also informs other HR strategies, such as reward or performance, determining how they are integrated into the overall business strategy (21).

In this study, the dimensions of complexity, centralization and formalization affect the organizational structure by 0.69, 0.69 and 0.82, respectively, and the coefficient of effect of the dimensions of the human resources environment in the Universities, human resource insights, goals, strategies and human resource systems were,

respectively, 18.0, 0.34, 0.76, 0.56 and 0.79.

Pertusa-Ortega tests three hypotheses using a sample of 164 large Spanish firms. The results show that organizational complexity and centralization exert a positive and a negative influence, respectively, on knowledge performance, which confirms the two hypotheses related to these variables. However, the analysis reveals no empirical evidence to confirm the hypothesis according to which formalization and knowledge performance have a positive relationship (22). Moreover, a positive and significant relationship was found between the effective factors of organizational structure and management in the Universities. Given the positive path coefficient stated, one can state that the relationship between structure and SHRM in the Universities is incremental (direct). The study is in line with that of Sparrow & Pettigrew (8).

Allui consistent with my result showed that that based on participants' perceptions, the higher education institutions under study have a strong level of awareness of SHRM. However, Saudi higher education is facing major problems surrounding the development of human capital, especially of the faculty members and needs to devote more attention to their SHRM practices. The employee recruitment and selection process is largely inadequate and needs effective attention. The results also showed that the performance appraisal and compensation system does not guarantee a highly motivated core of staff, especially if they are expatriate workers (23).

Schuler & Jackson, states the emergence of SHRM from personnel management in the Universities in two stages, where the first stage is moving from personnel management in the Universities to traditional human resource management and the second the move from traditional human resource strategic human resource management (9). Armstrong, have considered the concept of SHRM in the Universities as a general approach towards

SHRM in the Universities for organizational goals and orientations.

Human resource management is a kind of management approach to employees based on the four basic principles of human resources, strategic integration, culture and the organizational values, cooperation and commitment of the employees. Human resource management in the Universities is both work-oriented and human-oriented. This feature stresses that human resource strategies have to be integrated into the fabric of the organization and support the achievement of its goals (10).

The level of satisfaction of the descriptive statistics of organizational culture dimensions among the respondents was more than desirable. However, the feature recognizes the fact that people cannot be dealt with like other sources. The employees have needs and expectations that may not be consistent with the needs and expectations of the organization, and certainly individually or collectively become more and more expecting given the nature of their perception of the acceptable behavior of employers. All the managers deal with human resource management issues one way or another in the Universities, and thus need to gain a deep understanding of the values that guide and motivate staff. These managers have to base their approaches to universities management on those values. One has to acknowledge that the individuals have various interests from the organization and adopting a collectivist view seems necessary in this regard (11).

SHRM deals with the relationship between human resource management and strategic management in the Universities and considers both human capital needs and the development of process capabilities (the ability to do things efficiently). Overall, SHRM mainly focuses on each problem in the Universities that either affects the strategic plan of the organization or is affected by Araabi & Moorei (12). Moreover, the SHRM in the Universities can be defined as the process of formulating

and implementing a human resources strategy to link human resources policies and methods with the strategic goals and objectives of the organization (13).

The significant positive relationship found between organizational complexity and knowledge performance (H2) seems to indicate that, in complex organizations, the depth and diversity of the knowledge base may stimulate creativity and increase the willingness to share information and knowledge, as well as the cross-fertilization of ideas due to the interaction between individuals (24).

The purpose of SHRM is to create a general vision to provide the opportunity to deal with the main issues of employees. SHRM benefits the organization from skilled, committed and motivated employees to reach a sustainable competitive advantage. Its purpose is to create a sense of purpose and direction in today's often turbulent environments to meet the business needs of the organization and the individual and group needs of its employees by designing and implementation of coherent and practical human resource programs and policies. Armstrong, argue that SHRM has to provide a unified, broad, contingent, and integrated framework (10).

Empirical studies have reported that HRM can enhance an organization's resilience against environmental disruptions. Carvalho & Areal, found that companies listed as "Great Places to Work" are more resilient and maintain better financial performance in times of crisis than other companies. They reasoned that great workplaces that tend to be considerate in using layoffs during challenging times and proactive in using HR practices akin to high-performance work systems (HPWS) will contribute to building organizational resilience (24).

The correlation coefficient obtained in our study between organizational culture and strategic management of human resources was equal to 0.723, which indicates the relationship between strategic management of human resources and organizational

culture. The adjusted determination coefficient for Brier's structure variable is 0.518, which shows that the independent variable of organizational structure has been able to explain 52% of the changes in the dependent variable of strategic resource management (25).

In previous studies, strong relationship between organizational culture and personal effectiveness, and leadership effectiveness has been observed. In fact, organizational culture is an integral part of the organization (26)

Job satisfaction is a general attitude about his work. Who has the job satisfaction level is high, Positive attitude towards their job or career and who is not satisfied with their job, has a negative attitude towards the job. Job satisfaction is influenced by factors such as good working conditions, same wage, fringe benefit, challenging tasks, Favorable cooperators, Leadership and qualified manager are complying with the wishes of the individual goals (27).

The purpose of high-performance management is to affect the performance of the Universities by increasing productivity, increasing the quality of work and services provided, increasing the quality of customer service, increasing profits, creating more growth and more value for shareholders and helping the company's employees. High performance management methods are recruitment with very high accuracy, procedure selection, useful and extensive training, management training activities, motivational payment systems, and performance management process in the Universities. According to the results of the Poursadegh & Mehdizadeh Molabashi, management in human resource management, strategy and structure are respectively and are interdependent and are affected by environmental forces (14).

By managing their human resources efficiently, organizations develop the behavior of their employees in a way that is necessary for the success of their competitive strategy, as in the research of Bamberger & Mesholam (15), Khalili et al.

(16), Desler (17), Robbins Stephen et al. (18), and Jazni (19) is also evident. To ensure the implementation of business strategies and necessary competencies at all levels of the organization, it is necessary to use human resource development initiatives to provide those competencies (20).

Adiguzel et al., showed that the organizations' capabilities and opportunistic behavior influenced their performance and competitiveness. Companies are struggling to ensure both employee satisfaction and customer satisfaction to survive in today's competitive world. Therefore, ensuring competitiveness is objectively the main strategic goal of any company. The research developed a novel framework of competition using a structural perspective and empirical tests the proposed relationships using data from the service sector in Turkey. Since the research was conducted in the service sector and companies located in Istanbul, it contains certain restrictions (28).

Companies always look for opportunities in their market or in the market they intend to enter for the first time because they are actually pursuing their own interests by looking for opportunities. Companies want to be in an advantageous position in the market by discovering the most suitable opportunities for them. At the same time, when companies discover opportunities and implement the necessary strategies, their level of competitiveness and their performance are positively affected. In addition, there is a need for further research on the questions that represent the similarity of capability in the future because the new current of artificial intelligence in the 5.0 industry will be subject to its superiority. Therefore, companies will need to renew the questions representing the variables. This research provides a perspective to expand and enhance the understanding of skills and behavioral processes that influence the competitiveness of firms for future research.

Recommendations

Rules, regulations and standards should be developed in such a way that the forces can make the necessary decisions in specific cases and avoid confusion and parallel rules.

Increase the ability of employees in the field of organizational change and readiness for it and adaptation to environmental changes so that forces do not face crises in changing conditions and can easily adapt to complex and changing situations.

Employees' ability to be able to accompany the university to achieve organizational goals in situations where rules and regulations do not comply with the conditions governing the organization.

Conclusion

The main cause for the study is that we are usually face limitations in terms of resources like capital, land, energy, equipment, and so on, but having a huge resource like human capital with the power of creativity and innovation can be a winning cause in the competitive markets and build a better world based on it. Thus, human resource management is a main section of science and art of management in the Universities where with a strategic approach in the Universities, one will reach a forward-looking, innovative and transformational idea and the role of human resource tasks in attracting and the provision of human resources in the Universities, nurture and improvement, maintenance and finally the proper and effective use of this strategically important resource will be more than ever. Thus, a lot of attention has to be paid to the level of human resource activity to maintain the Universities in this critical competitive position and upgrade it from administrative duties to aligning (partnering) with the level of business strategy and as an important decision maker.

Author's contribution

Ali Reza Rouhani Ghehsareh and Alireza Manzari Tavakoli developed the study concept and design. Sanjar Salajegheh

acquired the data. Samaneh Mehdizadeh and Ali Reza Rouhani Ghehsareh analyzed and interpreted the data, and wrote the first draft of the manuscript. All authors contributed to the intellectual content, manuscript editing and read and approved the final manuscript.

Informed consent

Questionnaires were filled with the participants' satisfaction and written consent was obtained from the participants in this study.

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Conflict of interest

The authors declare that they have no conflict of interests.

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