Presenting a manager selection pattern based on competency: a case study of Shahrekord and Isfahan Universities of Medical Sciences

Safar Faramarzi1*, Reza Sepahvand2, Hojatollah Vahdati3, Amir Hooshang Nazripour4, Hooshang Taheri Mirahaed5

1Ph.D. student of Human Resources Management, Shahrekord University of Medical Sciences, Shahrekord, Iran, Lorestan, Iran
2Associate Professor of Business Administration, Lorestan University, Lorestan, Iran
3Assistant Professor, Department of Business Administration, Lorestan University, Lorestan, Iran
4Assistant Professor, Department of Business Administration, Lorestan University, Lorestan, Iran
5Ph.D in Human Resource Management, Lorestan University, Lorestan, Iran

*Corresponding Author: Safar Faramarzi, Email: faramarzi45@yahoo.com

Abstract

Background and aims: Selection in the management arena is examined from a variety of dimensions and is based on the type of activity of the organization, the selection of the place of activity, as well as the selection of staff and management. The present study aimed to provide a theoretical framework and paradigmatic model of individual constructs of managers, staff, and elites of Shahrekord and Isfahan University of Medical Sciences in selecting competency based on the merit.

Methods: The results of the data analysis were presented based on the coding triple stages, and more than 168 meaningful propositions and 128 corresponding concepts were extracted in the open coding step. Subsequently, 16 subcategories were obtained from these meaningful propositions. These categories had a conceptual relationship with each other and could be easily categorized. In the central coding step, by a more precise examination and linkage between the concepts, five subcategories were derived including scientism, skill and technological capability, pragmatism, networks and communication skills, and organizational efficiency.

Results: With more abstraction of these categories in selective coding, a core category was described as “Choosing the managers based on the merits of the scientism of managers with technological skills and abilities that, with the pragmatism strategy, in addition to network expansion and communication skills, lead to increased organizational efficiency.” It appears that it can cover all the other categories.

Conclusion: In general, the structural equation modeling model was able to validate the developed native model, and in this regard, the native model was validated for choosing the managers based on their competency in Shahrekord and Isfahan University of Medical Sciences.

Keywords: Competency, Choice of Managers, Native Pattern, Shahrekord and Isfahan University of Medical Sciences

Introduction

Selection in each area is based on criteria. Different choices exist in the field of management, and various the theory and theoretical approaches are present in this regard. Selection is investigated from a variety of dimensions in management arena, and it relies on the type of activity related to the organization, the selection of the place of activity, along with the selection of staff and management. Undoubtedly, all the alternatives are influenced by a more general option in the name of the choice of managers that leads to the categories of survival and the growth of the organization until it is dissolved. Considering the importance of choosing the managers in the organization, an effective model for all the existing organizations is considered as a fundamental principle. Today, many patterns are available to select from within the organizations, each with a special emphasis on the particular. A large number of managerial roles are present in an organization, the entirety of which is defined by the management in order to steer the entire set to the organization’s growth and prosperity. Therefore, success in playing a role and undertaking this heavy responsibility is beyond anything related to the ability and effectiveness of the managers, which is basically dependent on their competency, skills, level of knowledge, insight, and abilities. Given the importance of these factors in the success of the managers, continuous search and effort are required to find and educate those who possess this type of competence, ability, and skill (1,2) in order to become effective and effective leaders. In addition, selection is based on the competence of the policy of most successful organizations and companies and the growth and advancement of each organization depends on using competent and capable managers and assigning powerful managers is subject to appropriate approaches.
and criteria for the selecting and applying the managers. Each organization achieves its goals through its managers. Therefore, proper selection and application of appropriate managers play a role in the organization’s success regarding achieving strategic goals (3).

Recognizing and attracting deserving forces in each organization is a strategic issue that is of great importance in knowledge-based organizations (4). In this regard, experts in the field of management propose competence-based human resource management, which is a strong tool that emphasizes people’s behavior and helps the organizational success. Accordingly, competencies and models should be determined and developed to describe these competencies for an organization to implement a competency-based approach (5). Competence and meritocracy are among the concepts that can be interpreted based on various social, cultural, political, legal, organizational, and other views, and all the issues mentioned in the establishment of a system or community, government or an affirmative organization are very influential in this respect. An apparent look may be that meritocracy is often an organizational matter and refers to the functions of human resource management, especially in issues such as the selection and appointment of managerial occupations. However, the selection and appointment process and even the maintenance of managers are merely the attributes of meritocracy, and the establishment of a competent system and any analysis of the roots, challenges and barriers of this broad and comprehensive study is required (6,7).

In the present study, it was attempted to identify the competency dimensions for the University of Medical Sciences, and then these competencies, along with their constituent components were presented in the form of a comprehensive model. Accordingly, in this study, a qualitative model of the existing theoretical model descriptive of the suit was reviewed and developed and a competency model was proposed using the foundation data approach. Further, a slightly modified model was tested by structural equation modeling based on the data. Therefore, choosing the managers based on the merit is believed to play an effective role in achieving the strategic goals of this organization and can be useful in implementing the document of future perspective.

The research objectives included designing a principal choice model for competency-based Shahrekord and Isfahan University of Medical Sciences, as well as examining and validating the native pattern of the managers' selection based on their competency in Shahrekord and Isfahan University of Medical Sciences.

Materials and Methods
The hybrid or mixed method was used based on the aim of the study. In this case, the research begins with a qualitative method with the goal of exploration, and then with a small method and a wider sample, the statistical society continues to generalize the findings. Since the qualitative data in this study were collected in the first stage of research, the intention of the researcher could be to discover the subject of the research considering the participants’ viewpoints. Therefore, in the next step, this could be implemented in a wide range of competing sociology. Furthermore, the qualitative method was the grounded theory of the theory or the method of data of the foundation. Accordingly, the researcher initially conducted a deep interview with 15 managers, staff, and elites of Shahrekord and Isfahan University of Medical Sciences to develop a native model of choosing the managers based on the merit and then, sought to validate and test the obtained results employing a quantitative survey method. The statistical population of the qualitative part included experts and university professors. In the quantitative section, a total of 230 directors and staff of Shahrekord and Isfahan University of Medical Sciences were selected based on Cochran formula. Based on data analysis, the researcher concluded that all the professors and experts had a single opinion regarding the selection pattern basis of merit. In the quantitative section, a written questionnaire was used for measuring the variables, collecting the necessary data and information, and reviewing the hypotheses. The ethical code obtained for the present study was 0000000328592901.

Results
In order to achieve a theoretical framework and a paradigm model, a qualitative method and grounded theory were utilized from personal constructs of the managers, staff, and experts from Shahrekord and Isfahan University of Medical Sciences. Therefore, the theoretical framework of this research suggested that the managers, staff, and experts had great potential and capabilities for explaining the merit. Moreover, ground theory was focused on through in-depth interviews. The model presented in this study was the result of a deep analysis of 15 interviews conducted with the managers, staff, and experts from Shahrekord and Isfahan University of Medical Sciences who were involved in the selection process of competency-based managers. The length of the interviews varied between 40 to 120 minutes encompassing a total of 989 minutes of interviews and an average of 66 minutes for each person. The results of the data analysis were presented based on the coding triple stages. In the open coding process, more than 168 meaningful propositions and 128 corresponding concepts and, in the next step, 16 sub categories of these corresponding concepts were extracted. These categories had a conceptual relationship with each other and were easily categorized. In the central coding step, the concepts were precise examined and linked together out of which five subcategories were obtained including scientism, skill and technological capability, pragmatism, networks and communication skills, as well as organizational efficiency. Additionally, a nuclear category was described by further
abstraction of these categories in the selective coding stage as follows (Table 1).

“Choosing managers is based on the merits of the knowledge-based discipline of managers with technological skills and abilities that in addition to network expansion and communication skills, leads to increased organizational efficiency through a pragmatic strategy.”

At this stage, taking the concepts of the data was the main characteristic of the theory of ground-based strategy, and describing the process of theorizing was possible by analyzing the categories. Proper naming of the categories, asking motivational questions, as well as comparing and deducing a new, integrated, and realistic design of a bunch of raw and unorganized data require special creativity and the theoretical sensitivity should be the basis for the continuation of work by such creativity. Theoretical sensitivity through the experience of professionalism, text study, personal experience, and the process of data analysis during the research add to the theoretical sensitivity. Such sensitivity is important since it is essentially a qualitative research and a basic theory of meaningfulness to the data. Subsequently, each of the meaningful categories was analyzed and interpreted in terms of creativity and theoretical sensitivity.

Selection of the managers based on the merits of the knowledge management of the managers with technological skills and abilities, along with network expansion and communication skills causes an increase in organizational efficiency utilizing pragmatic strategy. The last step of the encoding included a selective coding one in which the codes in the central stage of coding continued on a more abstract level. The current study aimed to integrate and refine the obtained categories at the pivotal stage of coding. At this stage, formatting and linking each category with other categories was described and the category of ultimate kernel was derived including all the concepts and categories. By combining the five main categories of the research (i.e., scientism, skill and technological capability, pragmatism, networks, as well as communication skills and organizational efficiency), the core category emerged in the selective coding stage. Given the main categories and the above description, it can be declared that selecting the managers was based on the competence of managers with technological skills and abilities that, through pragmatism strategy, in addition to network expansion and communication skills, can lead to increased organizational efficiency.

Based on the category of the final core that was taken and abstracted from other major categories, the managers and experts of Shahrekord and Isfahan Universities experienced, understood, or imagined the circumstances, context, and merits of the managers. Further, in certain interactive conditions, they explained the merits of managers, indicating that if these conditions are provided in each organization, the merit-based selection of managers will be accomplished.

The findings of this study showed that merits can have different reasons. The qualitative results of the profound interviews of the managers and experts of Shahrekord and Isfahan University of Medical Sciences indicated that different issues and concepts are the reasons of organizational competence. By performing three stages of coding, all the issues were unanimously “The choice of managers based on the merits of the knowledge-based knowledge management and a technological capability that, in addition to network expansion and communication skills, resulted in increasing the organizational efficiency utilizing pragmatism strategy.”

Therefore, all the findings were plotted in a paradigmatic model for better understanding. As shown in Figure 1, this model has several sections and the circumstances are causation, phenomenon, context, intervening conditions, strategy, and outcome.

In this model, the scientism of directors was considered

### Table 1. The Output of Coding Triangles

| Subcategories                          | Axial Categories                  | The Core Category                                                                 |
|----------------------------------------|-----------------------------------|------------------------------------------------------------------------------------|
| Scientific capacity                    | Scientism                         | Selection of managers based on the merits of the knowledge management of managers with technological skills and abilities, which, with pragmatic strategy, in addition to network expansion and communication skills, leads to an increase in organizational efficiency. |
| Researcher                             |                                   |                                                                                    |
| The scientific basis of action         |                                   |                                                                                    |
| Accept new ideas                       |                                   |                                                                                    |
| Technological acceptance               |                                   |                                                                                    |
| Mastering technique                    |                                   |                                                                                    |
| Creative users                         | Skill and technological capability |                                                                                    |
| Specialization                         |                                   |                                                                                    |
| Personal characteristics of the person | Pragmatism                        |                                                                                    |
| Risk aversion                          |                                   |                                                                                    |
| Targeted actions                       |                                   |                                                                                    |
| Social capital                         | Networks and communication skills  |                                                                                    |
| Inter-organizational relationships     |                                   |                                                                                    |
| Respect for the values of the organization |                                   |                                                                                    |
| Align with the community               | Organizational efficiency          |                                                                                    |
| Social responsibility                  |                                   |                                                                                    |
Manager selection based on competency

as a causal condition. In the current study, four indicators of scientific, research, scientific basis of practice and the acceptance of new ideas were emphasized in order to explain the scientism and its exact definition. Based on the conceptual content of the categories, scientism was viewed as a direct factor in the development of the competence of managers. In addition to the condition of the formation of merit, developing the merit was a priority, which was based on the mutual understanding between the managers and experts of Shahrekord and Isfahan University of Medical Sciences. Furthermore, the skills and abilities of the students were regarded as an important platform for the development of competence. The skills and abilities of the innovations were defined with four indicators of technological acceptance, server technology, creative users, and specialization that combined these four indicators in order to match the variables of the skills and abilities of the nanotechnology. Based on the core of some interviews, strategies or strategies were obtained to engage management in competence development.

In other words, increasing the amount of merit in any organization relies on the pragmatism of the managers. The pragmatism strategy is defined with three indicators of personal characteristics, risk taking, and targeted actions. Practicalism leads to an organizational performance while having a two-way relationship with the merit. Finally, the paradigmatic model of research should have consequences for the central research phenomenon. The most important outcomes expected in determining the merits of managers are organizational performance. Organizational efficiency is indexed with three core categories of respect for organizational values, alignment with society, and social responsibility of the organization. The performance of the organization actually increases significantly if these three categories within the organization experience significant growth. Organizational efficiency, though, is a consequence of the merits of the managers in the organization while it is itself a factor for merit in the reciprocating process.

In order to determine the intensity and direction of the effect of independent variables on the level of choosing the managers on the basis of their competence, a structural equation model was employed that defined how to measure a hidden variable using two or more observed variables (Figure 2). The structural model of this research was derived from a paradigmatic paradigm pattern of the qualitative part of the research which was quantitatively applied for its validation among the broader statistical society (Table 2).

If a model drawn in the form of a diagram is confirmed by its fitness indices, then the model can be used to infer statistical information about the causal relationship between the variables in that model. Since the model was confirmed by fitness indices, and considering the acceptability of fit indices, the results related to the statistical analysis of statistical deduction were calculated using Amos software.

According to the data obtained from the statistical inference of the research, estimates and significant level revealed that the effect of all variables on the dependent variable of managers’ selection based on merit was significant in Shahrekord and Isfahan University of Medical Sciences (Table 3). In addition to structural relationships that were all meaningful, there was a kind of factor analysis in the model for some indicators. For example, in the four-variable scholarly model, there were four variables including academic ability, scholarly scholarship, scientific basis for action, and the adoption of new ideas that were all, with high coefficients, able to explain the scientism index. Based on the results of the model among these four variables, the scientific basis of practice (D3) with the coefficient of 0.41 could have a

![Figure 1. Paradigm research model.](image)

![Figure 2. Structural equation modeling for explaining and testing the selection model of competency-based managers.](image)
significant and direct effect compared to other indicators on the basis of scientific action. Moreover, all the six main variables in the model could explain the main variables. This is a very proper definition of the main indicators with correct points. As the model shows, the effect of all variables on the dependent variable of managers’ selection based on merit was significant in Shahrekord and Isfahan University of Medical Sciences. In general, a native model for selecting the managers based on their competency in the above-mentioned universities had a high and acceptable credibility for implementation in other universities and scientific centers of the country.

Discussion
Selection based on the merit in management is regarded as one of the important issues in different areas of management and organization. Today, many large and small organizations have made significant efforts in the area of competence management for organizational and managerial development (8). There are several measures in relation to the selection based on the merit, and each of these actions is related to the organization’s function while the issue of selection based on the merit in Shahrekord and Isfahan University of Medical Sciences has always been a concern for many managers and experts in these organizations. Undoubtedly, selection based on the merit in many organizations is nowadays difficult and the scope of these problems is not only the whole organization, but also the whole society, and the organizational and managerial community of the country is dealing with problems such as management weakness and even corruption managers. In this regard, many scholars and experts developed many theoretical and conceptual processes for solving the problem of selection based on the merit, which should admit that so far these approaches have not been useful and choosing the managers of the organizations of the country is always more political than the merit. Therefore, the results of many studies demonstrated that the existing theories in this field cannot be very effective in explaining the state of management of the country; accordingly, analyzing the selection status based on the merit at Shahrekord and Isfahan University of Medicine Sciences was of great importance by compiling a native model. Therefore, this research was presented in two qualitative and quantitative sections.

In the qualitative part of this research, it was attempted to find a native theory in this field through presenting a theoretical framework and paradigmatic model of personal constructs of managers, staff, and elites of Shahrekord and Isfahan University of Medical Sciences. The theoretical framework outlined in this research suggests that managers, staff, and experts of Shahrekord and Isfahan University

| Table 2. Variables and graphical symbols in the model |
|-----------------------------------------------|
| **Variable**      | **Indicators**                      | **Graphic Icons in the Model** |
|-------------------|------------------------------------|--------------------------------|
| Scientism (D)     | Scientific capacity                | D1                             |
|                   | Researcher                         | D2                             |
|                   | The scientific basis of action     | D3                             |
|                   | Accept new ideas                   | D4                             |
| Technology skills and abilities (MF) | Technological acceptance | MF1                            |
|                   | Mastering technique                | MF2                            |
|                   | Creative users                     | MF3                            |
|                   | Specialization                     | MF4                            |
| Pragmatism (AG)   | Personal characteristics of the person | AG1                           |
|                   | Risk aversion                      | AG2                            |
|                   | Targeted actions                   | AG3                            |
| Networks and communication skills (SF) | Social capital                    | SF1                            |
|                   | Inter-organizational relationships | SF2                            |
| Organizational performance (KS) | Respect for the values of the organization | KS1                           |
|                   | Align with the community           | KS2                            |
|                   | Social responsibility              | KS3                            |
| Competency (Y)    | Mental or intellectual merit       | Y1                             |
|                   | Technical or professional suitability | Y2                            |
|                   | Organizational competence          | Y3                             |
|                   | Personality and behavioral competencies | Y4                            |

| Table 3. The results of statistical inference |
|-----------------------------------------------|
| **Statistical Deduction of Research** | **Estimate** | **Standard error** | **Critical rate** | **Significance** | **Result** |
|-------------------------------------------|--------------|--------------------|------------------|-----------------|------------|
| Scientism                                 | 0.313        | 0.063              | 4.968            | 0.000           | Accept     |
| Technology skills and abilities           | 1.481        | 0.274              | 4.405            | 0.000           | Accept     |
| Pragmatism                                | 4.335        | 2.229              | 1.053            | 0.000           | Accept     |
| Networks and communication skills         | 1.061        | 0.076              | 13.960           | 0.000           | Accept     |
| Organizational performance                | 1.894        | 0.730              | 2.594            | 0.002           | Accept     |
of Medical Sciences have great potential and potential for explanation of the merit. In their view, the choice of managers based on the merits of the knowledge-based discipline of the managers with technological skills and abilities improves the organizational efficiency in addition to networking and communication skills, and the level of competence determinants essentially depends on factors such as knowledge, skills, as well as technological capability, pragmatism, networks, and communication skills and organizational efficiency. In a study, it was concluded that knowledge management continues to evolve and draw upon support from many theoretical and methodological areas (9). Knowledge and the management of knowledge appear to be regarded as increasingly important features for organizational survival. Knowledge management is explored with respect to its content, definition and domain in theory and practice, along with its use and implications and point out some problems inherent in the concept (10). A study presents knowledge management as a coordinating mechanism. Empirical evidence supports the view that a firm with a knowledge management capability uses resources more efficiently and thus is more innovative and perform better (11). Knowledge management practices were found to be directly related to organizational performance which, in turn, was directly related to financial performance. However, no direct relationship was observed between knowledge management practices and financial performance. A different set of knowledge management practices was associated with each value discipline (i.e., customer intimacy, product development and operational excellence). A gap existed between the knowledge management practices that firms believed to be important and those that were directly related to organizational performance (12). With more abstraction of these categories in selective coding, a core category was explained as “Choosing managers with consider to the merits of the scientist of the managers having technological skills and abilities that, through pragmatism, will lead to increased organizational efficiency, in addition to network expansion and communication skills”. In the quantitative section, in order to determine the intensity and direction of the effect of independent variables on choosing the managers relying upon the merit, a structural equation model was used which determined how to measure a hidden variable using two or more observed variables. The structural part of the quantitative part was the result of a paradigm shift in the qualitative part of the research, which was quantitatively implemented in order to validate it among the wider statistical society.

**Conclusion**

In general, the structural equation modeling was able to validate the developed native model, and in this regard, the native model was validated for choosing the managers based on competency in Shahrekord and Isfahan University of Medical Sciences. Finally, such a model was acceptable for implementation in other universities and scientific centers of the country.

**Conflict of interests**

None.

**Ethical considerations**

The study approved by University of Lorestan University (ethical code: 0000000328592901).

**Acknowledgments**

This study was supported by Lorestan University with a grant number of 23946 and the authors would like to gratefully thank all the participants of this study and the authorities.

**References**

1. Naderian Jahromi M. Determine the skills and competencies of the managers of the physical education organization from their point of view and provide a management model [dissertation]. Tehran: University of Tarbiat Moallem, School of Physical Education and Sport Sciences; 1983. [Persian].
2. Khoshrudi A, Akrami M. Identification of constructors of managerial competencies. J Manag Stud. 2011;6(4):580-92. [Persian].
3. Shah Mohammadi GR. Approach to select manager based on multi-criteria decision making (TOPSIS). Journal of Human Resource Management Development and Support. 2013;29:157-72. [Persian].
4. Roshanandali Arbatani T, Jafari Zaoj. J Presentation of human resource competency model in news organizations: a case study. Q J Res Dev Process. 2015;28(3):47-62. (In Persian).
5. Scheer SD, Cochran GR, Harder A, Place NT. Competency modeling in extension education: integrating an academic extension education model with an extension human resource management model. J Agric Educ. 2011;52(3):64-74. doi: 10.5032/jae.2011.03064.
6. Abdelsabur F. An analysis of the compulsory social dimensions of government organizations (scope: Ministry of Energy). Twenty-sixth International Electrical Conference; Tehran: Iran. 2011. [Persian].
7. Ranjarb M, Khaef Elahi A, Danaee Fard H, Fani A. Measuring competency model for managers in the health sector (structural equation modeling approach). J Mazandaran Uni Med Sci. 2014;23(109):104-13. [Persian].
8. Stewart MM, Shapiro DL. Selection based on merit versus demography: Implications across race and gender lines. J Appl Psychol. 2000;85(2):219.
9. Wiig KM. Knowledge management: an emerging discipline rooted in a long history. In: Despres C, Chauvel D, eds. Knowledge Horizons: the present and the Promise of Knowledge Management. Knowledge Research Institute, Inc; 2000:3-26.
10. Mårtensson M. A critical review of knowledge management as a management tool. Journal of Knowledge Management. 2000;4(3):204-16.
11. Darroch J. Knowledge management, innovation and firm performance. Journal of Knowledge Management. 2005;9(3):101-15.
12. Zack M, McKeen J, Singh S. Knowledge management and organizational performance: an exploratory analysis. Journal of Knowledge Management. 2009;13(6):392-409.