

Assessment of Training Needs of Education Experts in Kerman University of Medical Sciences

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Abstract Introduction: Training needs assessment is the first step in implementation and development of educational programs. The aim of this study was to determine the educational needs of education experts in Kerman University of Medical Sciences. **Methods:** This cross-sectional study was conducted in Kerman University of Medical Sciences in 2015. The study sample included all education experts (N=45). A valid and reliable questionnaire was used to collect data. In order to analyze data, descriptive statistics (mean and standard deviation) and inferential statistics (Pearson and ANOVA) were applied. SPSS version 21 was used for data analysis. **Results:** Findings showed that regarding technical, conceptual and human skills, the educational needs of experts were over the average level. There was not a significant difference between years of experience and age. Conversely, we could observe a significant difference between type of employment and educational needs ($F=3.43$, $p=0.43$). **Conclusion:** Education experts need to participate in training courses regarding technical, perceptual and human skills. This is more prominent about human skills. In order to enhance knowledge and skills of education experts, we suggest holding educational courses for education experts.

Keywords: *needs assessment, education experts, technical needs, conceptual needs, human needs*

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1. Introduction

Universities are the most important places of education and human resources are considered to be one of the strategic assets in the universities [1,2]. Any organization to achieve its goals requires qualified and competent personnel. Besides; the development of organizations and institutions depends on the development of knowledge, insight, skills and behavior of human resources [3,4]. Development of human resources as the means of improving the quality of their works and useful way for dealing with change that are two basic features of the competition in organizations is of crucial importance and must be well designed and programmed [5]. The existence of any organization depends largely on the skills and knowledge of employees and whatever this field is updated and optimized, employees' adaptability with internal and external environment of the organization will be increased [2]. Employees' training can lead to strategic development and ensures the survival and integrity of the organization [6]. Therefore, training of employees is one

of the main and critical tasks in any organization. The first step to reach this goal is determining the specific needs that should be included in training programs [3]. Identifying the training needs is a prerequisite for a successful educational system; in fact the first cause for ensuring the effectiveness of educational programs and improvement of skilled personnel [7,8]. Training needs assessment helps organizations to examine the knowledge and skills of their members. Awareness of the obtained data can be used as a fundamental basis for developing a training program, in order to increase the skills and knowledge of the individuals [9]. Different definitions of needs assessment are provided. According to one definition, needs assessment is the process for establishing agreement and collecting the views of individuals and groups regarding their needs. According to another definition needs assessment is the process of setting goals, determining the existing status, measuring needs and establishing priorities. The important thing in this definition is prioritizing the needs according to their importance [11]. Education is expensive and should only be introduced when the response to a recognized need

exists and to be the best solution to the problems which can be solved through it. Training activities that are designed regardless of these conditions actually will be a waste of resources. Therefore, priority will be given to some specific needs rather than focusing on all of them [7,12]. Education experts are as part of human resources that attention to their training needs must be considered according to the training needs of other human resources such as physicians, nurses, faculty members and others.

Variety of researches have been conducted in the field of needs assessment in educational systems in different groups including family health experts, experts in the field of drug prevention and treatment, faculty members, and other medical records staffs. But there is only one research on educational needs of education expert conducted in Isfahan [2,11,13,14,15]. Considering the fact that the needs of people varies according to different cultures and also due to the fact that the needs assessment is a dynamic process and even a society's expanding needs is different at different times and regarding that no study has been conducted on the training needs of education experts in Kerman, it is necessary to assess the training needs in the province. Since training courses specifically for educational staff is not held in recent years, and if implemented experts demand for these courses has not been considered, it is necessary that authorities determine basic themes of in-service training programs to increase the effectiveness and efficiency of the system [2]. So the aim of this study was to determine the training needs of education experts in Kerman University of Medical Sciences.

2. Materials and Methods

This needs assessment was carried out in Kerman University of Medical Sciences in 2015. This was a training needs assessment that was performed with the aim of developing a training program for university experts. This was an institutional research and study population consisted of all experts of Kerman University of Medical Sciences, which when performing the study, a total of 48 participants were enrolled. Given that in this study preference or expressed needs were considered, the experts stated their needs using a self-assessment questionnaire.

At first a 50 items questionnaire that had been used in the study of Aminoroaya and colleagues [2] was used and the experts were asked to rate their need for training in each item on a 5-point Likert scale. This questionnaire assesses the training needs of educational experts in the field of technical requirements (15 items), cognitive needs (20 items) and human needs (15 questions) as well as demographic characteristics. Content validity was confirmed by specialists in the study of Aminoroaya and colleagues and reliability of 89% was obtained using Cronbach's alpha coefficient [2]. In this study, the reliability of this questionnaire was 73%. The needs based on the Likert scale ranged as "very low", "low", "moderate", "high" and "very high" from 1 to 5.

Consequently, the minimum score for each question was 1 and the highest was 5. For each question, the mean was calculated separately and the mean need for each item was considered 3. Thus, the score higher than 3 was

considered as necessary. Data were reported using descriptive statistics with mean and standard deviation and inferential with Pearson correlation coefficient test and one-way ANOVA. Pearson test was used to determine the relationship between work experience and age with training needs. SPSS v. 21 was employed for data analysis.

One way ANOVA was used to compare the relationship between type of employment and training needs. Ethical considerations included: protection the right of free will to participate in the study, the confidentiality, permission from the relevant authorities and compliance with the provisions of the Declarations of ethics in research.

3. Results

In this study 39 out of 48 participants completed the questionnaire; the response rate of %81. All individuals who completed the questionnaire were female and had the bachelor's degree. The mean age was 37.79 ± 6.11 years, with the youngest 28 years and the oldest 51 years. The mean of employee tenure was 10.94 ± 16.5 years; with the least of 2 years and the most of 23 years of experience. Training needs of education experts for each question is presented in Table 1.

According to Table 1, the highest staff training requirements was within three area of developing the ability of sensitivity and responsibility in performing tasks (4.74 ± 0.63) and the lowest associated with the use of computer hardware (2.41 ± 0.75).

Training requirements were more than average regarding the skills of technical, conceptual and human needs; 4.13 ± 0.17 for technical skills, 4.28 ± 0.15 for conceptual field and 4.44 ± 0.17 for human standards. Pearson test results showed a significant relationship between the training needs and job tenure in technical skills ($r = -0.03, p = 0.83$), conceptual field ($r = 0.16, p = 0.32$) and human standards ($r = 0.19, p = 0.23$). But there was not a significant relationship between the educational needs and age in technical skills ($r = -0.03, p = 0.81$), Perceptual field ($r = 0.13, p = 0.40$) and human standards ($r = 0.13, p = 0.40$).

The results of ANOVA showed a significant difference between the type of employment and educational needs ($F = 3.43, p = 0.43$).

The assumption of homogeneity of variances is established and Tukey test demonstrate a significant difference between individuals involved in official jobs and those with contract employment regarding their human skills needs. So that people who were officially employed need more training in the field of human skills than those who were employed on contract.

4. Discussion

Strategic planning in organizations and educational institutions is crucial. Considering that needs assessment can provide comprehensive and proper requirements to provide planning, training needs assessment has been taken into consideration more and more in the last decade [12]. Needs assessment as an important tool for the empowerment of human resources indicates the educational gaps, facilitate rapid and effective decision-

making and helps the planners to apply a suitable solution for eliminating the gap with regards to limited financial resources and rising costs [5,16,17]. Education experts are as part of human resources that attention to their training needs must be considered according to the training needs

of other human resources such as physicians, nurses, faculty members and others. So the present study aimed to determine the training needs of education experts in Kerman University of Medical Sciences.

Table 1. The training needs of education experts, as well as priority

Item	Max	Min	Mean
Specialized technical skills (training needs)			
Computer software	5.00	3.00	4.1795
Computer hardware	4.00	1.00	2.4103
Using required equipments and educational tools	5.00	3.00	4.3846
Methods of evaluating the performance of self and others	5.00	3.00	4.5641
Acquaintance with short-term and long-term planning methods in the organization	5.00	2.00	4.3077
Ways of identifying occupational problems	5.00	4.00	4.5385
Acquaintance with training program design methods	5.00	3.00	4.2564
Acquaintance with training program design practices	5.00	4.00	4.4872
Methods of modifying existing processes	5.00	4.00	4.5385
Methods of Using new technologies and techniques	5.00	4.00	4.3846
Skills in educational evaluation techniques	4.00	4.00	4.0000
Job-related finance information	3.00	1.00	2.4615
Skills in writing style and official correspondence	5.00	3.00	4.0000
Acquaintance with the rules, regulation and duties	5.00	4.00	4.7949
Getting acquainted with computer software educational training	5.00	4.00	4.7692
Conceptual skills			
Ability to present new ideas, creativity and innovation	5.00	3.00	4.2308
Ways to reduce organizational conflict	5.00	4.00	4.2564
Problem-solving skills in the workplace	5.00	4.00	4.2564
The methods of achieving effective organizational standards	5.00	3.00	4.0513
Ways to achieve acceptance of change and transformation	5.00	3.00	4.0769
Acquaintance with goals and policies of the organization	5.00	3.00	4.0513
Belief in management as an essential basis in the organization	5.00	3.00	4.2564
Predicting the results of work before performing	5.00	3.00	4.0513
Inter-section cooperation and coordination procedures(within the faculty and within the office of education)	5.00	3.00	4.2308
External cooperation and coordination procedures(outside the faculty and the office of education)	5.00	3.00	4.3333
Methods of logical decision making	5.00	4.00	4.5641
Occupational information exchange	5.00	3.00	4.2308
Realizing the conditions and time requirements	5.00	3.00	4.1282
Ability to establish cooperation with clients	5.00	3.00	4.4872
The ability to establish sensitivity and responsibility in performing tasks	5.00	3.00	4.7436
The analysis of Occupational issues	5.00	3.00	4.3077
Methods of tasks prioritizing	5.00	3.00	4.2051
Understanding the situation and fitting your responses	5.00	3.00	4.4103
The importance of implementing laws and regulations and administrative discipline.	5.00	3.00	4.4615
Ways of understanding the objectives of other parts of the organization	5.00	3.00	4.3333
Human skills			
Ways of promoting job satisfaction	5.00	3.00	4.4872
Methods of optimizing the organizational climate	5.00	3.00	4.3846
Methods of creating interest and motivation in personal responsibilities	5.00	3.00	4.4359
Achieving the ways to create desirable working environment	5.00	3.00	4.4359
Ways to strengthen the spirit of faith, integrity, purity and professional integrity	5.00	3.00	4.4872
Selecting the proper methods of behavior modification	5.00	3.00	4.6667
Coping with job stress	5.00	3.00	4.2308
Achieving the ways of effective communication skills	5.00	3.00	4.1795
Strengthening and development of Islamic culture	5.00	3.00	4.5385
Supporting participation and teamwork methods	5.00	3.00	4.4359
Strengthening self confidence to accept responsibility	5.00	3.00	4.4359
Skills of Stimulating the personnel for changing in methodology	5.00	3.00	4.4103
The recognition of one's abilities	5.00	3.00	4.4103
knowing one's cognitive strengths or weaknesses	5.00	3.00	4.5897
Effective communication skills with clients	5.00	3.00	4.5641

The results of this study showed that the needs in technical skills was more than average and the most important needs were acquaintance with rules, regulations and duties related to education experts. In the study of Aminoroaya and colleagues also the needs of educational professionals in the field of technical skill was more than average. But the most important training need was in the field of technical skills and the use of computer software, and using techniques and technology [2].

However, the same result was obtained regarding the needs that were pointed out in the study of Aminoroaya *et al.*

This indicates that employees have a high demand in this area over many years.

But the fact that the populations of the two studies are different should not be neglected. More demand on acquaintance with laws and regulations and job description in this study could be related to major accelerated changes in the organizations and issuing new and numerous rules.

Therefore more attention to this basic need is necessary. It is recommended to establish training workshops along with issuance of new training guidelines.

Another finding of the study is the fact that the training needs of professionals in the field of conceptual skills was more than average, and the most important demand in this regard was establishing the sense of sensitivity and responsibility in performing tasks. Aminoroaya *et al* also found that the demand for conceptual skills was more than the average level. But the most important training needs were related to the ways to achieve the standards of efficiency, intersector cooperation and coordination methods and finding the ways to achieve the acceptance of change [2].

However, our study also provided the same result. There are several ways to create sensitivity and responsibility that can prevent many risks of lack of accountability.

The results also showed that the education expert's need in the field of human skills was more than the average and the most important need was learning behavioral modification techniques.

Aminoroaya *et al* also reached the same results in this regards, but the most important requirements were promoting job satisfaction, optimization techniques of organizational climate, and methods to create interest and motivation [2].

Of course, these needs also were more than the average in our study. There are several convenient methods to change behavior and for meeting the needs of employees in the field, training workshops should be held.

As a whole, results showed that the most training needs in three areas of technical, conceptual and humane skills was related to human skills. The results of a study that was conducted at the University of California showed that all stakeholders and officials, for more efficient operations and organizational developments, needed training in basic information and skills and the study on the managers of steel company was consistent with these results [18,19]. But studies of Aminoroaya *et al* on education staff and Jahanbakhsh *et al* on employees of medical record department did not match this result [2,11]. In these studies technical skills training was the most in need issue.

Great attention has been paid to social skills and deficits during the past several years. Some of these programs have been developed to increase social skills (interpersonal), especially for staffs [20].

Since the origin of many individual, organizational and community problems can be found in the lack of effective communication, the communication system and generally misinterpretations of communication, and due to the fact that education experts have interact with the students, the importance of the need for human skills training clears up.

The results of this study also showed that there was no relation between duration of service and training needs. These results were consistent with the study of Jahabbakhsh *et al* conducted on steel company managers [11,19].

But the study of the training needs of human resources management office of the Ministry of Health was not consistent with the above results indicating the influence of work duration on the type of educational needs [21].

Further investigation is required to check this difference. In this study there was no significant relationship between age and educational needs. This result was not consistent with study of Jahabbakhsh *et al* showing negative relationship of age with the need for technical skills training

Lack of the views of authorities and students as the beneficiary in this assessment was one of the challenges in this study. Another challenge was not completing the questionnaire by male participants, despite following-up. Also this study was conducted in Kerman University of Medical Sciences and generalization is within a short time.

It is recommended that a comprehensive study taking into account the students and the authorities with using motivational legal factors to be conducted to assess training needs of staffs in all medical universities and a comprehensive program to be prepared for educational experts.

5. Conclusion

Education experts need to have continuing training courses in the three categories of technical, conceptual and human skills as the most one. It is recommended to consider these needs and provide the necessary training courses to enhance the knowledge and skills of education experts.

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