ABSTRACT

Introduction: Human resources development is one of the most important components of any organization and detecting important factors influencing human resources management plays an essential role in the success of the firms. In this study, we investigated different factors influencing human resources productivity of Shiraz University of Medical Sciences staff.

Method: The present research was a cross-sectional study. Sample size was calculated 208 individuals. To access information about the human resource productivity, a valid and reliable questionnaire was used. The data were analyzed using SPSS software. Pearson correlation was used for statistical analysis of the data (p=0.05).

Results: The results showed that there was a statistically significant relationship (p-value<0.001) between human resources productivity and factors affecting the productivity of human resources (motivational factors, leadership style, creativity and innovation, general and applied education, and competitive spirit). Motivational factors (r =0.89) and general education (r =0.65) had the most and the least effects on human resources productivity.

Conclusion: Considering the fact that motivational factors were the most effective factors on human resource productivity, we recommend that managers should care more than before about this factor; also, in order to motivate the employees, they should consider the staff’s individual differences.

Keywords: Resource, Human resource, Productivity
productivity of human resources including motivational factors, leadership style, creativity and innovation, general and applied education and competitive spirit. These findings will help the organization managers to recognize and strengthen these factors.

Methods
The present research is a cross-sectional study conducted at Shiraz University of Medical Sciences on 8 vice-chancellors including educational affairs, development & resource management affairs, health, research, student affairs, clinical affairs, and food drug and cultural affairs. The subjects of this research included all personnel in these 8 departments. In this study, we used a stratified random sampling method. The size of the sample was calculated 208, using information from previous studies and considering the confidence level =0.95, SD = 25, mean=125 by software power Ssc.

To access information about the human resource productivity, one questionnaire was used. This questionnaire was designed by an Iranian scholar named Tahmasebi based on a combination of human resource productivity questionnaires of Hanisch thesis (2008), Ahmadi’s thesis (1380), and indicators outlined in the comprehensive management model about the factors affecting the productivity of human resource of Ahmadi and Alvani. This scale has 47 items. Employees would be asked about human resource productivity for a five-point scale (1 to 5), which includes options of so much (5), much (4), average (3), low (2), very low (1). Finally, the score of each response was added and for each factor one score and for human resource productivity one total score was obtained.

Factors affecting the productivity of human resources, the item numbers of each factor in the questionnaire and the minimum and maximum scores of each factor are shown in Table 1.

Table 1. Factors affecting the productivity of human resources

<table>
<thead>
<tr>
<th>Factors affecting the productivity of human resources</th>
<th>competitive spirit</th>
<th>general and applied education</th>
<th>Creativity and Innovation</th>
<th>Leadership style</th>
<th>Motivational factors</th>
<th>human resources productivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>The number of items</td>
<td>6</td>
<td>5</td>
<td>9</td>
<td>11</td>
<td>16</td>
<td>45</td>
</tr>
<tr>
<td>The minimum score</td>
<td>6</td>
<td>5</td>
<td>9</td>
<td>11</td>
<td>16</td>
<td>45</td>
</tr>
<tr>
<td>The maximum score</td>
<td>30</td>
<td>25</td>
<td>45</td>
<td>55</td>
<td>80</td>
<td>235</td>
</tr>
</tbody>
</table>

Cronbach’s alpha coefficient was reported 0.91 in Tahmasebi’s study and its validity has been approved through different studies. The data obtained from human resource productivity questionnaires was analyzed by SPSS software. Pearson correlation coefficient test was used for statistical analysis of the data.

Results
The majority of the staff was female and most of them had bachelor degrees. Also, the majority of the personnel were married and most of them had less than 10 years of experience. Among the factors affecting the productivity of human resources in all the departments, the highest and lowest mean scores belonged to the motivational factors and general education.

The results of this research showed that there was a significant relationship (p-value<0.001) between human resources productivity and the factors affecting the productivity of human resources (Motivational factors, Leadership style, Creativity and Innovation, General education, competitiveness) (Tables 1). Motivational factors (r =0.89) had the most effect on human resources productivity. After that leadership style (r =0.86), creativity and innovation (r =0.79) and competitive spirit (r =0.67) were the effective factors and general and applied education(r =0.65) had the lowest effect (Table 2).

Discussion
The primary aim of human resource productivity was to maximize effective usage of the most important factors of production, namely human resources. This paper has presented a survey for identifying the influencing factors on human resource productivity of Shiraz University of Medical Sciences staff.

Findings from various theoretical studies have indicated that human resource productivity was an important issue for all organizations and different factors affect it. In the study of Lamka et al (2014), 12 critical factors which negatively affect labor productivity were identified. The factors were Management system, Work planning and Scheduling, Incompetent supervisors, (Bilateral) Poor communication, Rework, Labor supply and work crews, Late deliveries of materials and equipment, Workers absenteeism and turnover, Motivation, Lack of training/skills, Poor site conditions (location, ground conditions, confinement), and safety at workplace.

Bahadori et al. (2013) stated that factors affecting human resources’ productivity in a Military Health Organization were mental, intellectual and personal growth; organizational support, organizational culture, motivation, evaluation and performance feedback, ability, environment; individual health; training; and job identification.

Malmir et al. (2012) in their study mentioned that the effective factors on productivity of human resources were environmental factors (kind of job, job satisfaction, social relationship, partnership), and individual factors (experience related to the job, level of education, age average, learning as a part of service, level of income).

Research results of the Shekari et al.’s study (2012) showed that factors affecting the productivity of human resources in KhorasanRazavi Gas Company were health aspects, leadership style, motivational factors, organizational commitment, work experience, general and applied education, demographic characteristics, physical environment within the organization, external environment and competitive spirit, respectively (8). Allah Verdi et al. (2010) stated that consideration of the factors related to the
management style was found the most important factor affecting the productivity of labor. Individual factors, culture, organization structure, reward systems, training courses and factors related to the physical environment were important in the next stages (9).

**Conclusion**

According to the findings, motivational factors were the most effective factors on human resource productivity of Shiraz University of Medical Sciences Staff. Therefore, we recommend that managers should care more than before about motivational factors and in order to motivate the employees they should consider staff individual differences. Considering the fact that the leadership style of managers had a significant impact on increasing the employees’ productivity, we recommend that the managers should use human-centered and participatory management styles that allow the employees to participate more in organization activities. Since increasing the creativity of employees is related to their productivity, managers can increase human resource productivity through holding creativity workshops, appreciating creative staff, allocating funding to creative and innovative measures. Since the existence of competitive spirit in staff can increase their productivity, managers can strengthen the competitive spirit by placing special facilities for successful staff in different fields of science, research and culture. Whereas the general and applied sciences had the least effect on employees’ productivity, we suggest the managers to use some methods as e-learning in staff working hours.

**Acknowledgement**

Authors would like to thank the dean of Management School and the management team who provided constructive comments.

**Conflict of Interest**

None Declared.

**References**