Educational need assessment of the staffs in the area of education at the University of Tarbyat Modarres

Tahereh Hoseini¹, *, Mohamad Ehsan Taghizadeh², Mohamad Reza Sarmadi³

¹MA, Department of Educational Sciences (Curriculum), Payame Noor University, PO BOX 19395 - 3697, Tehran, IRAN
²Assistant Professor, Department of Psychology, Payame Noor University, PO BOX 19395 - 3697, Tehran, IRAN
³Associate Professor, Department of Psychology, Payame Noor University, PO BOX 19395 - 3697, Tehran, IRAN

E-mail address: Hd.diamond@yahoo.com

Keywords: Need assessment, Educational need assessment, Staff's education.

ABSTRACT. The fundamental goal of this article was to identify and prioritize educational need assessment of the University of Tarbyat Modarres' staffs. The research methodology was in form of field and library studies and the type of research fell under the survey and descriptive category. The research universe included educational staffs of 7 faculties and educational deputyship of the University. The members of the statistical sample population amounted to 120 people where the questionnaire was distributed and collected among 85 people of whom in form of sample available. The research tool was a researcher made questionnaire with a Cronbach's alpha of %86 along with 36 items which was used on the 4 value Lickert scale. The statistical method applied in this research included descriptive and inferential statistics where in the descriptive statistics, tables and graphs of frequency and percentages were used while in the inferential statistics, variance analysis and the student t test were utilized in order to prioritize staff's educational needs. Research findings based on 6 research questions could be inferred to say that the Educational need assessment of the staffs had had a medium impact in fulfillment of the University's educational goals (t value: -1/423). Priority of staff's educational needs in the area of education was respectively as follows: managerial courses (knowledge, time and development and …); professional ethics courses and human relations; IT skills and Foreign languages courses (t value: -1/423). Considering results we can state the educational need assessment had left a medium effect on increasing of professional efficiency and ability of the staffs (t value: 0/296). Experts also maintain that educational need assessment does not conform to the educational level (t value: -3/96) and their organizational positions (t value: -8/637) and in the end, educational courses were not either designed or implemented based on staff's educational needs (t value: -6/463). No significant relationship was either found between job records and organizational positions and the experts' response to none of the research questions.

1. INTRODUCTION

Formulation of policies of each organization is done based on its needs. Offering services, continuity and promotion of its quality levels requires an understanding of the needs. Need assessment is considered to be a basis for setting the programs required in order to provide educational needs so that in accordance with the conditions, necessary planning is made. Need assessment as one of the major components in many areas concerned with in advance planning and provision for attaining definite objectives and ends has been focused attention since old times (Fathi Vajargah, 1997). Conducting of studies for determining their needs and priorities could result from personal and group work and more elimination of known educational needs also need cooperation, accuracy, acceptance and execution of programs by practitioners in the area intended by the organization which could have the readiness for embracing educational courses during work or outside of the working hour. Thus, the significance of need assessment for getting to understand the
University as an entity providing higher education and as an entity training expert forces required by different sectors in the country has a highly sensitive, effective and orientating mission in the area of scientific, cultural and economic development. Conducting this study paves the way for criticism of the performance of a division of the University's educational services within the national Higher Education System so it becomes clear that what challenges it is faced with on the way the organization which provides for Higher education to other organizations. Hence, considering the staffs of this entity are faced with a wide spectrum of the youths being students, qualitative promotion of reciprocal interactions of the University's educational staffs and the students has always been one of the concerns by the Higher Educational System. Thus, educational need assessment manifests while formulating educational program and courses by the University's staffs and it is an instrument for awareness of staff's problems for acquiring promotion in the level of educational services level in line with promotion of educational and research programs of the University. Today, sciences are witnessing a rapid speed in all areas and for conducting all activities in each organization, they are in need of using trained staffs and hence offering complementary education to people in accordance with the developments seems tangible. Expansion and optimization of the human force has undoubtedly been one of the obsessions of the effective principals in all successful organizations and therefore, today, education, optimization and restoration of forces is considered to be one of the major organizational capital pivots. Need assessment too, is one of the fundamental components of the educational process in each organization and wherever the issue of formulation of schemes and adoption of a series of educational measures is raised, need assessment is also raised (Fathi Vajargah, 1997). Results by Diane (2003) demonstrated that as business-production organizations need to produce means and instruments based on the clients' interests and his way of thinking, the principal of in service specialized education groups need to update education material and offer them in accordance with the modern human knowledge.

Diane maintains that the work of duty analysis which is completed by the traditional service within 15 months will analyses the same in service education duty in two days. The methodology is the person is first asked what method he needs to be able to conduct that particular activity (this comprises content), thus this content is analyzed where each activity can be learnt in half an hour. University as an entity providing higher education and as an entity training expert forces required by different sectors in the country has a highly sensitive, effective and orientating mission in the area of scientific, cultural and economic development. Conducting this study paves the way for criticism of the performance of a division of the University's educational services within the national Higher Education System so it becomes clear that what challenges it is faced with on the way the organization which provides for Higher education to other organizations. Hence, considering the staffs of this entity are faced with a wide spectrum of the youths being students, qualitative promotion of reciprocal interactions of the University's educational staffs and the students has always been one of the concerns by the Higher Educational System. Thus, educational need assessment manifests while formulating educational program and courses by the University's staffs and it is an instrument for awareness of staff's problems for acquiring promotion in the level of educational services level in line with promotion of educational and research programs of the University. The current research seeks to identify and prioritize staff's educational needs working in the area of education at the university under study and determine the role of educational need assessment in qualitative improvement of staff's in service training programs and the continued education so that it is a guideline for academic planners and the respective ministries for access to actual information and hence the resulting findings are considered for intended planning in the section intended. It is clear that promotion of quantitative and qualitative level of educational could leave substantial effects in educational settings like universities and need assessment is an instrument for achieving the above purpose. A question that arises in here is: what are the sectors requiring an educational program required for promoting organizational goals is clear and its goal is to access actual information related with the nature of work done in then organization.
educational needs of the staffs in the area of education at the University of Tarbyat Modarres and what guidelines could be formulated for planning aimed at eliminating the above needs?

2. METHODOLOGY

Statistical sample and population

In the present article, for investigating hypotheses and explaining an appropriate paradigm, of educational need assessment all the staffs in the education division from 7 faculties of Humanities, Medical Sciences, Basic Sciences, Technical and Engineering, Agriculture, Arts, Natural resources and Marine Sciences of the University of Tarbyat Modarres, numbering 120 people were considered as the statistical population, from among whom a sample of 85 people was chosen through in access methodology. In this research, given the fact that the purpose is to understand the status quo and help the decision making process within the area of staff's education, the descriptive and survey type research was applied.

Methodology and research tools

In this research, given the fact that the purpose is to understand the status quo and help the decision making process within the area of staff's education, the descriptive and survey type research was applied. In order to support or reject the hypotheses and explain an appropriate paradigm, of educational need assessment all the staffs, the questionnaire was used as a main tool for studying and investigating problems and issues of the statistical sample population. The research tool was a researcher made questionnaire with 36 items which was used on the 4 value Lickert scale. After measuring the reliability of the questionnaire, the Cronbach's alpha of %86 was obtained through split half where this indicates a good reliability. In fact, the questionnaire reliability was approved. The nominal and content method was applied for studying validity. Hence, the questionnaire was given out to 8 experts and proficient professionals for approval. The final analysis was conducted from among 85 questionnaires. First, data were extracted out of the questionnaires and then necessary tables were applied by using the SPSS software.

Findings

In the descriptive section, we were concerned with analyzing data based on the tables acquired from information analysis through the SPSS software. Then, data and their trends were analyzed by using descriptive statistics indices like average, standard deviation and delimiting graphs and tables. Also, in the inferential section, in order to investigate educational needs, a questionnaire containing 36 questions was distributed among the Education staffs of the University and the findings were observed as following: To investigate each of the research questions, relevant questions were placed in the questionnaire. To investigate each of the question group in the questionnaire, the student t test was applied. For this purpose, the average response to the questionnaire's questions regarding each research question was considered to be a point of a research question.

- Test of normality of the research questions point

The Kolmogorov- Smirnov test was applied for investigating the normality of the research questions point. The hypotheses under study in this test are as follow:

Null hypothesis: Research questions point is normal

Opposite hypothesis: Research questions point is not normal

The following table indicates the Kolmogorov- Smirnov test results for each of the research questions.
Table 1. The Kolmogorov-Smirnov Z

<table>
<thead>
<tr>
<th>Research question</th>
<th>No.</th>
<th>Kolmogorov-Smirnov Z</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research question1</td>
<td>84</td>
<td>1/087</td>
<td>0/188</td>
</tr>
<tr>
<td>Research question2</td>
<td>84</td>
<td>0/785</td>
<td>0/568</td>
</tr>
<tr>
<td>Research question3</td>
<td>84</td>
<td>1/301</td>
<td>0/068</td>
</tr>
<tr>
<td>Research question4</td>
<td>84</td>
<td>0/960</td>
<td>0/315</td>
</tr>
<tr>
<td>Research question5</td>
<td>84</td>
<td>0/974</td>
<td>0/299</td>
</tr>
<tr>
<td>Research question6</td>
<td>84</td>
<td>0/902</td>
<td>0/390</td>
</tr>
</tbody>
</table>

Table (1) indicates the significance level of the Kolmogorov-Smirnov test for each of the research questions. In accordance with the fact the significance level of all the questions is greater than 0/05, research questions point is normal with %95 confidence. Table, 2 indicates the number of people whose response to the questionnaire questions has been used in estimating the point of each of the questions. In the following table, average, standard deviation, and standard error of each question have been shown.

Table 2. Single group t statistic

<table>
<thead>
<tr>
<th>Research question</th>
<th>No.</th>
<th>Average</th>
<th>Standard deviation</th>
<th>Standard error average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research question1</td>
<td>83</td>
<td>2/515</td>
<td>/516</td>
<td>0/056</td>
</tr>
<tr>
<td>Research question2</td>
<td>83</td>
<td>2/411</td>
<td>0/565</td>
<td>0/062</td>
</tr>
<tr>
<td>Research question3</td>
<td>83</td>
<td>2/53</td>
<td>0/613</td>
<td>0/067</td>
</tr>
<tr>
<td>Research question4</td>
<td>83</td>
<td>2/306</td>
<td>0/444</td>
<td>0/048</td>
</tr>
<tr>
<td>Research question5</td>
<td>83</td>
<td>1/948</td>
<td>0/582</td>
<td>0/063</td>
</tr>
<tr>
<td>Research question6</td>
<td>83</td>
<td>2/100</td>
<td>0/563</td>
<td>0/016</td>
</tr>
</tbody>
</table>

In table (2) the student t test static, freedom degree, significance level relating to the two way test, discrepancy average and two way confidence distance of %95 are shown for each of the research questions.

Table 3. Single group t test

<table>
<thead>
<tr>
<th>Test value: 2/5</th>
<th>T</th>
<th>Freedom degree</th>
<th>Significance level</th>
<th>Average discrepancy</th>
<th>Confidence Level of %95</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Higher</td>
</tr>
<tr>
<td>Research question1</td>
<td>0/276</td>
<td>82</td>
<td>0/783</td>
<td>0/015</td>
<td>-0/097</td>
</tr>
<tr>
<td>Research question2</td>
<td>-1/423</td>
<td>82</td>
<td>0/159</td>
<td>-0/088</td>
<td>-0/211</td>
</tr>
<tr>
<td>Research question3</td>
<td>0/296</td>
<td>82</td>
<td>-/531</td>
<td>-0/319</td>
<td>-0/453</td>
</tr>
<tr>
<td>Research question4</td>
<td>-3/962</td>
<td>82</td>
<td>0/000</td>
<td>-0/193</td>
<td>-0/290</td>
</tr>
<tr>
<td>Research question5</td>
<td>-8/637</td>
<td>82</td>
<td>0/000</td>
<td>-0/551</td>
<td>-0/678</td>
</tr>
<tr>
<td>Research question6</td>
<td>-6/463</td>
<td>82</td>
<td>0/000</td>
<td>-0/399</td>
<td>-0/522</td>
</tr>
</tbody>
</table>
Student t test results

Research question 1: In the above table, the significance level for the research question 1 is greater than 0.05; therefore, with a confidence level of 95%, the test null hypothesis, stating the point for the research question 1 is 2.5 is accepted. In other words, with a 95% confidence level, in accordance with the opinion of the education experts the staff's educational need assessment has medium effects on the materialization of the academic educational goals.

Research question 2: the significance level for the research question 2 is greater than 0.05; therefore, with a confidence level of 95%, the test null hypothesis, stating the point for the research question 2 being 2.5 is accepted. In other words, with a 95% confidence level, education experts are on average in agreement with the courses on designing being prioritized.

Research question 3: the significance level for the research question 3 is greater than 0.05; therefore, with a confidence level of 95%, the test null hypothesis, stating the point for the research question 3 being 2.5 is accepted. In other words, with a 95% confidence level, education experts maintain that staffs' educational need assessment could have medium effects on the increasing of their professional efficiency and ability.

Research question 4: the significance level for the research question 4 is less than 0.05; therefore, with a confidence level of 95%, the test null hypothesis, stating the point for the research question 4 being less than 2.5 is rejected. Given the fact the average point for the research question 4 is 2.31, with a confidence level of 95% the point for this question is less than 2.5.Therefore, with confidence level of 95% education experts argue that educational need assessment of the staffs dose not conform to their level of education.

Research question 5: the significance level for the research question 5 is less than 0.05; therefore, with a confidence level of 95%, the test null hypothesis, stating the point for the research question 5 being less than 2.5 is rejected. Given the fact the average point for the research question 5 is 1.95, with a confidence level of 95% the point for this question is less than 2.5.Therefore, with confidence level of 95% education experts argue that educational need assessment of the staffs dose not conform to their organizational positions.

Research question 6: the significance level for the research question 6 is less than 0.05; therefore, with a confidence level of 95%, the test null hypothesis, stating the point for the research question 6 being less than 2.5 is rejected. Given the fact the average point for the research question 6 is 2.10, with a confidence level of 95% the point for this question is less than 2.5.Therefore, with confidence level of 95% education experts argue that educational need assessment of the staffs dose not conform to educational courses.

3. CONCLUSION

Now, we begin to elaborate on the findings of empirical data analysis in accordance with the research questionnaire in order to assess the needs of the education staffs at the University of Tarbyat Modarres in Tehran. In accordance with the analyses done, we applied the inferential statistics on statistical data as mentioned in chapter four in detail. The findings in connection with the research questions which have brought in form of 6 questions are going to be separately analyzed.

Research question 1: Is staff's educational need assessment effective in materialization of the academic educational goals?

While analyzing questionnaire questions related with the goal of the research, the following results were acquired:

Staffs are on average aware of the academic educational goals and most of whom do not consider their own educational needs as consistent with the academic educational goals. Most of the staffs considered participation ion education courses as effective in metallization of perspective and mission of the university. Also, a higher number of sample members admitted that the officials did
not consider staffs training in choosing educational course and academic educational goals and annually they consider a series of repetitive and usually educational courses for the staffs; thus failing to provide an exact need assessment based on their professional expertise needs. Most agree on the subject that the courses educational goals are not expressed clearly and transparently. In accordance with the statistical results and with the confidence level of %95, question 1 is accepted. In other words, given the opinion education experts, educational need assessment of the staffs has medium effects on the fulfillment of the academic educational goals. In fact, the academic educational goals being fulfilled is not simply based on the need assessment of the staffs and holding of educational courses and some other factors are involved.

Research question 2: Most staffs do not consider educational courses in line with their own educational needs priorities. Also, most staffs agree on this subject that officials responsible for training staffs did not act to elicit their need assessment in designing courses. Certainly, staffs have different areas in educational areas on mind (in line with their own organizational and professional positions), however, the researcher due to limitations in questions, has simply considered 4 cases of the needs where given the results, the priority of the educational staff's needs is as follows:

1. Managerial courses (management of knowledge, time and development) (%51/8)
2. Professional ethics courses and human relations (%42/4)
3. IT skills, particularly ICDL (%34/1)
4. Foreign languages (524/7)

In accordance with the statistical results and with the confidence level of %95, question 2 is accepted. In other words, with a %95 confidence level, education experts are on average in agreement with the courses on designing being prioritized.

Research question 3: To what extent the staffs' educational need assessment is effective in increase of their professional efficiency and abilities?

Almost, a higher number of staff admitted that via participation on educational courses they felt no change in the promotion of their own professional knowledge. Also, participation in courses had led to an increase in their abilities and efficiency to some level, while leaving little impact on raising their professional motivation; however, most staffs did believe that accurate and systematic need assessment, leading to effective courses were quite effective in increasing of their efficiency. Also, staff considered on average participation in courses as resulting in a rise in the level of general skills like health, safety and sports skills and unfortunately most staff did agree that participation in courses did not result in learning of specialized skills. Also, participation in the courses involved no rise in payments for the staffs (Mirsepasi, 2003). In accordance with the statistical results and with the confidence level of %95, question 3 is accepted. In other words, education experts maintain that educational need assessment of the staff did have a medium effect on increasing proficiency and their professional abilities and in fact, absence of exact ad expert need assessment could hinder the process of staffs' training.

Research question 4: Does staff's educational need assessment conform to their education level?

Almost, most staffs agree that officials did not consider staffs training in choosing educational course and academic educational goals and annually they consider a series of repetitive and usually educational courses for the staffs; thus failing to provide an exact need assessment based on their professional expertise needs. Most staffs were eager to see that spending educational courses were leading to an issuance of degrees and in fact promotion of their education level. Most staffs consider educational courses as being conform to B.A. education level not with Undergraduate or
M.A. levels. Since a higher percentage of staffs hold B.A. degrees, this issue is thought as a strong point while most staffs do not see a relationship between educational need assessment and their own educational level. In accordance with the statistical results and with the confidence level of %95, question 4 is accepted. In other words, education experts maintain that educational need assessment of the staffs do not conform to their educational levels.

Research question 5: Peoples' organizational posts create motivation on average among people and almost most staffs claimed that courses are not designed in accordance with their organizational posts and involve little diversity. All staffs agree on the matter that educational courses did have little impacts on their organizational positions and unfortunately organizational positions were not in consistent with their professional ranks. Almost, a higher percentage of the staffs did not consider participation as resulting in reinforcement of their own scientific foundation within the organizational position. In accordance with the statistical results and with the confidence level of %95, question 5 is rejected. In other words, education experts maintain that educational need assessment of the staff did not conform to their organizational positions.

Research question 6: Do educational courses conform to the staff's educational needs?

Most staffs claim they are assigned no role in designing their educational courses recommended. They also admitted that educational goals of the courses were not in line with their educational needs. A higher number of sample members did not consider as applied the contents offered in the courses and all the staffs expressed that had no role in choosing ye teachers. However, most staffs considered conduct of educational need assessment on the part of the officials as resulting in increasing motivation for the staff. In the end, almost all of the members participate in the course for filling their own educational hours and not simply for removing their professional needs (Alvani, 2003). In accordance with the statistical results and with the confidence level of %95, question 6 is rejected. In other words, education experts maintain that educational courses of the staff did not conform to their need assessment.

References