RELATIONSHIP BETWEEN THE DEMOGRAPHIC CHARACTERISTICS AND THE EFFECTIVENESS OF E-BANKING TRAINING COURSES BASED ON KIRKPATRICK MODEL FOR EMPLOYEES OF MASKAN BANK BRANCHES IN TEHRAN, IRAN

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Abstract

This study was carried out aimed to measure the Relationship between demographic characteristics and the effectiveness of e-banking training courses for employees of Maskan Bank Branches in Tehran province. The research method in terms of objective is considered as an applied research and information collection method is descriptive-survey. The statistical population of this research includes all employees of Maskan Bank Branches in Tehran Province who have participated in e-banking courses and have a population of about 1100 people. The statistical population of this study includes all employees of Maskan Bank Branches in Tehran Province who have participated in e-banking training courses and have
a population of about 1100 people. 285 people were selected using Morgan table and by simple random sampling method. The tool measurement used was questionnaire based on the Kirkpatrick model in four levels of reaction, learning, behavior and results, which its reliability was calculated using Cronbach’s alpha coefficient, 0.89 and it was confirmed. Descriptive and inferential statistical methods (one-way t-test, one-way ANOVA and Pearson correlation coefficient) were used in order to analyze the obtained data. According to the results of t-test, e-banking training courses were effective for employees of Maskan Bank Branches in Tehran province. Also, the analysis of demographic findings based on the results of the one-way between-subjects ANOVA showed that employees' attitudes at different positions, work experience or education level were not significantly different towards the factors affecting the effectiveness of e-banking training courses and none of them should be omitted from e-banking courses.

Keywords
Effectiveness of Training Courses, Demographic Characteristics, Kirkpatrick, E-Banking, Work Experience, Positions, Education Level, Bank Maskan

1. Introduction

Nowadays, the achievement of organizational goals depends on the ability of the employees, which is possible in the light of continuous education, consistent with the realities and circumstances of the organization's temporal and spatial conditions. Training and development of human resources not only play an important role in the knowledge and skills creation in the employees, but also make it possible for individuals to adapt to changing environmental pressures. In the meantime, continuous need to update the staff training process is of great importance. The personnel training process tries to help organizations in order to optimize this activity and make organizations training purposeful, dynamic and flexible, aimed to meet the educational needs of organizations (Abili, 2007).

In fact, in-service training introduces new knowledge into the previous training basket. In the contemporary world, more than ever, the survival of the organizations depends on the interaction between the working methods in the organization and extra-organizational changes and innovations. This interaction greatly depends on the use of the effective staff in-service training mechanism (Mazlomi et al., 2013). Fundamentally, on-the-job training can be imagined a part of continuous education that humans need it to play an effective role in job relationships and in general social relationships (Kazempour and Ghaffari, 2011).
All these activities pursue a fundamental goal that is the same learning. Today, all facilities are at the service of the organization in order to learn. Utilizing management systems recommends learning by adopting new educational principles and methods rather than common and passive teaching methods. The orientation of the education process towards a systematic approach considering the need for sophisticated technologies, changes in the occupations and learning organizations, and its integration with strategic functions, if is properly and competently planned and implemented, can lead to employee productivity, correction of organization managerial issues and, in addition, it has provided significant economic returns and considered as an important factor in the effectiveness of manufacturing and service organizations (Poursadegh, 2008). Training programmes are effective only to the extent that the skills and behaviors learned and practiced during instruction are actually transferred to the workplace (Chiaburu & Lindsay (2008).

Therefore, awareness of the effectiveness of training courses and their result are of utmost importance for managers. And assessment of educational evaluation is considered as one of the most important stages of educational planning, which provides useful information on how to design and implement educational programs and its implementation in a proper manner provides a useful basis for evaluating the educational performance of educational centers (Poursadegh, 2008). In other words, any educational program that is being implemented needs to be evaluated to provide feedback required to all authorities and planners for making necessary decisions and a comprehensive and complete evaluation can inform us of the effectiveness of the results of the training courses and provides a feedback that can be used to evaluate the effectiveness of the training provided in achieving the desired goals (Bates, 2004). Training assessment is a process that is used to determine the effectiveness of training courses. The effectiveness of training then refers to the amount of benefit the learners and their organizations derive from training as they planned before (Stewart & Brown, 2009). Deming considers that educational evaluation as an existential justification of the education sector and providing evidences for the cost and benefits of the organization, whose purpose is to judge the quality and value of the program and identify the benefits of education (Foxon, Lybrand, 2008).

2. Kirkpatrick Evaluation Model

Objective-driven evaluation and systematic approaches are widely used in employee training evaluation. In the goal-oriented approach, the results and outcomes of the educational program are examined only. Considering this approach among the existing models, we can refer to the Kirkpatrick evaluation model (Bramley and Kitson, 1994). The Kirkpatrick model
is defined as a comprehensive, simple, and practical model for many educational situations. It divided the evaluation process into four level or stages as below:

- **Reaction (Attitude and Satisfaction):** Measures how the participants feel about the training program. Proper reactions will lead to perform further training courses and can encourage other staff to participate in these courses.
- **Learning (Knowledge):** It refers to determine the amount of learning, skills, techniques and facts that have been learned by participants during the course and explained to them.
- **Behavior:** The nature and extent of changes that occur in the behavior of participants due to participation in the training course.
- **Results:** The extent to which the goals are achieved which are directly related to the organization (Schmidt et al, 2009).

Evaluation knowledge found in the literature has not been fully utilized in program evaluation. This reveals that training evaluation has not been culturally embedded in most organizations (Chen and Rossi, 1992). Levels three and four of Kirkpatrick model are not often used because organizations find it much simpler just to focus on the first two levels. The lacks of organizations who evaluate at this level (and the subsequent lack of empirical organization-based data and case studies) mean that these levels of evaluation remain poorly understood (Cheng and Hampson, 2008).

### 3. Research History And Question

Over the last ten years, despite the severe sanctions conditions, Maskan Bank has made significant advances in the development, innovation and provision of a diversified e-banking service to its customers, which are more than 20 million people. In order to increase the number of transactions in the field of electronic banking such as internet banking, telephone banking, mobile banking and ATM, through 1200 branches in the country, its employees needed to be properly educated first. To achieve this, it was essential that all bank staff, through effective training, initially planted all the features of these tools in order to properly transfer these trainings to the bank's customers.

- But there was a new problem:

  In order to reduce the costs and also because of the problem of separating the employees from work and attending them in e-banking courses, the bank education manager wanted to omit one or two of the three certain categories of demographics which their training was not that much effective. This meant deleting some groups.

  The purpose of the education center of maskan Bank was that whole effectiveness is merely due to the effectiveness of at most two certain categories of demographics and it might be that the presence of some categories were not necessary in these courses and just
loaded more costs. In other words, it says: “Does any of the demographic data have less meaningful significant effect on Reaction, Learning, Behavior or Results according to Kirkpatrick model?” The best thing to do was to determine the extent to which the impact of the demographic data was to see if the groups with no educational effectiveness can be eliminated (Figure 1).

The Significant demographic characteristics of the bank were:
- Job category
- Degree of education
- Experience of work

![Significant demographic characteristics of the bank](image)

**Figure 1: The impact of significant demographic characteristics on effectiveness of e-banking courses based on Kirkpatrick model**

Here it was decided to examine the impact of demographic characteristics on the effectiveness of the education. This research started after the beginning of e-banking courses in Tehran province. It began to examine the impact of demographic characteristics on effectiveness of these courses based on the Kirkpatrick model. It carried out four stages related to the Kirkpatrick model, which included reaction, learning, behavior and results at appropriate times and four questions:

**3.1 Question 1:** Is there any difference between work experiences in each of the factors affecting the effectiveness of e-banking training courses?

**3.2 Question 2:** Is there any difference between education levels in each of the factors impact the effectiveness of e-banking training courses?

**3.3 Question 3:** Is there any difference between Job categories in each of the factors impact the effectiveness of e-banking training courses?

**3.4 Question 4:** Is there any significant relationship between the factors affecting the effectiveness of e-banking training courses?
4. Research Methodology

This study is considered as an applied study in terms of objective, and in terms of collecting and analyzing information, is considered as a descriptive/survey research. The statistical population of this study includes all employees of Maskan Branches in Tehran province who participated in e-banking courses held in Maskan Bank in 2014, which is equal to 1100 people. According to Krejcie and Morgan's table (Shariatmadari, 2003), the sample size was estimated at 285 people. In this study, simple random sampling method was used for selecting individuals.

The information collection method and tool in this study was library and field method in such a way that information was collected to access its research background and theoretical foundations by referring to libraries and studying related books and articles. In the field stage, a researcher-made questionnaire (with questions about reaction, learning, behavior, and results levels) based on Kirkpatrick model was used to collect information, according to the Likert 5-point scale. In this study, in order to ensure the reliability of the questionnaire, a questionnaire was executed in a 30-person sample and its reliability was estimated equal to 0.89 by Cronbach's alpha for the effectiveness of e-banking courses questionnaire. This coefficient indicates the homogeneity of the items. One-sample t-test, one-way variance analysis and between-subjects effects, Pearson correlation coefficient test were used for data analysis in inferential statistics.

5. Results

5.1 Analysis Of The Data Related To The Question 1:

Is there any difference between work experiences in each of the factors affecting the effectiveness of e-banking training courses?

By examining the results of one-way ANOVA and between-subjects effects, it can be seen that the view of employees with a different working experience are not significant different from each other about the factors impacts the effectiveness of e-banking learning courses (Table 1 & 2).

**Table 1: Average staff in each of the factors based on work experience**

| view of staff by work experience | 0 to 10 years | 11 to 20 years | 21 to 30 years |
|---------------------------------|--------------|----------------|----------------|
|                                 | old          | old            | old            |
| Reaction                        | 3.35         | 3.23           | 3.44           |
| Learning ( knowledge and skills )| 3.30         | 3.27           | 3.36           |
| Behaviour                       | 3.37         | 3.28           | 3.29           |
| Results ( using electronic banking tools ) | 3.38 | 3.33 | 3.65 |
| Electronic Banking Training Courses | 3.35         | 3.28           | 3.44           |
Table 2: The results of the results of between-subjects effects, one-way analysis of variance of different work experience and factors

| Source                      | Dependent variables                  | Sum of squares | Degrees of freedom | Average squares | The statistics F | Significance level |
|-----------------------------|--------------------------------------|----------------|--------------------|-----------------|------------------|-------------------|
| Work Experience             | Reaction                             | 95             | 2                  | 475             | 917              | 0.401             |
|                             | Learning ( knowledge and skills )     | 145            | 2                  | 0.072           | 130              | 878               |
|                             | Behaviour                            | 408            | 2                  | 204             | 404              | 668               |
|                             | Results ( using electronic banking tools ) | 1.858         | 2                  | 929             | 1.171            | 0.312             |
|                             | Electronic Banking Training Courses   | 469            | 2                  | 235             | 526              | 592               |

5.2 Analysis of Data Related To the Question 2

Is there any difference between education levels in each of the factors impact the effectiveness of e-banking training courses?

By examining the results of one-way ANOVA and between-subjects effects, it can be seen that the view of employees with different education levels are not significant different from each other about the factors affecting the effectiveness of e-banking learning courses (Table 3 & 4).

Table 3: Average employees in each factor based on education level

| view of staff by education level | Diploma | Bachelor | MA  |
|---------------------------------|---------|----------|-----|
| Reaction                        | 3.42    | 3.33     | 3.29|
| Learning ( knowledge and skills ) | 3.32    | 3.30     | 3.24|
| Behaviour                       | 3.33    | 3.35     | 3.32|
| Results ( using electronic banking tools ) | 3.39    | 3.41     | 3.28|
| Electronic Banking Training Courses | 3.37    | 3.35     | 3.28|

Table 4: The results of the between-subjects effects, one-way analysis of variance of different education levels and factors

| Source                          | Dependent variables                  | Sum of squares | Degrees of freedom | Average squares | The statistics F | Significance level |
|---------------------------------|--------------------------------------|----------------|--------------------|-----------------|------------------|-------------------|
| Education                       | Reaction                             | 0.385          | 2                  | 192             | 0.370            | 0.691             |
|                                 | Learning ( knowledge and skills )     | 0.127          | 2                  | 063             | 0.114            | 0.893             |
|                                 | Behaviour                            | 0.039          | 2                  | 0.019           | 0.038            | 0.0962            |
|                                 | Results ( using electronic banking tools ) | 0.400         | 2                  | 0.200           | 0.250            | 0.779             |
|                                 | Electronic Banking Training Courses   | 0.132          | 2                  | 0.066           | 0.147            | 0.863             |
5.3 Analysis of Data Related To the Question 3

Is there any difference between job categories in each of the factors impact the effectiveness of e-banking training courses?

By examining the results of one-way ANOVA and between-subjects effects, it can be seen that the view of employees with different positions are not significant different from each other about the factors affecting the effectiveness of e-banking learning courses (Table 5 & 6).

Table 5: Average view of staff in each of the factors by job category

| View Of Staff By Job Category | Executive | Professional | Managerial |
|-------------------------------|-----------|--------------|------------|
| Reaction                     | 3.27      | 3.39         | 3.47       |
| Learning ( knowledge and skills ) | 3.26      | 3.28         | 3.38       |
| Behaviour                    | 3.34      | 3.27         | 3.38       |
| Results ( using electronic banking tools ) | 3.33      | 3.52         | 3.51       |
| Electronic Banking Training Courses | 3.30      | 3.37         | 3.44       |

Table 6: The results of the between-subjects effects, one-way analysis of variance of different job categories

| Source                        | Dependent variables                                      | Sum of squares | Degrees of freedom | Average squares | The statistics F | Significance level |
|-------------------------------|----------------------------------------------------------|----------------|--------------------|-----------------|------------------|-------------------|
| Job Category                  | Reaction                                                 | 2.228          | 2                  | 1.114           | 2.169            | 0.116             |
|                               | Learning ( knowledge and skills )                        | 0.771          | 2                  | 0.386           | 0.695            | 0.500             |
|                               | Behaviour                                                | 0.189          | 2                  | 0.094           | 0.187            | 0.830             |
|                               | Results ( using electronic banking tools )                | 2.275          | 2                  | 1.138           | 1.437            | 0.239             |
|                               | Electronic Banking Training Courses                      | 0.999          | 2                  | 0.500           | 1.124            | 0.326             |

5.4 Analysis of Data Related To the Question 4

Is there any significant relationship between the factors affecting the effectiveness of e-banking training courses?

According to the result of the Pearson correlation coefficient in the table above: The relationship between effective factors on the effectiveness of e-banking training courses is positive and significant (P <0.05). As a result, it can be concluded that due to a positive and significant relationship between the factors, of improvement or change in one factor improves and changes in other factors and also increases the effectiveness of the training courses (Table 7).
Table 7: Correlation coefficient for relationship between factors affecting the effectiveness of e-banking training courses

| Correlation between factors       | Reaction | Learning | Behavior | Results |
|----------------------------------|----------|---------|----------|---------|
| Reaction                         | 1        | -       | -        | -       |
| Learning (knowledge and skills)  | 0.712    | 1       | -        | -       |
| Behavior                         | 0.677    | 0.738   | 1        | -       |
| Results (using electronic banking tools) | 0.617    | 0.667   | 0.666    | 1       |

6. Conclusion

According to the results of this study, the different work experience, education and different positions towards the factors influencing the effectiveness of e-banking courses are not significantly different. Also, the results indicate that the relationship between effective factors on the effectiveness of e-banking training courses is positive and significant. It means that considering the positive and significant relationship between factors, improvement or change in one factor leads to improve and change in other factors and also increase the effectiveness of training courses.

In other words, all of the demographic data either individually or in combination, had a significant effect on the effectiveness of the e-banking training courses and should not be omitted from that courses. This education is not a cost, it’s an investment.

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