

# Designing and Testing the Model of Learners' Satisfaction towards On-The-Job Training Courses Case: National Iranian Gas Company

Bahram Fadaiyan<sup>1,\*</sup>, Hamideh Reshadatjoo<sup>2</sup>, Ali Taghipour Zahir<sup>3</sup>, Seyyed Musa Golestaneh<sup>4</sup>

<sup>1</sup>PhD student in Educational administration, Science and Research Branch, Islamic Azad University, Tehran, Iran

<sup>2</sup>Assistant Professor, Higher Education, Science and Research Branch, Islamic Azad University, Tehran, Iran

<sup>3</sup>Associate Professor, Curriculum Planning and Higher Education, Science and Research Branch, Islamic Azad University, Tehran, Iran

<sup>4</sup>Assistant Professor, Educational Psychology, Academic Faculty of Bushehr Persian Gulf University

\*Corresponding author: b\_fadaiyan@yahoo.com

Received February 04, 2015; Revised February 24, 2015; Accepted March 01, 2015

**Abstract** Staff development and improving job status done through training is concerned as important parts of Human Resource Management in the third millennium organizations. In the US companies, 135 billion dollars is allocated each year for training (Patel, 2010) and most of Asian rich countries are also trying to review their educational systems to make required changes for enrichment of economy (Kayani, 2008:3). Continuity of the training needs to use and apply a uniformed system to promote staff's satisfaction and effectiveness of training process. The aim of this paper is to design and test the Model of Learners' Satisfaction about on-the-job training courses among those staff working in National Iranian Gas Company (NIGC). Statistical population consisted of 40000 staff working in NIGC among which 384 persons were randomly selected based on multi-stage clustering sampling method. Data were obtained via two survey questionnaires (Salanova, 2009; NIGC, 2013) with highly acceptable validity and reliability ( $\alpha=0.82\%$ ). Findings, based on Regression Analysis, showed that the best predictors for learners' satisfaction about OJT courses would respectively be planning and implementation, content, time, goals and priority, executive management, need assessment, way of evaluation, welfare and services, teacher's ability, facilities and equipments. Furthermore, indices of the proposed model represented the goodness fitness of the model. Finally, some required suggestions and ways were delivered.

**Keywords:** Training Courses (TC), On-The-Job Training (OJT), Learners' Satisfaction (LS), National Iranian Gas Company (NIGC)

**Cite This Article:** Bahram Fadaiyan, Hamideh Reshadatjoo, Ali Taghipour Zahir, and Seyyed Musa Golestaneh, "Designing and Testing the Model of Learners' Satisfaction towards On-The-Job Training Courses Case: National Iranian Gas Company." *American Journal of Educational Research*, vol. 3, no. 3 (2015): 307-311. doi: 10.12691/education-3-3-9.

## 1. Introduction

Complexity, ambiguity and accelerated change of today organizational demands have made the management of affairs hard and difficult. Armstrong (2009) knows the HRM as "a comprehensive, congruent and strategic approach by which staff of all organizations work and emphasizes the main aim of HRM is to become sure about organizational success through assisting and empowering staff.

The major challenge and discussion of development is to improve life and its quality. Most economists have argued any nation's HR can direct that nation towards socioeconomical progress and not physical or natural capitals (Kayani, 2008).

Some studies have showed educated staff are more adaptive and therefore, they are pioneers in affairs and they become self-esteemed while facing new

environmental conditions. Furthermore, these staffs are more likely to tend to be trained. These traits are directly related to training (education) process (Sudar and Singh, 1994).

National Iranian Gas Company (NIGC) is one of the companies affiliated with Ministry of Oil having 45-year experience. Having NIGC presently has more than 40000 employees working in different parts of Iran including 8 refining companies, 10 transferring operational zones, and 30 provincial gas companies. All of these employees are actively trying to extract, treat, transfer, and deliver gas to home, industrial, and commercial customers and consumers as well.

NIGC's staffs are being trained through training department head quartered in Tehran while each above-mentioned companies has a separate section entitled training part whose task is to design, plan, coordinate, implement, and evaluate on-the-job training courses(OJTC) for their own employees.

In order to implement a continual OJT system resulted to staff's satisfaction, some factors are required such as need assessment, planning, implementation, and evaluation while content of courses, informing, executive management, instructor's ability, educational facilities, course quality, learner's readiness should be concerned to approach the determined aims and finally make the training cycle complete; therefore, this paper is to design and test a model by which the staffs' satisfaction is promoted regarding various factors.

## 2. Literature Review

One of the traits of excellent organizations is to use effective and efficient staffs for dealing with changes, so it is a need for decision-makers to identify effective factors on staffs' satisfaction and then take and perform practical tactics to increase organizational satisfaction (Salehi, 2010).

Leaders and managers have ultimately concluded that training and improving employees could be concerned as one of the major strategies for their organizational positive agreeableness since the life of organization is highly dependent upon staffs' various skill and knowledge and therefore, the more educated, the more ability to cope with contextual changes (Samkhanian, 2005).

Alhosseini (1990) quoted by Tuffler, stated that training would be the most significant activity and way for facing the huge changes in future life of any organization and emphasized effective and efficient training would help individuals grow and get job enrichment and clearly they would work effectively.

Satisfied staffs are likely to be loyal and hardworking and naturally if an organization is unable to get its employees satisfied, the employees are, in turn, unable to get the clients or customers satisfied (Cassano, 2008), so what is a need for staffs and how their needs are met is important since if an organization is able to meet its staffs' needs, then the customers' needs will be met appropriately.

Smith (2008) believes that a staff's attitude (whether good or bad) can affect directly on organization's customers and McMichael (2009) claims that OJT has played a viatl role in organization's staff instruction and therefore, it can teach the most appropriate methods for doing works.

Noddler (1984) describes OJT as a type of learning which is prepared to improve individual's performance in the existing job status.

Regarding the above-mentioned description, Chan (2010) presented two interpretations and said that the first step would be to improve the existing performance and the second step would be the learning process which should not be pictured as a feature used for future rather than it would be palnned and based immediately.

OJT is classified into three groups based on its nature, duration, and purpose and they are respectively as the following table.

Table 1. Types of OJT (Fathi, 2010: 8)

| Duration  | Purpose   | Nature                     |
|---|---|----------------------------|
| 1-specialized short time<br>2-long time<br>3-mixed or average | 1-justifiable<br>2-re-training<br>3-make-up<br>4-knowledge increasing | 1-specialized<br>2-general |

Chan (2010) believes that those staff pssing OJT courses are more successful than those who are not taking part into OJT courses and therefore, they can help the organization approach its ultimate aims.

Studying some fields and factors affecting OJT success in three organizational, individual, and managerial levels, Shimon (1998) found that OJT would bring up a certain success for organization and improve actions and finally it would help to meet organizational expectations.

To prevent additional expenditure imposed to training process, a model is required by which designing, planning, implementing, evaluating and the other related affairs are measured. Most of training specialists have accepted a general model known as ADDIE. This model has both structure and required flexibility for its whole components (see Figure 1).

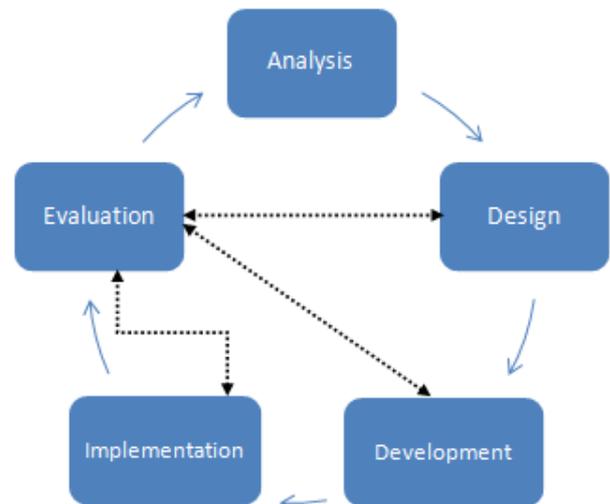


Figure 1. The five main steps in OJT process (Chan, 2010: 15)

The ADDIE model, proposed by the US defense department is a structured approach for duties and decisions related to training design process.

Some models of OJT are procedural and leave some significant and cognitive components; for example, Crandall's model (1994) which consists of developing, collecting the requirements, practice and plan presentation, encouraging the learner to learn, correcting the mistakes, continuity of practice and the repetition of step four until the needed proficiency acquired.

Many models have also been presented containing some cognitive aspects of training (e.g. Brwon & Campione, 1986; Palinscar, 1982; Collins, Brown & Newman, 1989; Farmer, Buckmaster & Legrand, 1992; Hamilton, 1992).

The said models are all resulted from research and studies in training mostly containing Declarative Knowledge Transfer (DKT) and teachingof comprehensive skills and reading improvement. Learning purpose in OJT is usuall declarative knowledge along with procedural knowledge and skill proficiency in tasks related to job (Kyne, 1996:6).

## 3. Research Purposes

a) Identifying and determining the contribution of each of effective factors on staffs' satisfaction about OJT courses;

b) Presenting a model regarding the dimensions, indices and factors shaping staffs' satisfaction in OJT process.

### 4. Research Questions

- What model can be presented for staffs' satisfaction about OJT courses?
- How is the fitness of the model based on NIGC's experts and elites point of view?

### 5. Extracted Indices and Presenting a Proposed Model for the Paper

According to Abbaszadegan (2000)," selecting or developing any model or framework for OJT depends on some various factors including organization's educational culture, level of education, philosophy and the goals having been set, resource and available facilities" and while accepting that" it can be said the common center for all models and frameworks will be the four basic functions in training and improving human resources such as need assessment, planning, implementation, and evaluation" (51), the existing conceptual framework of this paper has been presented and finalized as followed:

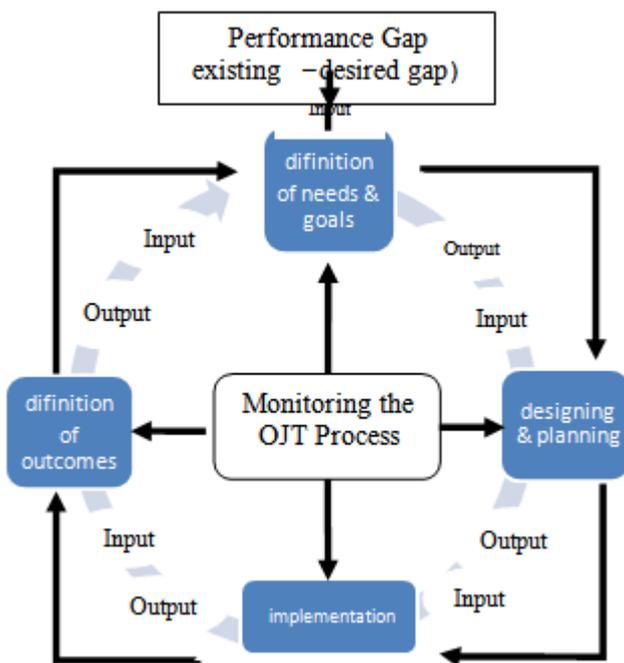


Figure 2. Proposed Model of the paper

### 6. Methodology

It is a descriptive-surveying research trying to design and test the Model of Learners' Satisfaction about on-the-job training courses among those staff working in National Iranian Gas Company (NIGC). Statistical population consisted of 40000 staff working in NIGC among which 384 persons were randomly selected based on multi-stage clustering sampling method. Data were obtained via two staff satisfaction standard questionnaires (Salanova 2009; NIGC 2013) from the 384 selected

persons. Both of questionnaires were formed based on a ten-rated scale having started from very little agree to very highly agree completed by the participants (staffs). Content validity and Chronbach's Alpha ( $\alpha=0.82$ ) were used to measure the questionnaires validity and reliability.

To analyze the gathered data, descriptive and inferential statistical indices were used such as frequency, mean, SD, and Path Analysis, Analysis of Multiple Stepwise Regression, and SEM.

### 7. Findings

Table 2. Frequency distribution and percentage of participants

| Gender<br>Variables |                    | Male   |            | Female |            | Total  |            |
|---------------------|--------------------|--------|------------|--------|------------|--------|------------|
|                     |                    | Fre q. | Percentage | Fre q. | Percentage | Fre q. | Percentage |
| Studies             | H.S.Graduates      | 28     | 96.6       | 1      | 3.4        | 29     | 100        |
|                     | A.D.               | 40     | 85.1       | 7      | 14.9       | 47     | 100        |
|                     | B.A & B.S          | 16     | 77.4       | 49     | 22.6       | 21     | 7          |
|                     | M.A & M.S          | 71     | 78         | 20     | 22         | 91     | 100        |
| Marital Status      | Married            | 27     | 82.2       | 60     | 17.8       | 46     | 100        |
|                     | Single             | 29     | 63         | 17     | 37         | 34     | 0          |
| Type of Employment  | Official           | 28     | 82.6       | 59     | 17.4       | 34     | 0          |
|                     | Contract           | 7      | 58.3       | 5      | 41.7       | 12     | 100        |
|                     | Arbitrary          | 19     | 59.4       | 13     | 40.6       | 32     | 100        |
| Work Experience     | Less than 10 years | 11     | 62.1       | 67     | 37.9       | 17     | 7          |
|                     | 10-20 years        | 11     | 95.9       | 5      | 4.1        | 12     | 1          |
|                     | 20 years and more  | 81     | 94.2       | 5      | 5.8        | 86     | 100        |
| Work Place          | Refining           | 24     | 100        | 0      | 0          | 24     | 100        |
|                     | Transferring       | 69     | 89.6       | 8      | 10.4       | 77     | 100        |
|                     | Dispatching        | 20     | 75.6       | 66     | 24.4       | 27     | 0          |
|                     | Headquarter        | 10     | 76.9       | 3      | 23.1       | 13     | 100        |

Table 3. The Brief of the Model Affecting on Staffs' Satisfaction

| Index<br>Model | R     | R <sup>2</sup> | Adjusted R <sup>2</sup> | SE    | R <sup>2</sup> changes |
|----------------|-------|----------------|-------------------------|-------|------------------------|
| 1              | 0.725 | 0.525          | 0.524                   | 14.56 | 0.525                  |
| 2              | 0.814 | -.663          | 0.661                   | 12.29 | 0.137                  |
| 3              | 0.850 | 0.722          | 0.720                   | 11.17 | 0.059                  |
| 4              | 0.870 | 0.757          | 0.754                   | 10.46 | 0.034                  |
| 5              | 0.883 | 0.779          | 0.776                   | 9.98  | 0.23                   |
| 6              | 0.893 | 0.798          | 0.795                   | 9.57  | 0.019                  |
| 7              | 0.902 | 0.813          | 0.809                   | 9.21  | 0.015                  |
| 8              | 0.905 | 0.819          | 0.815                   | 9.07  | 0.006                  |
| 9              | 0.907 | 0.822          | 0.818                   | 9.00  | 0.003                  |
| 10             | 0.908 | 0.824          | 0.820                   | 8.96  | 0.002                  |

Criterion Variable: Staff's Satisfaction (SS)

Model 1: Predictor Variable: Planning and Implementing (PI)

Model 2: Predictor Variable: Planning and Implementing, and Need Assessment (PINIA)

Model 3: Predictor Variable: Planning and Implementing, Need Assessment, and Instructor's Ability (PINAIA)

Model 4: Predictor Variable: Planning and Implementing, Need Assessment, Instructor's Ability, and Aims and Priorities (PINAIAAP)

Model 5: Predictor Variable: Planning and Implementing, Need Assessment, Instructor's Ability, Aims and Priorities, and Time (PINAIAPT)

Model 6: Predictor Variable: Planning and Implementing, Need Assessment, Instructor's Ability, Aims and Priorities, Time, and Content (PINAIAPTC)

Model 7: Predictor Variable: Planning and Implementing, Need Assessment, Instructor's Ability, Aims and Priorities, Time, Content, and Executive Management (PINAIAPTCEM)

Model 8: Predictor Variable: Planning and Implementing, Need Assessment, Instructor's Ability, Aims and Priorities, Time, Content, Executive Management, and Welfare and Services (PINAIAPTCEMWS)

Model 9: Predictor Variable: Planning and Implementing, Need Assessment, Instructor's Ability, Aims and Priorities, Time, Content, Executive Management, Welfare and Services, and Evaluation Method (PINAIAPTCEMWSEM)

Model 10: Predictor Variable: Planning and Implementing, Need Assessment, Instructor's Ability, Aims and Priorities, Time, Content, Executive Management, Welfare and Services, Evaluation Method, and Equipments and Facilities (PINAIAPTCEMWSEMEF)

According to the findings written in Table 3, the tenth Model has the most Variance of factors affecting on Staffs' Satisfaction about OJT (Question No. 1).

**Table 4. The Indices of Fitness of The Proposed Model**

| Indices of Fitness                             | Range of Acceptance | Calculated Value |
|--|---------------------|------------------|
| $\chi^2/df$                                    | $\leq 3$            | 10.03            |
| Goodness Fitness Index(GFI)                    | $>0.9$              | 0.91             |
| Root Mean Square Error of Approximation(RMSEA) | $<0.9$              | 0.087            |

Findings written in Table 4 represent the good fitness of data and the proposed Model (Question No. 2).

## 8. Conclusion and Suggestion

Job Satisfaction(JS) is of those issues which has been concerened by many researchers in the sciences of organixational and industrial psychology and it will be paid attention since according to Spector (1997), it plays a main role in theories and models based on individual behaviours and attitudes (such as organizational justice, organizational trust, and staff turning over, and so on) and it has been found that job satisfaction is related to specific behaviors affecting organizational functions (e.g. staff turning over, absenteeism, organizational citizenship behavior, job performance) and it has practical applications in the promotion of individual life and organizational effectiveness as well.

There are various factors in organizations by which staffs' satisfaction/dissatisfaction about OJT is measured among which, and in this paper, some factors such as need assessment, goal setting, content, planning and implementing, evaluation method, instructor's ability, welfare and services, equipments and facilities, and time of OJT course or an educational conference were concerened along with some other individual's satisfaction factors from organization (e.g motivation, rewards, expectations, job designing, and workplace context).

Based on findings resulted from data analysis, a research structural model was explained and presented. This model was supported by NIGC's experts and elites (86%) and therefore, NIGC's decision makers can design some appropriately tested OJT courses to predict, identify, and measure the other possible effective factors and finally to promote staffs' satisfaction about OJT courses.

## Acknowledgement

This paper has been financially supported and supervised by Bushehr Province Gas Company (BPGC), so the authors would like to appreciate those honest BPGC and NIGC employees satisfactorily working hard to supply the warmth of Iranian people life.

## References

- [1] Abbaszadegan, S.M., & Torkzadeh, J. (2000). Educational Need Assessment in Organizations. Tehran: Sharing Corporation of Enteshar.
- [2] Alhosseini, H. (1990). The Theory of Continual Engineering: Explaining the Continuous Change in Organizations as Developing of Individual and Community. Port Abbas: Hormozgan University.
- [3] Armstrong, M. (2009). Handbook of Human Resource Management Practice. 11<sup>th</sup> ed. Philadelphia: Kogan Page, p. 1062.
- [4] Brown, A.L., & Campione, J.C. (1986). Cognitive science principles and work force education. In t.C. Sticht, F.R. Chang, & S. Wood (Eds.), Advances in Reading / Language.
- [5] Brown, A.L., & Palinscar, A.S. (1982). Inducing strategic learning from texts by means of informed, self-control training. Topics in learning and Learning Disabilities, Research, 4. Greenwich, CT: JAI Press Inc. 2, 1-17.
- [6] Cassano, E. (2008). The path to customer satisfaction. Available at: [http://www.sbsonline.com/National/Article/15028/0/The\\_path\\_to\\_customer\\_satisfaction.aspx?Category=101](http://www.sbsonline.com/National/Article/15028/0/The_path_to_customer_satisfaction.aspx?Category=101) [Accessed: 29/03/2009].
- [7] Chan, J. F. (2010). Training Fundamentals: Pfeiffer essential guides to training basics. John Wiley & sons, 2010.
- [8] Collins, A., Brown, J.S., & Newman, S.E. (1989). Cognitive apprenticeship teaching and the crafts of reading, writing, and mathematics. In L. B. Resnick (Ed.), Knowing, learning, and instruction. Hillsdale, NJ: Lawrence Erlbaum Associates.
- [9] Crandall, B.W., Kyne, M., Militello, L., & Klein, G.A. (1992). Describing expertise in one-on-one instruction (Contract MDA903-91-C-0058). For the U.S. Army Research Institute, Alexandria, VA. Fairborn, OH: Klein Associates.
- [10] Fathi Vajargah, K. (2010). Staffs' OJT Planning. 6<sup>th</sup> ed., Tehran: SAMT.
- [11] Hamilton, S.F. (1989). Learning on the job: Apprentices in West Germany. Paper presented at the March, 1989 Meeting of the American Educational Research Association, San Francisco, CA.
- [12] Hamilton, S.F., & Hamilton, M.A. (1992). Learning at work. In Youth apprenticeship in America: Guidelines for building and effective system. Washington, DC: Commission on Work, Family, and Citizenship.
- [13] Kayani, T. (2008). Challenges of Human Resource Development to Pace with Globalization. Pakistan: Allameh Eqbal Open University.
- [14] Kyne, M. (1995). Incorporating cognitive requirements into OJT. Unpublished master's thesis, University of Dayton, Dayton, OH.
- [15] MacMichael, J. (2009). Job Site Training - Good For All Your Employees. Available at: <http://ezinearticles.com/?Job-Site-Training-Good-For-All-Your-Employees&id=2068627> [Accessed: 28/03/2009].
- [16] Nadler, L. (1984). The Handbook of Human Resource Development. Hoboken, NJ: John Wiley & Sons.
- [17] National Iranian Gas Company. (2013). Training Calendar. Tehran: NIGC Publications.

- [18] Palincsar, A.S., & Brown, A.L. (1984). Reciprocal teaching of comprehension-fostering and monitoring activities. *Cognition and Instruction*, 1, 117-175.
- [19] Patel L. (2010). *ASTD State of the industry report 2010*. Alexandria, VA: American Society for Training & Development.
- [20] Salavano, A. & Kirmannen, S. (2010). *Employee Satisfaction and Work Motivation*. Finland: Mikkeli University of Applied Sciences, p. 1.
- [21] Salehi, S., Amirkabiri, A., & Eskandari, A. (2010). Surveying the Effective Factors on Staffs' Job in Tehran Province Office. *Eslah and Tarbiat Journal*, Vol. 100, p. 25.
- [22] Samkhanian, M.R. (2005). *HR Educational Planning: Essentials and Processes*. Tehran: Mehrborna.
- [23] Shimon, L. (1998). *Management of staffs and Human Resources*. Translated by M.A.Tousi, Governmental Management Publications.
- [24] Smith, P.E. (2008). *Happy Positive Employees Make Happy Satisfied Customers*. Available at: <http://www.articlesbase.com/human-resources-articles/happy-positive-employees-make-happy-satisfied-customers-700069.html> [Accessed: 30/03/2009]
- [25] Spector, P. (1997). *Organizational Psychology*. New York: Prentice Hall.
- [26] Spector, P. (1997). *Job Satisfaction: Application, Assessment, Causes and Consequences*. Thousand Oaks, CA. Sage Publications.