IDENTIFYING FACTORS AFFECTING PURE TRAINING OF EMPLOYEES AND EVALUATING THEIR SIGNIFICANCE IN TABRIZ SOCIAL SECURITY ORGANIZATION

Yaghoub HAFEZI

Faculty of Management and Economics, Islamic Azad University of Tabriz, Tabriz, Iran

*Corresponding Author
E-mail: yaghub.hafezi@gmail.com

ABSTRACT

The present study evaluates the significance of factors affecting the pure training of employees in the Tabriz Social Security Organization. The research method was descriptive and applied. Its statistical population includes all the employees and experts of the Social Security Organization of East Azarbaijan Province. The sample size was 277 people based on Morgan's table. After confirming the validity and reliability of the questionnaire and collecting the information for the research objective, data analysis occurred through the fuzzy DIMATEL method. The results showed that the commitment of leadership and senior management are the most influential factors among the factors affecting the pure training of employees of social security of Tabriz. Choosing competent individuals was also another influential factor. The factors of attention to employees' satisfaction, training efficiency and strategy and perspective were influencing factors, respectively. Attention to employees' satisfaction, the commitment of leadership and senior management, strategy and perspective, training efficiency, and choice of competent individuals were most significant respectively.

Keywords: pure training of employees, commitment of leadership and senior management, attention to employees' satisfaction

INTRODUCTION

Human power in organizations and institutions is supposedly the most valuable resource and asset, through which an organization can survive in a competitive environment and synchronize itself with the changes (Kazanchoglu and Ozken-Ozen 2019). Managers of organizations can help employees' empowerment in different ways, and one of these methods is holding training courses in the organization. One of the characteristics of the present age is that the foundations of knowledge and information in various scientific fields have progressed rapidly and are changing. Therefore, in-service training is one of the most important training of the organization, because job needs and environmental conditions in the organization are continuously changing (Antoni and Antoni, 2017). In the meantime, pure training is one of the appropriate approaches to continuous improvement and attention to the customer in service, commercial, administrative and educational organizations (Bento and Tontini, 2018). Organizations are not exempt from this rule. Pure training of employees is a set of targeted and predetermined actions for continuously and systematically improving the level of knowledge, skills, and attitudes to increase the well-being and effectiveness of the individual and the organization in their current and future job performance (Mohammadi et al. 2020)

The main goal of training employees is to empower individuals to succeed in their jobs, develop professionalism, and adapt to changes and new situations in work life to improve performance and meet their work needs (Lompa et al. 2021). Nowadays, the main key to working methods in organizations and trans-organizational changes and innovations is the use of employees' in-service effective mechanisms (Sefakianki and Kakiros 2019). On the other hand, the main goal of organizational training is to transfer learning to the environment. However, many researches confirm that in practice, there has not been much transfer of learning and organizations have not been able to achieve their expected results (Ramazani et al. 2021).

Tabriz Social Security Organization needs appropriate and effective communication and training due to its inherent duties in service delivery; we can accelerate these through attention to employees. Accordingly, in recent years, with the introduction of new educational methods, attention to training and learning has increased in organizations, but it seems that some organizations are left behind in using this process. Therefore, studying the factors affecting the pure training of employees in service organizations can resolve the relevant ambiguities and make managers take appropriate actions through training for better development and learning. On the other hand, it is noteworthy that no research has studied this subject in the social security organization and this research can be one of the first researches to fill the theoretical gap. Consequently, the purpose of this research is to assess the significance of the factors affecting the pure training of employees in the Tabriz Social Security Organization.

Research Methodology

The present study was applied-descriptive research.

Its statistical population included all the employees and experts of the social security organization of East Azarbaijan province. According to the statistics of human resources, this organization in East Azarbaijan province has 465 members, of which 277 people were randomly selected as the sample size.

The collecting information in the research was in the library and the field. It used a questionnaire to collect data and for answering the research questions.

The validity of the questionnaire of this study was tested by the formal validity method. Therefore, we gave the research questionnaire to the supervisor and two university professors and experts on the subject and asked them to express their opinions about the validity of the questionnaire after reading it. After collecting the declared opinions, the conclusion was that the questionnaires have high validity.

Cronbach's alpha coefficient was appropriate for determining the reliability of the questionnaire. For this purpose, the designed questionnaire has been provided to 25 members of the statistical population.

After collecting the questionnaire, the value of Cronbach's alpha coefficient for the whole questionnaire was greater than 0.7 and consequently, the designed questionnaire had acceptable reliability.

The DIMATEL method was usable for significance assessment to analyze the data.

Results

Development of a communication framework of effective factors in pure training through Fuzzy DIMATEL

The communication framework of the effective factors of pure education has been determined through the fuzzy DEMATEL method. Thus, we have used triangular fuzzy numbers for pairwise comparisons in the fuzzy DIMATEL method. Accordingly, we have asked seven experts to determine the causal relationships between the social marketing effectiveness factors. After obtaining the judgments of the experts, we obtained the average of all the comparisons and the matrix of the fuzzy direct relationship, which is a result of the average opinions of the experts. The main dimensions of pure training are the commitment of leadership and senior management, strategy and perspective, selection of competent individuals, attention to employees' satisfaction, and training efficiency. Therefore, at this stage, experts compared these dimensions. After the comparison of the experts, we took an average from their comparisons; the matrix of Table (1) gives the results of the average opinions of the experts.

Table (1): Average opinions of experts on the dimensions

Total equation	C1			C2			C3			C4			C5		
C1	0.000	0.000	0.000	0.321	0.464	0.643	0.357	0.571	8.000	0.464	0.714	0.821	0.143	0.286	0.536
C2	0.250	0.393	0.607	0.000	0.000	0.000	0.214	0.321	0.536	0.429	0.571	0.679	0.500	0.714	0.857
C3	0.393	0.571	0.750	0.464	0.679	0.786	0.000	0.000	0.000	0.107	0.179	0.393	0.286	0.429	0.607
C4	0.250	0.357	0.536	0.214	0.429	0.643	0.357	0.536	0.714	0.000	0.000	0.000	0.393	0.643	0.857
C5	0.179	0.321	0.536	0.393	0.607	0.750	0.393	0.607	0.750	0.179	0.250	0.464	0.000	0.000	0.000

After calculating the average matrix of experts' opinions, de-scaling occurs in the next step. For de-scaling, relations (1) and (2) have been usable.

$$\tilde{x}_{ij} = \frac{\tilde{z}_{ij}}{r} = \left(\frac{l_{ij}}{r}, \frac{m_{ij}}{r}, \frac{u_{ij}}{r} \right)$$

(1)

And

$$r = \max_{1 \le i \le n} \left(\sum_{j=1}^{n} u_{ij} \right)$$

(2)

Based on equation (2), $\sum_{j=1}^{n} u_{ij}$ the average of comments was calculated for each row of the matrix and the largest of them was selected for de-scaling. Table (2) shows the results.

Table (2): $\sum_{j=1}^{n} u_{ij}$ for each row of the matrix of the average comments of the dimensions

Row	Value $\sum_{j=1}^{n} u_{ij}$	Symbol	Maximum
Commitment of leadership and senior management	C1 10		10
Strategy and perspective	C2 2.67		
Attention to employees' satisfaction	C3 2.53		
Choosing the competent people	C4 2.75		
Training efficiency	C5	2.5	

Table (2) shows the result of de-scaling the total relationship matrix.

Table (3): unscaled matrix of opinions on the main dimensions

Unscaled matrix	C1			C2			C3			C4			C5		
C1	0.000	0.000	0.000	0.032	0.046	0.064	0.036	0.057	0.800	0.046	0.071	0.082	0.014	0.029	0.054
C2	0.025	0.039	0.061	0.000	0.000	0.000	0.021	0.032	0.054	0.043	0.057	0.068	0.050	0.071	0.086
C3	0.039	0.057	0.075	0.046	0.068	0.079	0.000	0.000	0.000	0.011	0.018	0.039	0.029	0.043	0.061
C4	0.025	0.036	0.054	0.021	0.043	0.064	0.036	0.054	0.071	0.000	0.000	0.000	0.039	0.064	0.086
C5	0.018	0.032	0.054	0.039	0.061	0.075	0.039	0.061	0.075	0.018	0.025	0.046	0.000	0.000	0.000

After calculating the unscaled matrix, we should calculate the general fuzzy relation matrix. According to the definitive condition, the general fuzzy relation matrix should be defined as equation (3).

$$\tilde{T} = \lim_{w \to \infty} \left(\tilde{x} + \tilde{x}^r + \cdots + \tilde{x}^w \right) = X(I - X)^{-1} \qquad (3)$$

Since triangular fuzzy numbers are used in this research, relations (4), (5), and (6) should be applied to calculate the general fuzzy relation matrix.

$$\left[l_{ij}'' \right] = X_l \times (I - X_l)^{-1}$$

$$\left[m_{ij}'' \right] = X_m \times (I - X_m)^{-1} \qquad (5)$$

$$\left[u_{ij}'' \right] = X_u \times (I - X_u)^{-1} \qquad (6)$$

Table 4 shows the results of the calculations until reaching the fuzzy total relation matrix.

Table 4: calculation for Fuzzy relation matrix

Calculations of $[l_{ij}''] = X_l \times (I - X_l)^{-1}$ from the dimensions matrix

Dimensions	C1	C2	C3	C4	C5
C1	0.004	0.036	0.039	0.049	0.019
C2	0.028	0.005	0.026	0.046	0.053
C3	0.042	0.050	0.004	0.015	0.032
C4	0.028	0.026	0.039	0.004	0.042
C5	0.021	0.043	0.042	0.021	0.004

Results for calculations of $[m_{ij}''] = X_m \times (I - X_m)^{-1}$ from the dimensions matrix

Dimensions	C1	C2	C3	C4	C5
C1	0.010	0.057	0.066	0.078	0.041
C2	0.047	0.013	0.044	0.064	0.080
C3	0.063	0.076	0.011	0.028	0.052
C4	0.044	0.054	0.063	0.009	0.073
C5	0.040	0.069	0.068	0.033	0.011

Calculations of $[u_{ij}''] = X_u \times (I - X_u)^{-1}$ from the dimensions matrix

Dimensions	C1	C2	C3	C4	C5
C1	0.093	0.161	0.903	0.143	0.139
C2	0.083	0.030	0.136	0.087	0.108
C3	0.096	0.102	0.093	0.062	0.086
C4	0.077	0.091	0.148	0.023	0.109
C5	0.076	0.098	0.147	0.066	0.027

Table 5 summarizes the general fuzzy relation matrix of the dimensions.

Table 5: General relationship matrix of the main dimensions

	C1			C2			C3			C4			C5		
C1	0.004	0.010	0.093	0.036	0.057	0.161	0.039	0.066	0.903	0.049	0.078	0.143	0.019	0.041	0.139
C2	0.028	0.047	0.083	0.046	0.013	0.030	0.026	0.044	0.136	0.046	0.064	0.087	0.053	0.080	0.108
C3	0.042	0.063	0.096	0.015	0.076	0.102	0.004	0.011	0.093	0.015	0.028	0.062	0.032	0.052	0.086
C4	0.028	0.044	0.077	0.004	0.054	0.091	0.039	0.063	0.148	0.004	0.009	0.023	0.042	0.073	0.109
C5	0.021	0.040	0.076	0.021	0.069	0.098	0.042	0.068	0.147	0.021	0.033	0.066	0.004	0.011	0.027

Finally, after calculating the sum of the rows and columns of the fuzzy total relation matrix, the significance of the dimensions $(\tilde{D}_i + \tilde{R}_i)$ and the relationship between the dimensions (influence and affectivity) $(\tilde{D}_i - \tilde{R}_i)$ are determined in the next step. If $\tilde{D}_i - \tilde{R}_i > \cdot$ the relevant dimension is effective and if $\tilde{D}_i - \tilde{R}_i < \cdot$ the relevant dimension is affective. Table (22-4) shows the values of $(\tilde{D}_i + \tilde{R}_i)$ and $(\tilde{D}_i - \tilde{R}_i)$ for each of the dimensions.

Table 6: Relationships and significance of critical dimensions of sustainability in the project management environment in terms of fuzzy numbers

Dimensions	D+R			D-R		
Commitment of leadership and senior management	0.270	0.457	1.864	0.024	0.047	1.014
Strategy and perspective	0.321	0.516	0.926	0.077	-0.022	-0.037
Attention to employees' satisfaction	0.260	0.482	1.867	-0.042	-0.020	-0.989
Choosing the competent individuals	0.251	0.455	0.829	-0.018	0.030	0.066
Training efficiency	0.261	0.478	0.883	-0.042	-0.035	-0.055

In the next step, we convert the fuzzy numbers $(\tilde{D}_i + \tilde{R}_i)$ and $(\tilde{D}_i - \tilde{R}_i)$ obtained from the previous step into definite numbers, according to the equation (1-4). Table (7) shows the results.

Table (7): relationships and significance of dimensions based on definite numbers

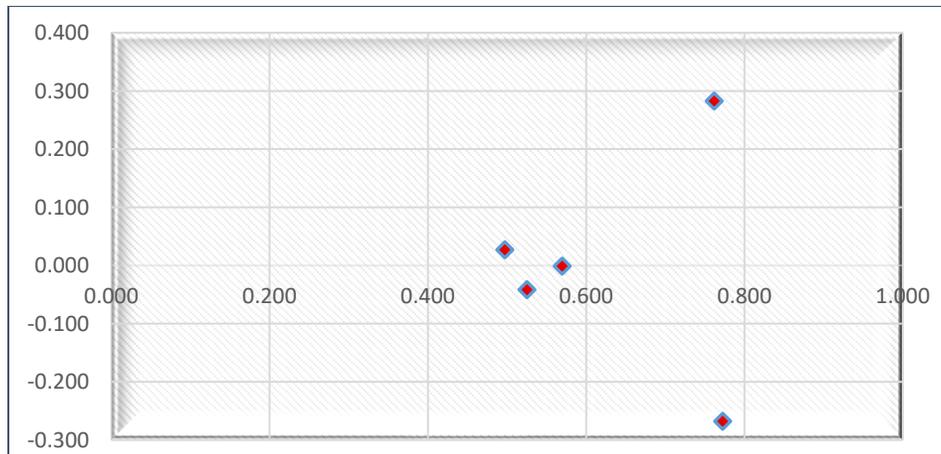| Dimensions	D+R*def*	Dimensions	D-R*def*
Commitment of leadership and senior management	0.762	Commitment of leadership and senior management	0.283
Strategy and perspective	0.570	Strategy and perspective	-0.001
Attention to employees' satisfaction	0.773	Attention to employees' satisfaction	-0.268
Choosing the competent individuals	0.497	Choosing the competent people	0.027
Training efficiency	0.525	Training efficiency	-0.042

Figure (1): Significance and passiveness of dimensions

Conclusion

The results of the DEMATEL fuzzy test showed that, according to the value of the D-R_{def} index, the most effective dimensions are the commitment of leadership and senior management with the value of the D-R_{def} index equal to 0.283 and the selection of competent individuals with the value of D-R_{def} index equal to 0.027.

Fuzzy DEMATEL analysis showed that according to the value obtained for the D-R_{def} index, attention to employees' satisfaction with the D-R_{def} index value equal to 0.268 is the most affective factor. Training efficiency with D-R_{def} index value equal to -0.042 is in the second rank of affectivity, and strategy and perspective with a value of D-R_{def} index equal to -0.001 are third in affectivity. Likewise, the significance of the dimensions was determined based on the D+Rdef index. Accordingly, attention to employees' satisfaction with the D+Rdef value of 0.773 is the most significant component. The commitment of leadership and senior management, strategy and perspective, training efficiency, and choosing competent individuals were in the second rank.

The results of the research showed that the most effective factor among the factors affecting pure training is the commitment of leadership and senior management. Therefore, the managers and decision-makers of social security organizations should support and participate in different levels of the organization, prove their long-term commitment to the realization of pure principles and activities, and support employees in line with the realization of pure goals.

The most effective and important factor among the factors affecting pure training is the attention to employees' satisfaction. Thus, the managers and decision-makers of the social security organization should welcome the ideas of trainees to control quality, improve the organization's processes, place the expectations and demands of the employees at the center of the analysis of the continuous improvement processes, and show their attention to the satisfaction of the employees in the matter of training.

In terms of significance, the factor of strategy and perspective is the effective factor in pure training after the two factors of commitment of leadership and senior management and attention to employees' satisfaction. Thus, managers and decision-makers of social security organizations

should create a common vision regarding the realization of pure principles and activities, by drawing a specific road map to improve processes, paying attention to continuous improvement, and respecting all stakeholders in the organization's mission statement.

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