

Training Needs Analysis (TNA) on Mid-Rank directors of Saderat Bank (BSI) in Tehran

Dr. Abbas Khorshidi¹, Dr. Mahmood Mirzamani and Razieh Shabani^{3*}

1. Associate professor in Islamic Azad University (IAU), Islamshahr Branch, Educational Sciences Group, Islamshahr, Iran
2. Associate professor in Islamic Azad University (IAU), Islamshahr Branch, Consultation Group, Islamshahr, Iran
3. MA student in the field of Educational Management, Islamic Azad University (IAU), Islamshahr Branch, Iran

ABSTRACT

The present essay has dealt with Training Needs Analysis (TNA) on mid- rank directors of Saderat Bank (BSI) in Tehran. Statistical population of the current study comprises of all chairmen and vice- chairmen (assistants) of central departments as well as Tehran administrations of Saderat Bank (BSI) (totally 200 participants) with BA degree and higher. To select the referent sample and also in order to improve accuracy in measurement, classified random sampling method has been adapted and according to sample space formula from H.S. Bola table 135 participants were elected as sample for this study from mid- rank directors in Saderat Bank (BSI) in Tehran City. A questionnaire with 69 questions was employed as measurement tool that was built by researcher and it was prepared by means of national and international studies and interview with experts via Delphi Technique. Validity of measurement tool was calculated by Cronbach Alpha Coefficient and total value of test validity was 0.86. The results of factor analysis imply that the effective factors on Training Needs Analysis (TNA) among mid- rank director of Saderat Bank in Tehran (BSI) include: First factor: Human (10.71) with 13 parameters; Second factor: Skill (8.999) with 10 parameters; Third factor: Maturity (8.94) with 9 parameters; Fourth factor: Perceptual (conceptual), (7.26) with 9 parameters; Fifth factor: Attitudinal (6.054) with 5 parameters; Sixth factor: Technical (5.52) with 7 parameters; Seventh factor: Knowledge (4.011) with 6 parameters; Eighth factor: Leadership (3.79) with 4 parameters; and Ninth factor: General (2.557) with 4 parameters. Finally, these 9 factors interpreted 58% of total variance.

Keywords: Training, Directors, Needs Analysis, Human, Skilled, Maturity, Perceptual, Attitudinal, Technical, Leadership, General

1. INTRODUCTION

The effectiveness and efficiency of any organization extremely depends on this fact that personnel of that organization, particularly managers, are qualified for acquiring the position that is assigned to them. With respect to a role that directors play in organizational success, enjoying those characteristics, competencies, knowledge, information and the needed skills for them is crucially important for implementation of administrative performance successfully.

In a study, Mirkamali [1] expresses that with respect to this point that necessity of training is inevitable for managers so it should be known that needs analysis is a foundation for training planning. The fact that despite of its due importance, needs analysis has not been yet taken seriously and or planners have easily ignored it. Recognition of training needs is a difficult task; of course, but it is a matter of fact that the need exists. Thus, needs analysis is the foundation and basis for educational planning and design. Needs analysis is the process of meeting educational requirements that has been measured by knowledge, information, and skills and behaviors needed for personnel in an organization for its better effectiveness in the given organization.

Bigdeli [2] has purposed measurement and or in other words recognition of need as the primary and the most crucial stage in training process. In an investigation, it was concluded that if training is done based on objective criteria and study on real requirements, it will be more effective in performance of organization and personnel.

Mirsepasi [3] has introduced election of competent individuals for administrative positions as one of the critical and complicated tasks in Human Resources (HR) management. Assessment and reconstruction of HR is a process from which pioneer organizations have been benefitted for training and renovation, performance assessment and promotion of their managers often in industrial and advanced countries.

Sharifian [4] argues that although paying attention to educational needs, accurately recognition and characterization of their preference and importance have background and history over the time but growth and development of needs analysis methods and techniques have not been noticeable and outstanding. In fact, practical and basic needs analysis has been noticed only during recent centuries.

*Corresponding Author: Raziyeh Shabani (MSc student). Educational Management, Islamic Azad University (IAU), Islamshahr branch, Iran. rshabani803@yahoo.com

Abbaszadegan and Torkzadeh [5] believe that educational needs analysis denotes recognition of requirements (distance between what exists now with what have to be in future) and their ranking based on order preference and selection those needs that have to be reduced and or omitted.

In a study, Fathi Vajargah [6] expresses: Within training domain, needs analysis is deemed as one of the most basic and essential factors in planning process. Needs analysis is utilized wherever subject of formulation of designs and taking a group of educational measures are purposed. Educational planners throughout the world and in all organizations which are involved in education should inevitably purpose convincing reasons for formulation of their plans and educational designs.

Abtahi [7] sought for the reason of failure in many management training institutes in unplanned training operation and without sufficient thinking and pondering over this subject. While proper educational plans not only will reduce vulnerability of managers, officials, and educational experts and planners but also it will guarantee goals of personnel and organization.

Jazayeri [8] argues that importance and sensitivity of educational process increase when we pay attention to the limited budgets that have been allocated to training process since priorities and necessities are purposed in this subject and policy- makers and educational planners have to select among various and unlimited requirements for this reason the existing facilities may not meet all requirements. In such conditions, educational experts and practitioners should obtain some criteria based on which they are able to recognize the necessary problems and make efforts to resolve them. With respect to this point that accurately and objective needs analysis is the first effective step in a successful educational planning, the present study reviews requirements of mid- rank directors of Saderat Bank (BSI) in Tehran in order to purpose an appropriate educational model for their training by identifying their needs.

Several studies have been carried out about managers' training needs analysis so we deal with some of them in the following:

Burrton and Merrill [9] indicated in a study that needs analysis is a systematic process to determine goals and to identify distance between current state with the objectives and finally to characterize preferences for practice. In a research, Suarez [10] showed that process of collection and analysis of information is needs analysis in the field of education and training that is led to identifying requirements for individuals, groups, institutions, local community and society as whole. In another study, Fathi Vajargah and Mehrmohammadi [11] consider needs analysis as process of gathering and analysis of information based on which requirements of individuals, groups and communities are identified and they attach a history for this issue as background of education and training or human, in fact. Despite of relatively long history of needs analysis in other human insight fields, especially social services and healthcare, in education and training, needs analysis is a subject that has been noticed after 1960s. In a study, Holton and Alood [12] indicated that in the field of training needs analysis, scientific literature is not too deep although many case studies have been conducted in this regard. In fact, presentation of triple levels of needs analysis by Keith & Brian is the main framework for needs analysis. This theory was purposed in 1961. They believed that Training Needs Analysis has triple levels including "Organizational analysis, performance analysis and individual analysis". Today, performance analysis stands for "Work or task analysis" and individual analysis refers to "Human analysis personally".

In another research, Layt [13] showed that all authors suggest that needs analysis is the first step that is involved in HR or organizational development. The knowledgeable planners take importance of creation of a basis for needs as pivot and observe that obtained information and data from need analysis may justify organizational planning. Similarly, they consider profitability of needs analysis for supply and allocation of sources to plans and projects.

In a study, Kolten [14] showed that determination of personnel's requirements and improvement of their ability by training might have a stable impact while the foremost effect is rational confrontation to these needs. In another research, Robert R. Jacob [15] displayed that to make sure of position of a new curriculum in an institute the information should be collected and analyzed routinely and systematically concerning to educational needs of learners, available sources and possible barriers before starting and execution of the given plan.

Ghoorchian [16] indicated this point in another study that in order to achieve skills at standard level, training and development of human resources should be especially taken into consideration. In this course, properly execution of needs analysis process is the most basic step in formulation and execution of educational plans. In fact, needs analysis is infrastructure for training building so to the extent this cornerstone is stronger, the building on this foundation will be more rigid and invulnerable. The start point for any type of training is to determine educational need and formulation of educational plan is subjected to measurement and recognition of requirements.

Needs are recognized during needs analysis process and efforts are made according to priority for their fulfillment or realization and data that have been obtained from needs analysis in the needed group of information are provided. Wiles [17] indicated in other research that training needs analysis might contribute to organizations to test knowledge and skill levels in their members. Information about needs analysis may be adapted as a basis for development of training plan to improve workers' skill and knowledge. Needs analysis is the process of collection and creation of agreement among individual and groups' comments regarding their requirements.

In another study, Keith and Brain [18] showed that needs analysis not only has an enriched history in education and training field but also in the field of social services and public healthcare. We need to training in order to leave away our classic and improper beliefs and acquire new knowledge and skills. Watkins [19] argue that by needs analysis one might remove most of the existing conflicts among members in a system and acquire a common field and requirement to determine the given results by participation of all beneficiaries in planning.

Swit [20] has expressed foremost goals of needs analysis in another study as follows: 1) to determine what kind of training is related to employee's job; 2) to identify what type of training may improve employee's performance; 3) to distinguish between educational requirement with organizational problems; and 4) to link improvement of occupational performance with organizational objectives and results.

Soriano [21] in other research has implied goals of needs analysis as follows:

a) **Discovery:** Sometimes in planning, needs analysis studies may seek for identifying basic needs so that they should discovered in different fields and several groups of audiences.

b) **Testing:** In some cases, needs analysis is intended to clarify this point that if requirements are fulfilled in the light of suggested changes in plans or not.

c) **Recognition:** Needs analysis is aimed at recognition when it seeks for finding the best possible way or path to realize needs.

d) **Evaluation:** Its goal is to explore distances among the existing plans and need fulfillment.

In other study, Helmek [22] has described the foremost goals in needs analysis as follows:

1. Providing information for planning
2. Necessity of plans renovation or increase use life for plan
3. Operating transaction
4. Avoidance from exclusion in planning and attraction of public participation
5. To observe economic aspect in planning issues
6. Necessity of accountability

According to aforesaid points, the main objectives of this study are to answer to the following questions:

1. What are educational needs for mid- rank directors in Saderat banks at Tehran Province?
2. What are the constituent parameters for each of these requirements?
3. How does the order preference act in these parameters and needs?

2. MATERIAL AND METHODS

Methodology of the present study is of applied type in terms of objectives and of quantitative kind in terms of data and this study is of local survey type. Since researcher has intended to achieve a certain field and to seek for knowing when, why, who and how to conduct this study and in fact the major goal of researcher was to describe, interpret and discover information from sample within certain period of time.

In this study, statistical population comprises of mid- rank directors of Tehran Saderat Bank (BSI) including chairmen and vice- chairmen of central departments as well as managers and assistants of BSI administrations with BA educational degree and higher that are totally 200 participants.

To select referent sample group as well as to enhance accuracy of measurement of sample space, classified random sampling method was utilized and based on formula for determination of sample space, H.S. Bola Table was used for sample in this study where 135 mid- rank directors from Tehran Saderat Bank were the participants in this group.

A questionnaire with 69 questions that were made by researcher was the measurement tool in this study. This questionnaire was drawn up by the aid of national and global studies and interview with experts via Delphi Technique. Scales of this questionnaire consists of 1-7 choices where 1 denotes minimum agreement and 7 stands for maximum acceptance against any parameter (variable) for the participants.

Validity of measurement tool was calculated by Cronbach Alpha Coefficient and its value was 0.86. Validity of measurement tool was computed by exploratory factor analysis through dividing into explorative constituents where it has a relatively high factor loading. Furthermore, all questions have been confirmed in this questionnaire.

3. RESULTS

Data description:

Statistical features of 9 effective factors in training needs analysis for mid- rank directors of Tehran Saderat Bank are given in Table-1.

Of the figures in the above table, one may deduce the following points:

1) A contrast among mean values of 9 factors from view of sample groups generally indicates that the factors (Human, Skill, Maturity, Perceptual (conceptual), Attitudinal, Technical, Knowledge, Leadership, and General respectively influence in training needs analysis for mid- rank directors in Tehran Saderat Bank.

2) A comparison among values of standard deviation in factors from sample group's view may characterize variance in skill factor is greater than in other variables.

- 3) The minimum and maximum scores for any factor are 1 and 7 from sample group's view, respectively.
- 4) Positive skewness suggests that distribution skewness is deviated toward right side of normal distribution while positive kurtosis indicates that the given distribution is higher than normal distribution.

Table 1. Statistical features of scores of factors separately based on priority (n=135)

Title of Factor	Variance	Skewness	Kurtosis	Standard Deviation	Mean	Maximum	Minimum
Human	134.09	-0.147	-0.583	11.58	71.05	7	1
Skill	186.59	-0.36	-1.33	13.66	52.49	7	1
Maturity	153.76	-0.25	-1.41	12.40	45.73	7	1
Perceptual	127.69	-0.74	-0.63	11.30	49.41	7	1
Attitudinal	101	-0.14	-1.44	10.05	34.21	7	1
Technical	40.32	-0.98	0.27	6.35	40.86	7	1
Knowledge	41.73	0.083	-1.16	6.46	31.29	7	1

Data analysis:

In order to confirm data description and generalize results of study to the population from which they have been extracted, a statistical test was used that called factor analysis so that results of this test are given in the following tables respectively. It should be noted that among 69 parameters for measurement of training needs analysis on mid- rank directors, all of these parameters are relatively correlated at high and appropriate level and none of them were omitted. Factor analysis was conducted by means of analyzing variables into main elements and the results of Bartlett's Test of Sphericity were tabulated in Kaiser- Meyer- Olkin (KMO) table and to make sure of adequacy of sampling and non- zero nature of data correlation matrix in this population the given outcomes were calculated in Table 2. Thus by observing the figures that listed in this table it can be concluded that execution of factor analysis is justifiable.

Table 2: KMO values and fixed load

Kaiser- Meyer- Olkin (KMO)	0.66		
Bartlett's Test of Sphericity	Approximated Squared Root	Degree of Freedom	Significance Level
	14697.17	2346	0.001

To determine this point that from how many significant factors measurement tools has been saturated, three following parameters were considered and 9 factors have been extracted according to these three parameters.

- 1- Eigen value;
- 2- Variance ratio determined by any factor; and
- 3- Rotation matrix of eigenvalue.

Gradient diagram where its slope starts from factor 9 is displayed in Fig. 1.

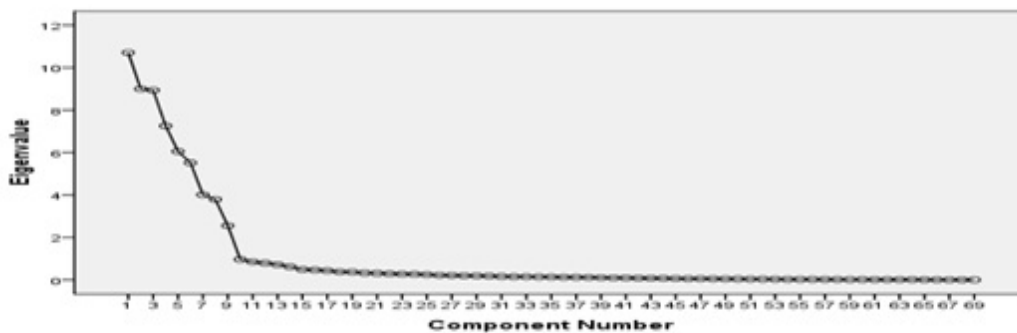


Figure 1. Scree diagram for determination of training measurement factors for directors

As it characterized from Table -3, with eigenvalue of 10.711 and about 15.52% of total variance of variables, first factor allocated an outstanding share in this table so that its portion is completely distinct from share of other factors here. As it mentioned before, since its non- rotated factor matrix and loads have not significant structure so it was decided to transform the extracted factors based on usual technique by means of varimax rotation around new axes in order to make easier and practical both general outcomes of items in questionnaire and its structured identification that shows main and relatively clear routes to achieve interpretable solutions. Factor matrix that has been created by varimax rotation is given in Table 4.

Table 3. Final attributes of factor analysis for extraction of factors of directors' training needs analysis

Factor	Cumulative Percent	Variance Percent	Eigen value
1	%15.52	%15.52	10.711
2	%28.57	%13.04	8.999
3	%41.52	%12.96	8.941
4	%52.05	%10.52	7.260
5	%60.82	%8.77	6.054
6	%68.82	%8.00	5.52
7	%74.63	%5.81	4.011
8	%80.13	%5.50	3.79
9	%85.23	%3.71	2.557

Table 4. Matrix of vertical rotation factors (varimax) for 60 questions

Q	F1	Q	F2	Q	F3	Q	F4	Q	F5	Q	F6	Q	F7	Q	F8	Q	F9
1	0.866	28	0.904	43	0.908	14	0.884	57	0.911	37	0.939	68	0.931	52	0.915	60	0.867
9	0.837	26	0.898	47	0.906	17	0.855	56	0.907	35	0.906	69	0.910	50	0.913	63	0.848
6	0.831	29	0.892	48	0.890	18	0.829	58	0.887	38	0.905	67	0.904	51	0.899	62	0.841
3	0.820	25	0.890	40	0.886	20	0.816	59	0.863	39	0.868	64	0.887	49	0.886	61	0.840
11	0.817	24	0.879	41	0.873	22	0.814	53	0.853	36	0.842	66	0.873				
12	0.816	31	0.867	44	0.829	19	0.805	55	0.828	33	0.839	65	0.781				
8	0.806	32	0.862	42	0.819	16	0.805	54	0.819	34	0.664						
10	0.804	23	0.840	46	0.803	15	0.792										
13	0.797	27	0.755	45	0.750	21	0.712										
4	0.794	30	0.572														
7	0.781																
5	0.780																
2	0.641																

Q: question; F: factor

According to conducted analysis on 9 extracted factors, criteria for definition and terminology of the extracted factors are as follows:

- a) Nature and size of variables in which the extracted factors of them have the greatest share.
- b) Review of glossaries and terms to see title and nature, vision and implicit points of variables.
- c) The existing theories and results of previous studies.

Nine factors were nominated with respect to above criteria as follows:

- First factor: Human needs including 13 parameters;
- Second factor: Skill requirements including 10 parameters;
- Third factor: Maturity needs comprising 9 parameters;
- Fourth factor: Perceptual (conceptual) requirements consist of 9 parameters;
- Fifth factor: Attitudinal needs including 5 parameters;
- Sixth factor: Technical requirements including 7 parameters;
- Seventh factor: Knowledge needs consist of 6 parameters;
- Eighth factor: Leadership needs comprising 4 parameters; and
- Ninth factor: General (public) needs including 4 parameters

4. DISCUSSION

Findings of the present study imply the followings points:

1- Totally 69 parameters influence on measurement of training needs analysis on directors of Tehran Saderat Bank where all of them are in compliance with cultural, political, social, economic, and religious values etc. in Saderat Bank (BSI).

2- Overall, 9 factors have been extracted for directors' training needs analysis as follows.

- First factor: Human needs (10.17) with 13 parameters
 - Second factor: Skill requirements (8.999) with 10 parameters
 - Third factor: Maturity needs (8.94) with 9 parameters
 - Fourth factor: Perceptual (conceptual) needs (7.26) with 9 parameters
 - Fifth factor: Attitudinal requirements (6.054) with 5 parameters
 - Sixth factor: Technical needs (5.52) with 7 parameters
 - Seventh factor: Knowledge needs (4.011) with 6 parameters
 - Eighth factor: Leadership requirements (3.79) with 4 parameters; and
 - First factor: General needs (2.557) with 4 parameters
- Finally, these 9 factors interpret 83.83% of total variance.

3- Each of these nine factors comprises the following parameters.

First factor: Human; according to order preferences obtained from factor analysis it includes the following parameters.

1) To comprehend needs, talents and problems of their personnel and making effort to meet them rationally; 2) to create motivation in their subordinate personnel; 3) to establish mental health in their subordinate administration; 4) to accept personal differences of their subordinates; 5) Encouragement to and create team- working; 6) Skill for creation of viability and vitality in organization; 7) to command respect for their own personality and others'; 8) to create collaboration spirit among colleagues; 9) Ability to recognize and solve organizational problems; 10) Loving others; 11) To strengthen self- reliance in them and others; 12) Listening well and acceptance others' viewpoints; 13) to identify personality of their personnel and respect to them.

Second factor: Skill; according to order preferences obtained from factor analysis it includes the following parameters.

1) Skill of controlling Letters of Credit (LCs); 2) to have legal insight and proficiency in organizational rules and regulations; 3) to have skill of creative thinking in organizational issues and problems; 4) to have skill to create link between technical rationality with emotional wisdom in organizational issues; 5) Skills for tackling against types of stress and anxiety in organization; 6) to have skill in doing specialized affairs in their subordinate system; 7) decision- making skills in organizational issues; 8) skills of sympathy and empathy with their subordinate system; 9) to have technological insight and attaching importance to them; and 10) to have insight for holding seminars for information of their personnel.

Third factor: Maturity; according to order preferences obtained from factor analysis it includes the following parameters.

1) To control emotions, feelings and excitations; 2) accountability for organization; 3) To participate in social meetings and movements and communication with individuals in society; 4) ability to make optimal decision for human resources and organization; 5) To be aware of their own emotions and feelings and to express them properly and on time; 6) to enjoy work and life and enthusiasm toward vitality; 7) to be able for tolerance against problems and adaptability to conditions; 8) to have potential for recognition judgment and decision- making in problem solving; and 9) to have motivation for doing the assigned tasks.

Forth factor: Perceptual (conceptual); according to order preferences obtained from factor analysis it includes the following parameters.

1) To perceive organizational delicacies and complexities; 2) to be sensitive to their own personnel; 3) to have self- reliance and commitment to organizational issues; 4) To create link between current issues and organizational far-flung goals; 5) evaluation of thoughts and comments regardless of their sources; 6) to have flexibility (logical acceptance of methods in new solutions); 7) to have potential for generalization in organizational issues; 8) To have philosophical thinking and mentality toward their agents in subordinate system; and 9) to accept provisional and conditional judgments and making decision in ambiguous conditions.

Fifth factor: Attitudinal; according to order preferences obtained from factor analysis it includes the following parameters.

1) To take strategic approach in organizational issues; 2) to strengthen spirit of participation and cooperation in solution of organizational problems; 3) to create self- analysis; 4) to comprehend experiences among different cultures (to perceive differences and diversity in various cultures); 5) to improve positive attitude toward doing one's own task; 6) to strengthen creative attitude and thinking in organizational issues; and 7) to enhance positive attitude toward doing task in their own personnel.

Sixth factor: Technical; according to order preferences obtained from factor analysis it includes the following parameters.

1) To have potential to control their own subordinate system; 2) To possess knowledge and ability and planning for execution of affairs; 3) To have potential for guidance and commanding their own subordinate system; 4) To have potential for coordination of affairs and activities done by their subordinate system; 5) To have ability for organizing the relevant activities and affairs; 6) To have certain specialty regarding their own subordinate system; and 7) To adapt scientific techniques for calculation of loss and profit.

Seventh factor: Knowledge; according to order preferences obtained from factor analysis it includes the following parameters.

1) To pay attention to growth in their own occupation; 2) to notice to occupational growth for others; 3) to pay attention to and improve general information needed for colleagues; 4) to pay attention and enhance specialized information needed for themselves; 5) to notice and improve general information needed for them; and 6) to consider and strengthen specialized information needed for colleagues.

Eighth factor: Leadership; according to order preferences obtained from factor analysis it includes the following parameters.

1) To be foresighted and patient about problems and issues; 2) To have potential for penetration into customers' heart; 3) to take personal risk for issues; and 4) ability to penetrate into heart of their subordinate personnel.

Ninth factor: General (public); according to order preferences obtained from factor analysis it includes the following parameters.

1) To pay attention and improve their own physical health and others'; 2) to be virtuous and committed to do the assigned tasks; 3) to notice and strengthen their own emotional health and others'; and 4) To pay attention and improve their own mental health and others'.

Due to some limitation, reliability of nine factors and convergent validity has not been computed.

5. CONCLUSION

At the end, it is suggested that with respect to importance of these factors, analysis on training needs in this study to be carried out by experienced researchers throughout Iranian Saderat bank (BSI) network as well as all occupational groups and a standard tools to be constructed for training needs analysis of directors, experts and employees by psychometrics and specialist and experienced personnel in education and training system and convergent validity and reliability of nine factors to be calculated and also a certain base to be established in the center of any province regarding parameters of needs analysis since needs analysis is an individual, situational, perpetual, open-ended, variable, and dynamic and extremely complex task. Thus, by using these parameters at any time and situation, training needs analysis for individuals and identifying its effective factors should be done based on characteristics of individual, environment, organization and group.

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