



**A COMPETENCY-BASED SUCCESSION PLANNING MODEL
WITH RESPECT TO ADJUSTING ROLE OF ORGANIZATIONAL
CULTURE IN TELECOMMUNICATION INFRASTRUCTURE
COMPANY OF IRAN (TICIR)**

Narges Hosseini^a, Masoud Pourkiyani^{a*}, Ayob Sheikhi^b

^a Department of Management, Islamic Azad University, Kerman Branch, Kerman, IRAN.

^b Department of Statistics and Computer, Shahid Bahonar University of Kerman, Kerman, IRAN.

ARTICLE INFO

Article history:

Received 04 June 2019
Received in revised form 09
July 2019
Accepted 20 July 2019
Available online 06 August
2019

Keywords:

Succession planning;
Competency model;
Competency-based
management;
Organizational culture;
Adjusting (variable);
Infrastructural
communication.

ABSTRACT

The current research aims to propose a competency-based succession planning model with respect to adjusting role of organizational culture in Telecommunication Infrastructure Company of Iran (TICIR). This study was conducted as an applied research in terms of objective and it was assumed as a descriptive survey by taking approach toward interpretative structural modeling. The statistical population of this study included two groups of experts and directors (Directors general, chairmen of offices, responsible experts and experts of TICIR Company). Primarily, in order to determine sample size for statistical population, 20 of experts were elected using non-randomized and selective sampling method and 340 members of the second statistical population were chosen by means of classified sampling technique including directors general, deputies of directors general, chairmen of offices, responsible experts and other experts of TICIR Company. The findings about succession planning model indicated that the variable of succession planning reached to a level higher than satisfactory rate therefore all of the related elements were placed higher than satisfactory level. Finally variable of organizational culture, as adjusting variable, was also placed at the level higher than satisfactory rate in this study. Hence, all of these variables reached to the level higher than satisfactory rate.

© 2019 INT TRANS J ENG MANAG SCI TECH.

1. INTRODUCTION

The Telecommunication Infrastructure Company of Iran (TICIR) is one of the governmental fields responsible by Ministry of Information Technology and Communication. Structure of organizational manpower possesses a long history and they will reach to the retirement of their career in an early time in the future. With respect to vital role of this organization, management of this organization has put dealing with subject of succession planning for the organizational personnel as

high on the agenda. On the other hand, some new and young workforces have joined to the organization where they are assumed as the best and most available capital and resource to meet this vital requirement. Accordingly, it necessitates for design and execution of a process to realize key goal of providing appropriate directors to avoid from cessation in playing this role and realization of organizational objectives which can be drawn within process of succession planning. Advancement in various cultural, political, economic, and social fields and especially technology has made the existing competitive environment as ambiguous, unstable, and extremely variant. Planning may provide suitable conditions for exposure to these uncertain conditions for the organizations. Many organizations employ planning of directors to cope with potential for destruction and ruining in organization and to meet environmental requirements and occurring events. Finally, organizations try to improve their own positions smartly and address development and recognition of administrative talents in their planning and assume them their growth and achievement in systematic and serious planning to manage talents and succession planning (Basiri and Sabegh, 2014).

Succession planning is a program through which appropriate persons are elected for incumbency of high-ranking administrative and major posts among qualified and talented personnel. The human talents in organization are identified for incumbency of major positions and jobs in subsequent years and they are gradually prepared to assume these jobs and tasks (Bidmeshki et al., 2014).

Competency is defined according to this point that how a person is selected, what s/he knows and what s/he does. And some other important factors are knowledge, communication, technical skills, distinct thought, emotion, values and activities which are led to an efficient function (Cross, 2010). In fact, competency describes characteristics of personnel they need to them for doing of their tasks properly (Kotonen et al., 2012). Competency management comprises of a group of merits or a list of tasks for apprentice who needs to acquire or execute them so that to be considered as a superior or competent person in terms of occupational aspect. Creation of competency-based management includes several advantages at individual and organizational level. The value-added advantage for an organization is owed to enhance competitive position of the organization, possession of suitable personnel for different jobs, facilitation of employment process, and constant development of personnel according to their requirements. This, in turn, leads to better performance of personnel, improvement of commitment in personnel, and finally enhancement of performance in personnel (Sanghi, 2007).

According to the conducted studies, competency model is an important member in changing if individual and organizational structure which supports from training empowerment plan, performance management, the plan of jobs description, and succession planning (Ennis, 2008). It has been moved toward international occupational standards or competency models as a result of rising number of retired personnel and it aimed to cover the gap of skill and knowledge, nationalization of workforce, and attraction and maintenance of talented forces (Conner et al., 2014). The competency models are assumed as important in terms of succession planning because regardless of this process it is difficult to do several tasks including creating of relationship among main organizational competencies to occupational competencies, giving a transparent definition about talented personnel, accurate determination of competencies needed for present and future in organization, preparation of a basis for performance management by creation of a favorable workplace that is followed by

favorable performance of personnel, creation of clear occupational expectations for the present and future, perfect job evaluation, and development of individual plan to contribute to the personnel to decrease the gap between the needed competencies for achievement (Rothwell, 2005).

There are some organizations which possess powerful directors where they could not survive without such personnel at all; however, these organizations may unwantedly lose these workforces because of several reasons including retirement, resignation, death and or even job promotion. Thus, it is required for prevention from creation of disruption in organizational processes to employ plans to provide competent forces. However, many organizations ignore this issue unfortunately and as they are aware of importance of this subject when it is in vain to do anything and organization is losing the valuable workforces. Therefore, it is necessary for existing of a systematic and purposive method and plan to upgrade scientific awareness to implement succession management and planning to determine key roles by talented and competent personnel. It has been proved those succession plans which are tied with occupational path for personnel, may improve spirit of personnel and their productivity. Those organizations, which support from occupational development by creating of chances for personnel to find new opportunities inside the organization and encouraging them to job motion, will more unlikely share them in developing of their job.

Whereas these personnel more unlikely look for several opportunities in organization if maintenance process is done duly in organization; overall, this is led to increase in job satisfaction among personnel. Nevertheless, there is problem in succession planning models in which despite effect of organizational culture on succession planning, succession planning models have ignored effect of this variable. Thus, designing of a model that can fill this gap may create more suitable structure for the organization and for this reason current research is intended to deal with this important subject. In today world competition, the companies which are active in ICT field especially TICIR Company can remarkably contribute to the country to achieve a position proportional to their valuable level. In this regard, human resources play a crucial role. Alternately, experiences and skills of personnel are considered as a source for which organization spend a lot of costs to acquire them. Nonetheless, organizational directors have forgotten role of these workforces because they think the experienced and skillful personnel always attend in the organization and they may not need to plans for human resource development while exiting of human resources imposes some costs to the organization since organization is required again to spend more time and cost for training of personnel. Hence, presentation of a competency-based succession planning model may provide this opportunity for organizations to train a competent person as future director before retirement of current manager and after retirement of previous manager a person is substituted with him/ her that organization ensures from competency and skill of such a person and thereby organization could continue their proper path. With respect to aforementioned subjects, the current research tends to present a competency-based succession planning model given adjusting role of organizational culture in TICIR Company.

2. RESEARCH QUESTIONS

These questions are raised in this study as follows:

- 1- What are the indices for succession planning in TICIR Company?
- 2- Which are parameters of competency in TICIR Company?

- 3- How is the condition of succession planning in TICIR Company?
- 4- How is the status of competency in TICIR Company?
- 5- How is the condition of organizational culture in TICIR Company?
- 6- What is the relationship among competency and succession planning in TICIR Company?
- 7- Is there any relationship among competency and succession planning with respect to adjusting role of organizational culture in TICIR Company?
- 8- What are the characteristics of succession planning in TICIR Company and how much the validity of succession planning model in TICIR Company?

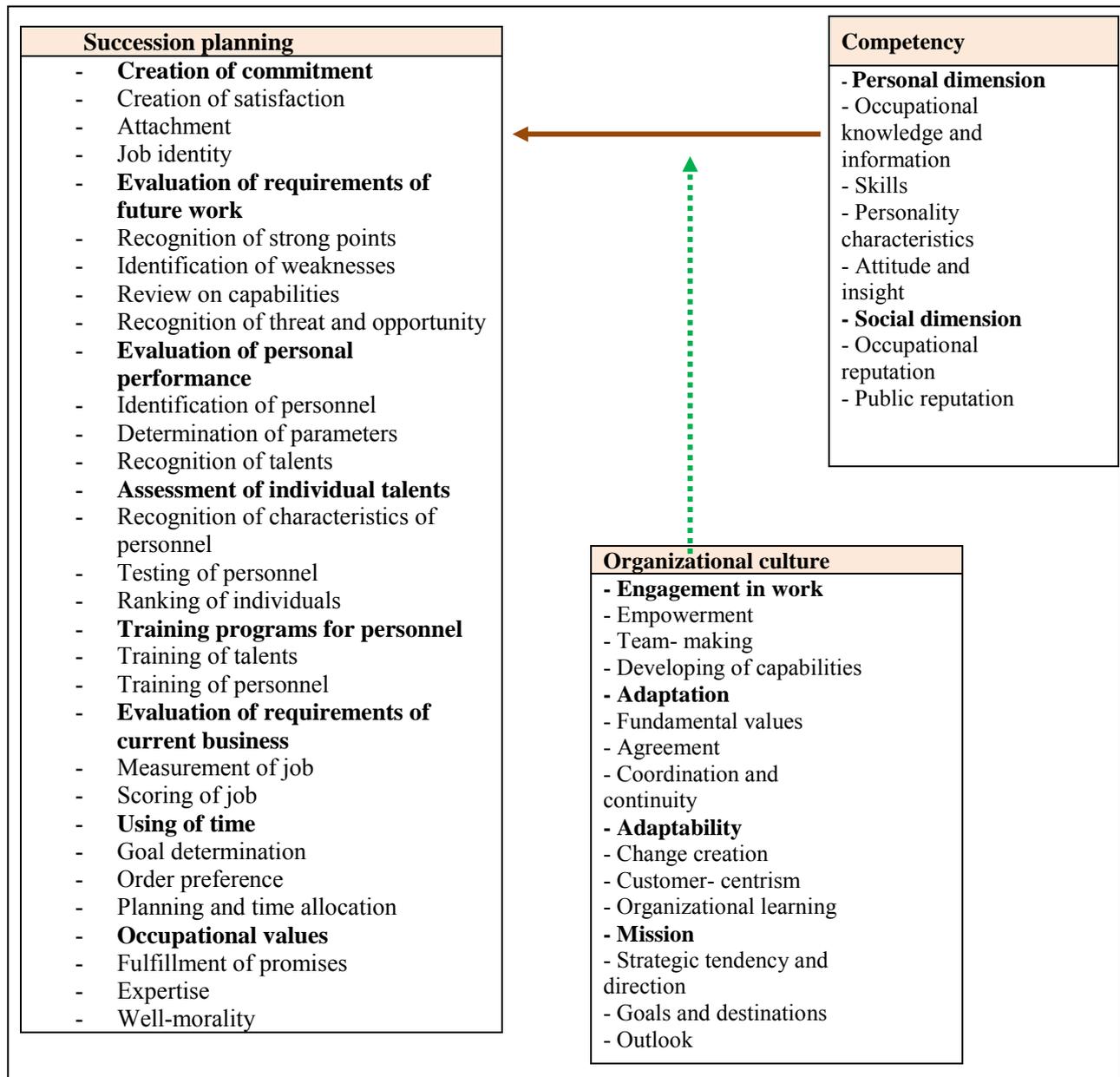


Figure 1: Research conceptual model

3. METHODOLOGY

This study is an applied research in terms of objective and it is descriptive survey in terms of method and it has been carried out by taking approach toward interpretative structural modeling. The statistical population of this study was composed of two groups: The first group was the experts who quantity was uncertain and dispersed and the second group comprised of all directors general, deputies of directors general, chairmen of offices, responsible experts and also other experts in TICIR Company throughout Iran where they were totally 2217 members. Using of non-randomized selective

sampling method to determine sample size for first statistical population, we elected 20 respondents of experts by considering some criteria such as accessibility, scholar expertise in university and academic centers where they studied, having the relevant educational degrees concerning book or paper. To determine sample size for the second statistical population i.e. directors general, deputy of directors general, chairmen of offices, and responsible experts and other experts of TICIR Company, they were chosen by classified sampling method with 340 members.

3.1 DATA COLLECTION TOOLS

The questionnaire items are interpreted by Delphi technique out of focus group (experts) to determine and prioritization of dimensions and indices of competency-based succession planning in TICIR Company. The quantity of these questionnaires was 5.

- 1- The first questionnaire was utilized to identify dimensions and indices of succession planning in TICIR Company. This questionnaire is completed by the experts.
- 2- The second questionnaire will be used for determination of dimensions and variables of competency in TICIR Company. This questionnaire is filled out by experts.
- 3- Third questionnaire will be utilized for measurement of succession planning status in TICIR Company. This questionnaire is completed by operational directors and corporate experts.
- 4- The fourth questionnaire will be employed for measurement of competency status in TICIR Company. This questionnaire is completed by operational directors and corporate experts.
- 5- The fifth questionnaire will be utilized for measurement of status of organizational culture in TICIR Company. This questionnaire is completed by operational directors and corporate experts.

Both content validity and construct validity were employed in this study to determine validity of questionnaires. After reading of books and essays regarding the research subject and study on questionnaires in other papers and researches, the needed items were designed for research variables to determine content validity and the codified questionnaires for research variables were examined by research masters. The exploratory factor analysis and confirmatory factor analysis were employed for review of construct validity of measurement tool (questionnaire) as well as appropriateness of psychometric criteria of questionnaires which were assumed as important defaults in structured equations. In order to determine internal reliability, rate of internal reliability was calculated for questionnaires of succession planning, competency, and organizational culture using Cronbach's alpha coefficient and given that the Cronbach's alpha coefficients were higher than (0.7) the internal reliability was confirmed for all three questionnaire. The questionnaires were distributed gathered by attendance and electronically at any phase.

4. RESEARCH FINDING

SPSS and IMOS software, Pearson's correlation test, Kolmogorov-Smirnov test, binominal test, frequency tables, Bazargan Standard table, factor analysis, modeling of structured equations with path analysis were utilized for statistical description and analysis and structural relations. Among total 340 participants in this study 69.1% of them were males and 30.9% were females in section of demographic data. The highest numbers for educational degrees in participants, BA degree (51.5%) and high school diploma (47.1%) were the most frequent rates among the participants. Similarly, 35 participants were chairmen of offices, 282 members were experts and responsible experts, and 23 participants included directors general and their deputies out of them 81.5% have been employed by official system and 18.5% of them were as contractual personnel.

Table 1, normality of studied variables was examined before analysis of research hypotheses. Kolmogorov-Smirnov test was employed for determination of assumption of normality of variables.

Table 1: Analysis on normality of research variables

Variable	Kolmogorov-Smirnov	p-value
Succession planning	0.068	0.077
Competency	0.074	0.083
Organizational culture	0.051	0.064

Table 2: Analysis on relationship between variables.

Variable	Kolmogorov-Smirnov	Value (-p)
Succession planning	1	0.860**
Competency	0.860**	1

* Significant at level 0.05 ($p < 0.05$); ** Significant at level 0.01 ($p < 0.01$)

Likewise, Pearson's correlation coefficient was utilized to determine relationship between variables. The resultant findings from correlation test are given in Table 2. Given the Pearson's correlation coefficient and also this quantity ($p\text{-value} \leq 0.001$), there is significant and direct relationship among competency and succession planning in TICIR Company at level 0.01.

The multivariate regression was utilized to review relationship between competency factors with succession planning in TICIR Company. The given results from regressive analysis and determination coefficient indicated variables of knowledge and information, skills, personality characteristics, attitude and insight, and public reputation affected significantly succession plan as predictors ($p\text{-value} < 0.05$). Similarly, according to parameter of partial correlation coefficient among effective factors of competency on succession planning in TICIR Company, variable of public reputation has the maximum relationship with succession planning.

Table 3: Regression coefficients for effective factors of competency on succession planning

Variable	Standardized coefficient	t-statistic	p-value	Partial correlation coefficient
Knowledge and information	0.245	6.488	0	0.335
Skills	0.322	8.074	0	0.405
Personality characteristics	0.191	5.620	0	0.294
Attitude and insight	-0.109	-2.813	0.005	-0.152
Professional reputation	0.034	0.932	0.352	0.051
Public reputation	0.354	8.618	0	0.427

Table 4: Fitness indices for succession planning model.

Index	Favorable statistic value	Reported value
RMSEA	≤ 0.08	0.036
Chi2 ratio (x^2/df)	< 3	2.024
GFI	≥ 0.90	0.921
AGFI	≥ 0.90	0.945
CFI	> 0.90	0.910
NFI	> 0.90	0.987
TLI	> 0.90	0.941
IFI	> 0.90	0.956

With respect to adjusting role of organizational factor, goodness of fit indices in succession planning model, competency model, and the model among competency and succession planning is given in Tables 5, 6, and 7. There are several techniques for estimation of general goodness of fit with the observed data. The criteria of Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI), Root Mean Square Error of Approximation (RMSEA), Normed Fit Index (NFI), Tucker

Lewis index (TLI), Incremental Fit Index (IFI), Non-Normed Fit Index (NNFI), and Comparative Fit Index (CFI) were used for assessment of goodness of fit in all models at this study. Figure 2 show path analysis diagram.

Table 5: Fitness indices for competency model.

Index	Favorable statistic value	Reported value
RMSEA	≤ 0.08	0.059
Chi2 ratio (χ^2/df)	< 3	2.280
GFI	≥ 0.90	0.898
AGFI	≥ 0.90	0.923
CFI	≥ 0.90	0.901
NFI	≥ 0.90	0.924
TLI	≥ 0.90	0.996
IFI	≥ 0.90	0.909

Table 6: Fitness indices for model among competency and succession planning with respect to adjusting role of organizational culture

Index	Favorable statistic value	Reported value
RMSEA	≤ 0.08	0.061
Chi2 ratio (χ^2/df)	< 3	1.924
GFI	≥ 0.90	0.942
AGFI	≥ 0.90	0.980
CFI	≥ 0.90	0.911
NFI	≥ 0.90	0.965
TLI	≥ 0.90	0.897
IFI	≥ 0.90	0.899

With respect to the given indices, these models are suitable fitted.

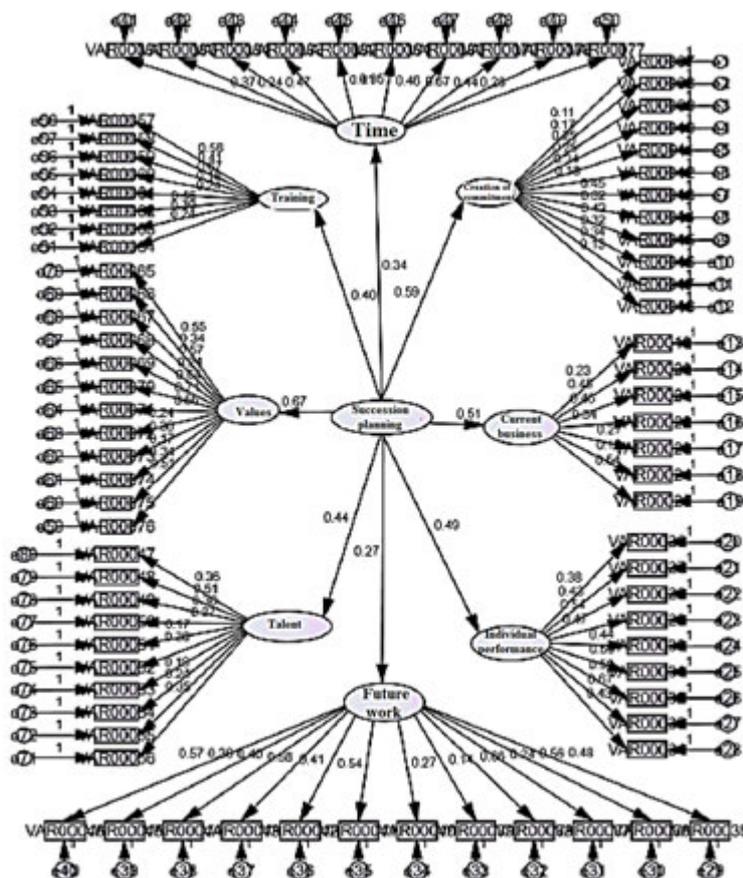


Figure 2: Diagram for path analysis of variable of succession planning.

Table 7: Indices of succession planning.

Dimension	Component	Indicator
Commitment	Satisfaction	The nature of the work(e1) Consult with staff(e2) Satisfaction with promotion(e3) Increase salary(e4)
	Attachment	Job attachment(e5) Endure hard work (e6) Job rotation (e7) Doing better (e8)
	Job identity	Good sense of work (e9) Social site (e10) Introduction to Jobs (e11) Satisfaction with promotion (e12)
Evaluation of current work requirements	Job evaluation	Evaluation criteria (e13) Dimensions of competence (e14) Occupation based on expertise (e15) Enterprise Management Post (e16)
	Job Scoring	Scoring system (e17) Periodic evaluation of jobs (e18) Job score breakdown (e19)
Evaluation of individual performance	Getting to know people	Recognize the skill of the staff (e20) Know the talent of the staff (e21) Undertaking posts with recognition (e22)
	Indicators	Definition of job indicators (e23) Revision of indicators (e24) People's job performance (e25)
	Recognizing talents	Determining career path (e26) Recruitment tests (e27) Matching jobs (e28)
Evaluation of future work requirements	Recognize strengths	Dimensions of competence of each job (e29) Competent Appointment (e30) Identify people's strengths (e31)
	Recognizing weaknesses	Identifying weaknesses (e32) Evaluation system (e33) Appropriate training (e34)
	Exploring abilities	Ability to upgrade (e35) Appropriate job position (e36) Ability to hire (e37)
	Recognizing threats and opportunities	Ability recognition test (e38) Recognizing job opportunities (e39) Identifying Threats and Opportunities (e40)
Use time	Goal Determination	Use experiences in purpose (41) Know the goals (e42) Objective Evaluation (e43) Compatibility between goals (e44)
	Prioritization	Prioritize goals (e45) Effective time and resource management (e46) Setting work priorities (e47)
	Planning and time allocation	Daily Checklist (e48) Preparation of work plan (e49) Daily Schedule (e50)
Employee training programs	Nurturing talents	Strengthening staff skills (e51) Educational Planning (e52) Pay attention to nurturing talent (e53) Training course (e54)
	Staff training	The Role of Training in Promotion (e55) Recognize skills and talents (e56) Specialization course (e57) Staff Skills Training (e58)
Work Values	Fulfilling the covenant	Doing the job to the end (e59) Perform assigned tasks (e60) Staff promises (e61) Doing the job best (e62)
	specialty	Knowledge transfer day (e63) Level of education (e64) Increasing knowledge and experience (e65) Apply appropriate techniques (e66)
	Good mood	Lack of staff deviance (e67) No militancy (e68) Client tolerance (e69) Staff promises (e70)
Evaluating individual talents	Understanding individual characteristics	Pay attention to individual characteristics (e71) Managers' perception of individual characteristics (e72) Pay special attention to hiring (e73)
	Staff Test	Test for upgrade (e74) Test for employment (e75) Periodic evaluation of ability (e76) Test for ability recognition (e77)
	Ranking of people	Ranking of people (e78) Role in promotion (e79) The importance of rank of staff (e80)

Likewise, the results given in Table 8 indicate path coefficients, quantity of t-statistic, p-value, and analysis on type of relation.

Table 8: Studied relationship between parameters

Studied relationship	Path coefficient	t-value	p-value	Type of relationship
Succession planning → (competency * culture)	0.365	11.076**	<0.001	Incremental
Succession planning → (individual dimension * culture)	0.475	6.439**	<0.001	Incremental
Succession planning → (knowledge * culture)	0.271	8.745**	<0.001	Incremental
Succession planning → (skill * culture)	0.424	9.172**	<0.001	Incremental
Succession planning → (personality * culture)	0.172	6.7341**	<0.001	Incremental
Succession planning → (attitude * culture)	0.663	14.324**	<0.001	Incremental
Succession planning → (social dimension * culture)	0.645	7.591**	<0.001	Incremental
Succession planning → (professional reputation * culture)	0.491	7.523**	<0.001	Incremental
Succession planning → (public reputation * culture)	0.465	8.217**	<0.001	Incremental
Succession planning				

** The values greater than 1.96 are significant at level 0.05.

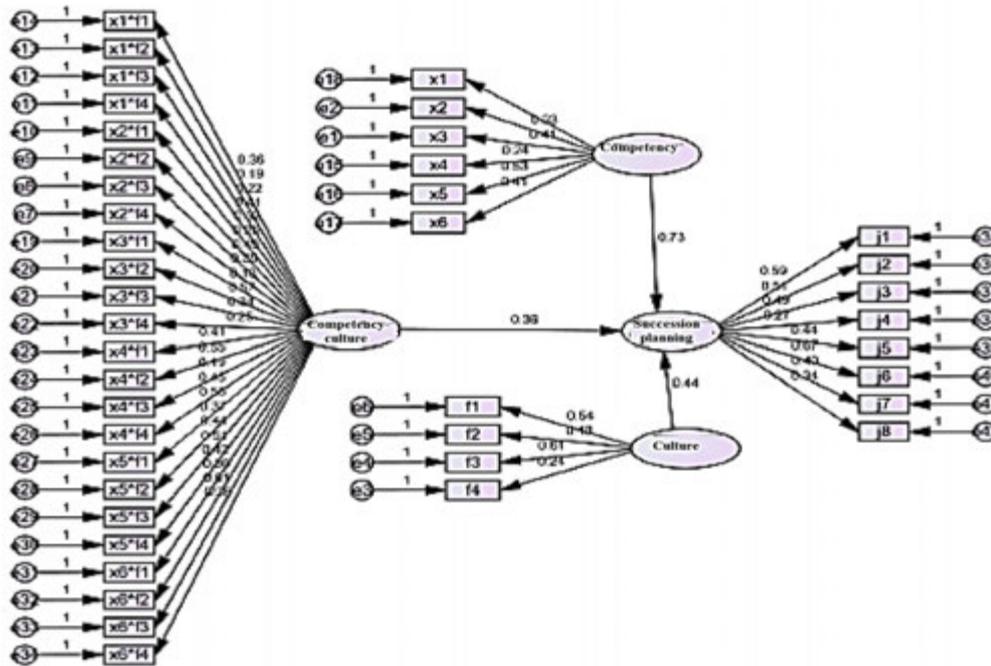


Figure 3: Diagram of path analysis among succession planning and competency with respect to adjusting role of organizational culture.

With respect to gram of path analysis in Figure 3 and the given t-value ($1096 < 11.076$) in Table 8 and also calculated p-value ($0 < 0.05$), null hypothesis is rejected and it can be concluded that there is relationship among competency and succession planning with respect to adjusting role of organizational culture in TICIR Company.

5. DISCUSSION

According to the findings it can be concluded that variable of succession planning is placed at the

level higher than satisfactory rate. Therefore all elements of this variable are placed at the position higher than satisfactory level, except variable of commitment which is placed at good level. Accordingly, it is suggested about factor of organizational commitment to the directors to provide personnel's satisfaction by employing improvement and progress in line with their occupational path because job satisfaction causes organizational commitment. Namely, job satisfaction is assumed as precondition for organizational commitment. Thus, they should pay due attention to way of promotion of personnel and prepare the ground to achieve individual and organizational goal by implementation of accurate management on processes of occupational promotion for personnel logically and precisely.

Based on the results of this study, it can be concluded that variable of competency has been placed at the level higher than satisfactory condition. Therefore, all elements of this variable are in the position higher than satisfactory level. According to the given results about individual dimension, the mean value of this variable is (3.56) which is higher than satisfactory level. Thus, it is suggested to the organization to improve related education and expert trainings for personnel in order to increase their professional knowledge and information for doing of occupational activities. To this end, various training courses should be held with respect to expertise in personnel in organization. Based on the findings from this study, it can be concluded that variable of organizational culture has been also at the level higher than satisfactory position. Therefore, all elements of this variable are placed as high level than satisfactory rate. Variable of mission is placed at level higher than satisfactory position. Thus, it is suggested to leaders to clarify organizational objectives perfectly for this personnel so that organizational personnel to be aware of the tasks which should be done thereby the organization to achieve in the long run. Similarly, organization needs to codify clear strategies for the future so that strategic path of the organization not to be ambiguous to personnel.

6. CONCLUSION

Finally, given that the presented model in this study enjoys favorable validity and it is aligned with theoretical patterns and scientific bases; accordingly, whereas organizational culture totally forms behavior of organizational members including directors and personnel at different levels thus it can affect organization in creation of change and strategic orientation noticeably and alternately the basis and framework for determination of competent subject is relatively affected by organizational culture to great extent their elements should be improved. Therefore, certain efforts and planning should be taken for upgrading and improvement in each of dimensions and parameters of organizational culture because organizational culture directly and indirectly intervenes in determination of competency level in individual and it plays an important role in creation of consistency in the given behaviors of personnel. The studies have indicated that rather than this point election of personnel for incumbency of future positions is assumed as one of the foremost success factors in succession planning, organizational culture should be also developed and a type of positive attitude should be taken toward able personnel and it should not be only focused on their background. Thus, attention should be more paid to implementation of meritocracy culture in organization so that to prepare suitable platform to train competent personnel in the organization since organizational culture is composed of a system of common values which guide behavior in personnel and acts as an important factor in achievement for execution of succession planning. Moreover, specific legal

criteria and methods should be employed in systems of attraction of workforces, appointment and promotion thereby to pave the way needed for establishment of a meritocratic system and developing of meritocracy in organization.

7. AVAILABILITY OF DATA AND MATERIAL

The used or generated data in this study is available upon request to the corresponding author.

8. REFERENCES

- Basiri, A., Sabegh, Z.A. (2014). Organizational Factors Influencing Succession Planning Managers in Khuzestan Province.
- Cross, J. 2010. *Engaging the paradox of competence: business and education research, develop a master of business competence model*. Doctoral Thesis. Capella University.
- Ennis, M.R. (2008). *Competency models: a review of the literature and the role of the employment and training administration (ETA)*. U. S. Department of labor.
- Kotonen, U., Savonen M-L., Tuominen, U., Lahtinen, H. & Suomrki, A. 2012. Process and methods of competence management and development. In -Kotonen, U. & Suomrki, A. (ed.) *Competence development of logistics centers: development of logistics centers in Southern Finland*. The publication series of Lahti University of Applied Sciences. 22-28.
- Rothwell, W.J. (2005), *Effective Succession Planning: Ensuring Leadership Continuity and Building Talent from Within*. American Management Association (AMACOM). New York. 3rd Ed.
- Sanghi, S. 2007. *The Handbook of Competency Mapping*. New Delhi: Vivek Mehra for SAGE Publications India Pvt Ltd.
- Zeinolabedin Bidmeshki Zohreh, Adli Fariba, Vaziri Mojdeh (2014). Comparison of status quo of succession planning and talent management with the favorable status in higher education, *Journal of research and planning in higher education*, series 20, vol. 2 (serial 72): 51-72.



Narges Hosseini is a PhD student at Department of Management, Islamic Azad University, Kerman Branch, Kerman, Iran. She is working at the Telecommunication Infrastructure Company of Iran (TICIR). Her research interest focuses on Succession Planning.



Dr Masoud Pourkiyani is Assistant professor, Department of Management, Islamic Azad University, Kerman Branch, Kerman, Iran. He got his Ph.D. in Government Management. His researches include Strategic and Public Policy Orientation, Succession Planning, and Competency



Dr. Ayob Sheikhi is an Assistant Professor in Statistics Group, Department of Statistics and Computer, Shahid Bahonar University of Kerman, Kerman, Iran. He got his Ph.D. in Statistics. His researches include Statistics and Applied Probability, Descriptive Statistics and Linear measurement models.

Trademarks Disclaimer: All products names including trademarks™ or registered® trademarks mentioned in this article are the property of their respective owners. using for identification purposes only. Use of them does not imply any endorsement or affiliation.