

Analysis the Level of Satisfaction in Dangerous and Risky Jobs by Smart Systems in Power events of Mashhad city, Iran

Author's Details:

Mehdi Baghban Saad Abadi^{1*}, Raha Jalili Sabet², Mehdi Barez Moghadam³

¹) Master of Public Administration & young counselor of Financial Deputy of Mashhad Municipality (Corresponding Authors ²) Master of Public Administration in Azad University of Tehran Center ³ MSc Student of Executive management

Abstract

Job satisfaction is defined as a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences. In order to, the purpose of this study is analysis the level of satisfaction in dangerous and risky jobs in power events of Mashhad city by smart systems. Methodology is based on survey methods and field athletics. Also, the research method we have used is based on the descriptive- analytical approaches. Results showed that at the first scenario, satisfactory calculation has an appropriate status by considering the average of 32/3 and a significance level of 002/0. Also it has showed that with the determination of W vector as a gene and this effectiveness genome and the analysis of other states of W sector, we will reach the optimal solution.

Key words: Job Satisfaction, Mashhad city,

1. Introduction

The most-used research definition of job satisfaction is by Backer (1997), who defined it as a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences (Backer, 1997). Implicit in Locke's definition is the importance of both affect, or feeling, and cognition, or thinking. When we think, we have feelings about what we think. Conversely, when we have feelings, we think about what we feel. Cognition and affect are thus inextricably linked, in our psychology and even in our biology. Thus, when evaluating our jobs, as when we assess most anything important to us, both thinking and feeling are involved. Still, from the point of view of the content dimensions between managerial culture and the organizational one there are notable differences (Bentiregna, 2002). At its most general level of conceptualization, job satisfaction is simply how content an individual is with his or her job. At the more specific levels of conceptualization used by academic researchers and human resources professionals, job satisfaction has varying definitions (Calendar, 2008). Affective job satisfaction is usually defined as one-dimensional subjective construct representing an overall emotional feeling individuals have about their job as a whole (Deakin & Reid, 2013). Hence, affective job satisfaction for individuals reflects the degree of pleasure or happiness their job in general induces cognitive job satisfaction is usually defined as being

a more objective and logical evaluation of various facets of a job. As such, cognitive job satisfaction can be one-dimensional if it comprises evaluation of just one aspect of a job, such as pay or maternity leave, or multidimensional if two or more facets of a job are simultaneously evaluated. Cognitive job satisfaction does not assess the degree of pleasure or happiness that arises from specific job facets, but rather gauges the extent to which those job facets are judged by the job holder to be satisfactory in comparison with objectives they themselves set or with other jobs (Rasdl, 2013). While cognitive job satisfaction might help to bring about affective job satisfaction, the two constructs are distinct, not necessarily directly related, and have different antecedents and consequences (Titiev, 1959).

Working is one of the most common experiences of adult life; it is a necessity for procuring the necessities of life, an essential component of personal identity, and a major form of interacting with, shaping, and being shaped by the social world (Gini, 2001). Organizational work settings and processes, however, are undergoing rapid changes in response to changing societal norms, economic developments, generational shifts, and technological and organizational practices around the world. In Japan, for example, the very high level of dedication of white collar workers to their companies, known as the salary man phenomenon, is eroding as firms increasingly hire part-time and short-term staff who are not part of the corporate

family (Sayonara, 2008). In Germany, the federation of labor unions published a large-scale investigation on work in multiple industries and observed a declining sense of belonging and identification with work (Deutscher, 2007). As per organizational development is concerned, employees performance consider as a back bone for the industry (Ebrahimzadeh, Sarai & Skandari, 2010). So organization's wants to get the loyalty of their employees towards organization. The complete knowledge and awareness of organizational culture should help to improve the ability to examine the behavior of organization which assists to manage and lead (Brooks, 2006). Pettigrew (1979) was used the term "job satisfaction" first time in the academic literature for his study in the journal of "Administrative Science Quarterly" (Fanni & Heydari, 2013). It is necessary for the management to identify the norms and values of the organization of the employees. It should be needed that should be developed in a way to improve the style of employee's performance and continuous develop the quality awareness (Hamsi, 1981).

Work meaning is affected by the conditions under which work takes place, and thus a second dimension of the construct assesses the degree to which different aspects of the work process are viewed as important (Kotter and Heskett, 1992). These include work design aspects, such as physical working conditions, convenient working hours, job security, and good pay; opportunities for learning, contacts with interesting people, task variety, and interesting work tasks; and the psychosocial dimensions of work, such as good relationships with coworkers, autonomy, and the match between job requirements and one's abilities and expertise (Kuchinke & et al, 2008). A third dimension of the meaning of working relates to the outcomes that individuals seek from working. Answers to these questions can inform the more fundamental question of why people work, why they extend more or less effort at work, why they intent to remain or consider leaving their place of work, and why they may or may not go beyond the 'call of duty' and display organizational citizenship behaviors (Apaydin & Balci 2011). Of all the major job satisfaction areas, satisfaction with the nature of the work itself which includes job challenge,

autonomy, variety, and scope best predicts overall job satisfaction, as well as other important outcomes like employee retention (Weiner, 2000). Thus, to understand what causes people to be satisfied with their jobs, the nature of the work itself is one of the first places for practitioners to focus on (Jeddi, 2010).

2. Background

Several studies have examined job satisfaction of individuals employed in positions related to sport (Keinde, 1995; Herrera and Lim, 2003; Aiyejuyo, 2004). Most of these reflected varying degrees of job satisfaction especially as it relates to predictive variables especially performance. Some studies also examined job satisfaction of employees generally and in relation to performance (Brown and Leigh, 1996; Ching, 2001; Corbin, 2001). Often considered a barometer of the health and effectiveness of an organization, a higher level of job satisfaction is associated with a number of other factors. These include, for example, reduced rates of turnover and absenteeism, less undesirable work-related behaviors such as aggression, strikes, and theft (Keinde, 1995), and better job performance (Ayodabo, 1994; Aiyejuyo, 2004). It should be noted, however, that research indicates general low satisfaction with some aspects of job in Nigeria especially with pay and promotion (Baridam & Nwachukwu, 1995; Onifade & Keinde, 2002) despite a relative higher performance index. It is more accurate to maintain that high job performance leads to high job satisfaction rather than the reverse (Aiyejuyo, 2004) and that positive relationship between job satisfaction and job performance is extremely complex (Snyder, 1990; Herrera & Lim, 2003). Various definitions have been presented for corruption; however, in the broadest sense, it is regarded as abusing the general resources and facilities for personal profit. Transparency International defines corruption as "personal abuse of given power" (Alvani & et al, 2010).

Job satisfaction is also positively related to a number of other predictive variables (Kent & Sullivan, 2003). Irrespective of job context or the task environment, there tend to be higher levels of

job satisfaction with upper level or more professionally oriented occupations (Ching, 2001), and with smaller organizations (Corbin, 2001). These studies have justified the need for additional investigation on job satisfaction because variability among individuals, organizations and communities has been found to affect many on measures of job satisfaction. It therefore becomes necessary that any study on job satisfaction be focused on factors determining the feelings, values and needs disposition of the individual employee so as to tap the human potential more efficiently for higher human needs (Abbaszadegan, 2010). Prior studies on part-time job satisfaction have relied on data from the other in-house survey instruments. Despite poor reliability, institutional instruments were comprised primarily of single survey questions to measure job satisfaction constructs with the exception of one summated rating scale of overall job satisfaction used in a study (Feldman & Turnley, 2001). Antony and Valadez (2002) were able to develop three summated rating scales using the NSOPF data: satisfaction with students, satisfaction with personal autonomy, and satisfaction with demands and rewards. Other standardized surveys such as the higher education research institute faculty survey were not designed with summated rating scales to measure part-time faculty job satisfaction (Antony and Valadez, 2002). Herzberg's Two-Factor Theory posits that workers are more likely to be motivated by motivators than by hygiene factors. This prediction is based on the theory that claims that motivators (achievement, recognition, work itself, responsibility, advancement, and possibility of growth) are the factors that lead to job satisfaction. Hygiene factors (company policy and administration, supervision,

interpersonal relations, working conditions, and salary) contribute very little to job satisfaction. Hygiene factors do not satisfy workers, but their absence will lead to dissatisfaction (Herzberg, Mausner, & Snyderman, 1959).

Job satisfaction is among the most intensely studied constructs in the organizational sciences. While meta-analyses have shown that the relationship between analyses is positive and small (George & Jones, 1997), analyses at the organizational level have shown that organizations with higher average levels of job satisfaction outperform others (Ostroff, 1992). performance and job satisfaction at the individual level of In addition, the importance of work can be indirectly assessed through the classic "lottery question," focused on respondents' willingness to work without the need for income (England & Harpaz, 1983). The second component of the work centrality domain is the importance of work relative to other life pursuits, namely family, religion, community, and leisure. In order to, Job satisfaction is generally defined as an employee's affective reaction to a job based on comparing actual and desired outcomes. It is considered a multifaceted construct that includes employee feelings about a variety of intrinsic and extrinsic job elements (Fields, 2002). To retain principals, we must enable them to develop and utilize their expertise and ability. If job satisfaction is to remain high, we need to address problems principals face and look for ways to help them to work effectively and productively. Despite budget cuts and school financial problems, it would be useful for boards of education and superintendents to hire assistant principals for power stations in Mashhad city which they have higher level of education and professions rather other peoples.

Table 1

The Characteristics of Job satisfaction

Dials of JS	Compared characteristics	Bureaucratic or mechanistic
Flexible standards and tasks depended to individual's decision	Standard rate (the rate of creativity by managers and employees)	full determined standards and predetermined tasks
Creative and innovator Welcoming new methods to work Success – oriented	Respecting job details	Traditional and conservative Familiarity with current trends
Non Emphasizing on the details of employees' affairs	Respecting the results of job	Emphasizing on the details of employees' affairs
Employee – oriented Collective decision	Respecting organizational members	Emphasizing on the way of doing the job
Emphasizing on employees' interests and organizational emphasis on decisions	The impact of outcomes and decisions on employees	Task – oriented Individual decision-making
Emphasizing on doing the jobs collectively	Respecting team working	Emphasizing on organizational interests in decisions
The feeling of freedom and independence in job	The rate of ambitious	jobs collectively Emphasizing on closed communications

Source: Authors adopted Sehat & et al, 2012 (2013).

3. Methodology

Since the purpose of this study is to determine the factors affecting on job satisfaction, methodology is based on survey methods and field athletics. Also, the research method we have used is based on the descriptive-analytical approach. We used a documental method to collect information. In order to applied methodology is according to correlation, field and survey methods. Data analysis is a multistep process that in during it, the data which gathering by sample and population tools were summary, coding, category and are processed to establish the relationship between these types of analyzes to test hypotheses. In this process, the data's have refine in both conceptually and in terms of empirical aspects and statistical techniques have played a major role in the syntheses and generalizations. Morgan's sample size estimation table was used to determine size of sample. In final presented some solve ways.

Table 2

Number of items and questions related to job satisfaction

Dimensions of job satisfaction	Number of items	Questions
Work	12	01-12
payment	6	13- 18
Supervisor	10	19- 28
Promotion	7	29- 35
Partner	10	36- 45

Source: Authors, 2013.

In negative questions of this questionnaire if selected the option of "Strongly agree", allocated the grade one and if the option is "completely disagree" is selected, 5th grade is awarded. Also with regarding the positive of some questions if the option "strongly agree" to select the fifth person to be awarded and if the option "I agree", "idea", "disagree" and "totally disagree" to select the order of 4, 3, 2 and 1 will be awarded. Acquired a minimum score of 45 and a maximum score for this test is 225. Furthermore, after collecting all the questionnaires again split method was applied to 129 samples indicated acceptable reliability coefficient for the questionnaire.

4.1. Results

In this section with regarding to collected data's in pervious sections, are discussed about research questions and ultimately achieving the objectives of the research. Different frequency components of job satisfaction questionnaire can be evaluated. In the analytical part was used of intelligent system for different tests. The

findings are suggest that the 5/18% of the sample has less than 30 years, 67 percent of 30 to 40 years, 40 to 28 percent in 5044 and 11 percent of those over 50 years.

Table 3

Age distribution of respondents

Variables	Frequency	Frequency percent
Less than 30 years old	24	18.5
30- 40	67	51.5
40-50	28	21.5
Upper than 50	11	8.5
Total	130	100

Source: Authors, 2013.

4.2. Analysis the Significant level different between SC and SO

Organizational provide sustainable aggressive advantage. He introduced three conditions; first, he suggests that culture must be viable, second the culture must be rare and have attributes and third culture must be imperfectly imitable. These can provide assistance to superior organizational performance that can be temporary or continue for long term. Long term increase in organizational performance may cause to get the competitive advantage under long run.

Based on the calculation and analysis conducted, computation satisfaction has an appropriate status by considering the average of 32/3 and a significance level of 002/0. However, observational satisfaction with mean 95/2 and the significant level of 678/0 was below average and therefore not satisfactory. Since the observational approach of this study was to determine the level of satisfaction as well as satisfaction (in other words, eliminating the gap between observed and calculated levels of satisfaction) levels closer observation is computation to satisfy. So the base of this research was observational satisfaction and can conclude that the job satisfaction is not in a desirable status.

Table 4

Significant according to a standard questionnaire to measure satisfaction

	Test Value = 3					
	The degree of freedom	The degree of freedom	Significance level	mean difference	Confidence interval (95%)	
					Up	Down
Satisfactory calculation	3.243	129	0.002	0.32308	0.1260	0.5260

Source: Authors, 2013.

Table 5

Meaningful measure of satisfaction based on Satisfaction observational

	Test Value = 3					
	The degree of freedom	The degree of freedom	Significance level	mean difference	Confidence interval (95%)	
					Up	Down
Satisfaction observational	0.403	129	0.687	0.04615	0.2726	0.183

Source: Authors, 2013.

4.2. Analysis the second scenario about Job satisfaction

According to the figure (1) and surveys conducted, the difference between observed and calculated satisfaction can be derived from two different sources. On the one hand, the lack of effective parameters in the research

model can be caused by an error when the error is not reliable because it is waived. On the other hand five parameters in the resrch model were calculated in the same weight which it will cause errors in the calculation. Also, this causes an increase in the value of work parameter in the society compared to other parameters and have more effective in increasing the satisfaction of the society.

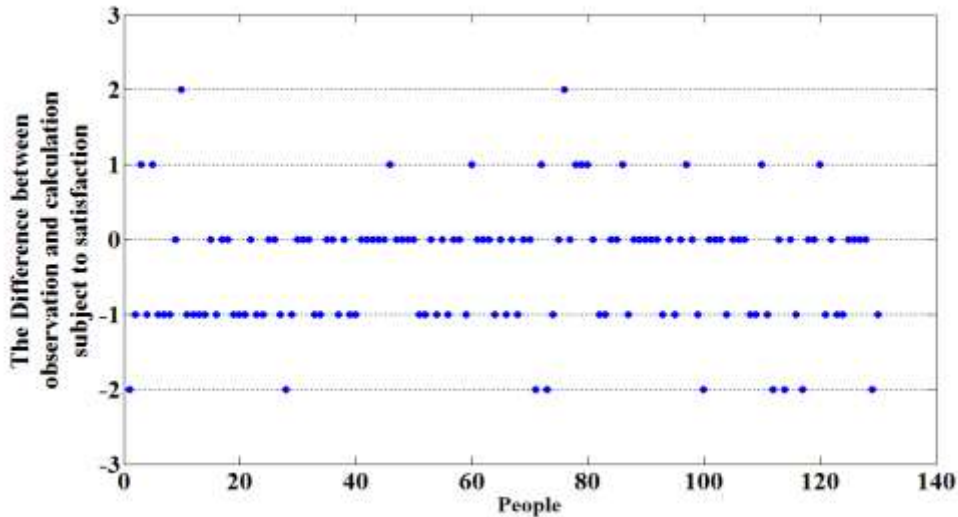


Fig. 1. The differences between computational and observational satisfaction

4.3. Effect of work, payment, promotion, supervisor and partner in Job satisfaction

Every person or employee in the organization has own different values and beliefs that he/she works with them. Whenever join any organization he/she allowed himself to internalize first with the organization’s culture to know whether he come up with them or not. Culture is being investigated to impact miscellany of organizational process. Organizational culture has a deep impact on the performance of employees that can cause to improve in the productivity and enhance the organizational performance.

By taking the difference between satisfactory calculation and observational satisfactory and the purpose of research to eliminate this gap was used of genetic algorithm optimization for the valuation of each of the parameters (work, payment, supervisor, and co-promotion). Error is defined as follows:

Error= SC-SO

(SC) satisfaction base on calculation

(SO) satisfaction base on observation

The impact of parameters is assumed as each other in SC, in other words satisfaction rate is calculated by the algebraic sum:

$$SC_1 = p_1 + p_2 + p_3 + p_4 + p_5 = \sum_{i=1}^5 p_i$$

Which in this formula:

- 1. P₁: work
- 2. P₂: payment
- 3. P₃: supervisor
- 4. P₄: promotion
- 5. P₅: partner

According to the hypothesis 3 the above formula is modified as follow:

$$Sc_2 = w_1 + w_2 + w_3 + w_4 + w_5 = \sum_{i=1}^5 w_i p_i$$

Which in this formula:

W₁: the weight of first parameter

W₂: the weight of second parameter

W_3 : the weight of third parameter

W_4 : the weight of fourth parameter

W_5 : the weight of fifth parameter

To initialize the vector W can be solved with the help of mathematical methods, unfortunately, due to the low number of degrees of freedom (number of significant weight change compared to the numbers or equations) it is not possible to solve analytically. In result of accepting a bit error with help of intelligent techniques optimization can be determined optimal weights. With the determination of W vector as a gene and this effectiveness genome and the analysis of other states of W sector we will reach the optimal solution.

Table 6

Associated weight with each parameters

Parameter	Obtained weight
Work	18.53754
Payment	45.33822
Supervisor	10.91115
promotion	1.792805
partner	23.92401

Source: Authors, 2013.

By considering the obtained weights and outputs of Genetic Algorithm, the weight of each will be multiplied in the parameters and the result is the represent predictions for the future.

$$W = [(18.53754P_1) + (45.33822P_2) + (10.91115P_3) + (1.792805P_4) + (23.92401P_5)]$$

It is understood that the vector of co-payments and promote have more effect in compare other parameter's more people to least impact on satisfaction and promotion has the minimal impact on improving people's satisfaction.

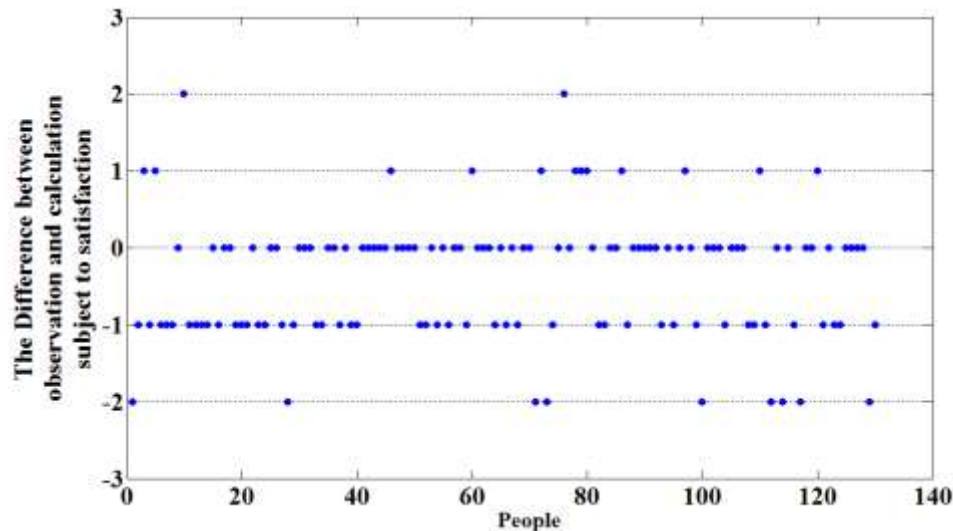


Fig. 2. the differences between calculated and observed Satisfaction before applying the weights

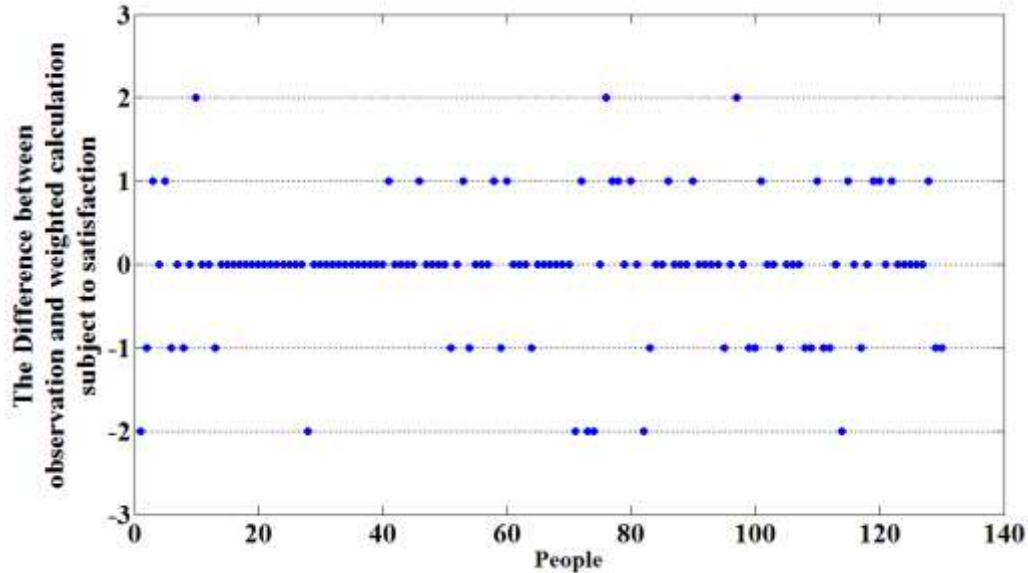


Fig. 3. the differences between calculated and observed Satisfaction after applying the weights

5. Conclusion and Suggestion's

In organizations with lower power distance, one can observe lack of concentration, flat hierarchy and accepting subordinates as advisor while in communities with higher power distance, one can see concentration and height hierarchy. To retain principals, we must enable them to develop and utilize their expertise and ability. If job satisfaction is to remain high, we need to address problems principals face and look for ways to help them to work effectively and productively. Despite budget cuts and school financial problems, it would be useful for boards of education and superintendents to hire assistant principals for power stations in Mashhad city which they have higher level of education and professions rather other peoples. Excessive workload, unhealthy and dangerous working environment, insufficient resources, people's suffering, conflict between home and work demands, lack of professional respect, lack of promotion chances, inadequate pay and benefits, domestic problems, and marital problems are the major causes of job dissatisfaction of power events of Mashhad city. Based on the calculation and analysis conducted, computation satisfaction has an appropriate status by considering the average of 32/3 and a significance level of 002/0. However, observational satisfaction with mean 95/2 and the significant level of 678/0 was below average and

therefore not satisfactory. On the other hand five parameters in the resrch model were calculated in the same weight which it will cause errors in the calculation. Also, this causes an increase in the value of work parameter in the society compared to other parameters and have more effective in increasing the satisfaction of the society. By taking the difference between satisfactory calculation and observational satisfactory and the purpose of research to eliminate this gap was used of genetic algorithm optimization for the valuation of each of the parameters. In order to, some suggestions can be mention as below:

1. pay more attention to the age and experience of experts to experience and level of satisfaction.
2. Using individuals who have related education to these jobs.
3. Groups of people who have better personal relationships of cooperation and thereby to increase the level of satisfaction.

References

- Abbaszadegan, M.** (2010). Official Corruption. 2nd Edition. Print. Cultural Research Office: Tehran.
- Aiyejuyo, A.** (2005). The meaning of working and professional development needs of employees in a post-communist country. *International Journal of Cross-Cultural Management*, 5(1), 105-119.
- Aiyejuyo, M.** (2004). Concepts of organizational culture and presumed links to efficiency. *International Journal of Management Science*, 17(4), 323-33.

- Alavani, S., Huston, T., & Norman, M.** (2010). A qualitative method for assessing faculty satisfaction. *Research in Higher Education*, 46(7), 803-830.
- Antony, J. S., & Valadez, J. R.** (2002). Exploring the satisfaction of part-time college faculty in the United States. *The Review of Higher Education*, 26(1), 41-56.
- Apaydin, C. Balci, A.** (2011). "Organizational corruption in secondary schools: A focus group study", *Education*; summer 20011; 131, 4; Proust, pg.818.
- Baker, M.** (2009), "The relationship between culture and corruption: a cross-national study", *Journal of Intellectual Capital*, Vol.10 No. 1.
- Baridam, B. Nwachukwu, Y.** (1995). Work attitudes, leadership styles and managerial behavior indifferent cultures. In R. W. Brislin (Ed.), *applied cross-cultural psychology* (pp. 186–208). Newbury Park, CA: Sage.
- Bentiteygana, M.** (2002). *Introduction to Cultural Anthropology*. New York: Henry Holt & Company.
- Brooks, P.** (2006). "E-Relationships for e-Readiness: Culture and corruption in international e- , *Industrial Marketing Management*, NO: 37
- Brown, Y. Leigh, O.** (1996). *Employment Outlook 2007*. Retrieved January 12, from <http://stats.oecd.org/WBOS/Default.aspx>.
- Calendar, A.** (2008). *Studying the Relationship between Organizational Culture and Knowledge Management in National Iranian Refining and Distributing Oil Products*. Master Thesis in Public Administration- Organizational Change. Management School, Tehran University.
- Ching, A. L.** (2001). *A first course in factor analysis*. Hillsdale, NJ: Lawrence Erlbaum.
- Corbin, I.** (2001). *Urbanization in third world counties with point on Iraq*. Washigton DC press.
- Deakin, J & Reid, C.** (2013) "Strategic management", translated by Zahra Yavari; Mahdi Jamshidian and Ali Reza Mansoory), Sheikh Bahaei High Education Institute.
- Deutscher G.** (2007). *DBG-Index Gute Arbeit 2007*. Wie die Beschaeftigten die Arbeitswelt beurteilen, was sie sich von guter Arbeit erwarten.
- Ebrahinzadeh, E. Sarai, B. Skandari, L.** (2003). "Management in the scope of cultures", translated by Moham Arabi and Davood Izadi, Cultural Research Office, 2nd edition.
- England, G. W., & Harpaz, I.** (1990). How working is defined: National contexts and demographic and organizational role influences. *Journal of Organizational Behavior*, 11, 253-266.
- Fanni, Z, Heydari.** (2013). Evaluating the regional development of border cities by TOPSIS model (case Sistan and Baluchistan Province, Iran). *SCS Journal*. In press.
- Feldman, D. C., & Turnley, W. H.** (2001). A field study of adjunct faculty: The impact of career stage on reactions to tenure track jobs. *Journal of Career Development*, 28(1), 1-16.
- Fields, D. L.** (2002). *Taking the measure of work: A guide to validated scales for organizational research and diagnosis*. Thousand Oaks, CA: Sage.
- George, J. M., & Jones, G. R.** (1997). Experiencing work: Values, attitudes, and moods. *Human Relations*, 50(4), 393-416.
- Gini, A. R.** (2001). *My job, myself: Work and the creation of the modern individual*. New York: Rutledge.
- Hamsi, R.** (1981). Reducing travel by design: what about change over time? In: Williams, K. (Ed.), *Spatial Planning, Urban Form and Sustainable Transport*. Alders hot, Ash gate.
- Heerara, L.** (2003). The transformation of work values in Israel. *Monthly Labor Review*, 122(5), 46-50.
- Hezberg, I., & Masner, X. Syderman, H.** (1959). The structure and the meaning of work: A relative stability amidst change. *Human Relations*, 55(6), 639-668.
- Jeddi, H.** (2010). "The Roots of Official Corruption and the Techniques to Fight against It", *Economical Politics Journal*, vol. 281 – 282.
- Keinde, D. B.** (1995). Facet importance and job satisfaction. *Journal of Applied Psychology*, 76(1), 31-39.
- Kent, G. Sullivan, M.** (2003). Employment and concepts of work in the new global economy. *International Labor Review*, 139(1), 5-32.
- Kotter, J. P. & Heskett, J. L.** (1992). *Corporate culture and performance*. New York: Free Press.
- Kuchinke, K. P.** (2008). The self at work: Theories about persons, the meaning of work, and their implications for HRD. In S. Turnbull & C. Elliott (Eds.), *Critical thinking in HRD* (pp. 141 – 155). London: Rutledge.
- Onifade, R. Keinde, D. B.** (2002). *Strategic management*, translated by Zahra Yavari; Mahdi Jamshidian and Ali Reza Mansoory), Sheikh Bahaei High Education Institute.
- Ostroff, S.** (1992). The relationship between satisfaction, attitudes, and performance: An organizational level of analysis. *Journal of Applied Psychology*, 77(6), 963- 974.
- Rasdl, A.** (2013). "Is the influence of organizational culture on organizational effectiveness universal? A dissertation for the degree of doctor of business administration .UMI Number 3443898 by proudest LLC. P30.
- Sayonara, salaryman.** (2008, January 5). *The Economist*, 68-70.

Synder, J. (1990). Personality and organizations: A test of the homogeneity of personality hypothesis. *Journal of Applied Psychology*, 83, 462-470.

Titier, L. W. (1982). *Employee-organization linkages: The psychology of commitment, absenteeism, and turnover*. New York: Academic Press.

Weiner, M. (2000). Analyzing the Sustainable City: Nature, Urbanization and the Regulation of Socio-environmental Relations in the UK. *Urban Studies*, 40, 1183-1206.