A Research Design to Predict HR Managers and Professionals' Competencies of Universities

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ABSTRACT

Nowadays, the role of Human Resource (HR) managers in educational centers is very vital [1]. Undoubtedly, to achieve organizational goals, educational institutes such as colleges and universities are required to have well-structured strategic programs as well as qualified HR managers who are able to lead their departments in compliance with their university mission [2]. To achieve this goal, HR administrators and professionals should enjoy a suitable and developed pattern of human resource competencies [3]. The following article, offers to investigate the essential competencies for the HR administrators and professionals in top ranked universities as well as developing a model based on influencing factors in order to predict the level of competencies among those who are going to apply for a position and those who are seeking promotion. This model is developed based on the psychological factors such as Big Five Personality [4, 5] and Jung's cognitive style theory [6]. This model is applicable as a hint in the top ranked universities for employing applicants with the best qualifications specially those who have no or not enough job experience, this study is expected to facilitate and accelerate to developing HR management quality at university.

KEYWORDS: Human Resource; Competency; Cognitive style; Personality.

1. INTRODUCTION

HR managers are basically responsible to help organizations with performing strategic missions of organization and evaluation performance that provide managers' information about human resources needs, organizational culture and necessary activities so that they can work efficiently [7]. In a smaller scope or scale a plenty of employers work in universities as considered organizations. These people and reach the organization's goals. The universities have very critical responsibilities, because they work with human resources and are responsible to teach and train usual people and make them intelligent, innovative and experts [8]. Thus, the most significant task of human resource departments of universities is to employ efficient and competent staff. Based on the importance of HR managers' roles in organizations, identifying essential competencies to perform duties in HR departments is the most important success key. In some literatures, competencies have been defined as the skills, knowledge, abilities, motivation, and other requirements, which are needed in order to perform the job successfully [9]. Awareness of level of HR competencies at the universities can guide to achieve the organizational goals and improve the level of HR competencies by giving employment to appropriate staffs and training for the current employees.

1.1. Current issues

In universities like other organizations, these questions have always been asked: Once competent, does this imply there is no further need for training or development? Which competencies should be rewarded and through which means? Which competent people are appropriate to be hired for work? According to Middlewood and Lumby the success of educational organizations such as schools, colleges and universities depend on the quality, performance and commitment of employees who work there [2]. Nowadays, the mission of universities is not only creating job opportunities but also fostering continuous and permanent innovation and creativity [10]. Having competent employee is a new challenge for educational centers such as Universities [8].

Nowadays, several studies have been done to identify the job competencies based on the changing and diversity of work culture, time and roles [11, 12, 13, 1]. In many cases, recognizing that the candidate for a job is competent or not and surveying the potential of him or her to improve the competencies is very difficult [14]. According to former studies People's competencies factors will be

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developed based on experience, and the amount of improvements is not same in different people [15, 16]. So there is an important question for the educational organizations' managers on how we can predict the people's competencies in the future when we want to hire new and fresh employees with no or little job experience [17].

Although there are several studies about HR competencies have been done by researchers, the literatures about the predicting competencies of people and the capacity of learning competencies are not enough, particularly with regards to institutions of education [18].

1.2. Humana resource management in universities

The majority of personnel management functions in educational organizations have historically come within the remit of the Local Educational Authority "LEA" with the role of universities and schools, until recently, being limited to the deployment of staffing establishment decided elsewhere. The role of universities has improved fast in terms of in connection both with complexity and scope with the evolution of autonomous educational institution. Educational organizations, however, face the extra challenges of coming to terms with the management implications of the human resource management in contrast to personnel management debate. In the further education parts, incorporation has indicated that colleges, like grant-maintained schools, have full employer obligations and responsibilities [19]. According to Middlewood and Lumby, It is necessary for the educational organizations to improve rapidly customized human resource management policies, which reflect their own preferences and priorities in connection with recruiting, retaining and developing employees effectively, rather than obsolete local custom and practice[2]. Middlewood and Lumby showed that HR managers in educational organizations focus on monitoring to control consistency of approach between mission, strategy, policy, and implementation and also evaluate to exhibit quantifiable progress in the quality of teaching and learning [2].

1.3. Psychological factor as the predictor to employ competent individual

Schmidt and Hunter, said that today general mental ability is used as the most valid predictor of job performance. Nowadays, Psychological appraisals have been preferred to use for selecting personnel in organizations [20]. There are many reasons why the psychological test is used in order to hire new individuals. Psychological testing make an assessment based on a wide range of people in the organizations. Psychological analysis extends data and information given to the organizations on the success of people in this role who have invention attributes or levels of intelligence [21]. According to the Russell and BonnieL, the psychological test can explain how much the candidates are interested in the jobs, positions and the organizations [21]. This Analysis can determine in- house candidates' level of competency in order to perform a job. While Job's competencies level improves along with work experience, Psychological factors are formed during childhood and adolescence as well as in adulthood (After 30 years age), the rates of changes are reduced [22, 23, 24].

Considering that adult people's psychological characteristics are almost constant, it seems that can be used as the predictor to find competent people when universities want to hire new staffs with no or little Job experience. Finding the relationship between psychological factors and essential HR competencies can help Educational centers' managers to achieve a valid predictor. Reviewing literature regarding to predict behavior and performance in the workplace shows that the most frequently studies in psychological theories as the predictor of behavior and success is about Personality traits, including the big five broad and narrow traits and Jung's cognitive styles [25].

1.4. Description of Big Five personality traits theories

One of the most widely recognized personality profiles is the "Big Five Model of Personality." The Big Five Model of Personality categorizes traits into dimensions of Openness, agreeableness, Neuroticism, conscientiousness, and Extraversion- introversion [26, 27, 4]. Many researchers refer the big five personality traits as the broad personality traits which explain broad and general behaviors across different settings [28]. The Broad five personality traits posit the following personality traits as a general explanatory framework for interpersonal behavior:

1. **Openness:** The extent to which team members are imaginative, sensitive, intellectual, polished versus down to earth, insensitive, narrow, crude, simple.
2**. Neuroticism:** They are interested in order to interpret ordinary situations as threatening. They are usually in a bad mood because of their negative emotional reactions. The people who are the high scores on neuroticism often can't think cleverly, make decisions.
3. **Agreeableness:** The extent to which team members are good-natured, gentle, cooperative, forgiving, hopeful versus irritable, ruthless, suspicious, uncooperative, inflexible.

4. **Conscientiousness:** The extent to which team members are careful, thorough, achievement-oriented, responsible, organized, self-disciplined, scrupulous versus irresponsible, disorganized, undisciplined, unscrupulous.

5. **Extraversion–introversion:** The extent to which team members are sociable, talkative, assertive, active versus retiring, sober, reserved, cautious.

1.5.   Description of Jung's cognitive style
           Jung's cognitive style is another most widely used in the workplace. Cognitive ability has been defined as the ability to arise with new, unusual or clever ideas, combine separate pieces of information and data or specific answers to solve problems [29]. Jung identifies four basic functions or ways in which these personal preferences are evidenced: sensing, thinking, feeling and intuiting. According to Jung, personal types are developed through a process of individuation in which, as individuals mature, they come to recognize a dominant or primary function and an auxiliary function as primary ways of interacting with the environment, while maintaining a respect and understanding of their less dominant functions. Its typology is composed of two pairs of opposite preferences, called dichotomies:

1. Sensing (S) or Intuition (N)—how you gather information
2. Thinking (T) or Feeling (F)—how you evaluate information

           Jung found four personality types based on the methods are used for gathering and evaluating information [15]. These four personalities are shown in figure 1. He called them Practical (ST), Conceptual (NT), Gregarious (SF) and Creative (NF).
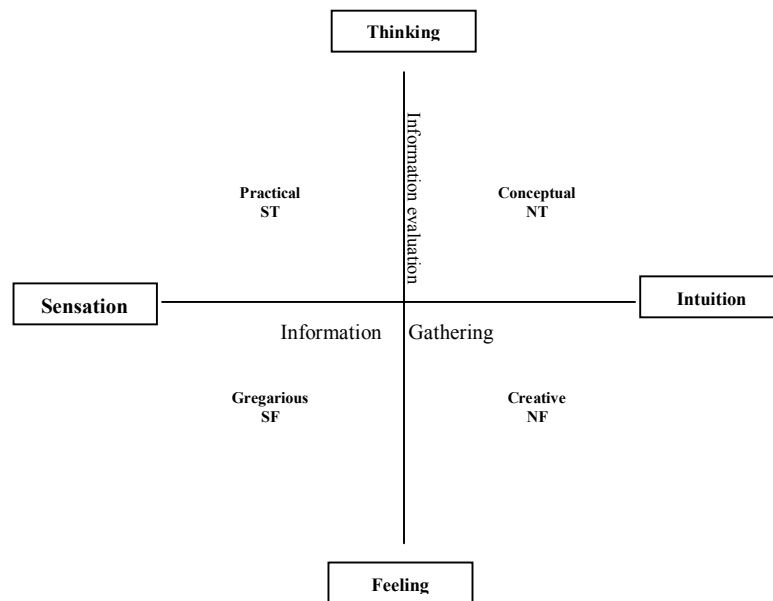

Figure1: Jung's cognitive styles and personality types

           ST people rely primarily on sensing for purposes of perception and thinking for purposes of judgment. Thus, their main interest focuses upon facts they can sense and thinking their way through step-by-step logical processes of reasoning. The ST cognitive style is valuable in organization because it produces a clear simple solution. STs remember details and seldom make factual errors. ST People may have a tendency to ignore interpersonal aspects of decisions. In addition, they tend to avoid risk [15, 6]. SF people rely on sensing for purposes of perception, but they prefer feeling for purposes of judgment. They are more interested in facts about people than facts about things and approach their decisions with personal warmth because their feeling weighs how much things matter to themselves and others. SFs may have trouble accepting new ideas that break the organizations' rules [15, 6]. NF people possess the same personal warmth as SF people because they both use feeling for purposes of judgment, but because NFs prefer intuition to sensing they centre their attention on possibilities instead

of the concrete situation. NFs may become too responsive to the needs of others. They also enjoy participative decision making and are committed to developing their employees [15, 6]. NT people, using intuition for perception, focus on a possibility, but they approach it with impersonal analysis, often subordinating the human element. NTs are innovative and will take risks. This makes NTs good at things like new business development [6].

2. Research questions

This study addressed 3 research questions:

RQ1: What HR competencies are necessary for the HR administrators and professionals of top ranked universities to achieve organizational goals?

RQ2: Are there any correlations between Big five Personality traits and the level of HR competencies in top ranked universities?

RQ3: Are there any correlations between Jung's cognitive styles and the level of HR competencies in top ranked universities?

3. METHODOLOGY

The purposes of this study were to identify the essential competencies for the HR managers and professionals in universities. This research has been done in two phases. At the first phase, the essential competencies of universities' HR managers and professionals were identified. At the second phase based on the HR competencies founded, the level of competencies parallel with personality traits and cognitive styles of participants were evaluated. Various methods have been shown to be relevant in constructing a competency model [30]. These methods include common data collection methods such as direct observation, review of job descriptions, job analysis interview questionnaire, focus groups and Delphi methods [31]. In this research, the Delphi study was used to identify and prioritize the competencies which are required for HR managers and professionals in universities.

3.1. Delphi method

Delphi is a technique employed in order to perform a systematic judgment and making decision about a particular topic. A group of expert people called Delphi panels participate in it. They should have enough knowledge and experience about the subject. Furthermore, they must be willing and have enough time to participate in the research [32]. Panelists of present research included twenty people who are HR managers and also have more than eight-years job experience in HR affairs. Two rounds of Delphi surveys were performed to identify HR competencies. At the first round, Delphi panels were asked to determine important competencies needed for the HR managers in universities and write them in a form. After gathering the forms in order to analyze the responses and rewording common responses to avoid duplication, a list of competencies based on responses of first round was made to be used as an instrument in the second round of Delphi. In the questionnaire of second round panels were asked to rate the importance of each competency, using a 7-point scale: from 1 rated as least important to 7 meanings very important. The data gathered from second round were analyzed through statistical methods. Based on the results of second round performing the third round of Delphi was not needed for this research because researchers obtained a consensus and no dissenting statement was issued.

3.1.1 Defining consensus

One of the most critical stages in Delphi study is defining consensus [33]. Likert scale is the most commonly used technique to analyze data in Delphi survey [34]. Some researchers have used standard division (SD) to assess the consensus [35]. Stronger consensus is shown with smaller SD, and scores will cluster more closely around the mean [36]. A commonly used method to determine consensus is Kendall's coefficient of concordance (W) which is calculated after second and other rounds of Delphi to evaluate the level of consensus among the Delphi panelists. A significant W (close to 1) and a low P-value (less than 0.05) implies the panelists are in consensus and used the same standards in determining the importance of factors [37].

3.2. Measures

After performing the first stage to determine the essential competencies for HR managers and professionals, the second stage was started to analyses the effects of psychological factors on HR competency's level. In this stage, the competencies' level of respondents and their psychological characteristic were evaluated. In order to measure HR competencies level and psychological factors a questionnaire was developed. Five point scales whereby one implies very weak to five implies very good was used for each question. The questionnaires had three groups of tests. First group of tests,

including 20 questions was developed based on competencies founded in stage one to assess the level of competencies. Second group of tests included 25 questions was developed to assess the Big Five personality traits and finally, the last group of tests, including 20 questions was prepared to assess the cognitive styles.

3.3. Participants

Participants were 75 HR managers and professionals in three Iranian universities. Of the 75 HR managers 77% were male, 23% were female. The average of job experience was 7.5 years.

3.4. Research Framework

Figure 2 shows the proposed framework of this research. Big five personality traits (A_1 to A_5) as well as Jung's personality types (B_1 to B_4) are considered as the independent variables. HR Competencies level is considered as the independent variable and the relationships between independent variables and independent variable will be measured to find the most influencer psychological factors can be used to predict the level of competencies. Correlation coefficients between psychological factors and HR competency level were measured to evaluate the relationships between these two factors (personality traits and Jung's cognitive styles) and HR competencies level. All analysis will be performed by SPSS software. The result can be useful for educational organizations choose the best individuals, especially when they want to hire new staffs.
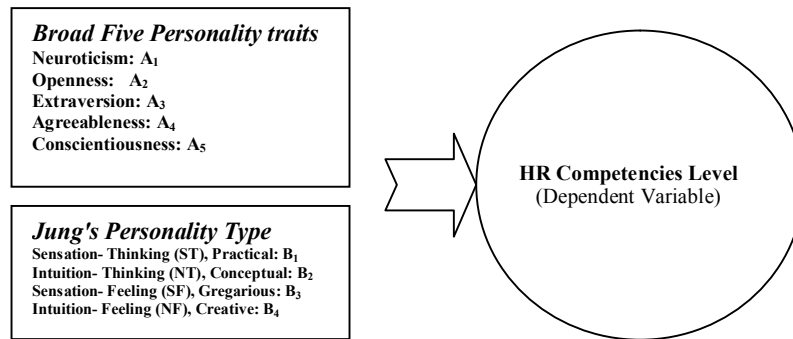

Figure 2: Big Five Personality Traits and Jung's personality types as the independents Variable

4. RESULTS

Based on the results of experts' opinion 11 essential competencies were identified in the first round of Delphi study. The results of the first round were used to conduct second round. In order to measure the level of consensus among the experts for the factors proposed, the Kendall's coefficient of Concordance (W) was measured after performing the second round of the Delphi study. Kendall's Coefficients Concordance and P-value for scored ranking were 0.744 and 0.000 respectively (refer Table 1) in the second round. Since Kendall's coefficient concordance was more than 0.7 (close to 1) and the P-value was less than 0.05, it was not necessary to perform third round of Delphi. As a result, the study was found to be statistically significant (p-value < 0.05) and consistent in the second round.

Table 1: Round 2 Delphi study's results

Competencies	Experts																		Mean	Group Rank
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R		
Empowering and delegating	6	7	7	6	6	7	5	7	7	7	6	7	5	6	6	5	7	7	6.33	11
Team working	7	6	7	6	5	7	5	6	6	5	6	6	5	5	5	5	6	6	5.78	10
Impact and influence	5	5	7	6	5	6	5	5	5	5	5	5	6	5	6	6	5	5	5.33	9
Communication	5	6	7	6	5	7	5	4	5	5	5	4	5	5	5	6	5	4	5.22	8
Leadership	6	6	5	4	4	4	5	5	5	5	5	6	5	4	6	6	5	5	5.06	7
Building trust	4	5	4	4	4	4	5	4	4	4	4	5	5	5	4	5	5	5	4.44	6
HR proficient knowledge	4	4	4	4	4	4	5	4	4	4	5	5	4	4	4	4	4	5	4.28	5
Strategic thinking	4	4	4	4	4	5	4	5	4	4	4	4	5	4	4	4	4	4	4.17	4
Self awareness	3	4	4	4	4	3	3	3	3	4	4	4	5	5	4	4	4	4	3.83	3
Change management	3	4	3	4	3	3	3	3	3	4	5	4	4	4	4	4	4	4	3.67	2
Conflict management	3	4	3	4	2	3	4	3	4	3	3	3	3	3	3	3	4	3	3.22	1
Kendall's W = 0.744, p-value = 0.000																				

In order analyze the relationship between the HR competencies' level and Personality's factors person's correlation analysis were performed. The data from table 2 confirmed that all five

personalities were correlated significantly with HR competencies' level. Neuroticism was correlated negatively with HR competencies level while other four traits were correlated positively. This means that with increasing the score of Neuroticism the level of competencies is decreased and with decreasing the score of Neuroticism the level of HR competencies is decreased. Agreeableness had the highest positive correlation with HR competencies level equal to 0.472 (Sig $\leq$ 0.05). that the coefficient correlations between each trait of Big five personality traits and HR competencies level from the highest to lowest are Agreeableness= 0.472, Extraversion= 0.418, Conscientiousness= 0.359, Openness= 0.329 and Neuroticism= -0.355.

Table 2   Pearson Correlation between HR competency level and Big 5 Personality traits

		Neuroticism	Extraversion	Conscientiousness	Openness	Agreeableness
HR Competencies Level	Pearson Correlation	- .355**	.418**	.359**	.329**	.472**
	Sig. (2-tiled)	.002	.000	.002	.004	.000
	N	75	75	75	75	75
**. Correlation is significant at the 0.01 level (2-tailed).						

The third research question (RQ3) focused on the correlation between Jung's cognitive styles, and HR competencies level. Table 3 presented that 3 of four styles (NF, SF and NT) were correlated with HR competencies level significantly. The Correlation analysis between HR competency level and Jung's personality types showed that HR Competency level is not correlated with ST cognitive styles significantly. The highest Pearson's correlation value was 0.765 for NF, and the lowest correlation value was 0.506 related to Correlation between SF styles and HR competencies level.

Table 3: Pearson Correlation between HR competency level and Jung's Personality types
**. Correlation is significant at the 0.01 level (2-tailed).

		NF	SF	NT	ST
HR Competencies Level	Pearson Correlation	.765**	.506**	.625**	.088
	Sig. (2-tiled)	.002	.000	.000	.453
	N	75	75	75	75

5.   DISCUSSION

This article tries to suggest the essential competencies for the HR managers and professionals in universities. Furthermore, personality factors including Big five personality traits and Jung's cognitive style were analyzed in order to suggest a way to predict HR competencies' level. These personality factors may be useful for universities, colleges, schools and other educational organizations to employ the most competent people for HR departments.

Eleven essential competencies were detected based on the results of Delphi study. These competencies are needed for the successful HR Managers and professionals in universities in order to perform organizational mission and achieve success in the future. Table 4 shows the list of competencies which are found in this research. These competencies can be used in Universities and other educational organization to assess the performance of HR managers and professionals.

Table 4: List of competencies

No.	Competencies		Ranking
1	Empowering and delegating	Assigning task, responsibility and authority to others. [38], [39] .	**11**
2	Team working	Actively participating as a member of a team to move the team toward the completion of goals [40].	**10**
3	Impact and influence	The ability to convince or persuade others to support an idea, agenda or direction	**9**
4	Communication and sociability	Clearing conveying and receiving information and ideas through a variety of media to individuals or groups in a manner that engages the audience. The ability to make effective relationship with other people [41].	**8**
5	Leadership	The ability to influence people so that they strive willingly and enthusiastically to help accomplish individual and institutional goals.	**7**
6	Building trust	Interacting with others in a way that gives them confidence in one's intention and those of the organization [42].	**6**
7	HR proficient knowledge	Knowledge of principles and procedures for personnel recruitment, selection, training, compensation and benefits, labor relations and negotiation, and personnel information systems.	**5**
8	Strategic thinking	The ability to recognize internal strengths and weaknesses as well as external opportunities and threats in order to achieve organizational goals.	**4**
9	Self awareness	Conscious knowledge of one's own character, feelings, motives and desires [43].	**3**
10	Change management	Able to facilitate change processes and adapt learning about change to new change initiatives; utilize change tools and processes with a focus on speed [44].	**2**
11	Conflict management	The ability to know when to stimulate conflict when a resolve it if they are to avoid its potentially disruptive effects [45].	**1**

Considering the importance of HR departments in universities and educational centers, the role of HR managers with identified competencies is very vital in achieving strategic goals at the top ranked universities. Based on the results of this research Empowering and delegating are the most important competencies of HR managers of universities. With regard to Importance of human resources, a competent HR manager and professional must be able to delegate responsibility and authority to others and to hold those so delegated accountable for results. Effective delegation can relieve or prevent managers' own burnout, foster competency in subordinates, decrease workload, elevate employee morale, and increase overall performance. It helps make employees feel like part of the team [46]. Based on the importance of human resource development, empowering the employees is important to encourage individuals to perform organizational tasks successfully and accept job responsibilities. Another competency which was found in this study was communication and sociability, means that the ability to make effective Communication and relationship with other people. In HR departments communication is at the heart of the HR managers and professional's job to work with their superior manager, their subordinates, and other people in other departments. HR managers send and receive ideas, instruction, progress reports, and many other kinds of information [38] from different departments. The complex requirements in employee-technology relationships in HR affairs have made an impact on the role of HR management. It has changed from that of directing and controlling HR to that of effectively leading the development of HR. A HR manager as a leader is someone who sees and can get the best out of others-helping them develop a sense of personal and professional accomplishment [47]. Building trust is the sixth competencies which were ranked by the HR experts in this research. It is important for the HR department of universities if an employee trusts his or her manager, he/she is more willing to communicate frankly about job problems. If employees trust the managers, they are less likely to distort his or her motives and make negative assumptions about manager's Communications [42]. Strategic thinking was another HR competency mentioned in this study. HR managers and professionals have to be able think strategically to use opportunities in order to support universities in achieving strategic goals. Self-awareness, the ability to manage changes and conflicts are the essential competencies for the HR managers which have been identified in this study.

The findings of correlation analysis presented that Intuition-Feeling (NF) style has the strongest correlation with HR competencies' level in the top ranked universities. The managers with characteristic of NF are charisma people who have the efficient ability to lead the effective teams. NF people are adaptable and agreeable. They are talent to make effective communication with other people [29]. Their capability of innovation able them to make the best decisions in complex situations. Regarding to the importance roles of effective communication and innovation in HR affairs, The people who have NF characteristics can be the first choose to work as the managers in universities' HR departments. In addition, the findings suggested that Intuition-Thinking (NT), and Sensation-Feeling (SF) people can be adequately competent HR managers in top rank universities. NT managers apply both thought and creativity to make strategic decisions and solve problems. NT people are good options for HR management jobs, because HR managers need the abilities and the skills such as "delegating and empowering others" and "openness and honesty in dealing with subordinates" beside the analyzing complex systems. Coordination ability is generally an inherent skill for Sensation-Feeling (SF) people. SF people are Gregarious and sociable. These people can work in teams successfully and can easily motivate others [15]. SF manager delegate tasks to others effectively. Finally, this study illustrated that there is not significant correlation between Sensation-Thinking (ST) and HR competency level in Iranian top rank universities. While, communication and social competencies are very important in HR affairs' jobs, ST people are generally weaker in social relationships compare with other cognitive styles [29]. This study suggested that NF people could be the first priority in hiring and choosing the people for the HR-related jobs at the Iranian top ranked universities. The NT and SF could be selected on the positions of HR if the NF candidates could not be available.

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REFERENCE

1. Ulrich, D., Brockbank, W., Johnson, D., Sandholtz, K. & Younger, J. (2008). *HR competencies: Mastery at the intersection of people and business.* Alexandria,VA: Society for Human Resource Management.

2. Middlewood, D., & Lumb, J. (1999). *Human resource management in schools and colleges.* SAGE.

3. Alfred, R. L. (2006). *Human resource management in colleges and universalities.* USA: The University of Michigan, School of education.

4. Costa, P. T., & McCrae, R. R. (1992). *NEO personality inventory professional manual.* Odessa, FL: Psychological Assessment Resources.

5. Lounsbury, J. W., Steel R. P., Gibson L. W., & Drost A. W. (2008). *Personality traits and career satisfaction of human resource professionals.* Retrieved from http://ecareer fit.com

6. Whetten, D., Cameron K., & Woods M. (2000). *Developing management skills for Europe.* Prentice Hall.

7. Madu, B. C. (2009). *An Examination of the Competencies Required in the Transformation of the Human Resources Professionals to an Executive Management Strategic Partner in the 21st Century,* Phd thesis, Capella University.

8. Salim, D. R. (2006). Keynote speech - *The Role of Human Resources in the Development of the University Malaysia,* Vice-Chancellor, University of Malaya. Retrieved from http://www.acu.ac.uk/member_services/professional_networks/human_resources_management_net work/conferences/conference_2006

9. Spicer, C. (2009). *Building a competency model* screening job candidate for desired competencies pays off in higher sales and lower turnover. *HR Magazine*, 54(4), 1-3.

10. Gaither, G. H. (2007). Developing leadership skills, *Academic leadership online journal.* Retrieved from http://www.academicleadership.org/leader_action_tips/Developing_Leadersh ip_Skills.shtml. 19/10/2010 9:49 AM.

11. Ulrich ,D. (1998). *Delivering results: A new mandate for human resources.* Harvard business school.

12. Schoonover, S. C., (1998). *Human resource competencies for the year 2000.* USA: SHRM foundation.

13. Schoonver S. C. (2000). Human *resources competencies for the year 2000: The wakeup call.* Allexandria. VA : Society for human resource management.

14. Everes, A., Anderson N., & Voskuijl. (2005). *Handbook of personnel selection.* United Kingdom: Blackwell.

15. Huczynski, A. & Buchanan, D. (2001). *Organizational Behavior (An Introductory Text).* Fourth ed. Harlow: Prentice Hall.

16. Karimi, A. (2008). *The competencies of managers in educational system.* Iran: Shadman.

17. Sun, L., & Shi, K. (2008). The human resource competency studies and the IPMA-HR competency training and certification program in China, *Public Personnel Management.* 37(3), p. 353.

18. Ahmadi, R. (2009). Strategic program for human resources in Iran. *Science and Research Magazine*, 65, 47- 67.

19. Warner, D. & Crosthwaite, E., (1993). Human resource management in higher education. *Current Business Research*, 1(3), 48-70.

20. Schmidt, F.L., & Hunter, J. E., (1998). The validity and utility of selection methods in personnel psychology: Practical and theoretical implications of 85 years of research findings. *Psychological Bulletin*, 124, 262- 274.

21. Russel, B., (1995). *How to hire the right person.* Australia; Simon & Schuster.

22. Khorsandfar, A., (2010). *Organizational behavior and successful managers.* Iran: Shadman.

23. Costa, P. T., Jr., Herbst, J. H., McCrae, R. R., & Siegler, I. C. (2000). Personality at midlife: Stability, intrinsic maturation, and response to life events. *Assessment, 7,* 365–378.

24. Freud, S. (1974). *The standard edition of the complete psychological works of Sigmund Freud.* James Strachey et al (Eds). London: The Hogarth Press and the Institute of Psycho-Analysis.

25. Hermann, A., (2009), *Using broad or narrow personality measures to predict Leadership success: does keeping it simple have an impact on predictive power and utility?* White paper, OPP Ltd.

26. Lussier, R. N. and Achua, C. F., (2001). *Leadership: Theory, Application, Skill Development.* Cincinnati, OH: South-Western College Publishing.

27. Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American Psychologist, 48,* 26-34.

28. Loveland, J. M., Gibson, L. W., Lounsbury, J. W. & Huffstetler, B. C. (2005). Broad and narrow personality traits in relation to the job performance of camp counselors child & youth care forum, 34(3), *Springer Science+Business Media*, Inc. DOI: 10.1007/s10566-005-3471- 6, 241-255

29. Ashton, M. C. (1998). Personality and job performance: The importance of narrow traits. *Journal of Organizational Behavior*, 19, 289-303.

30. Spicer, C. (2009). Building competency model screening job candidates for desired competencies pay off in higher sales and lower turnover. *HR Magazine*, 54(4), 1-3.

31. Kormanik, M. B., & Ruona, W. E. A. (2007). *In search of the "pracademic": Building a general competencies model for being a scholar-practitioner*. Paper presented at the annual meeting of the Academy of human resource development, Indianapolis; IN.

32. Andranovich, G. (1995). *Developing community participation and consensus: the Delphi technique*, *Partnerships in education and research*. WREP 131. Department of Political Science, Los Angeles: California State University.

33. Hanafin, S. (2004). *Review of literature on the Delphi Technique*. Dublin, Ireland; The national children's office.

34. Roberts-Davis, M. and Read, S. (2001). Clinical role clarification: using the Delphi method to establish similarities and differences between Nurse Practitioners and Clinical Nurse Specialists. *Journal of Clinical Nursing*, 2001; 10:33–43.

35. White, *E. The future of psychiatric nursing by the year 2000: a Delphi study.* Report, Department of Nursing, University of Manchester, Manchester; 1991.

36. Williams, P. L. and Webb, C. (1994). The Delphi technique: a methodological discussion. *Journal of Advanced Nursing*, 19, 180–186.

37. Rasli, A. (2006). *Data analysis and interpretation: a handbook for postgraduate social scientists*, Malaysia, UTM University.

38. Certo, S. C. (2008). *SUPERVISION: Concepts & Skills-building.* McGraw- Hill.

39. Newstorm, J. W. (2007). *Supervision managing for results*. 9th ed. McGraw-Hill.

40. Rue, L. W. and Byars, L. L. (2007). *Supervision key link to productivity*, 9th ed. McGraw-Hill.

41. Goodwin, C, Griffith D. B. (2006). *Supervisor's Survival Kit*. Pearson- Prentice Hall.

42. Mosely, D., Pietri, P., & Mosley Jr. (2010). *Supervisory management, the art of inspiring empowering and developing people*. 8th ed. Mason, OH: Thompson, South-western.

43. Church, A. H. (1997). Managerial self-awareness in high-performing individuals in organizations. *Journal of Applied Psychology,* 2(2), 281-292.

44. Naquin, S. (2008). *Certified public manager competency model*. Louisiana: USA, Louisiana management and supervisory survey (LMSS). Louisiana state University; 2008.

45. Griffin, R. W. and Moorhead, G. (2010). *Organizational behavior: Managing people and organizations*. Canada: South-Western.

46. Gennett, D. (2004). *If you want it done right. You don't have to do it yourself: The power of delegation.* Sanger, CA: Quill driver books.

47. Robbins, S. P. &, De Cenzo. (2001). *Supervision today*. 3rd ed, Prentice Hall.