

Big Five Personality Traits and Job Satisfaction

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Abstract: Job satisfaction represents one of the most complex areas facing today's managers when it comes to managing their employees and it can be considered as a result of employees' perception of how well their job provides those things that are viewed as important. The aim of this study was to investigate the relationship between five-factor personality traits (Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness to Experience) and job satisfaction among workers in one of the automobile spare parts companies in north of Iran, Guilan. In line with this purpose, the study was conducted with workers from all departments of the company included in the study sample. A relevant data was collected from 242 personnel. For analyzing data SPSS 25 and LISREL 10.2 that both are structural equation modeling were used. The results of the study indicated that there were significant relationships between personality traits and job satisfaction. Extraversion, Agreeableness, Conscientiousness and Openness to Experience were positively related but Neuroticism was negatively related to job satisfaction.

Keywords: Job satisfaction, Personality traits, Big five model.

Introduction

The theory of personality traits postulates that people naturally deal with different situations and interact with their environment in different ways. From a management perspective, information about an individual's personality can provide valuable information pertaining to what is the best method of communicating with them and what types of jobs and tasks they are most suitable for (Ali, 2018, p. 38). As is known, job or occupation constitutes a very important part of human life. Along with "economical" function of the job which meets important physical needs of human life, it also contributes to psychological and social functions of the individual to a high degree (Tan, 1992, p. 87). In order to create a harmony between the worker and his/her job, individual's abilities and personality must correspond to his/her job. Organizations are able to bring the people with right qualifications to the proper position only after long and expensive trainings. If the abilities and personality of the individual does not correspond to the job, it may become totally impossible to make the individual right for his/her position. Thus, many organizations today recruit people through meticulous processes. Many organizations benefit from personality tests which were developed specifically for this purpose in recruitment and promotion processes. The true match of job and employee will help for the success of employee and organization facets (Ongore, 2014). The main purpose of the present study was an effort to investigate the individual's abilities and knowledge along with determining whether his/her personality matches the personality

traits required for the position based on big five personality traits model.

Conceptual Framework

The Concept of Job Satisfaction

The concept of job satisfaction is among the important subjects of industrial psychology (Lu et al., 2005, p. 211). Judge and Klinger have described the concept of Job satisfaction as “the subjective well-being at work”. Generally, job satisfaction refers to one’s satisfaction from his/her job related factors (Judge and Klinger, 2008, p. 393). From the 1930s, research on job satisfaction increased exponentially, and it is still one of the most studied subjects in organizational research (Hofmans et al., 2013). Job satisfaction is a kind of emotional state of pleasure, which is the result of an evaluation that the individual has of his or her job or the perception that he or she has about the achievement of work-related values (Aziri, 2011). Job satisfaction as the total feeling of individuals toward their jobs has a direct effect on the individual and social and organizational life and it has a determinative role in the mental and corporeal health. In return, job dissatisfaction results in the reduction of the morality of work force and performance and threatening mental and corporeal health of the forces. The more consistency and proportionality is among the personality and job, the more job satisfaction will exist, and the less consistency and proportionality is, the less job satisfaction will exist (Golpayegan, 2017).

Job satisfaction is the result of an individual’s interaction with the environment around him or her (Locke, 1969). In turn, this interaction demonstrates several antecedent and consequent factors (Hofmans et al., 2013; Alegre et al., 2015; Jung and Yoon, 2015). According to Park and Deitz, on the other hand, job satisfaction is the inner harmony of the workers related to their jobs (Park and Deitz, 2005, p. 10).

Snarr & Krochalk defined Job satisfaction is the subjective perception of one’s job and is defined as an organizational behavior based on the individual’s role and degree of efficiency in the organization (Snarr & Krochalk, 1996). The factors affecting job satisfaction and motivation incorporate two general theories, including content theories, which deal with the content of creating job satisfaction and motivation, and process theories, which deal with its process (Afam, 2012).

Workers tend to have expectations related to the job they perform. Job satisfaction may be defined as the satisfaction of these expectations (Schermerhorn et al, 2009). Attitudes of the personnel towards their jobs is extremely important in an organization. Because their attitudes would have an impact on the quality of the job. According to Hofstede, one must have a better understanding of the concept of attitude in order to understand the concept of job satisfaction better. Attitude may be defined as “constant organization of beliefs related to an object or situation which in turn prepare the individual to respond to the situation in a preferred way” (Hofstede, 1998, p. 478). Richard Arvey and others have analyzed the relation between personality and job satisfaction. In this study, they have tried to establish that personality helps in determining job satisfaction. They have analyzed thirty-four identical twins in order to conduct the study. They have selected these twins among individuals who grew up separately from an early age. The degree of sameness of these people’s job satisfaction levels has been measured taking into account differing situational impacts as opposed to their identical genetic structure. The results of this study suggest that genetic factors contribute by 30% to the differences between job satisfaction levels between twins (Arvey, 1989, p. 188).

Five-Factor Model of Personality

Personality may be defined as emotional, interpersonal, experiential and motivational forms that explain behaviors in different situations. It points to psychological traits which are constant in time and which provides reasons for the behaviors of the individual, and these traits constitute a unified combination that shows who the person is while determining his/her emotional, behavioral and cognitive forms (Mount et al., 2005, p. 447).

“Personality” comes from the Latin term “persona.” In antique Greece and Rome, actors had masks called “persona” which emphasized the traits they represent on the stage. Later, this term has been used to mean both the person and his/her role in society (Luthans, 1992, p. 85). In many cases, five orthogonal characteristics result from measurement of many people’s personality traits and factor analysis as a covariance structure and these are named as extroversion, adaptability, self-control, neuroticism and openness towards experience. Based on the studies which support the robustness and versatility of five-factor model, categorization of five-factor model creates a pre- organizational structure for important personality traits, if not for all (Cook, 2005, p. 2).

If we are to conclude from these definitions related to personality, it comes out as a unique image of the factors affecting a person’s perception, thinking and behaving modes. Being under the constant impact of stimulants coming from inside and outside, personality includes all biological, psychological, hereditary and acquired abilities, motives, feelings, wants, habits and all other behaviors of the individual. In sum, it is possible to see hereditary traits and environmental impacts in the constitution of personality. One may conclude from this that if environment’s impact is taken into account, personality reflects to some extent traits common to the

community, and to some extent traits common in all humans, and not only traits unique to individual (Yelboga, 2006, p. 198).

As is shown by personality researchers, one of the definitions of personality traits is five-factor model (McCrae and John, 1990, p. 176). Five-factor model in the explanation of personality was first used in 1960s and gained speed later in 1980s and 1990s. By the late 1980s, personality scientists came to a common agreement on five strong factors of "Five-Factor Model" which provided a meaningful and useful categorization for the organization of complex findings in personality literature (Taggar et al., 1999, p. 901). Due to the frequent emergence of five-factor model of personality in studies conducted according to various methods, these factors are called as "Big Five" in the literature (Burger, 2006, p. 251). In general, "five-factor model" is used as a common term (Carver and Scheier, 2004, p. 66).

Although a number of popular models of personality traits continue to influence contemporary research but Modeling such patterns is a concern of theories of personality with a dynamic focus (DeYoung, 2015; Read, Smith, Droutman, & Miller, 2016; Revelle & Condon, 2015) and theories of personality variation (Fleeson & Jayawickreme, 2015; Heller, Perunovic, & Reichman, 2009). the Five Factor Model (the 'Big Five') proposed by McCrae and Costa Jr (1999) is the most widely used and recognized model today (Rossberger, 2014). It builds upon the 35 bipolar clusters of terms related to personality traits developed by Cattell (1943) and the classic Myers-Briggs Type Indicator (MBTI) by adding an important fifth personality trait, namely neuroticism or emotional stability, which is a core domain predictive of depression and anxiety disorders.

Extraversion: extent to which individuals engage with the external world and experience enthusiasm and other positive emotions. The positive attributed associated with Extraversion, including being sociable, assertive, and active (Weele, 2013). This allows extraverted individuals to successfully create and engage with their social network (Ali, 2018, p. 40).

Hypothesis 1. Extraversion will be positively and significantly related to job satisfaction.

Neuroticism: extent to which individuals experience negative feelings and their tendency to emotionally over react. Innovative individuals tend to be self-confident (Kirton & De Ciantis, 1986) and emotionally stable (Hsieh et al., 2011), which are characteristics associated with low levels of neuroticisms.

Hypothesis 2. Neuroticism will be positively and significantly related to job satisfaction.

Conscientiousness: extent to which individuals value planning, possess the quality of persistence, and are achievement-oriented. Hsieh et al. (2011) found Conscientiousness to have a significant positive effect on innovation capability.

Hypothesis 3. Conscientiousness will be positively and significantly related to job satisfaction.

Openness to Experience: extent to which individuals exhibit intellectual curiosity, self-awareness, and individualism/nonconformance. The characteristics of Openness include intellectual curiosity, broad-mindedness, imaginativeness, and originality (Weele, 2013) along with multiplicity of interests and information-seeking behavior (Bozionelos et al., 2014). All of these empower individuals with a strong Openness trait to engage in new experiences and challenges established views (Rossberger, 2014).

Hypothesis 4. Openness to Experience will be positively and significantly related to job satisfaction.

Agreeableness: extent to which individuals value cooperation and social harmony, honesty, decency, and trust worthiness. Agreeable individuals also tend to have an optimistic view of human nature. While Extraversion may determine an individual's propensity to socialize, Agreeableness is an important determinant of whether the individual is accepted by social groups and can effectively maintain social and business relationships (Ali, 2018, p. 42).

Hypothesis 5. Agreeableness will be positively and significantly related to job satisfaction.

Research Method

This study was designed to test the research framework and the above-mentioned hypotheses.

Population and Sample

Population of this research is workers at one of the automobile spare parts company in Guilan in north of Iran. Sampling method is the simple random method. Questionnaire contributed among 300 customers. Finally, 242 completed questionnaires were analyzed.

Statistical Analysis

For doing this research and gathering information, five ranges LIKERT questionnaire that include a 43-items was designed. To test and evaluate the relationship among variables of study, structural equation model with LISREL 10.2 and to measure and estimate the reliability of questionnaire SPSS 25 were used.

Results

Analysis of this research comprises two stages: (1) assessment of the measurement model; and (2) testing of the structural model.

Measurement model

Reliability

Reliability of measurement model were analyzed in two sections; one related to Cronbach's alpha(CA) and the other is the composite reliability(CR). A cronbach a greater than .70 is generally considerate reliable (Nunnally,1978) and for the composite reliability, it is at least 0.7 (Sosik et al., 2009). As shown in table 1, the values of Cronbach's alpha and the composite reliability of all components for this research are greater than 0.7. So research reliability is approved.

Validity

Convergent validity indicates that the indices of each construct have to be median correlated with each other. The criterion for convergent validity is that the average variance extracted (AVE) has to be more than 0.5 (Fornell & Larcker, 1981). AVE coefficients show the percentage of the construct variance or model variable has been analyzed by a separate component. In this research all the constructs have an AVE value above this minimum (Table 1). So, the measurement model is properly valid.

Table 1. Measurement model result

Construct	item	loading	t	VIF	CA	Rho_A	CR	AVE
Extraversion	Q01	0.88	17.06	3.328				
	Q02	0.83	15.59	2.751				
	Q03	0.83	15.74	2.885	0.93	0.93	0.947	0.781
	Q04	0.85	16.18	2.987				
	Q05	0.87	16.75	3.208				
Agreeableness	Q06	0.85	16.15	3				
	Q07	0.84	16.03	2.937				
	Q08	0.86	16.02	3.242	0.935	0.935	0.951	0.794
	Q09	0.89	16.6	3.65				
	Q10	0.87	15.72	3.255				
Conscientiousness	Q11	0.85	16.09	3.051				
	Q12	0.86	16.84	3.141				
	Q13	0.86	15.84	3.181	0.931	0.933	0.948	0.783
	Q14	0.86	14.42	3.216				
	Q15	0.84	15.67	2.792				
Neuroticism	Q16	0.85	16.09	2.849				
	Q17	0.87	16.84	3.173				
	Q18	0.84	15.84	2.812	0.921	0.928	0.941	0.76
	Q19	0.79	14.42	2.331				
	Q20	0.83	15.67	2.774				
Openness	Q21	0.85	16.03	2.935				
	Q22	0.87	16.42	3.085				
	Q23	0.84	16.48	3.061	0.929	0.932	0.946	0.779
	Q24	0.79	16.56	3.035				
	Q25	0.83	15.56	2.785				

Construct	item	loading	t	VIF	CA	Rho_A	CR	AVE
Supervision	Q26	0.74	-	1.709	0.811	0.812	0.888	0.726
	Q27	0.76	10.39	1.751				
	Q28	0.81	0.68	1.913				
Job Identity	Q29	0.83	-	2.285	0.871	0.872	0.921	0.795
	Q30	0.84	14.1	2.409				
	Q31	0.82	13.88	2.242				
Salary	Q32	0.86	-	2.616	0.89	0.89	0.932	0.82
	Q33	0.86	15.84	2.673				
	Q34	0.84	15.52	2.541				
Promotion	Q35	0.83	-	2.291	0.862	0.866	0.916	0.784
	Q36	0.81	13.26	2.089				
	Q37	0.83	13.48	2.251				
Colleagues	Q38	0.78	-	1.94	0.842	0.844	0.905	0.76
	Q39	0.81	11.98	2.013				
	Q40	0.81	11.95	2.054				
Environment	Q41	0.9	-	3.034	0.895	0.9	0.934	0.826
	Q42	0.87	17.34	2.837				
	Q43	0.81	15.69	2.397				

Note: AVE = Average Variance Extracted, CR = Composite Reliability, CA=Cronbach Alpha

Structural model

Correlation analysis

We computed means and standard deviations for each variable and created a correlation matrix of all variables used in hypothesis testing. Means, Standard deviations and correlations among all scales used in the analyses are shown in Table 2.

Table 2. Mean, Standard Deviation and Correlation Analysis

Construct	EX	AG	CO N	NEU	OP	SUP	JI	SA L	PR O	CO L	EN V	Mea n	SD
Extraversion	0.88 3											3.24 2	1.01
Agreeableness	0.39 9	0.89 1										3.15 8	0.99 2
Conscientiousness	0.47	0.36 3	0.88 5									3.34 4	0.95 1
Neuroticism	- 0.31	- 0.25 9	- 0.24 1	0.87 2								3.04	0.93 5
Openness	0.36 6	0.31	0.34 1	- 0.24 2	0.88 3							3.56 1	0.93 7
Supervision	0.47 2	0.34 3	0.40 6	- 0.32 4	0.29 5	0.85 2						3.92 3	0.77 2
Job Identity	0.38 8	0.34	0.41 3	- 0.36 9	0.39 2	0.34 5	0.89 1					3.61 3	0.91 3
Salary	0.5	0.40 5	0.39 1	- 0.31 4	0.31 7	0.30 1	0.24	0.90 6				3.45 9	0.97 2

Promotion	0.39 6	0.43 1	0.33 4	-0.34	0.36 1	0.32 9	0.20 9	0.35 1	0.88 5		3.59 3	0.87	
Colleagues	0.37 2	0.36 3	0.43 3	- 0.29 7	0.42 5	0.36 4	0.35 6	0.23 5	0.24 6	0.87 2	3.64 4	0.93	
Environment	0.51 1	0.41 2	0.42	- 0.36 9	0.41 4	0.32 9	0.35 3	0.31 5	0.30 9	0.29 9	0.90 9	3.16 2	1.03 2

Notes: The diagonal figures in bold indicate the average variances extracted (AVE) for constructs..

Model predictability and fit

The structural model had a good fit. The structural model had a good fit ($\chi^2 = 2305.57$, $df = 845$, $\chi^2/df = 2.728$, $RMSEA = 0.085$, $CFI = 0.917$) with all the fit-indices better than the recommended cut-off values. Due to the dependency of the χ^2 statistic on the sample size, a higher than cut-off value of comparative fit index (CFI) and a value of the χ^2/df less than three indicate a good fit (Kline, 1998). Other fit indices (NFI = 0.928, AGFI = 0.844) are also high, showing a good fit. The analysis revealed support for all our hypotheses except for hypothesis (H 2). (Table 3).

Table 3. Model Fit Summary

Model	Chi-Square	DF	Chi-square/DF	NFI	IFI	TLI	CFI	RMSEA	GFI	AGFI
Job Satisfaction	129.359	129	1.002	0.947	1	1	1	0.004	0.946	0.928
Total Model	2305.57	845	2.728	0.928	0.916	0.944	0.917	0.085	0.882	0.844
Critical Value	-	-	<3	>0.9	>0.9	>0.9	>0.9	>0.9	>0.8	>0.8

Results

One should take several steps to assess the hypothesized relationships in the inner model after accepting the outer models' validity and reliability. The path model established with a group of the structural equations representative of the theoretical model was evaluated with the structural model (Chin and Dibbern, 2010). Estimation of path coefficient (β), coefficient of determination R-square for the endogenous variable, t-value, and effect size (f-square) were the major criteria which are used to assess the structural model in this study (Henseler and Fassott, 2010; Götz et al., 2010; Tenenhaus et al 2005; and Chin and Dibbern, 2010). The structural models' projecting power was assessed considering the R2 depicting the extent to which the variance was identified based on the exogenous variables (Barclay et al.1995). To assess the hypothesized relationships, t-statistics was calculated, and the path was approximated. Multiple correlation coefficients between endogenous and exogenous variables are measured based on the Beta coefficient (Hair et al., 2012). The value was evaluated in terms of magnitude, sign, and Value $t=2.58$ $p<0.01$ and $t=1.96$ $p<0.05$. The structural model analysis is shown in Table 4 and Figure 1. Based on the result of SEM, Extraversion (β 0.336; $P < 0.01$), Agreeableness (β 0.251; $P < 0.01$), Conscientiousness (β 0.250; $P < 0.01$) and Openness (β 0.251; $P < 0.01$) positively affect the Job satisfaction but Neuroticism (β -0.264; $P < 0.01$) negatively affect the Job Satisfaction. Therefore, all hypotheses in this research confirmed except hypothesis H2. Overall, 89% of the variance in Job satisfaction was explained by the model ($R^2=0.89$).

Table 3. Hypothesis Testing

Hypothesis	Beta	t-value	f ²	R ²	Result	Sign
Extraversion -> Job satisfaction	0.336	5.550	0.266		Supported	+
Agreeableness -> Job satisfaction	0.251	4.964	0.190		Supported	+
Conscientiousness -> Job satisfaction	0.250	4.775	0.180	0.89	Supported	+
Neuroticism -> Job satisfaction	-0.264	-5.326	0.216		Not Supported	-
Openness -> Job satisfaction	0.251	5.023	0.189		Supported	+

Notes: $|t|>1.96$ Significant at $P<0.05$, $|t|>2.58$ Significant at $P<0.01$.

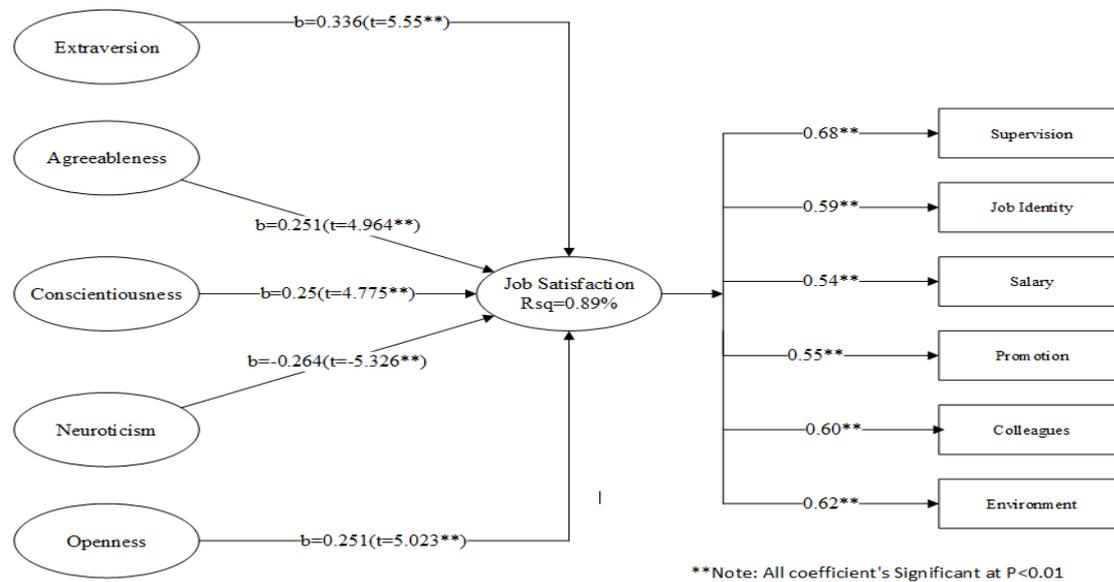


Figure1. Paths Standardized coefficient (β)

Conclusions

The study examined the influence of personality traits on job satisfaction. According to the findings of this research, four personality traits including extraversion, agreeableness, conscientiousness, and openness to experience have positive effect on individual's job satisfaction whereas neuroticism has negative effect on it. Therefore, it is recommended to use the findings of this study to promote individual's satisfaction among employees in the organizations by the management and HR practitioners.

Organizations should introduce training programs that promote personality traits like; extraversion, agreeableness, conscientiousness, and openness among employees to enhance their inner satisfaction during life work. Apart from training the existing employees, the managers should also assess the personality of potential employees during recruitment process in order to identify the candidates with high extraversion, agreeableness, conscientiousness, and openness to experience and drop the individuals with higher level of neuroticism personality trait in the selection process.

Reference

- Afam, C. C. (2012). The influence of leadership practices on faculty job satisfaction in baccalaureate degree nursing program. (3510178 Ph.D.), The University of North Carolina at Charlotte, Ann Arbor. Retrieved from <https://search.proquest.com/docview/1021198313?accountid=41318> Nursing & Allied Health Database; ProQuest Dissertations & Theses A&I; ProQuest Dissertations & Theses Global database.
- Alegre, I., Mas-Machuca, M., & Berbegal-Mirabent, J. (2015). Antecedents of employee job satisfaction: do they matter?. *Journal of Business Research*, 69(4), 1390-1395.
- Ali, I. (2018). Personality traits, individual innovativeness and satisfaction with life. *Journal of Innovation & Knowledge*, 4 (2019), 38-46
- Arvey, R. D., Bouchard, T. J., Segal, N. L., & Abraham, L. M. (1989). Job satisfaction: Environmental and genetic components. *Journal of Applied Psychology*, 74(2), 187-192.
- Aziri, B. (2011). Job satisfaction: a literature review. *Management Research & Practice*, 3(4), 77-86.
- Barclay, D., Higgins, C., and Thompson, R. (1995). The Partial Least Squares (PLS) Approach to Causal Modelling: Personal Computer Adoption and Use as an Illustration. *Technology Studies, Special Issue on Research Method-ology*, 2(2), 285-309.
- Bozionelos, N., Bozionelos, G., Polychroniou, P., & Kostopoulos, K. (2014). Mentoring receipt and personality: Evidence for non-linear relationships. *Journal of Business Research*, 67(2), 171-181.
- Burger, J. M. (2006). *Personality*, Istanbul: Kaknus Publications.
- Carver, C. S., & Scheier, M. F. (2004). *Perspectives On Personality*, Fifth Edition, Pearson Allyn and Bacon Inc.: New York.
- Chin, W. W., & Dibbern, J. (2010). An Introduction to a Permutation Based Procedure for Multi-Group PLS Analysis: Results of Tests of Differences on Simulated Data and a Cross Cultural Analysis of the

- Sourcing of Information System Services between Germany and the USA. In *Handbook of Partial Least Squares* (pp. 171-193). Berlin: Springer.
- Cook, V. D. (2005). An investigation of the construct validity of the Big Five construct of emotional stability in relation to job performance, job satisfaction, and career satisfaction.
- DeYoung, C. G. (2015). Cybernetic big five theories. *Journal of Research in Personality*, 56, 33–58. <http://dx.doi.org/10.1016/j.jrp.2014.07.004>.
- Fleeson, W., & Jayawickreme, E. (2015). Whole trait theory. *Journal of Research in Personality*, 56, 82–92. <http://dx.doi.org/10.1016/j.jrp.2014.10.009>.
- Fornell, C., & Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18, 39–50.
- Golpayegan, M. (2017). Evaluating the Relation between Personality Properties with Job Satisfaction of the Staff. *Journal of History Culture and Art Research*, 6(3), 937-949. doi:<http://dx.doi.org/10.7596/taksad.v6i3.964>
- Götz, O., Liehr-Gobbers, K., & Krafft, M. (2010). Evaluation of Structural Equation Models Using the Partial Least Squares (PLS) Approach. *Springer Handbooks of Computational Statistics*, 691-711.
- Hair, Joseph F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, 40, 414–433.
- Heller, D., Perunovic, W. Q. E., & Reichman, D. (2009). The future of person-situation integration in the interface between traits and goals: A bottom-up framework. *Journal of Research in Personality*, 43, 171–178.
- Henseler, J., & Fassott, G. (2010). Testing Moderating Effects in PLS Path Models: An Illustration of Available Procedures. Berlin, Heidelberg, Springer Handbooks of Computational Statistics, 713-735.
- Hofmans, J., De Gieter, S., & Pepermans, R. (2013). Individual differences in the relationship between satisfaction with job rewards and job satisfaction. *Journal of Vocational Behavior*, 82(1), 1-9.
- Hofstede, G. (1998). Attitudes, values and organizational culture: Disentangling the concepts. *Organization studies*, 19(3), 477-493.
- Hsieh, H.-L., Hsieh, J.-R., & Wang, I.-L. (2011). Linking personality and innovation: The role of knowledge management. *World Transactions on Engineering and Technology Education*, 9(1), 38–44.
- Judge, T. A., & Klinger, R. (2008). Job satisfaction. In *The science of subjective well-being*, 393, A393-dq.
- Jung, H. S., & Yoon, H. H. (2015). Understanding pay satisfaction: the impacts of pay satisfaction on employees' job engagement and withdrawal in deluxe hotel", *International Journal of Hospitality Management*, 48(1), pp. 22-26.
- Kirton, M. J., & DeCiantis, S. M. (1986). Cognitive style and personality: The Kirton adaption-innovation and Cattell's six teen personality factor inventories. *Personality and Individual Differences*, 7(2), 141–146.
- Kline, R. B. (1998). *Principles and Practice of Structural Equation Modeling*. New York, NY: The Guilford Press.
- Locke, E.A. (1969). What is job satisfaction?. *Organizational Behavior and Human Performance*, 4(4), 309-336.
- Lu, H., While, A. E., & Barriball, K. L. (2005). Job satisfaction among nurses: a literature review. *International journal of nursing studies*, 42(2), 211-227.
- Luthans, F. (1992). *Organizational Behavior*, 6.Ed., Mc Graw Hill Company: New York.
- McCrae, R. R., & John, O. P. (1992). An introduction to the five factor model and its applications. *Journal of personality*, 60(2), 175-215.
- Mount, M. K., Barrick, M. R., Scullen, S. M., & Rounds, J. (2005). Higher order dimensions of the big five personality traits and the big six vocational interest types. *Personnel Psychology*, 58(2), 447-478.
- Nunnally, J. (1978). *Psychometric theory*. New York: McGraw-Hill.
- Ongore, O. (2014). A study of relationship between personality traits and job satisfaction. *Procedia - Social and Behavioral Sciences*, 141, 1315 – 1319.
- Read, S. J., Smith, B. J., Droutman, V., & Miller, L. C. (2016). Virtual personalities: Using computational modeling to understand within-person variability. *Journal of Research in Personality*. <http://dx.doi.org/10.1016/j.jrp.2016.10.005>.
- Revelle, W., & Condon, D. M. (2015). A model for personality at three levels. *Journal of Research in Personality*, 56, 70–81. <http://dx.doi.org/10.1016/j.jrp.2014.12.006>.
- Rossberger, R.J. (2014). National personality profiles and innovation: The role of cultural practices. *Creativity and Innovation Management*, 23(3), 331–348.
- Schermerhorn, J. R., Hunt, J. G., & Osborn, R. N. (2009). *Fundamentos de comportamiento organizacional*. Bookman Editora:USA.
- Snarr, C. E., & Krochalk, P. C. (1996). Job satisfaction and organizational characteristics: results of a nationwide survey of baccalaureate nursing faculty in the United States. *J Adv Nurs*, 24(2), 405-412. doi:10.1046/j.1365-2648.1996.19725.x

- Sosik, J. J., Kahai, S. S., & Piovoso, M. J. (2009). Silver Bullet or Voodoo Statistics? A Primer for Using the Partial Least Squares Data Analytic Technique in Group and Organization Research”, *Group Organization Management*, 34(5).
- Taggar, S., Hackew, R., & Saha, S. (1999). Leadership emergence in autonomous work teams: Antecedents and outcomes. *Personnel*.
- Tan, H. (1992). *Psikolojik Danisma ve Rehberlik*, Mem: Istanbul.
- Tenenhaus, M., Vinzi, V. E., Chatelin, Y.-M., & Lauro, C. (2005). PLS path modeling. *Computational Statistics & Data Analysis*, 48(1), 159–205.
- Weele, I. (2013). The effects of CEO’s personality traits (Big5) anda CEO’s external network on innovation performance in SMEs.
- Yelboga, A. (2006). Kisilik Ozellikleri ve Is Performansi Arasindaki Iliskinin Incelenmesi. *Is, Guc Endustri Iliskileri ve Insan Kaynaklari Dergisi*, 8(2), 196-211.