

The Relationship between the Big Five personality Factor and self-efficiency in managers of Bank

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Abstract: The present research aimed at investigating the relationship between Big Five personality Factor and self-efficiency in managers of Bank Saderat, Golestan province, Iran. For this purpose, the hypotheses proposed were tested using data collected from NEO Five-Factor Personality Inventory and scale of self-efficiency. Research sample included 81 managers of Bank Saderat branches in Golestan province who were selected through convenience sampling. Research method was based on correlation analysis and stepwise regression test. Results indicated that there was a statistically positive significant relationship between extraversion, agreeableness, openness to experience, and conscientiousness to self-efficiency. However, there was a statistically negative (reverse) significant correlation between neuroticism and self-efficiency in managers. Moreover, results of stepwise regression indicated that two of NEO five personality factors, i.e. conscientiousness (directly) and neuroticism (reversely) had significant relationships with self-efficiency.

Keywords: Big Five-Factor personality, personality traits, self-efficiency, bank managers.

1. Introduction

Personality constitutes relatively stable emotional, cognitive, and behavioral patterns by which an individual could be defined. In fact, personality includes relatively stable behaviors or behavioral habits (Alipour, 2011). One of the most valid personality models is the five-factor personality pattern that consists of extraversion, agreeableness, openness, conscientiousness, and neuroticism and has a great impact on human behavior (Costa & McCrae, 1992; Goldberg, 1992). Extraversion includes sociability, surgency, and energy. Extrovert people have a high tendency to have social communication with others, possessing self-efficiency and participating in group activities. Agreeableness includes compassion, gentleness, tolerance, patience, compromise, good-temper toward irritability, animosity, aggression, and aggression, while being conscientious. Openness to experience includes creativity, wisdom, being philosophically-oriented, talent, and educatedness, pleasantry, and unconventionality rather than complaisance and obedience. Neuroticism includes anti-social attitudes, offence, distrust to others, lack of personal maturity, exaggerated emphasis on masculine traits, hostility and anger, irresponsibility, superficial social relations, self-centeredness, and conflict with legal authorities (FathiAshtiyani, 2009). Conscientiousness involves trustworthiness, responsiveness, hard-work, and accuracy, often leading to doing occupation better than others, avoidance of impulse, disorder and delay in doing affairs, and inhibition of individual motivations (McCrae & Costa, 1985). Personality is one of predictors for success, self-esteem, self-efficiency in job and meritocracy, and by identifying personality elements and dimensions accurately, and employing people according to their personality traits, they will definitely exhibit an optimal performance (Aeney, Bochar, Segel, Abraham, 1989). Most theories on career selection hold that the most important effective element on career choice and success is personality. Super (1998) thinks that people choose careers to express their own personality. In his opinion, people's activities in workplace are demonstrations of their self-concept. Research indicates that personality traits have an important role in people's beliefs and career performance. Barrick and Mount (1991) suggested that amenability, diligence, and effort to fulfill tasks as well as achievement of professional goals and dependency on organization affect job gains. Generally, people who are successful in job and management largely enjoy attention and readiness for new experiences that is one of components of factor personality, i.e. openness to experience. According to such viewpoints, whenever conditions for job selection based on personality traits are satisfied, the employees achieve career success, otherwise it is possible that job satisfaction is not obtained (Tat & Keenat, 1991; Muchinsky, 1997, cited from Salimi et al., 2006). Many studies have paid much attention to personality traits of managers (Mitchell, 1986; Caldwell and Burger, 1998; Aronson, Reilly, and Lynn, 2006; Van dam, 2003; Moss, McfarlandNgu, Kijowska, 2007). Self-efficiency is a key theory in cognitive-social theory of Bandura. It constitutes one's judgment about his/her ability to encounter situations he/she faces (Bandura, 1982). Bandura (2000) defines self-efficiency as peoples' beliefs about their abilities to mobilize incentives, cognitive resources, and control over a certain event. Sense of low self-efficiency is related to low self-esteem, pessimistic thoughts of one's self and functionality. Those with low self-efficiency avoid any act they believe is beyond their abilities.

Encountering unfavorable and stress situations, those with high self-efficiency could control their thoughts, exhibit more sustainability, and do not accept negative thoughts of themselves and disabilities (Masoudnia, 1986). Those with low self-efficiency view tasks and works difficult and it increases their stress ;strong self-efficiency beliefs bring about comfort and approach to difficult tasks. On the other hand, basis for strong self-efficiency could increase individual performance and self-efficiency determines how to confront barriers and unfavorable experiences and how much effort and insistence to be made to remove barriers (Friedel, Cortina ,Turner & Midgley, 2007).Research indicates that there is a relationship between personality traits and self-efficiency. There is a negative relationship between neuroticism and self-efficiency (Judge, Erez Bono &Thoresen, 2002)while there is a positive relationship between openness to experience and self-efficiency(Nauta, 2004; Rottinghaus, Lindly, Green &Borgen, 2002). Therefore, neuroticism is a strong predictor for lack of self-efficiency while extraversion and conscientiousness are positive predictors for self-efficiency. Furthermore, openness to experience has a positive relationship with self-efficiency whereas "agreeableness" has no relationship to it (Hartman, Betz, 2007). Research indicates that form among the five personality factors, three important factors (extraversion, openness to experience, and conscientiousness during job interviews) for managers have a significant role in social equations, i.e. communications with others. Also, among these three, conscientiousness is the most important one. That is why they play more important role in non-social processes (Van Dam 2003; Kaldol& Burger, 1998). A research conducted by Moss et al. (2007) on styles of leadership and management and its relationship with openness to experience and organizational commitment indicated that whenever level of openness to experience in NEO questionnaire decreases as one of personality traits, level of fidelity and commitment to the organization decreases in turn. In another study conducted by Aronson et al. (2006) on the effect of manager's personality on working teams and performance, results indicated that the personality variable and openness to experience had a strong relationship with team work and performance. Other personality variables such as extraversion and conscientiousness had indirect relationship on performance by working team. Results of a research by Silverthorne (2001) on the relationship between personality factors of NEO questionnaire and prediction of leadership ability in managers of three countries, China, Thailand, and USA ,suggested that compared to managers who do not view themselves much capable, capable managers from all three cultures described themselves as extravagant, agreeable, and highly conscientious, although, they scored low on neuroticism. Thus, given theaim of the research and importance of organizational and psychological elements in increasing productivity and improving quality of services and human communications with clients and employees, the present study was conducted with the aim of investigating the relationship between personality traits and self-efficiency in managers of Bank Saderat Branches of Golestan Province.

2. Methodology

Considering the purpose of the study, research method was a correlational one. Since in the present research, we studied the relationship between the independent variable, i.e. personality traits as the criterion variables and dependent variable, i.e. self-efficiency as a predicting variable among managers of Bank Saderat branches in Golestan province, we used the correlation method.

2-1. Statistical population, sample and sampling method

Statistical population for this research consistedof all managers and deputies working in branches of Bank Saderatin Golestan Province in 2014. From Supervision Branch, it was revealed that 91 managers and deputies are working at branches of the province. Thus, statistical population for the research consisted of 91 managers and deputies of Bank Saderat branches in Golestan Province, 81 of whom were selected as sample. Sampling method was based on convenient sampling asall of managers and deputies of branches in Golestan Province were studies. List of all of managers and deputies was first prepared. Because there are not more than one or two branches in cities of Golestan province except Gorgan and some of the branches do not have deputies and only have managers, then all of them were studies. Questionnaires were sent for all of them (91 participants) and they were asked to answer questions carefully. Thus, in addition to data collection, some questionnaires which were not completely answered or those which were accidentally answered by interpretation were ignored and finally 81 questionnaires were analyzed. Thus, statistical sample for the present research included the total number of 81 managers and deputies working at Bank Saderat branches in Golestan Province in 2014. (It is worth mentioning that given Krejcie and Morgan tables, 73 people were determined as research sample.)

2-2. Revised NEO Personality Questionnaire

NET test prepared by McCrae & Costa in 1985 was replaced by Personality questionnaire NEOPI-R and it is used to evaluate five main factors of personality including extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience. 48 questions are assigned to each item. Response key is prepared according to Likert scale. Some items are scored directly while the others are scored reversely. Long-term validity for such questionnaires has been also assessed. A long-term study (6 years) on the scales of neuroticism, extraversion, and openness to experience has revealed validity coefficients of 0.68 to 0.83 for both personal reports and couple reports. Validity coefficient for two factors, agreeableness and conscientiousness for a two-year interval were 0.78 and 0.63, respectively (McCrae & Costa).

2-3. General Self-Efficiency Questionnaire

This scale was developed by Sherer & Maddux in 1982. It includes 23 questions; 12 questions measure general health, and the other 6 are related to self-efficiency experiences for social situations (AsgharNejad, KhodaPanahi, and Heidari, 2004). The participants specified their success rates by marking one of the choices. Questions are formulated to assess expectations for general self-efficiency such as social skills and professional competencies. 5 answers have been suggested for any self-efficiency question. That is why 5 points are given to any question. Points for questions No. 1, 3, 8, 9, 13, and 15 are increased from right to left and it is reverse for the other questions (from left to right). In 1995, Barti (cited in Vaghri, 1997) applied split-half method to study reliability of self-efficiency scale. Reliability coefficient was found to be 0.76 for equal length and 0.76 for unequal length by Spirman-Brown and it was determined 0.75 by Gutman. Cronbach's alpha or overall homology for the questions was obtained 0.79 which were accepted as satisfactory for the given research.

3. Results and Data Analysis

Table (1) Kolmogorov-Smirnov for determination of data distribution

Variables	Neuroticism	Extraversion	Openness	Agreeableness	conscientiousness	Self-efficiency
Kolmogorov-Smirnov	.861	.802	.852	.993	.636	.876
Sig.	.448	.540	.453	.270	.814	.219

Given significance level obtained for every variable, as the obtained statistics for every variable is not significant at the 0.05 error level, then H0, which assumes normal distribution, and H1, which assumes both abnormal distribution and difference, are both rejected. Thus, all variables have normal distribution and parametric statistics could be used.

Table (2) Matrix of correlation between independent and dependent variables

	Neuroticism	Extraversion	Openness	Agreeableness	conscientiousness	Self-efficiency
Neuroticism	Correlation					
	Sig. level	1	-.427	-.251	-.480	-.572
	df	.000	.025	.000	.000	.000
Extraversion	Correlation	-.427	1	.377	.352	.489
	Sig. level	.000	.001	.001	.001	.000
	df	78	0	78	78	78
Openness	Correlation	-.251	.377	1	.104	.215
	Sig. level	.025	.001	.001	.358	.056
	df	78	78	0	78	78
Agreeableness	Correlation	-.480	.352	.104	1	.396
	Sig. level	.000	.001	.358	.000	.000
	df	78	78	78	0	78
conscientiousness	Correlation	-.572	.489	.215	.396	1
	Sig. level	.000	.000	.056	.000	.000
	df	78	78	78	78	0
Self-efficiency	Correlation	-.630	.353	.316	.267	.692
	Sig. level	.000	.001	.004	.017	.000
	Sig. level	78	78	78	78	78

As it can be seen from table (2), correlation coefficient ($p < .01$, $n = 81$, $r = -0.630$) for relationship between neuroticism and self-efficiency of managers is negative (reverse) and significant. However, for the other micro-

scales, NEO personality questionnaire indicates that correlation coefficient ($p < 0.01$, $n = 8$, $r = 0.353$) is positive and significant between extraversion and self-efficiency. Also, correlation coefficient for openness to experience is ($r = 0.316$); for agreeableness, it is ($r = 0.267$); and for conscientiousness it is ($r = 0.692$). results show that there is a positive and significant relationship between extraversion, openness to experience, agreeableness, and conscientiousness and self-efficiency.

Table (3) summary of specifications of multi-variable regression models

Model	Correlation coefficient	Determination coefficient	Modified determination coefficient
1	0.699	0.488	0.482
2	0.755	0.571	0.560

As it can be seen from table (3), two models are obtained by regression analysis ,while the second model has the largest determination coefficient (0.571) and correlation coefficient (0.755). R^2 indicates that 0.57% of changes in self-efficiency could be explained by introducing dependent variables in the analysis and the rest of changes are related to the other factors that are unknown here.

Table (4) regression line and the rest (fitting of regression line)

Model		Sum of squares	Degree of Freedom	Mean squares	F	Sig
1	Regression	5048/127	1	504/127	75/444	.000 ^a
	Remaining	8286/095	79	66/193		
	Total	10334/122	80			
2	Regression	5897/453	2	2948/726	51/840	.000 ^b
	Remaining	4436/770	78	56/882		
	Total	10334/222	80			

Given table (4) and level of significance 0.000, H1 for accuracy of regression model is approved.

Table (5) multiple regression for identification of factors affect self-efficiency

Model	NonStandardized Regression coefficient		Standardized Regression coefficient	T	Sig
	B	SD	Beta		
(1) Intercept	22/595	4/498		5/023	.000
Consciousness	0/736	.0/58	0/699	8/868	.000
(2) Intercept	54/355	9/207		5/904	.000
Consciousness	0/520	0/96	0/494	5/415	.000
Neuroticism	-0/434	0/112	-0/352	-3/864	.000

In table (5), level of significance indicates that for both regression models, given values of t and Beta and B, the variables are two independent significant variables including: conscientiousness (directly) and neuroticism (reversely) are significant. Accordingly, in addition to determination of Beta from impact rate for any of the variables mentioned, conscientiousness and neuroticism are introduced into the model and comparison of Beta

values suggests that relative contribution of conscientiousness to self-efficiency is 0.494, which is more than that of neuroticism.

Table (6) variables removed from the model

Model		Beta	T	Sig
1	Neuroticism	-0/352 ^a	-3/864	0/000
	Extraversion	0/025 ^a	0/266	0/791
	Openness	0/178 ^a	2/202	0/031
	Agreeableness	-0/023 ^a	-0/260	0/795
2	Extraversion	-0/047 ^b	-0/530	0/597
	Openness	0/133 ^b	1/741	0/086
	Agreeableness	-0/132 ^b	-1/579	0/118

According to table (6), at second stage, level of significance for variables extraversion, openness to experience, and agreeableness was more than 0.5 and they were removed from the model.

4. Conclusion and Discussions

Results of analysis using regression model indicated that in present research, there was a significant relationship between conscientiousness and neuroticism and they could predict self-efficiency. Thus results showed that conscientiousness is a direct predictor for self-efficiency. In other words, the more conscientious the managers, the more their level of self-efficiency, whereas neuroticism has a reverse relationship with self-efficiency. In other words, the lower managers score on neuroticism decrease in five-factor questionnaire, the more it could predict high self-efficiency. Results of the present study are consistent with findings of Hartman et al. (2007); Aronson et al. (2007); Nauta (2004); Rottinghaus et al. (2002); Wandervolt (2000, cited by Khakpour et al. 2008); Silverthorn (2000); Brick, Mont, and Stros (1999, cited in Khakpour et al., 2008). Conscientiousness variable, which is one of the most important dimensions of the five-factor personality, has a strong relationship with sense of positive efficiency. Conscientiousness is known as "tendency to success". Generally, two main traits, "ability to control impulses" and "tendency to and use of planning in behaviors" are included in this index to achieve goals in question. Managers with high scores on this index have predetermined strong objectives and demands. They are thoughtful, trustworthy, and punctual. High scores on conscientiousness is along with career and educational success (McCrae, Costa, and Botsch, 1982; cited in Haghshenas, 2006). However, because personal efficiency has a direct relationship with the belief "I am a successful person, then I can control conditions" and given that Bandura thinks that previous experiences could lead to an increased or decreased self-efficiency (Feist & Feist, 2009), managers who gain higher scores on conscientiousness will be more successful and it invests the belief in them they are effective or to feel that they have the required capabilities and skills to do tasks successfully. Thus, sense of competency as one of dimensions for personal factors enabling managers in an organization (inner-psychological factors) could result in an increased self-efficiency (Kateb & Amin, 2008). On the other hand, individual beliefs regarding their abilities could affect the stress rate they experience in threatening and stressful situations. Those who believe that they can control potential pressures and threats do not allow for disturbing cognitions and as a result, they are not disturbed; however, disbelief in self-efficiency for controlling potential threats could lead to pressure and anxious excitation (Abbaspour, 2008). According to Bandura (2000), intense excitement decreases performance and when people experience intense fear and anxiety or high level stress, their efficiency expectation will be reduced. Bandura views physical and emotional states as one of the main sources of self-efficiency. Managers with low anxiety and high extraversion could highly control themselves; therefore their performance has a direct relationship with their personality. Furthermore, results indicated that concept of self-efficiency as an important part in sense of control in work conditions, while capability of doing the assigned responsibilities has a significant relationship with competence and self-confidence (Salimi et al. 2008). Thus, managers who have low emotional stability have also low self-efficiency. In this research, the effect of the other three personality traits including extraversion, agreeableness, and openness to experience to predict self-efficiency did not show significance. In other words, although there is a relationship between such variables and self-efficiency, personal traits including conscientiousness and neuroticism are valid predictors for self-efficiency. Also, the largest determination coefficient is related to the conscientiousness dimension.

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