THE EFFECT OF THE BIG FIVE PERSONALITY ON JOB PERFORMANCE

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Abstract. Various studies have explored the concept of personality schemes and the effect they have on staff motivation, satisfaction and performance. Attention has also been given to how these programs contribute to the overall realization of organizational goals. This research was conducted to determine the effect of the big five personality on job performance in Surabaya. Understanding the relations among personality dimensions and job performance is a fundamental concern of industrial-organizational psychologists. In this study, Big five personality consisting of extraversion, agreeableness, conscientiousness, neuroticism, openness to experience role as independent variables. A sample size of 100 respondents in a questionnaire method had been conducted. Researchers used the Statistical Package for the Social Science (SPSS) version 23.0 to run the reliability analysis, significance analysis, and correlation coefficient analysis to analyze and interpret the data. The findings of this research are (1) extraversion has a significant positive effect on job performance; (2) agreeableness has a significant positive effect on job performance; (3) Conscientiousness has a significant positive effect on job performance; (4) Neuroticism has a significant positive effect on job performance; (5) Openness to experience has a significant positive effect on job performance; and (6) extraversion, agreeableness, conscientiousness, neuroticism, openness to experience have a significant positive effect on job performance. In addition, extraversion is the independent variable that has a dominant influence on job performance in research.

Keywords: the big five personality, job performance

INTRODUCTION

Assessment of performance potential based on personality in the management process occurs in the selection process of employees. In this process, management must take into account the correct and credible admissions procedure to obtain qualified workforce. Improper selection process affects the performance and turnover intention. Errors in the selection resulted in the selection of employees who showed work behavior not in accordance with the vision and mission objectives of the company. At least through a selection process based on personality, the company will prevent potential turnover due to the gap that will occur between workers and companies.

Personality is an important part of an employee, because personality can reflect how a person behaves, generally in everyday and especially in the work. Based on the behavior will form a pattern of action. Personality affects thoughts, feelings, and behaviors. This indicates that a job or occupation should be charged to the person in accordance with his personality. (Cervone and Pervin, 2016). The importance of personality variables as a predictor and guide the suitability of work hence required an accurate personality model.

Personality theory that is widely studied and used is the Big Five Personality Model. This theory is used in this study because during the late 1980s and early 1990s to the present day, most personality psychologists have become interested in using the five-factor model. These five factors have been found among diverse cultures, and use many languages. The big five personality provides a framework of comprehensive theories that aim to measure and determine one's personality (Kalshoven et al., 2011).

Therefore, the authors conduct this research with the title of the effect of big five personality on job performance. Big five personality models act as independent variables.

REVIEW OF LITERATURE

The Big Five Personality

The big five personality has been used as a guide for researchers to continue the research of its predecessors. This theory mentions personality consisting of extraversion, conscientiousness, openness to experience, neuroticism, and agreeableness. In addition to tracking employee

personalities, the big five personality is needed by individuals who want to succeed in organizational business (Salter et al., 2010). Here is a brief description of these five variables.

1. Extraversion. The dimension of extraversion relates to the degree of comfort in a relationship. Extroverts are people who enjoy togetherness, are energetic and have positive emotions. They tend to be excited, while introverts tend to be quiet, shy and quiet. Extraversion is characterized by a tendency to be confident, dominant, active and show positive emotions. Extraversion is generally associated with a tendency to be optimistic. Extraversion generally has a sanguine temperament that can make it focus on something positive from its experience. Additionally extraversion tends to be associated with the way a person uses his rationale, and how to overcome his problems (Bakker et al., 2006).

2. Agreeableness. The dimension of agreeableness refers to the tendency to submit to others. People with a high degree of agreeableness, are cooperative, warm and trustful, while someone who scores low, is a cold, non-obedient and antagonistic person. Another characteristic is kindness, sympathetic, loving, trustworthy, likes candor, altruism, attachment and self-serving, submissive, gentle, modest and humble. Some researchers say that agreeableness and social support have a consistent relationship (Bakker et al., 2006).

3. Conscientiousness. A person with high conscientiousness is someone who is responsible, organized, dependable and persistent. The person who has a low score is a person who is easily uncertain, unorganized and unreliable. Individuals with this personality type are described as individuals who are organized, self-controlled, organized, ambitious, focused on attainment, and self-discipline. In general, people who score high in conscientiousness are hardworking, sensitive to conscience, timely, and persistent. In contrast, low-score personalities tend to be unorganized, lazy, careless, and aimless and easily give up if a project becomes difficult (Feist and Feist, 2006).

4. Neuroticism. High personalized neuroticism scores tend to be easily anxious, temperamental, self-pity, emotional, and vulnerable to stress-related disorders. Low-scaled individuals are usually calm, tempered, and complacent (Feist and Feist, 2006). Due to its negative nature, neurotic individuals experience more negative life events than other individuals. In relation to job satisfaction, high neuroticism can reduce the level of job satisfaction (Heller et al., 2002).

5. Openness to experience.
   Persons who consistently seek out different and diverse experiences will gain high scores in openness to experience (Feist and Feist, 2006). Openness to experience relates to scientific creativity and artistic (Heller et al., 2002).

Job Performance

Performance is a reflection of the organization's ability to achieve its goals (Miller and Broamiley, 1990). Organizational performance is a combination of resources, organizational capabilities that are used efficiently and effectively to achieve their goals (Collis and Montgomrey, 1995). Performance measurement is to compare the level of output of the organization after performing operations with its inputs. This is the output of activity occurring within the organization (Wit and Meyer, 1998). Job performance has become a major issue in today's business environment, so many organizations strive to assess and manage it (Armstrong and Baron, 1998). Job performance is a function of knowledge, skills, abilities, and motivation directed at behavior determined by roles, such as formal job responsibilities (Campbell, 1999). Individual performance is a multidimensional construct consisting of task dimensions and contextual dimensions (Borman and Motowidlo, 1997). Individual performance refers to the effectiveness of individual behaviors that contribute to organizational goals (McCloy et al., 1994; Motowidlo, 2003). Effective individual performance management is essential for the implementation of strategy and organization to achieve its strategic objectives. Therefore, after a thorough review of the various performance concepts, it can be said that performance in the simplest form is the desired result the organization wants to achieve efficiently and effectively.

Thus, it is important to develop an in-depth understanding of the various factors that affect human resource performance and to consider the importance of having outstanding employees to keep production competitive in a challenging business environment. In addition, addressing

these factors will help organizations solve performance problems and also improve total employee performance (Tata and Prasad, 2004).

Conceptual Framework and Hypothesis

This research intends to know the influence of big five personality on job performance. Here is a conceptual framework of the research.
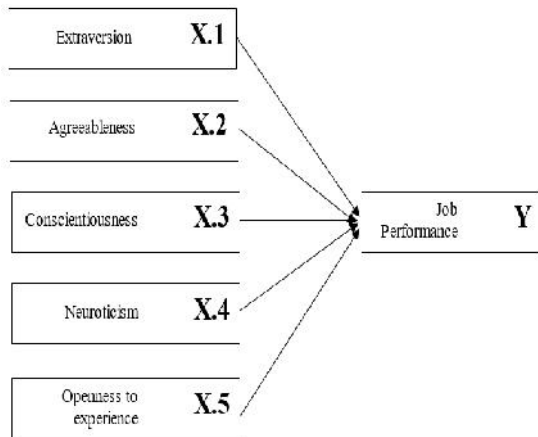

Fig. 1. Conceptual Framework

Here is the hypothesis in this study (1) extraversion has a significant effect on job performance; (2) agreeableness has a significant effect on job performance; (3) Conscientiousness has a significant effect on job performance; (4) Neuroticism has a significant effect on job performance; (5) Openness to experience has a significant effect on job performance; and (6) extraversion, agreeableness, conscientiousness, neuroticism, openness to experience have a significant effect on job performance.

REVIEW OF LITERATURE

Target population and Sampling

Population is a number of individuals who have one characteristic or the same nature which is then generalized from the results of research. The population in this research are employees in Surabaya City and who have worked for over a year. The sample is part of a population that is directly researchable. The sample in this research are employees of several companies in Surabaya which the number is determined as many as 100 respondents.

Data Processing

The sampling technique in this research is done by purposive sampling technique that is

sampling technique which is done based on subjective consideration to choose the member of population with certain characteristic and reject the member of population which do not have the characteristic. These characteristics are employees who have worked for more than one year.

Data collection methods in this study used primary data collected through questionnaires. The questionnaire was compiled using five Likerts scales. There are five independent variables of the big five personality: extraversion, agreeableness, conscientiousness, neuroticism, openness to experience. Job performance variables are the functions of knowledge, skills, abilities, and motivations directed at behaviors defined by roles, such as formal job responsibilities.

The results of data collection from 100 respondents will be continued through the process of statistical analysis using multiple linear regression analysis by SPSS program. Multiple linear regression analysis is used to determine the effect of independent variables on dependent variable. Before the regression equation is established, stages of the process such as validity and reliability, classical assumption, and t test and F test are performed.

Data Analysis, Discussions and Findings

The results of data collection obtained 100 questionnaires that deserve further processing. Test the validity of an instrument (in the questionnaire) by comparing corrected total correlation value of each variable indicator with a limit value of 0.3.

TABLE I. VALIDITY DAN RELIABILITY TEST

Variables	Validity Results		Reliability Results
X.1	X.1.1	.681	0.743
	X.1.2	.534	
	X.1.3	.638	
X.2	X.2.1	.411	0.714
	X.2.2	.459	
	X.2.3	.515	
X.3	X.3.1	.510	0.723
	X.3.2	.564	
	X.3.3	.559	
X.4	X.4.1	.482	0.722
	X.4.2	.401	
	X.4.3	.675	
X.5	X.5.1	.430	0.787
	X.5.2	.358	
	X.5.3	.720	
Y	Y.1	.727	0.925
	Y.2	.749	
	Y.3	.819	
	Y.4	.840	

Variables	Validity Results		Reliability Results
	Y.5	.794	

From table 1 it is known that each item of statement is above the limit of 0.3. Thus each question item on each research variable in the questionnaire declared valid.

After that proceed with reliability test. To know the reliability of a question by comparing the value of alpha cronbach with a limit of 0.6. When larger can be said reliable question. The results in Table 1 show the indicator variable is reliable.

The next step is to test the classical assumption to determine whether the regression model made can be used as a good predictor. The classical assumption test that will be performed is normality test, autocorrelation test, multicolinearity test, and heteroscedasticity test.

TABLE II.   KOLMOGOROV-SMIRNOV NORMALITY TEST

		Unstandardized Residual
N		100
Normal Parameters[a,b]	Mean	.1958515
	Std. Deviation	2.23838002
Most Extreme Differences	Absolute	.053
	Positive	.053
	Negative	-.032
Test Statistic		.053
Asymp. Sig. (2-tailed)		.200[c,d]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.

The normality test shows that the significance value of 0.2 is greater than 0.05 which means the data is normally distributed as shown in Table 2. Test autocorrelation by comparing the values of dl and du. For N = 100 then the value dl is 1.7176 and the value of du is 1.8199. Durbin Watson's value of 1,826. Thus it can be interpreted there is no autocorrelation. In Table 3, heteroscedasticity test was performed by Glejser test. In the Coefficients table each variable has a Sig value. 1 greater than 0.05 so it was decided there was no indication of heteroscedasticity.

TABLE III.   HETEROSCEDASTICITY GLEJSER TEST

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.843	.858		3.313	.001
	X.1	.068	.099	.099	.689	.493
	X.2	.023	.065	.042	.349	.728
	X.3	-.080	.072	-.133	-1.111	.269
	X.4	-.044	.085	-.071	-.519	.605
	X.5	-.079	.074	-.133	-1.067	.289

a. Dependent Variable: ABS_RES

The multicollinearity test uses comparison with Pearson coefficient. In table 4, the correlation shows the results of intercorrelation analysis between independent variables marked by the correlation coefficient of Pearson. In this case the SPSS output can be seen in the crossing of independent variables. All values less than 0.8 then multicolinearity symptoms are undetectable.

TABLE IV.   PEARSON MULTICOLINEARIT TEST

		Y	X.1	X.2	X.3	X.4	X.5
Pearson Correlation	Y	1.000	.681	.538	.640	.557	.541
	X.1	.681	1.000	.525	.417	.590	.472
	X.2	.538	.525	1.000	.294	.270	.284
	X.3	.640	.417	.294	1.000	.474	.426
	X.4	.557	.590	.270	.474	1.000	.529
	X.5	.541	.472	.284	.426	.529	1.000

After all assumptions are met, the next step is multiple linear regression analysis to determine the regression equation of the SPSS output results. The regression equation obtained as in Table 5 is
Y = 2.261 + 0.604X.1 + 0.320X.2 + 0.592X.3 + 0.283X.4 + 0.246X.5

TABLE V.   COEFFICIENTS

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.261	1.421		2.591	.009
	X.1	.604	.164	.313	3.693	.000
	X.2	.320	.107	.210	2.979	.004
	X.3	.592	.119	.351	4.981	.000
	X.4	.283	.111	.171	2.081	.031
	X.5	.246	.123	.147	1.999	.049

a. Dependent Variable: Y

From the results of multiple linear regression equation obtained a constant value of 2.261. This means that without being influenced by the value of the independent variable, the value of the dependent variable is 2.261. From Table 5 we can know the value of each significance which has a value below 0.05 which means that all independent variables have a significant partial

influence on the dependent variable. It shows that the first to the fifth hypothesis is proved. As for the sixth hypothesis which states that the personality has a significant effect simultaneously on the employee's performance is also proven true indicated significant value below 0.05 as shown in Table 6 below.

TABLE VI.   ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	984.984	5	196.997	38.108	.000[b]
	Residual	485.926	94	5.169		
	Total	1470.910	99			

a. Dependent Variable: Y
b. Predictors: (Constant), X.5, X.2, X.4, X.3, X.1

Hasil Output SPSS 23

Thus all the research hypotheses proved true. Contribution of variant of independent variable that is personality variable equal to 67% to form dependent variable that is employee performance. While the remaining 33% is determined by other factors such as motivation, demography, environment, discipline and others. It is shown by the value of coefficient of determination (Rsquare) is the value to know the amount of change in the dependent variable caused by the independent variable as shown in Table 7.

TABLE VII.   MODEL SUMMARY

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.818[a]	.670	.652	2.274

a. Predictors: (Constant), X.5, X.2, X.4, X.3, X.1
b. Dependent Variable: Y

Output SPSS 23

The results showed that each personality variable has a significant effect partially and simultaneously on job performance. These findings support findings from Murphy's (1989), Salgado (1997, 2002), Vinchur et al. (1998), Stewart (1999), Hurtz and Donovan (2000), Barrick et al. (2001).

Therefore, this research provides good determinant factors for the organization to concern about employees personality, which are extroversion, neuroticism, conscientiousness, agreeableness and openness to experience, in order to increase level of employee job performance since personality found to be associated with organizational performance.

Extraversion is an active employee who will have a high level of care (altruism) towards other employees and organizations. This will reduce the barriers that occur when working in teams because they are easy to socialize. This variable is the dominant variable affecting job performance in this research. Employees with individuals who are not dominant in neuroticism are less likely to experience job interruptions because they can manage their emotions and the stress they experience. Employees with people who have personal conscientiousness have high responsibilities, it will contribute to their performance as they work in earnest. Openness to experience is creative, curious and empathetic employees will volunteer to help colleagues where it will improve the performance of the organization together because of mutual support among employees. Employees with a high degree of agreeableness will facilitate the leadership to regulate its work behavior because it is coorperative and reliable. As individuals, we have personality traits that distinguish us from each other. These properties will make us more or less fit to work with each other. Personality can affect the way a person does something. Therefore, it is important to understand the employee's personality in the organization. Therefore, it is important to understand how important different factors are in contributing to one's performance when managing relationships with members of the organization.

Employees' job performance will affect the outcomes of the organization. Job performance also ensures the organization is functioning well and it consists of the knowledge and skills that able to guide the employees to perform variety of activities. Neubert and Taggar (2004) argued that the relation between job performance and the Big Five personality dimensions are more a consequence of social aspects of the workplace than ability. It means that the organization should increase the positive impressions of the employees towards them. The behavioral patterns of a good leader such as the leader gives full cooperation, support, and speaks favorably could exceed the employee job performance.

In the past decade, researchers have investigated the relationship of role of autonomy with the relationships between the ratings of job performance and Big Five Personality dimensions. The degree of autonomy a person has when conducting their job can be influential to their work outcome. According to Gellatly and Irving (2001), a person who has freedom, independence, or personal discretion to make decision, it makes sense to expect an emphasis on prescribed role related activities to the possible exclusion of non-role related activities. Hence, roles that provide

leaders with larger autonomy allow a wider range of extrarole and in-role behaviors. Thus managers need to understand the personality traits and characteristics of employees. Employees' job performance is one of the crucial elements that provide both goals and methods to achieve organizational mission. In view of this, effective leadership plays an important role on how the leaders response to employee in the working environment. Leaders who have an understanding of how individuals' personalities differ can use this understanding to improve their leadership effectiveness and lead to improve employees' job performance. The findings of this study revealed that leader's personality traits are closely related with employees' job performance (Ghani et al., 2016). Knowledge of the big five personality encourages a more precise understanding of the multiplicity of personality diversity among employees. The existing management within a good organization uses time to know the unique combination of personality, abilities and potential of each employee and further builds a fit between productive work and maximum performance.

To sum up, it is worth noting that this study enhances our thoughtful of personality differences to be well managed and the obligation of leaders to make employees have a sense of ownership and competence in the workplace so as to improve their performance.

CONCLUSION

The findings of this research are (1) extraversion has a significant positive effect on job performance; (2) agreeableness has a significant positive effect on job performance; (3) Conscientiousness has a significant positive effect on job performance; (4) Neuroticism has a significant positive effect on job performance; (5) Openness to experience has a significant positive effect on job performance; and (6) extraversion, agreeableness, conscientiousness, neuroticism, openness to experience have a significant positive effect on job performance. In addition, extraversion is the independent variable that has a dominant influence on job performance in research. Finally, future studies should enlarge the dimensions of employee personality traits at both the public and private sectors as both sectors have different cultures and work environments.

REFERENCES

Armstrong, M., & A. Baron. 1998. Performance Management – The New Realities. London: IPD

Ashton, M. C. 1998. Personality and Job Performance: The Importance of Narrow Traits, Journal of Organizational Behavior , 19, pp.289-303

Bakker, A., K.I. Van der Zee,. Lewig & M.F. Dollard. 2006. The Relationship between the Big Five Personality Factors and Burnout: A Study among Volunteer Counselors. The Journal of Social Psychology, 146(1), pp.31-50

Barrick, M. R., Mount, M. K., & Judge, T. A. 2001. Personality and Performance at the Beginning of the New Millennium: What do We Know and Where do We Go Next? International Journal of Selection and Assessment, 9, pp.9–30.

Borman, W. C., & S.J. Motowidlo, S. J. 1997. Task Performance and Contextual Performance: The meaning for Personnel Selection Research. Human Performance, 10, pp.99–109

Campbell, D. T., & D. A. Kenny. 1999. A Primer on Regression Artifacts. New York: Guilford Press.

Cervone, D., & Pervin, L. A. 2016. Personality: Theory and Research (13th ed.). Hoboken, NJ: John Wiley & Sons.

Collis, David and Cynthia A. Montgomery. 1995. Competing on Resources: Strategy in the 1990s, Harvard Business Review, 73 (July-August), pp.118-128.

Feist, J., & G.J. Feist. 2006. Theories of Personality. New York: Mc Graw Hill.

Ghani, Nadiah Maisarah Abdul, Nor Sara Nadia Muhamad Yunus, & Norliza SaifulBahry. 2016. Leader's Personality Traits and Employees Job Performance in Public Sector, Putrajaya. Procedia Economics and Finance, 37, pp.46-51

Gellatly, I.R. & P. G. Irving. 2001. Personality, Autonomy, and Contextual Performance of Managers.Human Resource, 14(3), pp.231-245

Hurtz, G. M., & J.J. Donovan. 2000. Personality and Job Performance: The Big Five Revisited. Journal of Applied Psychology, 85, pp.869–879.

Heller, D., M.K. Mount & T.A. Judge. 2002. FiveFactor Model of Personality and Job Satisfaction: A Meta-Analysis. Journal of Applied Psychology, pp.530–541.

Kalshoven, Karianne., Deanne N. Den Hartog, & Annebel H. B. De Hoogh. 2011. Ethical Leader Behavior and Big Five Factors of Personality.Journal of Business Ethics,100, pp.349-366

McCloy, R. A., J.P. Campbell & R. Cudeck. 1994. A Confirmatory Test of a Model of Performance Determinants. Journal of Applied Psychology, 79, pp.493–505.

Miller, K., & P. Bromiley. 1990. Strategic Risk and Corporate Performance: An Analysis of Alternative Risk Measure. Academy of Management Journal, 33(4), pp.756-779.

Motowidlo, S. J. 2003. Job performance. In W. C. Borman, D. R. Ilgen, & R. J. Klimoski (Eds.), Handbook of psychology: Vol.12. Industrial and organizational psychology (pp. 39–53). Hoboken, NJ: Wiley.

Murphy, K. R. 1989. Is the Relationship between Cognitive Ability and Job Performance Stable Over Time? Human Performance, 2, pp.183–200

Neubert, M. & S. Taggar. 2004. The Impact of Poor Performance on Team Outcomes: An Empirical Examination of Attribution Theory, Personal Psychology, 57, pp.935-968.

Salgado, J. F. 1997. The Five Factor Model of Personality and Job Performance in the European Community. Journal of Applied Psychology, 82, pp.30–43.

Salgado, J. F. 2002. The Big Five Personality Dimensions and Counterproductive Behaviors. International Journal of Selection and Assessment, 10, pp.117–125.

Salter, Charles., Mark Green, Phyllis Duncan, Anne Berre & Charles Torti. 2010. Virtual Communication, Transformational Leadership, And Implicit Leadership, Journal of Leadership Studies,4(2), pp:6-17

Stewart, G. L. 1999. Trait Bandwidth and Stages of Job Performance: Assessing Differential Effects for Conscientiousness and its Subtraits. Journal of Applied Psychology, 84, pp.959–968.

Tata, J. & Prasad, S. 2004. Team Selfmanagement, Organizational Structure, and Judgment of Team Effectiveness, Journal of Managerial Issues, vol. 16, no. 2, pp. 248-265.

Vinchur, A. J., J.S. Schippmann, F.S. Switzer, & P.L. Roth. 1998. A Meta-Analytic Review of Predictors of Job Performance for Salespeople. Journal of Applied Psychology, 83, pp.586–597.

Wit, B., & R. Meyer. 1998. Strategy: Process, Content, Context: An international perspective. Thompson Business Press.