

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/342926095>

RELATIONSHIP AMONG BIG FIVE PERSONALITY TRAITS, JOB PERFORMANCE & JOB SATISFACTION: A CASE OF SCHOOL TEACHERS IN SRI LANKA

Article · January 2019

CITATIONS

8

READS

4,525

1 author:



[Sagara Chandrasekara](#)
University of Colombo

15 PUBLICATIONS 78 CITATIONS

SEE PROFILE

RELATIONSHIP AMONG BIG FIVE PERSONALITY TRAITS, JOB PERFORMANCE & JOB SATISFACTION: A CASE OF SCHOOL TEACHERS IN SRI LANKA

Dr. WS Chandrasekara (Ph.D.)

Senior Lecturer, Institute of Human Resource Advancement, University of Colombo, Sri Lanka

Abstract

This study aims to examine the relationships among Personality traits, Job Satisfaction and Job performance. A sample study was conducted with 150 government school teachers using a closed ended questionnaire based on Personality Traits developed by Norman and McCrae & Costa, Job Performance developed by Borman & Motowidlo's, Task Performance developed by McAllister's, Contextual Performance developed by Organ and Farh's et al., and Job Satisfaction developed by Porter & Lawler, and Organ. Face to face interview method was performed and data was analyzed using SPSS 20.0. Job satisfaction and job performance show a reciprocal significant relationship. All the personality traits significantly influence on job performance whereas the Agreeableness indicates the greatest effect. In terms of job satisfaction, Agreeableness is most influential factor, followed by Extraversion. The other three personality factors do not have effect on job satisfaction. The contribution of this study is to provide empirical support for the reciprocal effect of job performance and job satisfaction. These findings confirm the previous studies' causal relationship between these two variables.

Keywords: *Big five personality traits, Job satisfaction, Job performance, Sri Lanka*

1 Introduction

Job satisfaction of teacher's is very significant, as they need to deliver a quality work in education for future generations. The quality of education is largely influenced by job satisfaction of teachers. Many

studies have been done on job performance and job satisfaction in the long history of this area. Roethlisberger and Dickson (1939) have done a study on job performance and job satisfaction in 1939. Locke (1976) has defined Job Satisfaction as an enjoyable or supportive emotional state resulting from the evaluation of individual's job experiences whereas Fritzsche & Parrish (2005) have defined it as the degree to which individuals enjoy their jobs. Job satisfaction can be described using equity theory. Equity theory discusses balancing the inputs and outputs of an employee (Adams & Freedman, 1976). According to the theory, the employee obtains intrinsic and extrinsic rewards in different forms such as, pay, bonuses, security, and pleasure. Persons become discouraged when inputs are not equally rewarded as compared to other equal jobs (Adams & Freedman, 1976). So, simply, job satisfaction is associated with how our personal anticipations of work or job are in correspondence with the actual outcomes. Job performance can be defined as "all the behaviors employees engaged at work" (Jex 2002). However, nowadays it is usually agreed that job performance consists of complex series of interrelating variables relating to job, the employee and the setting (Milkovich et al 1991).

1.1 The Big Five Personality Traits, Job Performance and Job Satisfaction

Many studies have been done on Personality Traits in the long history. The factors developed by Norman (1963) have been used widely in the literature. These factors are extraversion, emotional stability, agreeableness, conscientiousness and culture, later known as "Norman's Big Five" or "Big Five" (Barrick and Mount, 1991). Different researchers have marked the last factor differently, Norman (1963) as culture, Borgatta (1964) as intellect and McCrae and Costa (1985) as openness to experience. In this study openness to experience is used as the fifth factor. As this classification can properly identify the personality traits and it has been widely used in the research work, this study has chosen to explore the impact of Personality Traits on job performance and job satisfaction.

This study investigates the effects of personality traits by using five-factor model, on job performance and job satisfaction among School Teachers in Sri Lanka. Personality traits have specified a complete

description of an individual's personality, known as the five-factor model (McCrae & Costa, 1985). The five-factor model is a categorization of personality traits in five scopes, comprising with Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience (McCrae & John, 1992; McCrae & Costa, 1985; Deary & Whiteman, 2003). The basic measurements of the five factors have been shown to describe individual variances in behavior (Cribbin, 1972; Park & Deitz, 2006; McCrae & John, 1992). Therefore, five-factor model is suitable for capturing a broad picture of an individual's personality.

1.2 Hypotheses and Conceptual Framework

1.2.1 Conscientiousness

Conscientiousness comprises with achievement emphasis, neatness, efficiency, responsibility, thoroughness, and hardworking (McCrae & John, 1992). Lounsbury et al. (2012) defined conscientiousness as a personality trait linked with reliability, consistency, honesty and inclination obey with company rules, norms and values. Individuals who possess conscientiousness have careful planning, effective organizing and time management which may lead for more achievement in carrier life. Hence, Conscientiousness is positively related to job performance & job satisfaction (Hypothesis 1).

1.2.2 Neuroticism

Neuroticism generally includes characteristics such as worry, uncertainty, defensiveness, pressure, and anxiety (Judge & Higgins, 1999; Griffin & Hesketh, 2003; Lounsbury, Foster, Carmody, Kim, Gibson, & Dorost, 2012). According to literature, such characters may lead for more job stress, which decreases the level job satisfaction (Mercer, 1997; Stoeva, Chiu, & Greenhaus, 2002). Neurotics may also have time pressure to accomplish their work as they spend lot of time for worrying or undesirable affects. They are less efficient and effective time users. Therefore, Neuroticism is negatively related to job performance & job satisfaction (Hypothesis 2).

1.2.3 Extraversion

Extraversion is a characteristic that an individual tend to be sociable, active, outgoing, assertive, energetic, extroverted, warm hearted and talkative (Lounsbury, Foster, Carmody, Kim, Gibson, & Dorost, 2012; McCrae & John, 1992). They are more energetic, self-confident, outward-bound and dominant in public circumstances. Because of higher level of activeness and energy, extraverts may complete more duties in a given extent of time and thereby may also experience less exhaustion than others (Rusting & Larsen, 1998). Furthermore, as they focus more on positive aspects of social situations, they sense social situations as less stressful. Due to the optimistic thinking and energy of extraverts, they may have less tension and less time pressures. Hence, Extraversion is positively related to job performance & job satisfaction (Hypothesis 3).

1.2.4 Agreeableness

Agreeableness generally includes characteristics such as teamwork, friendliness, forgivingness, kindness, sympathy, and trustworthiness (McCrae & John, 1992). Agreeableness characteristics may reduce workplace conflict and stress. Individuals who hold agreeableness are more tending to be success at work and they get better emotional support from co-workers (Zellars & Perrewe, 2001). According to Yang & Hwang (2014), individuals with higher agreeableness cope with groups faster and develop interactions effortlessly. Greater support in the workplace may consequently reduce job stress and increase job performance & job satisfaction. Thus, it is predicted that Agreeableness is positively related to job performance & job satisfaction (Hypothesis 4).

1.2.5 Openness to experience

Openness to experience generally includes characteristics such as intelligence, unconventionality, creativity, curiosity, creativity, and originality (McCrae & John, 1992; Rajiv , Dant, Scott, Weaven, Brent, & Baker, 2013). Individuals who openness to experience are more tend to accept changers, and creative in finding solutions for problems. They are also more helpful to others. Hence, it is predicted that Openness

to experience is positively related to job performance & job satisfaction (Hypothesis 5).

1.2.6 The Job Satisfaction

The job satisfaction is a very important subject area of industrial psychology (Tang & Talpade, 1999). Job satisfaction has been defined in many different ways in literature. Some consider it as a happiness relating to his or her job. The “satisfaction” is defined as an expression of the pleasure and inner peace experienced by individuals themselves in general (Mercer, 1997). Workers have job expectations. Job satisfaction may be defined as the satisfaction of these job expectations (Tang & Talpade, 1999). On the other hand, Job satisfaction is the inner agreement of the workers related to their jobs (Park & Deitz, 2006). In recent years, the importance of job satisfaction is increased. Satisfaction is achievable if job expectations and the characters of the job itself are consisted with each other (Cribbin, 1972). Buitendach and Witte (2005) define job satisfaction as an individual’s opinions and assessments of a job, and this opinion is influenced by their situations, including needs, values and expectations. Individuals hence evaluate their jobs on the basis of aspects, which they contemplate as important to them. The level of involvement in decision-making and independency are influential factors in their levels of job satisfaction (Lounsbury, Foster, Carmody, Kim, Gibson, & Dorost, 2012).

1.2.7 Job performance

Job performance could be divided into two main parts, task performance and contextual performance (Motowidlo, Borman, & Schmit, 1997). Task performance deals with the actions that provide to complete a job to make anticipated and particular outcome. Contextual performance explains the success of the workers in doing their job, which reinforced by their personal conduct, social and physiological atmosphere of the workplace. Task performance comprises with job-specific undertakings including core job tasks. According to Motowidlo et al. (1997), job performance has a stronger relationship with cognitive ability. A study done by Lent & Brown (2006) has shown that labeling a task performance as positive is assumed to influence workers’ attitude toward their work. The main parts of task performance

comprise with sustaining situation awareness, operating facilities, performing control actions and communication tasks (Griffin & Hesketh, 2003). According to Van et al. (2000) when individuals use technical skills and knowledge to complete a task, they are engaging in task performance. Motowidlo et al. (1997), point out that researchers have often disregarded the aspects of contextual performance, which is very important to understand the job performance in addition to task performance. Contextual performance comprises with non-job-specific performances such as collaborating with co-workers and presenting commitment (Motowidlo, Borman, & Schmit, 1997)

1.2.8 Conceptual Framework

Lent and Brown (2006) recommend a social-cognitive model of job satisfaction, grounded on the social cognitive career theory. The social cognitive career theory provides an outline for understanding the influence of different personalities on job performance & job satisfaction. In this study, big five personality traits are functioned as independent variable (IV). It comprises with five major personality traits: Extraversion, Conscientiousness, Agreeableness, Emotional Stability and Openness to Experience. Job satisfaction and job performance are considered as the dependent variable (DV).

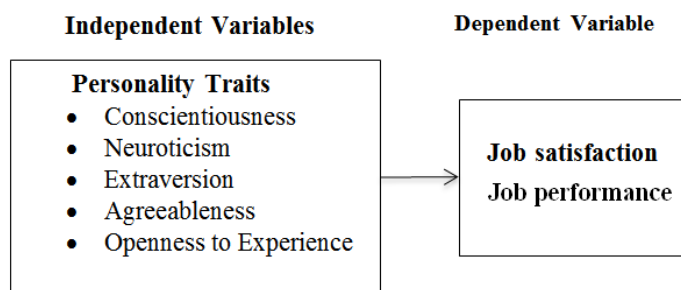


Fig. 1. Conceptual Framework

Based on the literature and the above framework, following hypothesis are postured;

H1: Conscientiousness is positively effect on job performance & job satisfaction

H2: Neuroticism is negatively effect on job performance & job satisfaction

H3: Extraversion is positively effect on job performance & job satisfaction

H4: Agreeableness is positively effect on job performance & job satisfaction

H5: Openness to experience is positively effect on job performance & job satisfaction

2 Methodology

In this study, correlation between big five personality traits and job performance & job satisfaction will be investigated. Independent variables and dependent variable are given in the conceptual model.

2.1 Participants

Study sample comprised of teachers working in three public secondary schools in Western Province, Sri Lanka who agreed to join the research study. Background factors such as gender, marital status, age, and years of service were considered when select the study sample. A total of 150 teachers, 50 teachers from each school were selected. Gender of teachers; 60% of female and 40% male teachers, and 80% of married; 20% of single have been included. Of the teachers, 32% were under the age of 30; 68% were 31 years and above. Yeas of services of teachers; 1-10; 20%, 11-20; 63.3%, 21-30;10%, 31 and above; 6.7%.

2.2 Measures

2.2.1 Personality Traits

Personality was measured using Big Five Personality factors developed by Norman (1963) and McCrae & Costa, (1985) with 20 items in all. A sample item is “I see other people’s point of view”. The scale deals with general assessment about the Big Five personality traits. Participants were asked to select their level of agreement for each item on a five-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The higher score, more tending towards a certain personality trait.

2.2.2 Job Performance

Job performance was measured based on Borman and Motowidlo’s (1993) scale and incorporated both task performance and contextual performance. The task performance was measured based on McAllister’s (1995) scale, and incorporated aspect of attendance and coordination (Fisher, 1980). A model item is “I

outperform my colleagues”. Contextual performance was measured using the eight items scale developed by Organ’s (1988b) and Farh’s et al. (1997). A model item is “I actively help my colleagues with their work”. The higher score is the better the job performance.

2.2.3 Job Satisfaction

Job satisfaction was measured using the scale developed by Porter & Lawler (1968), incorporating the concept of fairness suggested by Organ (1988a). Satisfaction is divided into two components as intrinsic satisfaction and extrinsic satisfaction with three points for each. Example item is: “My job is challenging.” The higher average score is the higher level of job satisfaction.

3 Results

3.1 Reliability and validity analysis

Confirmatory Factor analysis (CFA) was conducted to measure the construct validity of each variable used in the study. It helps to identify irrelevant items and to design the measurement model. According to Karriker and Williams (2009), the value of factor loading should be less than 0.4. The factor loading values of all variables namely Personality Traits (PT), Job Performance (JP), and Job Satisfaction (JS) are well above average level. According to Hair et al., (2003), values of GFI, AGFI, CFI, NFI and TLI should be above 0.90 or closer to 1, it indicates the better fit of the model. Hence, as given in Table 01 all the values of above indexes are above the average level and closer to 1.00. Therefore, data is ideal for further analysis. The values of model fit in this study are close to 1.00 as given in the Table 01, which means a good model fit. The value of Root Mean Square Error of Approximation (RMSEA) should be less than .05, and Chi-square (χ^2/df) should be less than 4.5 for a better fit of the model (Browne and Cudeck, 1993). As given in Table 01, both RMSEA and Chi-square values are above the average level, which indicates the better fit of the model. All the measurement values are above the average level, which means a good model fit of CFA in this study.

Table 01: Confirmatory Factor Analysis

Variables	Chi-square	RMSEA	GFI	AGFI	CFI	TLI	NFI	RMR	AVE	CR
PT	3.760	0.038	0.891	0.953	0.886	0.811	0.827	.016	.53	.82
JP	3.986	0.040	0.933	0.931	0.922	0.837	0.814	.031	.54	.83
JS	4.130	0.043	0.861	0.916	0.841	0.950	0.912	.024	.53	.80

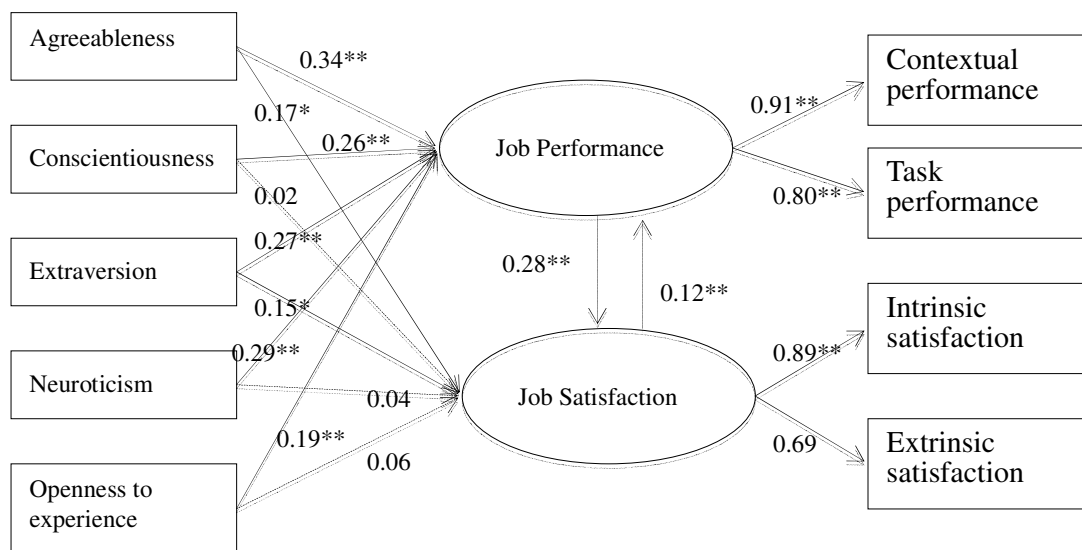
Notes: PT= Personality Traits, JP= Job Performance, JS= Job Satisfaction

Descriptive indicators and correlations of the study variables are give in Table 02.

Table 02. Descriptive Analysis and Correlations

Construct	Mean	SD	1	2	3	4	5	6	7	8
1 Contextual performance	3.94	0.47								
2 Task performance	3.81	0.48	0.53							
3 Intrinsic satisfaction	3.80	0.73	0.49	0.38						
4 Extrinsic satisfaction	3.44	0.68	0.40	0.30	0.50					
5 Agreeableness	4.50	0.65	0.51	0.38	0.42	0.28				
6 Conscientiousness	3.72	0.50	0.54	0.54	0.35	0.23	0.43			
7 Extraversion	4.01	0.52	0.51	0.52	0.35	0.25	0.41	0.51		
8 Neuroticism	3.03	0.65	0.60	0.53	0.36	0.24	0.40	0.47	0.52	
9 Openness to experience	3.05	0.59	0.51	0.59	0.34	0.26	0.33	0.51	0.52	0.50

Note: All correlations significant at $p < 0.01$



Notes: **p<0.01, *p<0.05

Figure 1: The effect of personality traits on job performance and job satisfaction

3.2 Discussion and Recommendations

Consistent with the previous studies, this study has found that the effects of all five traits on job performance are significant, with Agreeableness being the most influential factor whereas Neuroticism being the least influential factor. In terms of job satisfaction, findings of this study show that Agreeableness is the most influential personality trait on job satisfaction whereas Extraversion is the next most influential personality trait. Other three variables do not have significant influence on job satisfaction. Those who hold agreeableness are more team workers and tend to success at work and life, therefore, they get better emotional support from colleagues. This finding consists with Zellars & Perrewe (2001). They are good at socializing and have more friends than others. Furthermore, they are committed to their job and ready to devote more time for social collaboration, which can insure a greater chance of job promotion and thereby job satisfaction. These findings also consist with previous studies (Judge & Higgins, 1999; Van Den Berg & Feij, 2003). Findings of this study reveal the importance of agreeable characters, such as being cooperative, attentive and humble to others, as well as extraverted characters, such as being intimate, active and enthusiastic. These two traits, agreeableness and extraversion have

positive influence on job performance and job satisfaction.

Findings of this research indicate that there is a significant reciprocal influence between job performance and job satisfaction. This finding consists with pervious study done by Judge, Thoresen, Bono, & Patton (2001). It means the higher level of job satisfaction leads for better job performance and reciprocally, better job performance leads for higher job satisfaction. Because of the teachers who undertake their work better are more likely to be appreciated by students and their parents as well as the principal and higher authorities. On the other hand, teachers who are happier with teaching feel more enthusiastic about their work and hence they perform their job well. According to findings of this study, Job performance effect on job satisfaction. According to Vroom's (1964) Expectancy Theory, Job performance leads to rewards and, in order, those rewards are the reason for job satisfaction. On the other hand, Job satisfaction effect on job performance. Brayfield and Crockett (1955) done the first research in this regard and found a weak correlation between job satisfaction and job performance. Petty et al (1984) conducted another research and found a slightly higher relationship. The mutual causal relationship between job performance and job satisfaction could be described by the theory of expectancy. The expectancy theory explains that individuals are motivated to perform well to receive the rewards; thereby they will achieve higher level of satisfaction (Vroom , 1964; Lounsbury, Foster, Carmody, Kim, Gibson, & Dorost, 2012).

The main contribution of this study is to provide empirical support for the reciprocal effect of job performance and job satisfaction. These findings confirm the previous studies' causal relationship between these two variables. Only few studies have examined the mutual relationship between these two variables and discovered either partial support for the mutual relationship or support for a one-sided relationship. However, including a third variable, personality to this study, it was found reciprocal relationship between job performance and job satisfaction. As predicated, it was found that job performance has a positive effect on job satisfaction and job satisfaction has a positive effect on job performance. All the variables of Big Five personality traits have revealed a significant effect on job

performance. However, only agreeableness and extraversion indicated a significant influence on job satisfaction whereas the other three variables did not show a significant effect.

Works Cited

- Deary, I., & Whiteman, M. (2003). *Personality Traits*. Cambridge: Cambridge University Press.
- Adams, J., & Freedman, S. (1976). Equity theory revisited: comments and annotated bibliography. *UNIVERSITY OF NORTH CAROLINA CHAPEL HILL. NORTH CAROLINA* , 43–90.
- Barrick, M., & Mount, M. (1991). The Big Five personality dimensions and job performance: a meta-analysis. *Personnel Psychology* , 44 (1), 1-26 .
- Barrick, M., & Mount, M. (1991). The Big Five personality dimensions and job performance: a meta-analysis . *Personnel Psychology* , 44 (1), 1-26 .
- Borgatta , E. (1964). The structure of personality characteristics . *Behavioral Sciences* , 9 (1), 8-17 .
- Borman, W., & Motowidlo, S. (1993). Expanding the criterion domain to include elements of contextual performance. In N. Schmitt, & W. Borman , *Personnel selection in organizations* (pp. 71-98). San Francisco : Jossey-Bass Publishers .
- Brayfield, A., & Crockett, W. (1955). Employee Attitudes and Employee Performance. *Psychological Bulletin* , 52 (5), 396-424.
- Browne, M., & Cudeck, R. (1993). Alternative ways of assessing model fit; Testing Structural Equation Models. *154*, 136–162.
- Buitendach, J., & de Witte, H. (2005). Job insecurity, extrinsic and intrinsic job Satisfaction and affective organisational commitment of maintenance Workers in a parastatal. *South African of Business Management* , 26 (2), 27-37.
- Cribbin, J. (1972). *Effective Managerial Leadership*. New York : American Management Association .
- Farh, J., Earley, P., & Lin, S. (1997). Impetus for action: a culture analysis of justice and organizational citizenship behavior in Chinese society. *Administrative Science Quarterly* , 42 (3), 421-444 .
- Fisher, C. (1980). On the dubious wisdom of expecting job satisfaction to correlate with performance. *Academy of Management Review* , 5 (4), 607-612.
- Fritzsche, B., & Parrish, T. (2005). Theories and research on job satisfaction. In S. Brown, & R. Lent , *Career development and counseling: Putting theory and research to work* (pp. 180–202). Hoboken: NJ: Wiley .
- Griffin, B., & Hesketh, B. (2003). Adaptable behaviours for successful work and career adjustment. *Australian Journal of Psychology* , 55, 65- 73.
- Hair, J., Anderson, R., Tatham , R., & Black, W. (2003). *Multivariate data analysis (5th ed.)*. India: Pearson Education.
- Jex , S. (2002). *Organizational Psychology: A Scientist-Practitioner Approach* . New York : John Wiley & Sons.
- Judge, T., & Higgins, C. (1999). The Big Five personality traits, general mental ability, and career success across the lifespan. *Personal Psychology* , 52, 621-653.
- Judge, T., Locke, E., Durham, C., & Kluge. (1998). Dispositional effects on job and life satisfaction: The role of core evaluations. *Journal of Applied Psychology* , 83 (1), 17–34.
- Judge, T., Thoresen, C., Bono, J., & Patton, G. (2001). The Job Satisfaction-Job Performance Relationship: A Qualitative and Quantitative Review. *Psychological Bulletin* , 127 (3), 376-406.
- Karriker, J., & Williams, M. (2009). Organizational justice and organizational citizenship behavior: A mediated multifoci model. *Journal of Management* , 35 (1), 112-124.
- Klassen, R., Yerdelen, S., & Durksen, T. (2013). Measuring teacher engagement: Development of the engaged teachers scale.

Frontline Learning Research , 1 (2), 33–52.

Lent, R., & Brown, S. (2006). Integrating person and situation perspectives on work satisfaction: A social-cognitive view. *Journal of Vocational Behavior* , 69 (2), 236–247.

Locke, E. (1976). The nature and causes of job satisfaction. In M. Dunnette , *Handbook of industrial and organizational psychology* (pp. 1297–1349). Chicago: Rand McNally.

Lounsbury, J., Foster, N., Carmody, P., Kim, J., Gibson, L., & Dorost, A. (2012). Key personality traits and career satisfaction of CS workers . *Managing Service Quality* , 22 (5), 517-536 .

McAllister, D. (1995). Affect and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal* , 38 (1), 24-59 .

McCrae, R., & Costa, P. (1985). Updating norman’s “adequate taxonomy”: intelligence and personality dimensions in natural language and in questionnaires . *Journal of Personality and Social Psychology* , 49 (3), 710-721 .

McCrae, R., & John, O. (1992). An introduction to the five-factor model and its applications . *Journal of Personality* , 60, 175–215 .

Mercer, D. (1997). Job Satisfaction and the Secondary Headteacher: the creation of a model of job satisfaction. *School Leadership & Management* , 17 (1), 57-68 .

Milkovich, G., & Wigdor, A. (1991). *Pay for Performance: Evaluating Performance Appraisal and Merit Pay* . Washington : National Academy Press .

Motowidlo, S., Borman, W., & Schmit, M. (1997). A theory of individual differences in task and contextual performance . *Human Performance* , 10, 71–83 .

Norman, W. (1963). Toward an adequate taxonomy of personality attributes: replicated factor structure in peer nomination personality ratings . *Journal of Abnormal and Social Psychology* , 66 (6), 574-583 .

Organ, D. (1988a). A restatement of satisfaction-performance hypothesis . *Journal of Management* , 14 (4), 547-557 .

Organ, D. (1988b). *Organizational Citizenship Behavior –The Good Soldier Syndrome* . Lexington, MA : Lexington Books .

Park, J., & Deitz, G. (2006). The effect of working relationship quality on salesperson performance and job satisfaction: Adaptive selling behavior in Korean automobile sales representatives . *Journal of Business Research* , 59 (2), 204-213 .

Peeters, M., Rutte, C., van Tuijl, H., & Reymen, I. (2006). The Big-Five personality traits and individual satisfaction with the team . *Small Group Research* , 37.

Petty, M., McGee, G., & Cavender, J. (1984). A meta-analysis of the relationships between individual job satisfaction and individual performance . *Academy of Management Review* , 9 (4), 712-721 .

Porter, L., & Lawler, E. (1968). What job attitudes tell about motivation. *Harvard Business Review* , 46 (1), 118-126.

Rajiv , P., Dant, Scott, K., Weaven, Brent, L., & Baker. (2013). Influence of personality traits on perceived relationship quality within a franchisee- franchisor context . *European Journal of Marketing* , 47 (1), 279 – 302 .

Roethlisberger, F., & Dickson, W. (1939). *Management and the worker* . Cambridge, MA : Harvard University Press .

Rusting, C., & Larsen, R. (1998). Personality and cognitive processing of affective information . *Personality and Social Psychology Bulletin* , 24, 200–213 .

Stoeva, A., Chiu, R., & Greenhaus, J. (2002). Negative affectivity, role stress, and work–family conflict . *Journal of Vocational Behavior* , 60 (1), 1–16 .

Tang, T., & Talpade, M. (1999). Sex differences in satisfaction with pay and coworkers. *Public Personnel Management* , 28 (3), 345-348.

Van Den Berg, P., & Feij, J. (2003). Complex relationships among personality traits, job characteristics, and work behaviors . *International Journal of Selection and Assessment* , 11 (4), 326-339 .

Vroom , V. (1964). *Work and Motivation* . New York : Wiley.

Yang, L., & Hwang, M. (2014). Personality traits and simultaneous reciprocal influences between job performance and job satisfaction. *Chinese Management Studies* , 8 (1), 6-26 .

Zellars, K., & Perrewe, P. (2001). Affective personality and the content of emotional social support: Coping in organizations. . *Journal of Applied Psychology* , 86, 459–467 .