

Emotional Stability and Conscientiousness as Predictors towards Job Performance

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ABSTRACT

The predictive validity of personality traits toward proficient job performance has always been inconsistent. Thus, the purpose of this study was to determine the predictive validity of personality traits (emotional stability and conscientiousness) on job performance. This was done by distributing 16 Personality Factor Questionnaire to 450 civil servants employees. Job performance on the other hand was measured by self-reported and annual performance evaluation report received from the employer. SEM analysis was employed to test how well conscientiousness, emotional stability and job performance model fit the sample tested. SEM results confirmed the goodness-of-fit between the model and the sample. The two constructs were also predictors of job performance. It can be implied from the findings that personality traits can be used as predictors to evaluate the suitability of job applicants in personnel decision making. Future research studies can look into other indigenous traits for measure conscientiousness and emotional stability and should investigate indirect effect on job performance.

Keywords: Personality, conscientiousness, emotional stability, job performance

INTRODUCTION

Awareness and strong interest have arisen in the use of personality tests for personnel selection process arising from the emergence of five-factor personality model (FFM) (Costa and McCrae, 1988; 1991). Previous studies have also proven the existence of FFM personality model to be robust predictors across different theoretical framework, using different measures of personality tests, in different cultures, as well as using the ratings obtained from various subjects (Barrick and Mount, 1991; Digman, 1990). There are also results, particularly using meta-analytic review, to suggest that personality factors (conscientiousness and emotional stability) are equally good as cognitive tests in predicting job performance (Barrick and

Mount, 1991; Barrick *et al.*, 2001; 2005; Tett *et al.*, 1991).

Various terminologies have been used to describe conscientiousness (Digman, 1990). Cattell (1993) defines conscientiousness as self-control while Goldberg (1993) and McCrae and Costa (2004) describe it as dependability. Emotional instability is regarded as anxiety especially by Cattell (1993). Many researchers agree that conscientiousness measures traits such as responsibility, disciplined and orderly. Whereas emotional stability measures an individual's skills to control stress, anxiety and depression (Cattell, 1993; Goldberg, 1993; Digman, 1990; Costa and McCrae, 2004).

In the context of organization, job performance refers to the behavior, that is

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what the workers actually do in the context of their work and its relation to organizational goals. Job performance is also seen as actions performed by the employee in accordance with the objectives of the organization. Furthermore, job performance can be observed and measured by the efficiency and skills of individuals carrying out an assignment (Campbell, 1990; Campbell *et al.*, 1993).

Employees who have high conscientiousness are more responsible, disciplined, reliable, and resilient and determined when carrying out the task entrusted to them. Thus they are able to maintain performance even in an environment of changing organization (Barrick and Mount, 1991). They also have a strong commitment to work, not giving up easily, aimed at motivating behavior, morale and competitive (Costa *et al.*, 1991; Robie and Ryan, 1999). Accordingly, many researchers concluded that conscientiousness is the most prominent factor and acts as a predictor of job performance compared to other personality factors (Behling, 1998).

Emotional stability factor is the second significant predictor of job performance after conscientiousness. Employees who have high emotional stability show features of being calm, adaptable, do not like a hostile environment, self-confident, receptive and not easily depressed. A stable emotional state can help them adjust in an environment of self-knowledge workers (London and Mone, 1999), creative problem solving (Holyoak, 1991; Hatano and Inagaki, 1986), able to manage an uncertain and unpredictable environment (Hall and Mirvis, 1995), through continuous learning (Caligiuri, 2006). On the other hand, workers having low emotional stability (high concern) will show the characteristics of anxious, depressed, irritated, not confident, emotionally reactive, fear and insecure. As such, they are more vulnerable to stress at work, lack concentration, and lack skilled emotions when faced with stress at work (Barling and Boswell, 1995).

In the Western countries, meta-analytic findings indicate that emotional stability and conscientiousness significantly predict

job performance for all types of jobs (e.g., professionals, police, managers, salespeople, skilled, and unskilled). The other three FFM traits of extraversion, openness and agreeableness do not predict overall work performance. However, they only predict job performance in specific occupations or related to specific criteria and performance in the context of training and learning (Barrick and Mount, 1991; Barrick *et al.*, 1999; Hertz and Donovan, 2000; Salgado, 1997; Hogan and Ones, 1997; Barrick and Mount, 2001). Barrick *et al.* (1999) reviewed eight meta-analyses conducted since 1990 and reported that measures of conscientiousness and emotional stability predicted overall job performance with an average true score validity of 0.24 and 0.15 respectively.

Meta-analytical studies related to personality as a predictor of job performance were also conducted in different cultures. The first survey was conducted in Europe by Salgado (1997) on 36 studies of the relationship between personality and job performance. The findings supported the hypotheses, namely the relationship between conscientiousness and emotional stability with job performance was $r=0.25$, $p < 0.05$ and $r=0.19$, $p < 0.05$ respectively. The study by Jiang *et al.* (2009) on the relationship between conscientiousness and job performance among 478 workers from middle-levels government officers in China also showed a positive correlation. Then the study by Smithikrai (2007) among 2518 employees from a variety of jobs in Thailand showed that anxiety was negatively related with job success while conscientiousness was the only personality trait that consistently predicted job success of employees across occupation. The study by Fatimah Wati (2006) on the relationship between five factor personality and job performance among 260 civil servants in Malaysia showed a positive correlation of conscientiousness ($r=0.42$, $p<0.05$) but no relationship between emotional stability ($r = -0.10$, $p<0.05$) with job performance.

In general, past results pertaining to conscientiousness and emotional stability have proven that they can be significant predictors to

performance. Nevertheless, the consistencies of validity between these two factors as predictors are mixed. For example, most studies in the West show that conscientiousness could predict job performance much better than emotional stability (Barrick *et al.*, 1999). In contrast, Tett *et al.*'s (1991) and Salgado's (1997) study show that emotional stability is the better predictor, followed by conscientiousness.

However, the predictability of conscientiousness and emotional stability on job performance has not been studied much in Asian countries (Smithikrai, 2007). Salgado (1997) stated that it is possible that in other countries with cultural and organizational characteristics that differ from the United States and Canada, the Big Five may present different relations with job performance criteria. Moreover, recruitment and selection practices in the United States and Canada might be different from those in Malaysia because of cultural contextual difference, such as power distance, and also due to the typical differences of hierarchical and bureaucratic organization between Malaysia and the West (Robbins and Judge, 2009). This leads to the objective of the present study to investigate the predictability of conscientiousness and emotional stability on job performance. The aim of the study is also to determine which of the two predictors is the best toward job performance.

METHODS

In this study, data were collected from 450 middle level civil servant officers from a training institution in Malaysia. Among these participants, 269 were males, and 154 were females, with an average age of 40.85 and work experiences of 18.25 years. Respondents comprised of 390 Malays, 35 Chinese, 18 Indians, and 7 other ethnicities with 86.9% of them having higher education. Two standardized questionnaires were used to measure and they were:

1. The 16 Personality Factor Questionnaire (16PF) Fifth Edition. This questionnaire consists 185 items that yields subscale scores for each of the five major dimensions

of normal personality. The five global scales give an overview of an individual's personality makeup at a broad level of functioning while the more specific primary scale provide an in-depth picture of the individual's unique personality dynamic (Cattell and Schuerger, 2003). However, for the purpose of this study only two global scales were chosen which was conscientiousness and emotional stability. The primary traits of conscientiousness consist of rule-consciousness (G+), perfectionism (Q+), liveliness (F-) and abstractedness (M-) which include 42 items. The primary traits of emotional stability consist of emotional stability (C-), vigilance (L+), apprehension (O+) and tension (Q4+) which include 40 items. Therefore, only 82 items were selected from the 185 items of the original questionnaire.

The 16PF was translated (Fatimah Wati, 2010) into Malay using Brislin's (1976) back translation method. Participants responded to the 16PF items using a three-point Likert scale. Alpha estimates for the Malay version based on 450 adults were lively (F) = 0.71, rule-consciousness (G) = 0.86, abstractness (M) = 0.81, perfectionism (Q3) = 0.86, emotionality stability (C) = 0.74, vigilance (L) = 0.76, apprehension (O) = 0.70, tension (Q4) = 0.70, dominance (E) = 0.71, social boldness (H) = 0.80 and openness to change (Q1) = 0.70.

2. Job performance measure was based on the self-report and annual performance evaluation report received from the employer in the form of overall job performance score (e.g 70, 80, or 90). Participants were also asked to report their ability to produce the best performance based on eight items constructed from job performance criteria as suggested by Borman and Motowidlo (1993; 1997). Four items were developed for task performance (essential/primary), while four other items were related to contextual performance. Items related to task performance were skills in a range of tasks, verbal and written

communication skills, supervisory skills and leadership, and finally, managerial and administrative skills. The items that measured contextual performance were items related to organizational citizenship behaviors (such as altruism, economic, civic good, courtesy and teamwork), several aspects of organizational spontaneity (such as helping co-workers and protect the organization), personal initiative and taking action (taking charge).

Participants responded to each item using a six-point Likert-type scale ranging from 1 (poor) to 6 (excellent). Alpha estimates were 0.88 for both task and contextual performance. Data were analyzed structural equation modeling (SEM) approach as recommended by Hair *et al.* (2006).

RESULTS AND DISCUSSION

The proposed model was utilized to identify the direct effects of conscientiousness and emotional stability on job performance. Results in Table 1 showed that the proposed model for conscientiousness and emotional stability were significant predictors of job performance. All the goodness of fit indices of the model also met the recommended values as suggested by Hair *et al.* (2006).

TABLE 1
Results of goodness-of-fit index

Fit index	Recommended value	Observed value
Chi-square/ degree of freedom	≤ 3.00	2.40
GFI	≥ 0.90	0.967
AGFI	≥ 0.80	0.940
TLI	≥ 0.90	0.978
CFI	≥ 0.90	0.986
RMSEA	≤ 0.06 or ≤ 0.08	0.056

Results as shown in *Fig. 1* found that conscientiousness and emotional stability (anxiety) have direct impacts on job performance. The proposed structural model showed that 11%

variance of job performance were explained by conscientiousness and emotional stability. Conscientiousness was significantly related with job with path coefficient 0.35 (critical ratio value = 2.18, $p < 0.05$). Therefore, this means that conscientiousness has a significant positive direct effect on job performance. This indicated that employees who have higher scores in conscientiousness scored higher in job performance. Next, SEM analysis indicated that perfectionism (Q3) trait has the highest loading ($\lambda = 0.89$, $R^2 = 0.80$, $p < 0.001$) on conscientiousness, followed by abstractedness (M-) trait with a loading of $\lambda = -0.89$, $R^2 = 0.79$, $p < 0.001$, liveliness (F-), $\lambda = -0.82$, $R^2 = 0.67$, $p < 0.001$, rule-consciousness (G), $\lambda = 0.65$, $R^2 = 0.86$, $p < 0.001$, emotional stability (C-) trait, $\lambda = -0.55$, $R^2 = 0.30$, $p < 0.001$, and tension (Q4), $\lambda = 0.40$, $R^2 = 0.16$, $p < 0.001$ respectively.

Results in *Fig. 1* also showed that there was a significant direct path between emotional stability and job performance with path coefficient = -0.58 (critical ratio value = -2.78, $p < 0.05$). The results showed that emotional stability was the higher predictor of job performance. The results also indicated that vigilance (L) trait has the highest loading ($\lambda = 0.82$, $R^2 = 0.67$, $p < 0.001$) on anxiety, followed by apprehension (O) trait with a loading of $\lambda = -0.73$, $R^2 = 0.54$, $p < 0.001$, tension (Q4) trait, $\lambda = 0.40$, $R^2 = 0.16$, $p < 0.001$ and emotional stability (C-), $\lambda = -0.27$, $R^2 = 0.07$, $p < 0.001$ respectively.

The main results of this study have shown the goodness-of-fit between the model of conscientiousness and emotional stability with job performance of public servants in Malaysia. The result provided some support for Smithikrai's (2007) and Tyle and Newcombe's (2006) findings where they have found that emotional stability can predict job performance better than conscientiousness in Asian countries. This is contrary to Barrick *et al.*'s (1999) and Salgado's (1997) results where they suggested that in the West, conscientiousness is the most significant predictor for job performance, followed by emotional stability.

Civil servants officer who have higher emotional stability described themselves as

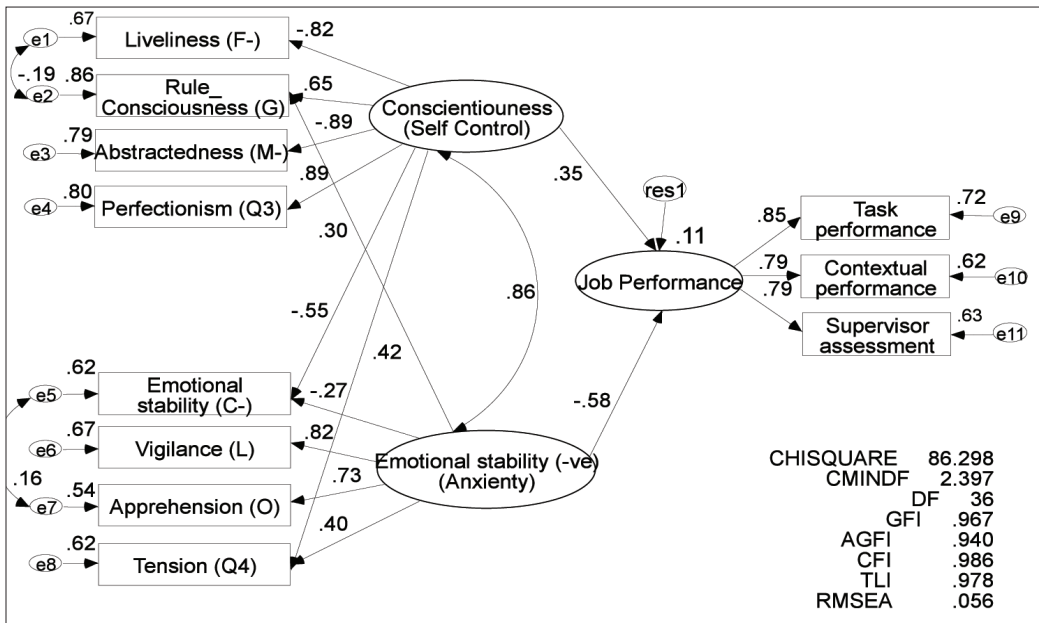


Fig. 1: Structural model on direct effects of conscientiousness and emotional stability on job performance

trusting, unsuspecting and accepting (L-). They were also self-assured, unworried and complacent (O), relaxed, placid and patient (Q4) and emotionally stable, adaptive and mature (C+). All these traits contributed to high job performance especially on task performance, followed by contextual performance and supervisory assessment. This is contradictory to those who have low emotional stability. These individuals described themselves as vigilant, suspicious, and skeptical (L+). They were also apprehensive, self-doubting, and worried (O+), tense, high energy, impatient and driven (Q4+), reactive and emotionally changeable (C-). Consequently, these individuals portrayed lower job performance especially on task performance, contextual performance and supervisory assessment.

Civil servant officers who were high in conscientiousness described themselves as perfectionist, organized, self disciplined (Q3+), grounded, practical and solution-oriented (M-). They were also serious, restrained, careful (F-), rule-conscious and dutiful (G+). At the

same time the officers were tensed, possessed high energy, impatient and driven (Q4+), reactive and emotionally changeable (C-). However, civil servant officers who were low in conscientiousness described themselves as tolerable to disorder, unexacting and flexible (Q3-), abstracted, imaginative and idea-oriented (M+). They were also lively, animated and spontaneous (F+), as well as expedient and nonconforming (G-). The traits resulted in low job performance that included task performance, contextual performance, and supervisory assessment. Therefore, the results showed that emotional stability and conscientiousness model can be applied in a local context and personality measurement tools can be used as predictors to evaluate the suitability of job applicants in personnel decision making.

CONCLUSION

In conclusion, the results of this study provided further support for the role of conscientiousness and emotional stability in predicting job

performance. The results can be used to imply that selection process should take into account candidates with personality that exhibit high conscientiousness and emotional stability traits to ensure that they can then perform well in the job. It is worth to suggest that future research should focus on other than Cattell's four traits to measure conscientiousness and emotional stability. For example, studies can look into other traits like indigenous traits that may well measure conscientiousness and emotional stability. Furthermore, future research should not only examine direct effect (mechanism) of personality traits but also the indirect ones in relation to job performance.

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