Personality traits and job performance among academic staff in a private academic institution

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ABSTRACT

This study investigates the association between the personality traits of academic staff members and their job performance in a Malaysian private educational institution. The personality traits were based on the Big Five which has five dimensions: openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism. About 110 participants from this institution were surveyed using a quantitative questionnaire, and their data were gathered. Throughout the study, the data were examined utilizing multiple regression analysis and factor analysis. According to the study's findings, conscientiousness, and openness to experience significantly positively affect job performance. However, it was determined that extraversion, agreeableness, and neuroticism were not statistically significant and had no connection to job performance. As a result, in this institution, openness to experience is the most essential predictor of job performance. The findings of this study showed the management that openness to experience and conscientiousness are crucial for improving job performance inside the institution. Therefore, the management should pay more attention to these areas and recruit new employees with openness to experience and conscientious personality traits.

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1. INTRODUCTION

Recent studies suggested that job performance is one of the factors used to gauge an organization's effectiveness [1]. Because job performance is one of the factors used to determine how well an organization is operating, businesses and organizations need to employ high achievers [1]. Job performance can be explained by an ideology that can be constructed in several dimensions, which are task and contextual performance [2]. Each organization needs employees who are capable of accomplishing tasks because their performances are critical to the company's overall success [3]. Individuals' behavioral patterns in job performance are connected to personality, which the human mind will be affected psychologically [4]. Hence, job performance and personality traits are interrelated [5].

Typically, an employee's job performance will be evaluated at the year's end so that the human resource (HR) department knows whether the employee's performance has increased or decreased. The HR can arrange activities or training for employees to improve themselves. Job performance can be a part of academic for industry section and organizational psychology and is helpful for HR management. For employees to work effectively, the management must understand which personality traits affect their work

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performance. In other words, the management has to understand the characteristics, types of behavior, and personality traits of the employees [6]. Researching the association between personality traits and academic staff members' job performance is vital, as a similar study has yet to be conducted in this private educational institution. Following the discussion, the researchers intend to fill the knowledge gap by answering the following research questions (RQ): i) What is the relationship between openness to experience and job performance among academic staff? (RQ1); ii) What is the relationship between extraversion and job performance among academic staff? (RQ3); iv) What is the relationship between agreeableness and job performance among academic staff? (RQ4); and v) What is the relationship between neuroticism and job performance among academic staff? (RQ5).

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. Job performance

Job performance can be defined as how the employees accomplish their work or are assigned duties by their superiors. When employees work, their performance can be measured by superiors while considering the output or by examining the proper implementation of processes and procedures [7]. To identify and define the underlying features of the behavioral episodes that make up the performance field, job performance uses the discrepancy between task and contextual performance [8]. Task performance is an indicator of an employee's efficacy in completing tasks to the organizational standards. In contrast, contextual performance refers to individuals willing to perform organizational activities to enhance the accomplishment of tasks [9]. Assessing job performance is very important for an organization to ensure its employees can function more effectively and keep the company's position in the market.

2.2. Personality traits

Handfuls of personality models have risen to prominence. Researchers generally accept some, and some are left behind. Across several literature studies [8], [9], industrial and organizational psychology suggested that the aggregate of personality characteristics can be grouped into five basic trait dimensions: openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism [10].

2.2.1. Openness to experience

Openness to experience is the foremost controversial among personality factors [10]. It is a dimension characterized by a desire to find more novel and challenging jobs to examine their condition. Openness to experience involves the willingness of those individuals to be in acceptance or open to everything [10]. Generally, openness to experience implies that although it can manifest in a variety of ways and be connected to both intellectual and physical experiences, someone who is open tends to be interested in learning something new. These people can experience emotions that are richer than typical people. Those individuals who are open to experience can learn something new and are able to understand the task quickly [11]. When the management wishes to build a team of employees, they prefer those who can solve problems for the organization, not those who create problems. Hiring an employee who can adapt to changes and new experiences can lead the organization to success and create healthy business growth [11]. Şahin *et al.* [12] claimed that openness to experience could produce higher performance because these employees show imaginativeness and attentiveness to inner feelings. Meanwhile, research by Alikaj *et al.* [13] showed that openness to experience was associated with job performance, especially for employees who are interested in abstract ideas. Therefore, it is hypothesized that: openness to experience has a significant positive relationship with job performance (H1).

2.2.2. Conscientiousness

Conscientiousness is a measure of how an individual will be organized, thoughtful and forward-thinking and is a personality trait of being careful or hardworking [11]. Conscientious people prefer to follow the schedule as planned rather than act without being prepared [12]. They will plan earlier, believe in how their behavior will affect each other, and be mindful of deadlines [13]. If the employees are conscientious, they will have a strong desire to complete the task and defeat the challenge. Conscientious employees tend to offer value in the workplace. Superiors will value and appreciate these goal-oriented employees and may hand them some essential tasks. Their responsibilities will lead them to get promotions and salary increments. According to Roberts *et al.* [14], being conscientious is one of the best ways to forecast various aspects of the workplace, such as job performance and career advancement. Therefore, the hypothesis is established as: conscientiousness has a significant positive relationship with job performance (H2).

2.2.3. Extraversion

Extraversion is about the capacity for joy, the intensity of preferred interpersonal interactions, activity level, and a desire for stimulation. Individuals enjoy engaging with the external world and desire to get the attention of the others in the groups [15], [16]. Research by Yalch *et al.* [17] recognized that extraverted individuals usually have countless friendships, enterprising vocational interests, and high social skills. For example, during the vacancy of a salesman, the percentage to be hired is very high for these extroverts because of their eloquence and ability to deal with the customers, where the jobs require effective interpersonal interaction. High extraversion has a high level of interview performance as one of the requirements for the salesman job is interpersonal interaction [18]. Hence, it is proposed that: extraversion has a significant positive relationship with job performance (H3).

2.2.4. Agreeableness

Agreeableness is a personality trait that may be relevant to trust, kindness, affection and other prosaic behaviors [5]. Agreeableness is always defined as the level of a person who believes in someone, straightforward, selfless, respectful, modest, gentle, and considerate [19]. Agreeableness is a trend to be sympathetic and cooperative with each other instead of suspicious and antagonistic. The collaborative nature of agreeable employees only focuses on social harmony; they tend to work cooperatively in teams, which will lead them to succeed in business if they get support from other colleagues. Agreeableness can significantly predict job performance related to training success and work behaviors [11]. Therefore, a hypothesis is proposed: agreeableness has a significant positive relationship with job performance (H4).

2.2.5. Neuroticism

Neuroticism is also known as emotional instability. It is referred to as individuals who tend to be shy, angry, insecure, depressed, unprotected and anxious [5]. People with neuroticism traits tend to display a more depressed mood and suffer from feelings of sadness, anxiety, swings, guilty, jealous and anger. Among the personality traits, neuroticism is the one that indicates negative attributes. Although neurotic people are easily disturbed, it does not mean they are incompetent. They lack confidence and their emotions are not stable [11]. Research by İlhan *et al.* [20] found that job performance presented by neurotic individuals is in reverse order with other personalities. In the recruitment process, neuroticism is the most important personality trait that should be avoided when selecting a candidate. Therefore, the following hypothesis is proposed: neuroticism has a significant negative relationship with job performance (H5).

2.3. Research model

The research model is established and shown in Figure 1 to address the problem statement and research objectives. It consists of five dimensions of personality traits as the independent variables. The dependent variable is job performance.

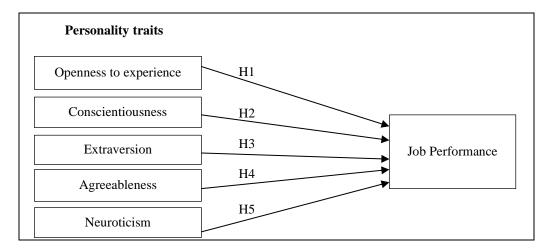


Figure 1. Research model

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3. RESEARCH METHOD

3.1. Population and sample

There were 150 academic staff members working for the private institution comprise the entire population. According to the sampling table created by previous researchers [21], a 150-person population requires a sample size of 108. Because it is practical and efficient, the convenience sampling strategy was adopted in this investigation [22]. A total of 110 responses from the respondents have been successfully collected by the researcher.

3.2. Measures

The five measures used to measure job performance were modified from previous study [23]. Meanwhile, the five measurement items of each personality trait were adapted from the research [24]. These measurements are known as the international personality item pool. Each study variable was measured using a 5-point Likert scale.

3.3. Data collection procedure

The research employed a quantitative approach, where the survey questionnaires were prepared in English via google document format. To verify that the data collected are accurate and pertinent to this study, the researcher distributes all questionnaires directly to all the academic staff in the institution. A timeframe of 2 weeks was used to collect the data. Afterwards, the SPSS was used to analyze this data. The outcomes of the hypothesis testing were utilized in the discussion that followed.

4. RESULTS AND DISCUSSION

4.1. Profile of the respondents

The Google survey activity has received a total of 110 responses. Table 1 shows the profile of the respondents. It was observed that 51.8% of respondents were females, while 48.2% were males, indicating a higher ratio of female respondents than males. Most respondents (38.2%) were ranged from 31 to 40 of age, followed by 41 to 50 years old (28.2%), and third is the age between 21 to 30 years old (14.5%). In terms of education, master holders recorded the highest percentage of 41.8%, followed by bachelor's degree holders (32.7%), Ph.D. holders (17.3%) and diploma holders (8.2%).

Table 1. Profile of respondents

Description (n=110)		Frequency (n)	Percentage (%)	
Gender	Male	53	48.2	
	Female	57	51.8	
Age	21-30	16	14.5	
	31-40	42	38.2	
	41-50	31	28.2	
	51-60	18	16.4	
	Above 60	3	2.7	
Education background	Diploma	9	8.2	
-	Degree	36	32.7	
	Master	46	41.8	
	Ph.D.	19	17.3	

4.2. Validity test and reliability test

To show that the measurements used in this study were valid, factor analysis was performed. The research model's study variables were evaluated using Bartlett's test of sphericity and Kaiser-Meyer Olkin measure sampling adequacy (KMO-MSA). According to Table 2, the Bartlett's test of sphericity was significant for the personality traits with a p value of 0.001 and KMO value of 0.745. According to research by Hair *et al.* [25], with Bartlett's test of sphericity significant at the p<0.01 level, an acceptable KMO score should be greater than 0.6. In Table 2, the principal component analysis (PCA) identified five components with Eigenvalues greater than 1.0. It explains a total of 63.634% of the variance. The extracted factors are component 1 (extraversion) contributes 26.844% of the variance; component 2 (openness to experience), 12.110%; component 3 (neuroticism), 9.712%; component 4 (conscientiousness), 8.203%; and component 5 (agreeableness), 6.765%. The range of the factor loading values was 0.565 to 0.915.

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Table 2. Factor analysis for the independent variables

Itam	Description	Factor loadings				
Item Description	1	2	3	4	5	
E5	I don't mind being the center of attention.	0.838				
E4	I like to draw attention to myself.	0.832				
E1	I am the life of the party.	0.800				
E3	I feel comfortable around people.	0.769				
E2	I talk a lot.	0.704				
O2	I do have a good imagination for new things.		0.794			
O4	I am interested in abstract ideas.		0.776			
O5	I have a rich vocabulary.		0.690			
O1	I am quick to understand things.		0.664			
O3	Accept people as they are.		0.565			
N2	I seldom get upset.			0.876		
N3	I seldom get stressed out easily.			0.840		
N1	I seldom feel blue.			0.718		
N5	I seldom easily disturbed.			0.592		
C4	I follow a schedule as planned.				0.710	
C5	I am exacting in my work.				0.695	
C1	I am always prepared for my job.				0.691	
C2	I did not make a mess of things.				0.662	
A5	I have a soft heart.					0.915
A1	I am interested in people.					0.886
	Eigenvalue	5.369	2.422	1.942	1.641	1.353
	Percentage of common variance (%)	26.844	12.110	9.712	8.203	6.765
	Cumulative	26.844	38.954	48.666	56.869	63.634
Pamarke: KMO-0.745 Partlatt's tast of sphericity P<0.001						

Remarks: KMO=0.745, Bartlett's test of sphericity P<0.001

Table 3 shows the factor analysis results for the dependent variable. The value of KMO for job performance is 0.893, and Bartlett's test of sphericity has a p-value of 0.001. It extracted 1 component with an eigenvalue greater than 1. The extracted factor explained 72.222% of the variance. The scale's factor loading values ranged from 0.810 to 0.873. Following the factor analysis, the researchers conducted a reliability test using Cronbach's alpha to assess the internal consistency of the scale. The Cronbach's alpha value for each variable was exhibited in Table 4. Openness to experience has a value of 0.787; conscientiousness, 0.701; extraversion, 0.882; agreeableness, 0.857; neuroticism, 0.766 and job performance 0.900. The results show that all the variables have surpassed the value of 0.7 and are deemed reliable [26].

Table 3. Factor analysis for the dependent variable

Item	Descriptive	Factor loadings
JP1	Automatically assist superior to solve the problem	0.873
JP2	Help others who have been absent	0.858
JP5	Passes along information to a colleague	0.854
JP3	Attendance at work is above the norm	0.853
JP4	Gives advance notice when unable to come to work	0.810
	Eigenvalue	3.611
	Percentage of common variance (%)	72.222
	Cumulative	72.222

Remarks: KMO=0.893, Bartlett's test of sphericity P<0.001

Table 4. Reliability test

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Variables	No. of items	Cronbach's alpha (α)		
Openness to experience	5	0.787		
Conscientiousness	4	0.701		
Extraversion	5	0.882		
Agreeableness	2	0.857		
Neuroticism	4	0.766		
Job performance	5	0.900		

4.3. Multiple regression analysis

To evaluate the hypotheses, multiple regression analysis was utilized. According to Table 5, the five different categories of personality traits accounted for 36% of the variation in job performance. The data show significant positive associations between 2 out of 5 personality traits and job performance. Openness to experience had a beta value of 0.456 (P<0.001), and conscientiousness had a beta value of 0.175 (P<0.05). Therefore, H1 and H2 were supported.

This study demonstrated that the most important predictor of job performance is open to new experiences (β =0.456, P<0.001). It indicates that academic staff who regard themselves as open to experience are quick to understand the tasks given by their superiors and have active imagination in their job. They are interested in abstract ideas and always encourage each other to learn new things. They use innovative ideas to succeed in their job. This result is consistent with the research's investigations [27], [28], where Le *et al.* [27] agreed that openness to experience individuals show active imagination and attentiveness to feelings that could achieve higher performance at work. Next, conscientiousness was discovered as a significant predictor of job performance (β =0.175, P<0.001). This finding signifies that academic staff who considered themselves high in conscientiousness believed that they could perform better than others because they organize their work to achieve targets even though they are facing distractions. This finding is consistent with previous researches [29], [30], which asserted that conscientiousness was the strongest positive predictor of job success because conscientious employees put in a lot of effort and consider the repercussions of their actions. Theoretically, this study provides an understanding of personality traits in shaping job performance in the context of academic industry. Practically, it offers guidelines to the academic institutions in hiring new academic staff to achieve high job performance.

Table 5. Multiple regression analysis for personality traits and job performance

Independent variable	Job performance		Hypothesis	Result	
independent variable	beta β	Sig.	Trypoutesis	Result	
Openness to experience	0.456**	0.000	H1	Supported	
Conscientiousness	0.175**	0.049	H2	Supported	
Extraversion	0.104	0.261	H3	Not supported	
Agreeableness	-0.005	0.950	H4	Not supported	
Neuroticism	0.012	0.886	H5	Not supported	
F value			11.716		
R square			0.360		

Remarks** significant at the 0.001 level

5. CONCLUSION

According to the study's findings, personality traits like conscientiousness and openness to new experiences have a big impact on how well people do at work. However, there was no correlation between extraversion, agreeableness, or neuroticism and job performance. This study implies that the management should conduct periodic assessments among the staff to identify those who possess openness to experience and conscientiousness for better execution of essential duties and facing new challenges. On top of that, the human resource department needs to focus on the suitable personality traits when recruiting new academic staff. Hence, a personality test has to be conducted before selecting a new candidate. On the other hand, the management may need to re-synergize the institution's strategies by re-designating the current academic staff with suitable personality traits for specific positions and tasks.

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