

# The Mediator Effect of Personality Traits on the Relationship Between Job Stress and Job Satisfaction among University Support Staffs

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## Abstract

Job satisfaction is a critical issue that is frequently emphasized in organizational management because it can influence employee decision making, behaviour, enthusiasm, commitment and productivity as well as contribute to the organization's goals. However, studies on the determinants of job satisfaction, particularly toward the university support staff, are scarce. Hence, this study aims to investigate the mediator effect of Big Five personality traits on the relationship between job stress and job satisfaction among the university support staffs. There were 272 data points collected and analysed using Structural Equation Modeling through SmartPLS SEM software. The findings showed that job stress, particularly career and achievement component, had a significant indirect effect on job satisfaction through the two personality traits of conscientiousness and agreeableness as mediators.

**Keywords:** Job Stress, Job Satisfaction, Big Five Personality Traits

**Introduction**

Job satisfaction in the workplace has been reported to be a phenomenon in the field of organisational psychology (A'tikah, 2017). According to Zainudin et al (2010) and Aida et al (2015), job satisfaction is an increasingly popular issue being studied in Malaysia because it provides significant benefits in achieving an organisation's goals (Thomas et al., 2009; Liatul & Noor, 2011). Employees who are satisfied with their jobs are more likely to stay with the organisation (Lottie, 2013; Chang et al., 2010). Employees who obtain job satisfaction are not only better able to interact with customers and understand their needs, but they are also able to improve the quality of their works and maintain an organization's good name (Ramendra & Gopal, 2013; Jusuf, 2012). In contrast, employees who are dissatisfied with their job will experience frustration, lack of motivation and potentially affect organisational procurement (Jusuf, 2012).

In Malaysia, the Public Service Department's Strategic Plan (2011-2015) emphasises the importance of increasing efficiency and strengthening work capacity among civil servants. This is aimed at producing committed and high-quality employees who can keep with current developments and globalisation (Kuo, 2009). In the context of a university, non-profit public universities require employees with positive attitudes and behaviours to improve the organization's overall functioning (Chang et al, 2010; Michael, 2010). Nevertheless, most previous job satisfaction studies focused on academic and teaching staff (Rinny et al., 2020; Kebede & Demeke, 2017) as opposed to support staff. Job satisfaction is important to investigate because it is associated with a strong work ethic, particularly among support staff (Saifuddin et al., 2012). Therefore, continuous research on job satisfaction is required to gain a thorough understanding of employees' attitudes in the workplace. Hence, the factors that can affect an employee's productivity, particularly job satisfaction, should be taken into account.

Job stress, on the other hand, is also a major focus variable in this study. Because employee stress has a negative impact on both individual jobs and organisations, research into work stress factors is critical and should be conducted extensively (Lorraine et al., 2010). According to Malaysian studies, employees who are stressed at work have a negative impact on the organization as well as their work outcomes (Azizi et al, 2011; Hanafiah & Normah, 2007). This phenomenon, according to Khan (2014), is also observed at the university level where internal problems have caused work stress.

Furthermore, many empirical studies on the determinants of job satisfaction in organisations have focused on job stress factors such as workload imbalances and employee capabilities (Moyosola et al., 2014), career and achievement (Piar & Hemange, 2012), structural factors or organisational climate (Ahmet & Mupekerjaa, 2013), employees' intellectual and social abilities (Simin et al., 2013) and the personality traits (Weipeng et al., 2015; Asmawati et al., 2014; Aoife, 2013; Thomas et al., 2013; Subburaj et al., 2012; Katyal et al., 2011; Hattice & Selma, 2011; Lorraine et al., 2010). Indeed, past studies have consistently revealed a positive relationship between job stress and job satisfaction (Moyosola & Abel, 2014; Simin et al, 2013; Saba et al, 2013; Piar & Hemange, 2012). However, only a few studies have been conducted to investigate the influence of the job stress dimensions on the job satisfaction dimensions in depth which is the focus of this study. Personality also plays an important role in explaining individual differences that can explain a person's work attitude in the organisation (Ariffin et al., 2009). Previous research has shown that employees with positive personalities are the foundation of an organization's success (Judge & Bono, 2001; Oyewumi et al., 2012). In fact,

the Vice Chancellor of Universiti Teknologi Malaysia (UTM) put emphasis on the importance of a positive attitude among university employees to increase organisational productivity 2021. In this study, the Big Five Personality model served as the theoretical foundation for describing, predicting, and determining employee job satisfaction in an organization. This model is widely accepted in the field of psychology for measuring employee personality attitudes in producing work and displaying the most dominant attitudes in the five dimensions (Thomas, 2010). Although previous studies have found a positive relationship between the Big Five Personality dimensions and job satisfaction Weipeng et al (2015); Asmawati et al (2014); Aoife (2013); Thomas et al (2013); Subburaj et al (2012); Katyal et al (2011), most previous studies have reported inconclusive findings and are more focused on the private sector employees. Hence, this study is important to clarify further on the impact of Big Five Personality toward job satisfaction specifically focus on the employees in public sector.

In addition, we also recommend the Big Five personality as a mediator variable because it has positive individual characteristics that have a dynamic interaction between individuals and the work environment Anh et al (2003); Einar et al (2014), as well as influencing job stress in improving organisational performance (Weipeng et al., 2015). Previous research has also discovered that personality is an important predictor of job satisfaction and performance (Vivian, 2005; Cohrs et al., 2006; Michael et al., 2006; Azizi et al., 2012; Klaus, 2012; Chia et al, 2013; Cheng-Liang, 2014). The Big Five personality as a mediator in the relationship between job stress and job satisfaction can improve theoretical understanding and provide empirical evidence on how personality influences the relationship between job stress and job satisfaction among the support staffs in an organizational context.

## **Literature Review**

### **Job Satisfaction**

Job satisfaction refers to a positive emotional state in terms of job experience and job pleasure where it differs based on individual's perception Klaus (2012) that positively impact the morale, commitment and productivity of an employee (Carlos et al., 2012). The determinant of job satisfaction, in turn, has a broad and subjective definition, where it involves many factors such as the type of task or rules in the workplace and the characteristics of the job itself (Felissa, 2004; Vivian, 2005). Herzberg (1966) divided job satisfaction into two main factors, namely motivation and extrinsic (hygiene), in which the intrinsic factor is the attitudes towards the individual's job while the extrinsic factor is the attitudes towards the organisation (Oladipo et al., 2014). According to Chang et al (2010), intrinsic factor relates to attitudes that indirectly contribute to the organisation, such as attitudes of responsibility towards work. In contrast, extrinsic refers to attitudes that benefit the organisation, such as work experience that facilitates the increase in productivity. Therefore, this study focuses on both dimensions of job satisfaction to identify employee attitudes in the organisation.

### *Job Stress*

Job stress refers to a situation, experience or feeling experienced by an individual when job demands exceed an individual's resources or energy (Okonkwo et al., 2015). In this study, job stress consists of six dimensions: intrinsic factors to employment, career development, management role, organisational factors, work relationships with others and home-work interface that give symptoms or responses to individuals and their jobs (Cooper & Dewe, 2004; Haslam, 2004). Past studies related to job stress have focused more on negative

attitudes towards job (Denise et al., 2018), growing demand, technological developments, high-quality services (Amanda et al., 2012), the need to achieve international standards as well as excessive workload (Muhammad Rizwan & Arooba, 2014), emotional factors and individual reactions to the job environment (Aoife, 2013; Asmawati et al., 2014; Weipeng et al., 2015) symptoms of anxiety, depression and other health problems (Amanda et al., 2012). Although there are various findings in the literature, however, past studies have shown inconsistent findings. In addition, only a few studies focus on job stress factors consisting of intrinsic factors, career development, management role, organisational factors, work relationships with others and home-work interface based on (Cooper et al., 1988). This refers to the Palmer and Cooper's (2001) Work Stress Model, which is more accurate in understanding individual job stress and identifying job stress levels (Sipon, 2007). In essence, this model emphasises individual attitudes towards demand, control, roles, change, relationships and support in the workplace. Individuals responding positively when faced with stress and considering it a job challenge will stimulate individual job satisfaction (Ahmet et al., 2013).

#### *Personality as a Mediator in the Relationship between Job stress and Job satisfaction*

Although theoretical and empirical evidence support the relationship between job stress and job satisfaction, it remains unclear whether job stress domains are indirectly linked to job satisfaction via the Big Five personality as a mediator. Hence, this research seeks to expand prior work by developing a more complex conceptual model, and testing the mediator effect of the Big Five personality on the both job stress and job satisfaction components. In this study, researchers have used the Big Five Personality model because this model is very accurate and consistent in predicting behavioural differences and basic characteristics of individual self-construction (Gellatly & Irving, 2001; Derek, 2003).

The Big Five Personality Model was developed by Goldberg (1992) comprehensively and empirically where personality has been divided into five dimensions: openness to experience, conscientiousness, extraversion, agreeableness and neuroticism, known as OCEAN which is highly related to factors that have positive and negative effects on describing individual differences (Derek, 2003; Ferguson, 2009). There is evidence that has shown that the Big Five Personality correlates with job stress (Constatinos, 2007; Newbury-Birch et al., 2001; Ho, 2007; Lorraine et al., 2010; Katyal et al., 2011; Hattice & Selma, 2011; Subburaj et al., 2012; Aoife, 2013; Thomas et al., 2013; Weipeng et al., 2015; Shirish et al., 2015; Asmawati et al., 2014), which in turn affects job satisfaction (Weipeng et al., 2015; Asmawati et al., 2014; Aoife, 2013; Thomas et al., 2013; Subburaj et al., 2012; Katyal et al., 2011; Hattice & Selma, 2011; Lorraine et al., 2010; Ho, 2007; Constatinos, 2007; Newbury-Birch et al., 2001).

Meanwhile, some studies have shown that the Big Five Personality can have mediator effects in the workplace, such as studies on negative moods and affective expectations by looking at stressful situations (Avi Besser & Todd, 2007), values and subjective well-being (Nick et al., 2009), and career decision-making with task dimensions and materialistic attitudes (Shafer, 2000). Therefore, employees with positive personalities and controlled job stress factors are more likely to experience job satisfaction. Consistent with such empirical evidence, the Big Five Personality variable is significant to be a mediator for employees' job stress and job satisfaction.

Hypothesis 1: There is a significant influence of job stress dimensions (intrinsic factors to employment, management role, work relationships with others, career and achievements, organisational structure or climate, home-work interface) on job satisfaction dimensions (intrinsic and extrinsic).

Hypothesis 2: There is a significant influence of job stress dimensions (intrinsic factors to employment, management roles, work relationships with others, career and achievements, organisational structure or climate, home-work interface) on the Big Five Personality dimensions (openness to experience, conscientiousness, extraversion, agreeableness, neuroticism).

Hypothesis 3: There is an influence of the Big Five Personality dimension (openness to experience, conscientiousness, extraversion, agreeableness, neuroticism) on the job satisfaction dimension (intrinsic and extrinsic).

Hypothesis 4: There is an influence of the Big Five Personality dimension (openness to experience, conscientiousness, extraversion, agreeableness, neuroticism) as a mediator between the dimensions of job stress (intrinsic factors to employment, management role, working relationships with others, career and achievement, organisational structure or climate, home-work interface) and dimensions of job satisfaction (intrinsic and extrinsic).

Based on the theoretical discussion and empirical evidence above, the conceptual framework of the model for this study is illustrated in Figure 1. Referring to Figure 1, job stress is an independent variable, and job satisfaction is a dependent variable. In addition, the conceptual framework of the model suggests that the Big Five Personality is a mediator variable between job stress and job satisfaction.

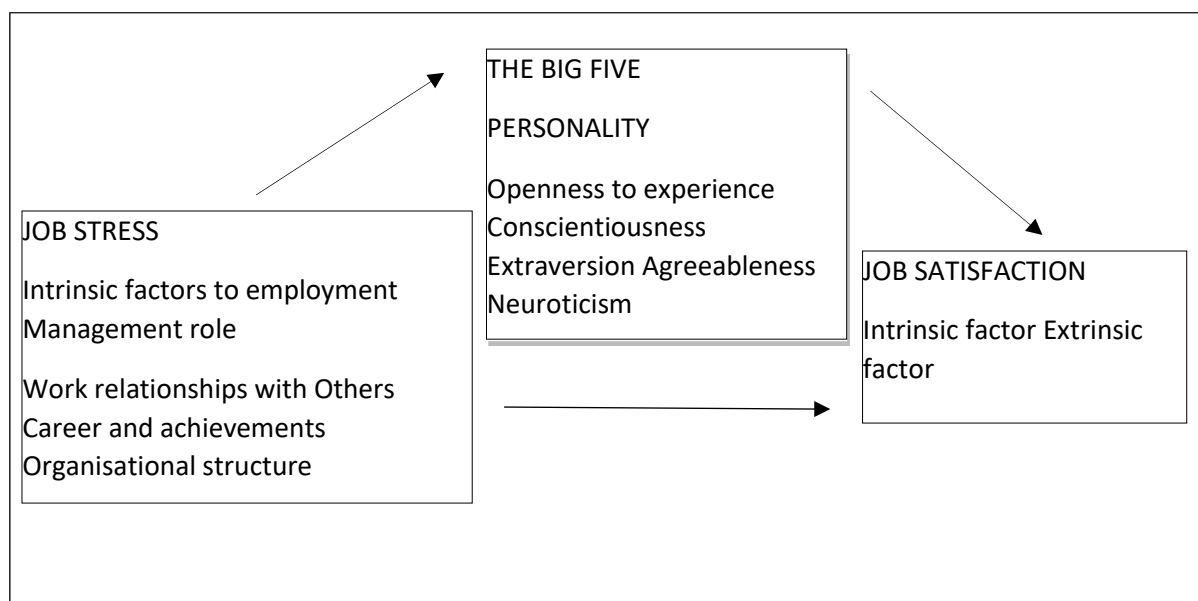


Figure 1. Conceptual Model

**Methodology**

*Participants and Procedure*

This study was conducted quantitatively using a questionnaire for data collection and involved 274 support staffs from University Technology, Malaysia. Questionnaires were distributed using a stratified random sampling technique. A large number of samples consists of 288

Malay respondents (98.3%), two respondents were Indians (0.7%), and three respondents were Chinese (1.0%). 40.6% of the respondents aged between 25 and 35 years, followed by 29.4% of those aged between 36 and 45 years, and those aged over 45 years were 24.9% of the population. Only 15 respondents were under 25 years old (5.1%). With the cooperation of departments and faculties, questionnaires were distributed to respondents for the purpose of data collection. The questionnaire also stated that respondents' participations was entirely voluntary, and that any information shared by the respondents was strictly confidential and only be used for the purposes of this study.

## **Measures**

### *Job Satisfaction*

The Minnesota Satisfaction Questionnaire (MSQ), consisting of 20 items developed by Weiss et al., (1967), was used in this study. Feedback to each item is based on a five-point Likert scale between 1 = very dissatisfied and 5 = very satisfied, for example, "the feeling of success I get from work".

### *Job Stress*

We used the Occupational Stress Indicator (OSI) containing 61 items developed by Cooper et al. (1988). Feedback to each item is based on a six-point Likert scale from 1 = very sure it was a source of stress to 6 = very sure it was not a source of stress. An example of a question is "have too much work to do"

### *The Big Five Personality*

In order to measure the employee personality, the NEO Five-Factor Inventory introduced by McCrae (2004) that has 30 items was used in this study. Feedback to each positive item was made on a five-point Likert scale from 1 = strongly disagree, 2 = disagree, 3 = not sure, 4 = agree to 5 = strongly agree, while the scoring method for negative items reversed the score on a five-point Likert scale from 1 = strongly agree, 2 = agree, 3 = not sure, 4 = disagree to 5 = strongly disagree. An example of a question is, "generate new thoughts, trigger new ideas".

### *Analysis and Results*

Each measure of the variable in this study was automatically analysed using Structural Equation Modeling through SEM SmartPLS 3.2.7 software. Data analysis began with data filtering to examine data values and missing external elements, multivariate assumptions and demographic profiles of respondents (Hair et al., 2013; Tabachnick & Fidell, 2013). Next, the researchers elaborated on reliability analysis, construct validity, descriptive analysis, relationships between variables, and an overall model structure analysis using SEM SmartPLS 3.2.7 software (Ringle et al., 2010). The Structural Equation Model (SEM) is a statistical approach used to test the cause and effect of the variables tested. It is used to measure the comparative strength of indirect and direct relationships between variables. The Structural Equation Model (SEM) was chosen to answer the study's objectives because it allows researchers to test several variables simultaneously in a single model. Moreover, the use of the Structural Equation Model (SEM) can reduce measurement errors and, in turn, lead to clear and valid conclusions about the overall study model (Tabachnick & Fidell, 2013).

*Model Measurement Results*

Model measurements were analysed using SmartPLS 3.2.7 software to assess internal consistency (composite reliability, Cronbach's Alpha) and convergent validity (AVE) (Hair et al., 2013). Beside that the composite reliability value should be higher than 0.70. (Hair et al., 2017). Table 1 shows that the composite reliability values for each construct between 0.847 and 0.956 are above the minimum acceptable level. In addition, construct validity tests should also be conducted for all items to examine model measurements consisting of convergent validity processes and discriminant validity (Zainuddin, 2012). Then, the researchers examined the mean of the extract of variance (AVE) in which the latent construct could be explained, and the shared variance was the sum of the variance in the variables relative to other constructs (Hair et al., 2017). Convergent validity for all items in this study was based on AVE values > 0.5 to guarantee convergent validity (Hair et al., 2017). Table 1 also shows the mean value of the variance extract (AVE) in this study was greater than 0.50, indicating acceptable discriminant validity.

Table 1

*Reliability of Internal Consistency and Convergent Validity*

Construct	Alpha Cronbach (AC)	Composite Reliability (CR)	Average Extract Variance (AVE)
<b>The Big Five Personality</b>			
Openness to experience	0.852	0.894	0.680
Conscientiousness	0.847	0.897	0.685
Extraversion	0.874	0.914	0.726
Agreeableness	0.911	0.944	0.849
Neuroticism	0.845	0.905	0.761
<b>Job Satisfaction</b>			
Intrinsic	0.892	0.918	0.654
Extrinsic	0.854	0.892	0.579
<b>Job Stress</b>			
Intrinsic Job	0.908	0.924	0.605
Management	0.904	0.923	0.633
Relationship	0.909	0.928	0.683
Career	0.859	0.899	0.641
Structure	0.928	0.942	0.699
Home-work	0.920	0.930	0.597

*Model Structure Decision*

Hair et al (2013) proposed a bootstrapping procedure in evaluating model structure through software in SmartPLS version 3.2.7. The bootstrapping procedure is a resampling method that takes many subsamples from the original data and estimates the model for each subsample to ensure a significant level of direct and indirect effects (mediators) of each hypothesis relationship in the model. The proposed relationship in the study model was analysed statistically at the significance level,  $p < 0.05$  (Preacher & Hayes, 2008). Table 2 shows the

direct effects between the variables in the study, while Figure 2 shows the structure of the study model.

Table 2  
*Direct and Indirect Effects of Study Variables*

Hypothesis	Relationship	Mean	$\beta$	t	p	LL 2.5%	UL 97.5%
1	Job Stress -> Job Satisfaction						
H1a(1)	Intrinsic Job -> Intrinsic	-0.163	0.105	1.688	0.092	-0.365	0.046
H1a(2)	Intrinsic Job -> Extrinsic	-0.456	0.107	4.365	0	-0.71	-0.295
H1a(3)	Management -> Intrinsic	0.349	0.149	2.505	0.013	0.086	0.659
H1a(4)	Management -> Extrinsic	0.539	0.153	3.544	0	0.254	0.836
H1a(5)	Relationship -> Intrinsic	-0.271	0.146	1.956	0.051	-0.561	0.01
H1a(6)	Relationship -> Extrinsic	-0.225	0.134	1.742	0.082	-0.495	0.038
H1a(7)	Career -> Intrinsic	0.368	0.141	2.801	0.005	0.15	0.665
H1a(8)	Career -> Extrinsic	0.305	0.126	2.667	0.008	0.116	0.595
H1a(9)	Structure -> Intrinsic	-0.009	0.151	0.099	0.921	-0.333	0.245
H1a(10)	Structure -> Extrinsic	-0.163	0.133	1.307	0.192	-0.458	0.056
H1a(11)	Home-work -> Intrinsic	-0.078	0.11	0.899	0.369	-0.336	0.083
H1a(12)	Home-work -> Extrinsic	0.123	0.133	0.834	0.405	-0.162	0.354
2	Job Stress -> The Big Five Personality						
H2a(1)	Intrinsic Job -> Openness	0.051	0.13	0.261	0.794	-0.235	0.266
H2a(2)	Intrinsic Job -> Conscientiousness	0.184	0.123	1.456	0.146	-0.027	0.421
H2a(3)	Intrinsic Job -> Extraversion	0.059	0.135	0.238	0.812	-0.197	0.302
H2a(4)	Intrinsic Job -> Agreeableness	0.082	0.172	0.187	0.852	-0.266	0.371
H2a(5)	Intrinsic Job -> Neuroticism	-0.309	0.152	2.269	0.024	-0.63	-0.086
H2a(6)	Management -> Openness	0.622	0.185	3.693	0	0.374	1.021
H2a(7)	Management -> Conscientiousness	0.201	0.188	1.329	0.184	-0.079	0.675
H2a(8)	Management -> Extraversion	0.189	0.203	1.207	0.228	-0.095	0.632
H2a(9)	Management -> Agreeableness	0.209	0.226	1.232	0.219	-0.117	0.725
H2a(10)	Management -> Neuroticism	0.335	0.223	1.801	0.072	-0.032	0.802
H2a(11)	Relationship -> Openness	0.392	0.113	3.621	0	0.215	0.671
H2a(12)	Relationship -> Conscientiousness	0.273	0.141	1.907	0.057	0.016	0.546
H2a(13)	Relationship -> Extraversion	0.161	0.145	1.024	0.306	-0.148	0.435
H2a(14)	Relationship -> Agreeableness	0.181	0.179	0.894	0.372	-0.168	0.503
H2a(15)	Relationship -> Neuroticism	0.273	0.156	1.718	0.086	-0.004	0.586
H2a(16)	Career -> Openness	-0.294	0.145	2.073	0.039	-0.617	-0.031
H2a(17)	Career -> Conscientiousness	-0.475	0.164	2.932	0.004	-0.819	-0.177
H2a(18)	Career -> Extraversion	-0.157	0.146	0.945	0.345	-0.414	0.133
H2a(19)	Career -> Agreeableness	-0.489	0.169	2.767	0.006	-0.796	-0.166
H2a(20)	Career -> Neuroticism	0.114	0.174	0.858	0.391	-0.159	0.504
H2a(21)	Structure -> Openness	-0.133	0.144	0.953	0.341	-0.447	0.133
H2a(22)	Structure -> Conscientiousness	0.277	0.149	1.862	0.063	-0.036	0.545
H2a(23)	Structure -> Extraversion	0.181	0.149	1.189	0.235	-0.119	0.472



H2a(24)	Structure -> Agreeableness	0.361	0.166	2.149	0.032	0.022	0.657
H2a(25)	Structure -> Neuroticism	-0.241	0.188	1.387	0.166	-0.629	0.102
H2a(26)	Home-work -> Openness	-0.449	0.157	3.291	0.001	-0.817	-0.296
H2a(27)	Home-work -> Conscientiousness	-0.298	0.232	1.5	0.134	-0.853	0.072
H2a(28)	Home-work -> Extraversion	-0.202	0.186	1.332	0.184	-0.575	0.107
H2a(29)	Home-work -> Agreeableness	-0.169	0.23	0.869	0.385	-0.626	0.265
H2a(30)	Home-work -> Neuroticism	-0.074	0.181	0.734	0.463	-0.503	0.165
3	The Big Five Personality -> Job Satisfaction						
H3a(1)	Openness -> Intrinsic	-0.014	0.068	0.271	0.787	-0.155	0.111
H3a(2)	Openness -> Extrinsic	0.061	0.066	0.923	0.356	-0.062	0.183
H3a(3)	Conscientiousness -> Intrinsic	0.303	0.082	3.731	0	0.16	0.485
H3a(4)	Conscientiousness -> Extrinsic	0.291	0.074	4.015	0	0.167	0.459
H3a(5)	Extraversion -> Intrinsic	0.163	0.095	1.786	0.075	-0.007	0.367
H3a(6)	Extraversion -> Extrinsic	0.12	0.092	1.385	0.167	-0.054	0.301
H3a(7)	Agreeableness -> Intrinsic	0.196	0.073	2.659	0.008	0.037	0.32
H3a(8)	Agreeableness -> Extrinsic	0.193	0.068	2.748	0.006	0.052	0.311
H3a(9)	Neuroticism -> Intrinsic	0.066	0.061	1.014	0.311	-0.059	0.179
H3a(10)	Neuroticism -> Extrinsic	0.111	0.062	1.677	0.094	-0.026	0.217
4	Job Stress-> The Big Five Personality ->Job Satisfaction						
H4a(1)	Intrinsic Job -> Openness -> Intrinsic	-0.001	0.01	0.066	0.947	-0.027	0.014
H4a(2)	Intrinsic Job -> Openness -> Extrinsic	0.003	0.012	0.17	0.865	-0.019	0.035
H4a(3)	Intrinsic Job -> Conscientiousness -> Intrinsic	0.057	0.042	1.307	0.192	-0.005	0.164
H4a(4)	Intrinsic Job -> Conscientiousness -> Extrinsic	0.055	0.04	1.346	0.179	-0.003	0.147
H4a(5)	Intrinsic Job -> Extraversion -> Intrinsic	0.009	0.025	0.218	0.827	-0.032	0.074
H4a(6)	Intrinsic Job -> Extraversion -> Extrinsic	0.006	0.02	0.208	0.835	-0.024	0.062
H4a(7)	Intrinsic Job -> Agreeableness -> Intrinsic	0.015	0.035	0.178	0.859	-0.06	0.08
H4a(8)	Intrinsic Job -> Agreeableness -> Extrinsic	0.016	0.035	0.169	0.866	-0.048	0.082
H4a(9)	Intrinsic Job -> Neuroticism -> Intrinsic	-0.021	0.023	0.935	0.35	-0.086	0.008
H4a(10)	Intrinsic Job -> Neuroticism -> Extrinsic	-0.034	0.027	1.325	0.186	-0.121	-0.001
H4a(11)	Management -> Openness -> Intrinsic	-0.01	0.044	0.287	0.774	-0.12	0.065
H4a(12)	Management -> Openness -> Extrinsic	0.037	0.043	0.96	0.337	-0.026	0.142

H4a(13)	Management -> Conscientiousness	0.059	0.06	1.277	0.202	-0.003	0.227
	-> Intrinsic						
H4a(14)	Management -> Conscientiousness	0.058	0.058	1.288	0.198	-0.011	0.216
	-> Extrinsic						
H4a(15)	Management -> Extraversion -> Intrinsic	0.037	0.044	0.932	0.352	-0.009	0.184
H4a(16)	Management -> Extraversion -> Extrinsic	0.028	0.037	0.848	0.397	-0.007	0.151
H4a(17)	Management -> Agreeableness -> Intrinsic	0.043	0.051	1.066	0.287	-0.015	0.185
H4a(18)	Management -> Agreeableness -> Extrinsic	0.04	0.048	1.069	0.286	-0.014	0.188
H4a(19)	Management -> Neuroticism -> Intrinsic	0.021	0.028	0.894	0.372	-0.008	0.107
H4a(20)	Management -> Neuroticism -> Extrinsic	0.038	0.037	1.122	0.262	-0.003	0.145
H4a(21)	Relationship -> Openness -> Intrinsic	-0.005	0.027	0.277	0.782	-0.066	0.042
H4a(22)	Relationship -> Openness -> Extrinsic	0.024	0.028	0.883	0.378	-0.016	0.093
H4a(23)	Relationship -> Conscientiousness -> Intrinsic	-0.08	0.045	1.828	0.068	0.017	0.193
H4a(24)	Relationship -> Conscientiousness -> Extrinsic	-0.078	0.044	1.812	0.071	0.018	0.208
H4a(25)	Relationship -> Extraversion -> Intrinsic	0.026	0.03	0.83	0.407	-0.013	0.107
H4a(26)	Relationship -> Extraversion -> Extrinsic	0.018	0.026	0.723	0.47	-0.016	0.091
H4a(27)	Relationship -> Agreeableness -> Intrinsic	0.034	0.037	0.832	0.406	-0.024	0.115
H4a(28)	Relationship -> Agreeableness -> Extrinsic	0.033	0.037	0.806	0.421	-0.027	0.121
H4a(29)	Relationship -> Neuroticism -> Intrinsic	0.018	0.024	0.689	0.491	-0.01	0.09
H4a(30)	Relationship -> Neuroticism -> Extrinsic	0.029	0.025	1.11	0.267	-0.001	0.107
H4a(31)	Career -> Openness -> Intrinsic	0.005	0.022	0.249	0.803	-0.03	0.06
H4a(32)	Career -> Openness -> Extrinsic	-0.018	0.024	0.757	0.449	-0.084	0.014
H4a(33)	Career -> Conscientiousness -> Intrinsic	-0.142	0.061	2.408	0.016	-0.31	-0.059
H4a(34)	Career -> Conscientiousness -> Extrinsic	-0.136	0.055	2.607	0.009	-0.29	-0.058
H4a(35)	Career -> Extraversion -> Intrinsic	-0.022	0.027	0.872	0.383	-0.105	0.011
H4a(36)	Career -> Extraversion -> Extrinsic	-0.015	0.024	0.733	0.464	-0.088	0.013

H4a(37)	Career -> Agreeableness -> Intrinsic	-0.093	0.044	2.058	0.04	-0.197	-0.022
H4a(38)	Career -> Agreeableness -> Extrinsic	-0.093	0.045	1.944	0.052	-0.198	-0.017
H4a(39)	Career -> Neuroticism -> Intrinsic	0.007	0.017	0.555	0.579	-0.006	0.061
H4a(40)	Career -> Neuroticism -> Extrinsic	0.013	0.023	0.665	0.506	-0.011	0.089
H4a(41)	Structure -> Openness -> Intrinsic	0.002	0.014	0.181	0.857	-0.018	0.041
H4a(42)	Structure -> Openness -> Extrinsic	-0.008	0.016	0.525	0.6	-0.065	0.006
H4a(43)	Structure -> Conscientiousness -> Intrinsic	0.084	0.052	1.649	0.1	0	0.212
H4a(44)	Structure -> Conscientiousness -> Extrinsic	0.078	0.046	1.81	0.071	0.005	0.181
H4a(45)	Structure -> Extraversion -> Intrinsic	0.025	0.03	0.994	0.321	-0.009	0.115
H4a(46)	Structure -> Extraversion -> Extrinsic	0.019	0.027	0.847	0.397	-0.009	0.099
H4a(47)	Structure -> Agreeableness -> Intrinsic	0.069	0.042	1.664	0.097	0.008	0.163
H4a(48)	Structure -> Agreeableness -> Extrinsic	0.069	0.042	1.591	0.112	0.007	0.164
H4a(49)	Structure -> Neuroticism -> Intrinsic	-0.013	0.02	0.798	0.426	-0.077	0.009
H4a(50)	Structure -> Neuroticism -> Extrinsic	-0.027	0.029	0.948	0.344	-0.111	0.009
H4a(51)	Home-work -> Openness -> Intrinsic	0.007	0.032	0.301	0.764	-0.049	0.08
H4a(52)	Home-work -> Openness -> Extrinsic	-0.026	0.031	1.013	0.312	-0.109	0.018
H4a(53)	Home-work -> Conscientiousness -> Intrinsic	-0.088	0.073	1.469	0.142	-0.278	0.012
H4a(54)	Home-work -> Conscientiousness -> Extrinsic	-0.085	0.068	1.527	0.127	-0.26	0.006
H4a(55)	Home-work -> Extraversion -> Intrinsic	-0.037	0.043	0.982	0.326	-0.194	0.006
H4a(56)	Home-work -> Extraversion -> Extrinsic	-0.028	0.036	0.875	0.382	-0.144	0.007
H4a(57)	Home-work -> Agreeableness -> Intrinsic	-0.034	0.051	0.767	0.444	-0.149	0.045
H4a(58)	Home-work -> Agreeableness -> Extrinsic	-0.033	0.049	0.752	0.452	-0.15	0.048
H4a(59)	Home-work -> Neuroticism -> Intrinsic	-0.005	0.018	0.463	0.643	-0.09	0.01
H4a(60)	Home-work -> Neuroticism -> Extrinsic	-0.008	0.023	0.592	0.554	-0.083	0.011

Note: \*\* p<.05; N=274; LL=lower level, UL=upper level

Next, we evaluated the coefficient of determination (R<sup>2</sup>) and the size effect, f<sup>2</sup>, from the study model. Table 3 shows the R<sup>2</sup> values for the endogenous variables. The standard value of R<sup>2</sup> proposed by Hair et al (2017) in PLS-SEM were 0.67, 0.33, and 0.19, which indicated large, medium, and small coefficients of determination, and values > 0.1 were appropriate for the entire model or model fit. R<sup>2</sup> values for endogenous constructs have reached a moderate and acceptable coefficient of determination. For the model in this study, the R<sup>2</sup> value for the endogenous dependent variable (DV) indicates that the proposed theoretical model explains

the intrinsic dimensions, variance = .514 (51.4%) and extrinsic, variance = .549 (54.9%) in job satisfaction and 58.8% which is a very satisfactory level for the predictive model. Therefore, this model has a strong predictive capacity model.

Table 3  
*Coefficient of Determination, R2*

Variable	R2	Coefficient Determination	ofVariance	Model Fit
Openness to experience	0.121	Small	12%	Fit
Conscientiousness	0.074	Small	7.40%	
Extraversion	0.063	Small	6.30%	
Agreeableness	0.068	Small	6.80%	
Neuroticism	0.052	Small	5.20%	
Extrinsic	0.549	Medium	54%	Fit
Intrinsic	0.514	Medium	51%	Fit

Table 4 shows the effect of size; f2 refers to how much exogenous formation contributes to the R2 value of the targeted construct in the model structure (Hair et al., 2013). Calculations for the relative size effect of exogenous constructs can be calculated as follows:

$$f^2 = \frac{R2\text{ included} - R2\text{excluded}}{1 - R2\text{ included}}$$

According to the rule proposed by Cohen (2000), the relative measurement value of effect size, f2 for exogenous constructs against endogenous constructs, is 0.02, which is a small effect, 0.15 is a medium effect, and 0.35 is a large effect. However, a small effect of f2 does not necessarily indicate that the effect is insignificant. Based on Cohen’s (2000) suggestion, the size effect for all study variables was considered to be small for the dimensions of job stress, job satisfaction and Big Five Personality.

Table 4  
*Size Effect of f2 for Study Variables*

Relationship	f2	Size Effect
The Big Five Personality ->Job Satisfaction		
Openness to experience-> Intrinsic	0.00	Small
Openness to experience-> Extrinsic	0.003	Small
Conscientiousness-> Intrinsic	0.07	Small
Conscientiousness-> Extrinsic	0.072	Small
Extraversion-> Intrinsic	0.014	Small
Extraversion-> Extrinsic	0.009	Small
Agreeableness-> Intrinsic	0.029	Small
Agreeableness-> Extrinsic	0.029	Small
Neuroticism-> Intrinsic	0.004	Small
Neuroticism-> Extrinsic	0.012	Small

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Job Stress-> Job Satisfaction

Intrinsic Job -> Intrinsic	0.01	Small
Intrinsic Job -> Extrinsic	0.078	Small
Management -> Intrinsic	0.029	Small
Management -> Extrinsic	0.066	Small
Relationship -> Intrinsic	0.022	Small
Relationship -> Extrinsic	0.016	Small
Career -> Extrinsic	0.028	Small
Structure -> Intrinsic	0.00	Small
Structure -> Extrinsic	0.007	Small
Home-work -> Intrinsic	0.003	Small
Home-work -> Extrinsic	0.004	Small

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Job Stress-> The Big Five Personality

Intrinsic Job-> Openness to experience	0.00	Small
Intrinsic Job ->Conscientiousness	0.006	Small
Intrinsic Job ->Extraversion	0.00	Small
Intrinsic Job ->Agreeableness	0.00	Small
Intrinsic Job ->Neuroticism	0.022	Small
Management -> Openness to experience	0.058	Small
Management ->Conscientiousness	0.007	Small
Management ->Extraversion	-0.007	Small
Management ->Agreeableness	0.009	Small
Management ->Neuroticism	0.018	Small
Relationship -> Openness to experience	0.026	Small
Relationship ->Conscientiousness	0.011	Small
Relationship ->Extraversion	0.003	Small
Relationship ->Agreeableness	0.004	Small
Relationship ->Neuroticism	0.01	Small
Career -> Openness to experience	0.013	Small
Career ->Conscientiousness	0.031	Small
Career ->Extraversion	0.002	Small
Career ->Agreeableness	0.029	Small
Career ->Neuroticism	0.003	Small
Structure -> Openness to experience	0.002	Small
Structure ->Conscientiousness	0.009	Small
Structure ->Extraversion	0.004	Small
Structure ->Agreeableness	0.015	Small
Structure ->Neuroticism	0.008	Small
Home-work -> Openness to experience	0.046	Small
Home-work ->Conscientiousness	0.02	Small
Home-work ->Extraversion	0.01	Small
Home-work ->Agreeableness	0.007	Small

Home-work -&gt;Neuroticism

0.003

Small

Hypothesis 1 predicts there is a significant influence of job stress dimensions (intrinsic factors to employment, management roles, work relationships with others, career and achievements, organisational structure or climate, home-work interface) on job satisfaction dimensions (intrinsic and extrinsic). The results of the study (Table 2) show that there was a significant influence of the dimension of job stress on intrinsic job-> extrinsic ( $\beta = .107^{**}$ ,  $t = 4.365$ ), management role-> intrinsic ( $\beta = .149^{**}$ ,  $t = 2.505$ ), management role-> extrinsic ( $\beta = .153^{**}$ ,  $t = 3.544$ ), career and achievement -> intrinsic ( $\beta = .141^{**}$ ,  $t = 2.801$ ) and career and achievement -> extrinsic ( $\beta = .126^{**}$ ,  $t = 2.667$ ). Therefore, the study hypotheses H1a (2), H1a (3), H1a (4), H1a (7) and H1a (8) are accepted. The overall effect in this study (intrinsic,  $R^2$

= .514, extrinsic,  $R^2 = .549$ ) shows that all dimensions of job stress had a moderate effect of 54% on intrinsic job satisfaction and 51% (extrinsic).

Hypothesis 2 predicts that there is a significant influence of job stress dimensions (intrinsic factors to employment, management role, work relationships with others, career and achievements, organisational structure or climate, home-work interface) on the Big Five Personality dimensions (openness to experience, conscientiousness), extraversion, agreeableness, neuroticism). The findings of the study (Table 2) show that there was a significant influence of intrinsic factors on occupational-> neuroticism (H2a (5);  $\beta = .152^{**}$ ,  $t = 2.269$ , LL = .63, UL = .086); management role-> openness to experience (H2a (6);  $\beta = .185^{**}$ ,  $t = 3.693$ , LL = .374, UL = 1.021), working relationships with others-> openness to experience (H2a (11);  $\beta = .113^{**}$ ,  $t = 3.621$ , LL = .215, UL = 1.671), career and achievement factors with openness to experience dimension (H2a (16);  $\beta = .145^{**}$ ,  $t = 2.073$ , LL = -.617, UL = -.031), conscientiousness (H2a (17);  $\beta = .164^{**}$ ,  $t = 2.932$ , LL = -.819, UL = -.177) and agreeableness (H2a (19);  $\beta = .169^{**}$ ,  $t = 2.767$ , LL = .796, UL = .166) was significant. Furthermore, organisational structure or climate-> agreeableness (H2a (24);  $\beta = .166^{**}$ ,  $t = 2.149$ , LL = .022, UL = .657) and home-work interface -> openness to experience (H2a (26);  $\beta = .157^{**}$ ,  $t = 3.291$ , LL = .817, UL = .296) were also significant. Thus, the study hypotheses H2a (5), H2a (6), H2a (11), H2a (16), H2a (17), H2a (19), H2a (24), H2a (26) are accepted. The overall effect in this study shows that all dimensions of job stress have a small effect on the Big Five Personality dimension (openness to experience,  $R^2 = .121$ , conscientiousness  $R^2 = .074$ , extraversion,  $R^2$

= .063, agreeableness  $R^2 = .068$  and neuroticism,  $R^2 = .052$ ), by 12%, 7.4%, 6.3%, 6.8% and 5.2%, respectively

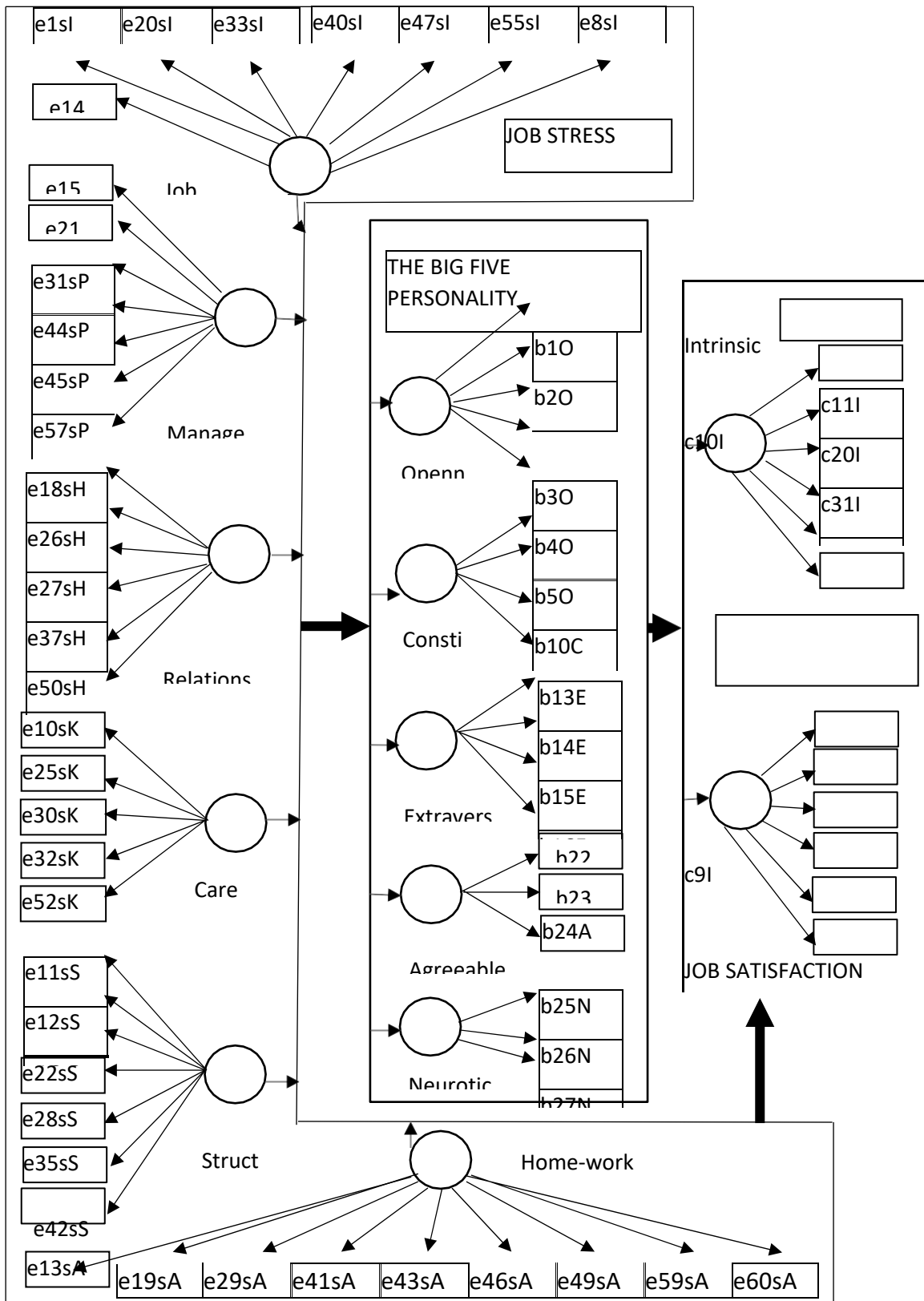
Hypothesis 3 predicts there is an influence of the Big Five Personality dimensions (openness to experience, conscientiousness, extraversion, agreeableness, neuroticism) on the job satisfaction dimensions (intrinsic and extrinsic). The results of the study (Table 2) show that there is a significant influence for the dimensions of conscientiousness with intrinsic (H3a (3);  $\beta = .082^{**}$ ,  $t = 3.731$ , LL = .16, UL = .485) and extrinsic (H3a (4));  $\beta = .074^{**}$ ,  $t = 4.015$ , LL = .167, UL = .459) at  $p < .05$ , while for the agreeableness dimension with intrinsic (H3a (7);  $\beta = .073^{**}$ ,  $t = 2.659$ , LL = .037, UL = .32) and extrinsic (H3a (8);  $\beta = .068^{**}$ ,  $t = 2.748$ , LL = .052, UL = .311). Based on the results of this study, only hypotheses H3a (3), H3a (4), H3a (7), and H3a (8) are accepted. The findings of this study suggest that the dimensions of openness to experience ( $R^2 = .478$  (47.8%) and neuroticism ( $R^2 = .444$  (44.4%)) had a small effect on job satisfaction (intrinsic), while on extrinsic they had a moderate effect,  $R^2 = .536$  (53.6%),  $R^2 =$

.513 (51.3%), respectively. Meanwhile, for the dimensions of conscientiousness, extraversion and agreeableness, they had a large effect on intrinsic ( $R^2 = .809$ ) with 80.9%, and extrinsic ( $R^2 = .761$ ) with 76.1%.

#### *Mediator Effect Test*

Table 2 summarizes the results of the mediator effect of the Big Five Personality dimension as a mediator between job stress and job satisfaction. According to Preacher and Hayes (2008), mediator influence can exist without significant influence between predictor variable (X) and criterion variable (Y). For the mediator analysis test, researchers performed bootstrapping to test the statistical significance of indirect influences for the mediator model (Preacher & Hayes 2008) using SmartPLS software version 3.2.7, which has the advantage of performing mediator influences simultaneously for all variables (Hair et al., 2013). Proposed hypotheses in the study model were developed to test the Big Five Personality variables as mediators. Bootstrap samples were obtained by repeatedly estimating a coefficient of at least 1000 bootstrap samples, each of which N cases were taken at random to replace the original sample (N = 293). The proposed effect is significant if the confidence interval (CI) is 2.5% for the lower benchmark (LL) and 97.5% for the upper benchmark (UL). In testing the hypothesis and significance of a construct, if  $\alpha = 5\%$  and a value of  $t > 1.96$ , then the construct is considered significant, and the hypothesis is acceptable (Ringle et al., 2010; Hair et al., 2013).

Figure 2 Structure of the Study Model





Hypothesis 4 predicts the influence of the Big Five Personality dimensions (openness to experience, conscientiousness, extraversion, agreeableness, neuroticism) as mediators between the dimensions of job stress (intrinsic factors to employment, management roles, working relationships with others, career and achievement, structure or climate) organisation, home-work interface) and dimensions of job satisfaction (intrinsic and extrinsic). The results of the study have shown that career and achievement-> conscientiousness-> intrinsic (H4a (33);  $t = 2.408$ ,  $LL = -.31$ ,  $UL = -.059$ ,  $** p < .05$ ), career and achievement-> conscientiousness-> extrinsic (H4a (34);  $t = 2.607$ ,  $LL = -.29$ ,  $UL = -.058$ ,  $** p < .05$ ) and career and achievement-> agreeableness-> extrinsic (H4a (37);  $t = 2.058$ ,  $LL = -.197$ ,  $UL = -.022$ ,  $** p < .05$ ) had a significant mediator influence. Therefore, the researchers only accepted hypotheses H4a (33), H4a (34), and H4a (37). Overall, the hypothesised results of this study contribute to knowledge by emphasising the importance of the Big Five Personality as a mediator in the relationship between job stress in particular career and achievement on job satisfaction. Since the indirect influence of career and achievement-> conscientiousness-> intrinsic, career and achievement-> conscientiousness-> extrinsic and career and achievement-> agreeableness-> extrinsic is statistically significant, this suggests that job satisfaction will increase when driven by career and achievement, and when there is control over the dimensions of conscientiousness and agreeableness.

## Discussion

The main objective of this study is to examine whether there is a Big Five Personality mediator influence between job stress and job satisfaction. First, the results of the study illustrate that intrinsic job stress factors to job, management and career roles and achievements have contributed positively to extrinsic job satisfaction among respondents. This is consistent with the findings of previous studies by (Newburry-Birch et al., 2001; Ernest et al., 2003; Jamal, 2005; Dale et al., 2006; Ho, 2007; Yao -Mei Chen et al., 2007; Hanafiah and Normah, 2007; Azman et al., 2009; Muhammad et al., 2011; Aoife, 2013 Rizwan and Arooba et al., 2014). This suggests that intrinsic factors are more likely to influence job satisfaction extrinsically (Moyosola et al., 2014). In comparison, the management role factor shows how employers should ensure that there is no conflict of employee roles in the organisation that can affect job satisfaction intrinsically and extrinsically. Employees who face role ambiguity in the job can experience job stress (Khattak et al., 2013) and affect employees' intellectual and social abilities (Yao-Mei et al., 2007; Simin et al., 2013). Similarly, work and achievement factors also affect job satisfaction intrinsically and extrinsically. Employees who are given meaningful grants such as promotion opportunities will directly increase their job satisfaction (Piar & Hemande, 2012).

Second, the findings of the study show that all job stress factors, namely management role, career and achievement, work relationships with others, and home-work interface, have a significant influence on the dimension of openness to experience. This demonstrates that management who understand the role of employees in the organisation will be more sensitive about their job safety, increase communication efforts among employees and avoid attitude conflicts in the workplace which affect the dimension of openness to experience. According to Cecil (2010), job stress factors have different effects on different individuals. Certain personalities such as openness to experience are able to deal with home-work-interface

fatigue symptoms (Cameron, 2003). In addition, the presence of a significant influence of job stress factors (career and achievement and organisational structure or climate) on the agreeableness dimension indicates that economic and political conditions in the workplace contribute positively to the agreeableness dimension. Employers who plan work situations well and improve the atmosphere of harmony can influence the dimension of agreeableness that shows behaviours such as wisely managing and resolving problems or work conflicts (Sampath & Kulathunga, 2010; Subburaj et al., 2012). In addition, career and achievement factors are associated with the conscientiousness dimension. This has demonstrated the extent to which employers are able to wisely manage career and achievement factors such as job type (Ho, 2007; Lorraine et al., 2010; Aoife, 2013; Weipeng et al., 2015) that affects task-oriented employees, including achievement-oriented, wise self-control, responsible, more thorough and sensitive (Selin, 2011). In addition, intrinsic factors to employment referring to risky work conditions in the workplace have a significant influence on the dimension of neuroticism associated with individuals having unstable emotions, becoming less confident, and contributing to negative behaviours in the workplace (Vivian, 2005). This is also supported by (Constatinos, 2007; Katyal et al., 2011; Hattice and Selma, 2011; Thomas et al., 2013; Asmawati et al., 2014). Negative attitudes are still a major factor that employers should pay attention to towards employees in university (Christopher et al., 2014).

Third, the results of the study indicate that the dimensions of conscientiousness and agreeableness have contributed positively to job satisfaction (intrinsic and extrinsic). This is consistent with the findings of previous studies by (Judge et al., 2002; Daniel et al., 2002; Vivian, 2005; Michael et al., 2006; Cohrs et al., 2006; Adrian et al., 2009; Klaus, 2012; Cheng – Liang et al., 2014; Dev et al., 2014; Joseph et al., 2015; Aida et al., 2015). This is an important first step in understanding the personality traits that influence employee reactions and attitudes in the workplace (Selin et al., 2011). According to Christopher et al. (2014), the agreeableness dimension shows that employees who are reliable and adaptable in all work situations have a strong correlation with job satisfaction, even motivated to maintain good relationships with their colleagues and can improve the harmonious atmosphere in the group, which subsequently help them achieve the desired job satisfaction (Selin, 2011). The study findings have also proven that an individual who possesses conscientiousness dimension is more likely to achieve higher job satisfaction because she or he tends to be achievement-oriented, self-controlled, responsible, more thorough, task-oriented, and sensitive (Selin, 2011). Employees with a high level of conscientiousness will do a better job than less meticulous employees (Spagnoli, 2012) and are very careful not to violate work rules, standards and procedures and bureaucratic structures, especially in the public sector (Judge et al., 2002; Christopher et al., 2014).

Fourth, important findings of the study in determining the extent to which Big Five Personality as a mechanism that can influence the relationship between job stress and job satisfaction have shown that the conscientiousness and agreeableness dimensions serve as mediators between career and job achievement and satisfaction intrinsically and extrinsically. This clearly indicates that the dimensions of conscientiousness and agreeableness are more influential on job satisfaction than career-related stress factors and workplace achievement such as job type, job transfer, promotion opportunities and economic or political circumstances. This demonstrates the importance of the Big Five Personality (Hui-Fang, 2007; Ian et al., 2009), i.e., the dimensions of conscientiousness and agreeableness in playing a key role to act as determinants of an individual's job satisfaction (Judge et al., 2002; Klaus, 2012; Christopher et al., 2014). This is in line with the findings of previous studies by (Judge et al.,

2002; Daniel et al., 2002; Vivian, 2005; Michael et al., 2006; Cohrs et al., 2006; Adrian et al., 2009; Klaus, 2012; Cheng-Liang et al., 2014; Dev et al., 2014; Joseph et al., 2015; Aida et al., 2015). This is because the agreeableness dimension indicates the attitudes of support staff such as appreciating cooperation, trustworthiness, adaptability, and good communication with colleagues have promoted a harmonious work environment, which in turn, helping them achieve the desired job satisfaction (Selin, 2011; Klaus, 2012; Christopher et al., 2014). The conscientiousness dimension also influences job satisfaction because the employees' attitudes that are responsible, organised, diligent and positive will encourage them to obtain job satisfaction (Spagnoli, 2012).

### Implications for Theory and Practice

#### *Implications for Theory*

Overall, the results of this study are important in terms of theoretical and practical implications. Theoretically, first, this study extends Social Exchange Theory by presenting empirical evidence related to the relationship of job stress factors consisting of six dimensions (intrinsic factors to employment, management role, work relationships with others, career and achievement, organisational structure or climate and home-work interface) has a positive influence on job satisfaction both intrinsically and extrinsically.

Second, this study provides empirical evidence of the direct influence of job stress dimensions (intrinsic factors to employment, management roles, working relationships with others, career and achievements, organisational structure or climate and home-work interface) on the Big Five Personality dimensions (openness to experience, conscientiousness, extraversion, agreeableness and neuroticism). Since the study of the relationship between the dimensions of job stress and the Big Five Personality is less applied in the context of public service, this study expands the latest knowledge on the influence of the dimensions of job stress on the dimensions of the Big Five Personality especially the dimension of openness to experience.

Third, this study also contributes to the Big Five Personality literature by providing empirical evidence to validate some theoretical expectations regarding the Big Five Personality dimensions (openness to experience, conscientiousness, extraversion, agreeableness and neuroticism) on job satisfaction dimensions (intrinsic and extrinsic). The findings have suggested that the conscientiousness dimension has the most significant positive influence on job satisfaction intrinsically. Fourth, this study has been detailed by emphasising the important role of the Big Five Personality dimension as a mediator between job stress and job satisfaction by using the SmartPLS SEM model, which has previously been limitedly analysed. Knowledge of the influence of the Big Five Personality on job stress and job satisfaction is also very limited based on searches using databases of online journals such as Ebscohost, Science Direct, e-journals.

As discussed in this study, the function of the Big Five Personality mediator is that it helps build a deeper understanding of the integration of the Big Five Personality dimensions (openness to experience, conscientiousness, extraversion, agreeableness and neuroticism) with job stress and job satisfaction. In particular, a specific understanding of how the conscientiousness dimension emerges as the strongest mediator in explaining the relationship between job stress (career and achievement) and job satisfaction extrinsically.

Finally, this study has created a comprehensive and new integrated work design model by contributing in developing theory with multidimensional constructions that analyzed simultaneously. Notably, by introducing the potential of the Big Five Personality as a mediator

variable measured based on a variety of different dimensions and aspects. This model is expected to serve as a guideline for future research and can assist in understanding the influence of Big Five Personality and job stress toward job satisfaction to the support staffs.

### *Practice Implications*

In terms of practical implications, first, the results of this study provide essential information on the importance of job satisfaction among support staffs in the university by focusing on the role of job stress. Job satisfaction plays a vital role as it can simplify the job process by filling gaps related to unspecified and unclear tasks with job descriptions. In addition, it also helps staff work overtime to fulfil responsibilities, provide better quality services, and are committed to the university's goals (Chia et al., 2013). The information obtained from this study can help in emphasizing the intrinsic or motivational factors to increase job satisfaction among support staff. This will benefit the increased productivity of employees and the organisation as a whole.

Second, this study emphasises the importance of job stress that has been integrated into the work design model. These findings can also be used as guidelines to raise awareness and provide knowledge to employees in identifying job stress factors and preventive measures to deal with job stress, including job stress management training programs that can improve employees' ability to cope with job stress. (Newbury-Birch et al., 2001).

Third, this study has identified the Big Five Personality dimensions, specifically conscientiousness and agreeableness, that have a positive influence on the job satisfaction of support staff intrinsically. The role of the Big Five Personality in employment is now vital enough to shape employee attitudes that will increase job satisfaction for better organisational achievement (Thomas et al., 2009; Azizi et al., 2012). This personality concept is essential to support employees in achieving high competency level in their workplace. The application of the appropriate personalities can be enhanced and incorporated in the employee training at the organizations (Homa et al., 2014) to promote the skills and developing good attitude which increase productivity. Researchers suggest that personality training programs will enhance employee competence and long-term effects on their profession (Chang et al., 2010).

### **Limitations and Recommendations for Future Studies**

Although all measures have been taken intensively, this study is still not free from some limitations that are a phenomenon in a study. Several limitations and recommendations can be considered for future studies in this field of study. These can also be considered as guidelines and factors that should be addressed later.

First, in terms of the respondents, this study's focused on the attitudes of support staffs particularly in one public university of University Technology Malaysia. The findings are believed to be different if the population from other universities. Therefore, future researchers may extend the current model of the study to other populations in both public and private universities.

Second, this study uses a cross-sectional study design to collect data over a period of time, which has weaknesses and limited ability to draw solid conclusions since it cannot measure the effects and consequences of the model over time (Sekaran, 2010). Therefore, it is suggested that the design of future longitudinal studies should be done using experimental studies that provides better understanding about the mediator effect of Big Five Personality on job stress and job satisfaction over time. Finally, the researchers suggest that future

studies should consider integrating other mediator variables to add knowledge about the effects of job stress on job satisfaction.

### **Conclusion**

Overall, this study has confirmed that intrinsic factors to employment, management and career roles and achievements are essential to increase job satisfaction intrinsically and extrinsically among support staffs. However, more dominant structural factors or organisational climate improve the work output of support staff. Other researchers should note these findings in the future, where additional studies are needed to clarify this issue. This study also shows that among all the dimensions of job stress, the role of management has the strongest effect on the dimension of openness to experience. This explains how management should ensure that there are no conflicts or role ambiguities that would trigger job stress to the employees who have a high propensity for improving their work skills. These dimensions are interrelated and require additional attention as they lead to positive work behaviors. Moreover, the results of the study have confirmed that the conscientiousness dimension exerts the most substantial effect on job satisfaction intrinsically and acts as the most vital mediator in explaining the relationship between job stress and job satisfaction. However, this study has revealed that several dimensions of the Big Five Personality (openness to experience, extraversion and neuroticism) have negative effects on dimensions of job satisfaction and contrary to the hypotheses of previous studies. Finally, the information from this study could assist in developing better guidelines to the employers to overcome job stress and use the Big Five Personality to increase job satisfaction among the employees.

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