



# Precursors to University Students Burnout: Developing a Typology on the Role of Personality

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**Abstract.** Burnout was finally interpreted, coined as well as defined by Freudenberger in 1961, this concept had and still is being restudied and redefined at every potential moment by various authors and psychologists. However, as there are many journal articles that indicate research about employee burnout, other areas such as student and parental burnout are not studied. Besides the effect of depression, stress is also another prominent negative effect of the student burnout. Thus, the main purpose of this research is to thus interpret and discuss the factors that can potentially influence burnout because one's personality (extraversion, neuroticism, openness to experience, agreeableness, conscientiousness) Therefore data collection was done via various questionnaire which were adopted from previous studies. Two of the paths tested in the structural model were significant with all the t-values greater than critical value of 2.3263 (p-value<0.01). The results indicate that Agreeableness ( $\beta = 0.402$ ), Neuroticism ( $\beta = 0.2814$ ) have a significant effect on Burnout. One path was significant with t-statistics greater than the critical value of 1.645 (p-value < 0.05). Openness ( $\beta = 0.402$ ) has a significant effect on Burnout. Hence H1, H4 and H5 were supported while H2 and H3 were not supported. The implications for practice of this study is that it is recommended for lecturers to differentiate their lecturing style, taking into consideration the personality orientation of their students. In summary, the present study provided preliminary evidence on the possible role of personality traits and burnout among university students.

**Keywords:** burnout, Big 5 personality, tertiary students, burnout typology

## 1 Introduction

In the upcoming modernization of the world, there are actually countless opportunities for the emergence of a particular phenomenon called burnout. This is especially true considering that the entire population has been and continues to be affected by the lingering consequences of the recent COVID-19 pandemic. Burnout is actually a simple occurrence due to the increasing pressure that one could gain at anywhere and at any time. For example, pressure or stress in a way can occur to the younger generation such as the students who experience stress through handling the piling looming demands of their academic studies, e.g., getting a high grade in their subjects [1].

For the first time, the WHO has officially classified workplace burnout as an occupational phenomenon in its latest revision of the International Classification of Diseases[32]. Thus, the most noteworthy negative effects of burnout can be both physical and psychological affliction. However, in the recent years, burnout had turned from an

occupational phenomenon into a serious mental condition that is so apparent and critical in the citizens of Malaysia. In addition, besides employees who experience burnout, students, in particular those who are doing their tertiary education level, to experience burnout.

Extensive research has been conducted on the correlation between personality and burnout in professional settings, yet there appears to be a lack of similar investigation regarding burnout among students and academics. Although there have been previous studies investigating the connection between personality and burnout in students [2] [3], it is evident that there are still numerous aspects to be explored in the association between personality and burnout.

In a study conducted by Hassan, Majeed, Tajuddin, Abdullah, & Ahmad [4], the authors concluded that the university students who also experiences burnout and its negative side effects that includes the negative emotion by 44.2% , incapable of getting excited by 44.5 % , anxiety that ranges from a mild to a chronic state by 33.8 % , parched mouths of students by 31.5% , sense of agitation by 40.3% and finally, the inability of the students to relaxed by 40.8 %.

Despite the field of burnout being studied repetitively over time, this field is still worth studying and discussing in detail. To illustrate, the complete understanding of how personality contributes to student burnout remains incomplete, and the existing literature primarily focuses on burnout in the context of job-related scenarios [5].

This field of study is important for any individuals and third-parties particularly parents, universities, managers, and government because it addresses the state of the increasing number of mental illnesses as it is one of the negative consequences of burnout. The primary aim of this study is to address these knowledge gaps by investigating the correlation between personality traits and burnout among students in Malaysian higher education institutions.

Thus, the main purpose of this research is to thus interpret and discuss the factors that can potentially influence burnout due to one's personality (extraversion, neuroticism, openness to experience, agreeableness, conscientiousness).

## **2.0 Literature Review**

To truly begin in the process of understanding student's burnout as one of the major but common issues that occurs in all individuals regardless of their age, gender, or education level [6], one must start by first understanding the general term "burnout".

First and foremost, the beginning of the burnout concept does not start as a concept that is widely known by the society but begins as an expression. An expression that existed and was introduced via a novel that was entitled "A Burnout Case" written by Graham Green that was published in 1961 [7].

Burnout, according to Maslach and Leiter, is an emotional ailment that arises as a strained reaction to severe interpersonal factors in one's environment [8]. While academic burnout might be similar to the job burnout, this term is interpreted as the student's emotions of feeling incapability, cynicism and the gradual decreasing of one's effectiveness.

This perspective term can also be defined as fatigue and disengagement afflictions that the students experienced due to the prolonged subjection to the ever-increasing said school's demands [9].

Personality is defined as the individual's distinctive ways of being logical, possessing sensitivity and behaviors where this aspect also covers areas like the individual's point of view, their disposition and their outlook as well [10]. Costa and McCrae, defined the five-factor model of personality which are neuroticism, conscientiousness, openness to experiences, extraversion and agreeableness in 1992 [11].

## **2.1 Agreeableness**

Agreeableness, according to Ngyuen, is defined as the tendency of an individual to create and maintain prosocial relationships. Individuals that practice this personality trait are more dependable, honest, charitable, submissive, humble, and tender-hearted. [12]. Previous research conducted by Wang and his fellow researchers, had discovered that the agreeableness trait had negative relations with dimensions of the student's burn-out, where in this case the  $p$  – values is less than 0.001, and the  $\beta$  value is all negative number, proving the relationship between the variables to be a negative significant re- lationship [13].

The complicated relationship between the student's burnout and agreeableness can also be found in another study conducted by Sulea et al, which reported that student's burn-out reacts negatively with the trait of agreeableness [14]

Therefore, in this study, Hypothesis 1 is proposed as below:

H1: There is a negative and significant relationship between the trait agreeableness and students' burnout.

## **1.1 Conscientiousness**

Conscientiousness refers to a trait of a person's character to be frequently practiced and portrays awareness. Typically, conscientious individuals are organized, exhibit self- control, and have excellent time management skills. Thus , Soliemanifar and Shaabani study reported the relationship between the conscientiousness trait and student burn-out [15]. Similar results were reported by another study that was conducted by Li and his colleagues on the topic of student's burnout that has a connection with stress, the type of personalities and social support [13].

Adding on, researchers like Vine and Morgan who conducted a study on the connection between the types of personality and burnout in 2020, had determine the relationship between the trait of conscientiousness and student's burnout to be a significant and negative relationship because the  $p$  – values is 0.023 which is less than 0.05 and the  $\beta$

value is  $-0.202$  [16]. Last but not least, the evidence that supports the earlier results of other studies can be found in another research conducted by Vardo and Efendic-Spahic, who found out that the  $p$  – value is less than  $0.001$  and the  $\beta$  value is  $-0.373$  which means that the relationship between the trait of conscientiousness and student's burnout turn out to be a significant but negative relationship [17]. Conscientiousness was found to have significant positive and negative correlation to efficacy and exhaustion respectively [5].

Thus, in this research, Hypothesis 2 is suggested as below:

H2: There is a negative, significant relationship between the trait of conscientiousness and the student's burnout.

### **2.3 Extraversion**

Norez, study indicates that there is a significant and negative relationship between the trait of extraversion and the student's burnout [18]. Higher extraversion will be negatively associated or unassociated with cynicism [5]. A study conducted by Wang and his fellow colleagues, reported the relationship between extraversion and the student's burnout is negative and significant [13].

Hence, in this research, Hypothesis 3 is recommended as below :

H3: There is a negative and significant relationship between the trait of extraversion and the student's burnout

### **2.4 Neuroticism**

Higher neuroticism will be positively associated dimensions of burnout [5]. Individuals whom portrays this specific trait are more vulnerable to any undesirable feelings like depression and anger [19] that can significantly contribute to the emergence of the student's burnout. Due to the emotional distress and lack of impulse control associated with neuroticism [20], students with higher levels of neuroticism are likely to exhibit diminished self-efficacy, heightened emotional exhaustion, and a stronger tendency towards cynicism regarding their academic pursuits.

Hence, in this research, the Hypothesis 4 is suggested as below:

H4: There is a positive, significant relationship between the trait of neuroticism and student's burnout.

### **2.5 Openness**

Openness to experiences according to Paul Costa and Robert McCrae in 2004, defines the trait as a spirit of inquiry, openness, and acceptance of unfamiliar situations [21]. Other researchers like Williamson, defines openness to experiences as a feature of cognitive style that sets imaginative, creative people apart from practical, traditional people where the individuals who portrays this particular trait are intellectually interested, art-loving, and aesthetically sensitive as well as they possess greater emotional awareness too [22]. This connection between this particular trait and student's burnout is further supported through a study conducted by Vardo and Efendic-Spahic, who concluded

their findings where the relationship between the trait of openness to experiences and the student's burnout had a negative and significant relationship [23].

Soliemanifar and Shaabani also reported that the trait of openness and student's burnout had a negative and significant relationship[15].

Hence, in this research, the Hypothesis 5 is proposed as below:

H5: There is a negative relationship between the trait of openness to experience with the student's burnout.

### **3.0 Methodology**

This study used convenience sampling in recruiting students studying in higher education institutions in Malaysia. Convenience sampling was employed in this study because the target populations are homogeneous and it is also a more affordable, easy way to reach the ready respondents [24]. A series of self-administered questionnaires encompassing demographic information and all relevant variables were utilized in this study. A G power analysis indicated that a sample population of 138 participants was required. A total of 155 respondents responded to the survey which fulfilled the minimum requirement of sample size.

All the measurements of the variables were adopted from previous studies [5]. Personality variables were measured using a 5-point Likert scale with the range of 1 representing strongly disagree to 5 representing strongly agree. Burnout was measured using a 7-point Likert scale with the range of 1 representing never to 7 representing always. Data analysis for this study involved employing SmartPLS 4, a software tool, to conduct Structural Equation Modeling using Partial Least Squares. The measurement model was utilized to assess the convergent validity and discriminant validity of the constructs, while the structural model was employed to examine the relationships among the variables.

### **4.0 Findings and Conclusion.**

#### **4.1 Respondents Profile**

Out of 155 respondents, the respondent's demographic profile shows that there are a total of 155 participants which are 55 males (35.5%) and 100 females (64.5%) . Their ages ranged from 19 years old to more than 23 years old with the majority portion of the respondent's ages being 22 years old which amounts to 52.3 % of the total number of respondents. Moving forward, the race of the respondents were divided into 4 categories which are Malay, Chinese, Indian and Others while the highest education level on the other hand are categorized into 7 categories , however, a big section of the respondents are Chinese that amounts up to 79.4 % that possess a Bachelor Degree that results to 86.5 % . In addition, the respondents are also from various universities and faculties but majority of them are from the Multimedia University and the Faculty of Business (FOB) that comprises of 96.1% and 91.6% . Now, under the aspect of the respondent's current degree is also Bachelor Degree that comprises of 96.8% of the total respondents.

**Table 1. Measurement Model**

<b>Construct</b>	<b>Items</b>	<b>Loadings</b>	<b>CR</b>	<b>AVE</b>
<b>Extraversion</b>	E1	0.588	0.844	0.522
	E2	0.769		
	E3	0.776		
	E4	0.674		
	E5	0.785		
<b>Agreeableness</b>	A1	0.788	0.837	0.631
	A2	0.751		
	A3	0.842		
<b>Conscientiousness</b>	C1	0.724	0.812	0.519
	C2	0.746		
	C3	0.665		
	C4	0.745		
<b>Neuroticism</b>	N1	0.708	0.865	0.563
	N2	0.689		
	N3	0.758		
	N4	0.780		
	N5	0.810		
<b>Openness</b>	O1	0.778	0.789	0.555
	O2	0.742		
	O3	0.712		
<b>Burnout</b>	B1	0.615	0.918	0.510
	B2	0.709		
	B3	0.743		
	B4	0.765		
	B5	0.754		
	B6	0.826		
	B7	0.516		
	B8	0.783		
	B9	0.552		
	B10	0.794		
	B11	0.724		

#### 4.2 Measurement Model Assessment

The convergent validity of the model was verified by the factor loadings criterion suggested by Hair et al. [25] where the author suggested the threshold of the factor loading (0.7), construct reliability (0.70) and average variance extracted (0.50)[25]. Table 2 shows that most of the standardized factor loadings were greater than 0.7 except E4(0.674), C3(0.665), N2(0.689), B1(0.615), B7(0.516), and B9(0.552). However, these items were retained because of their contribution to content validity [26]. The AVE obtained were in the range of 0.510 to 0.631. Similarly, the CR items were within a range of 0.789 to 0.918 [25]. The convergent validity of these constructs is thus deemed adequate.

**Table 2. Discriminant validity using HTMT criterion**

	1	2	3	4	5	6
1. Agreeableness						
2. Burnout	<b>0.753</b>					
3. Conscientiousness	0.370	<b>0.491</b>				
4. Extraversion	0.454	0.477	<b>0.699</b>			
5. Neuroticism	0.637	0.587	0.389	<b>0.289</b>		
6. Openness	0.450	0.671	0.860	0.759	<b>0.620</b>	

HTMT can be assessed by comparing the HTMT values obtained with the required threshold of HTMT.85 [27] or HTMT.90 [28] and HTMT inference does not contain value 1. As shown in table 2, all the values passed HTMT.90 and the HTMT inference did not exceed the value of 1, indicative of discriminant validity is established.

To test the hypotheses formulated in this study, a bootstrapping procedure with 5000 resamples, as recommended by Hair et al.,[25], was employed. The results obtained are presented in table 4. In order to gauge the lateral collinearity issue, variance inflation factor (VIF) was employed [29]. All the VIF values for independent variables are less than 5 as shown in table 4, showing no collinearity problem [25].

**Table 3 Results of Partial Least Square**

Hypothesis	Relationship	Std Beta	Std Error	t-value	Decision	R2	f2	VIF
1	Agreeableness -> Burnout	0.402	0.076	5.266***	Not Supported	0.514	0.227	1.465
2	Conscientiousness -> Burnout	0.054	0.071	0.755	Not Supported		0.004	1.637
3	Extraversion -> Burnout	0.107	0.071	1.516	Not Supported		0.014	1.738
4	Neuroticism -> Burnout	0.209	0.074	2.814***	Supported		0.058	1.561
5	Openness -> Burnout	0.183	0.079	2.306***	Not Supported		0.037	1.884

\*\*\* Significance at p-value<0.01, \*\* Significance at p-value<0.05



According to the  $R^2$  values of 0.75, 0.5 and 0.25 signify substantial, moderate and weak levels of explanatory power of model, respectively. Hair et al., [25] suggested that  $R^2$  values of 0.75 were substantial, a value of 0.5 moderate, and 0.25 weak. The  $R^2$  value obtained for burnout was 0.514. The value of 0.514 met Hair et al., [25] guideline for a moderate model.

Two of the paths tested in the structural model were significant with all the  $t$ -values greater than critical value of 2.3263 ( $p$ -value $<0.01$ ). The results indicate that Agreeableness ( $\beta =0.402$ ), Neuroticism ( $\beta =0.2814$ ) have a significant effect on Burnout. Nevertheless, despite the significant relationship between Agreeableness ( $\beta =0.402$ ), on Burnout, the Hypothesis will be rejected due to the hypothesis only being partially fulfilled as the relationship between the trait of agreeableness and student's burnout is positive. Therefore Hypothesis 1 (H1) is rejected.

One path was significant with  $t$ -statistics greater than the critical value of 1.645 ( $p$ -value  $< 0.05$ ). Openness ( $\beta =0.402$ ) has a significant effect on Burnout. However, for the proposed Hypothesis 5 (H5) will have to be rejected due to the fact that the proposed hypothesis is only partially fulfilled. The results of the  $\beta$  value 0.183 ( $p = 0.037$ ) indicate that there is a positive and significant relationship between the trait of openness to experience and student's burnout. Hence H4 were supported while H1, H2, H3 and H5 were not supported.

Findings revealed that consistent with previous studies, The discovery that there is a direct and positive correlation between neuroticism and burnout aligns with earlier research findings, reinforcing the belief that neuroticism serves as a robust predictor of burnout [30][31].

However, this outcome contradicts previous research findings that indicated a significant correlation between all Big Five personality traits and burnout. A potential explanation for these disparate findings could be attributed to the methodological approach employed. Unlike the previous studies reviewed, which predominantly utilized correlation or regression analyses to explore the relationship between personality and burnout, this study employed path analyses. [5].

The practical implications of this study suggest that lecturers are advised to adapt their teaching approach, considering the personality orientation of their students, in order to enhance instructional effectiveness.. In conclusion, this study offers initial evidence regarding the potential impact of personality traits on burnout among students in higher education institutions in Malaysia.

Certainly, one limitation inherent in this study is its cross-sectional design and reliance on self-report measures. Future studies may want to examine personality and burnout using a longitudinal design. Despite the limitation, examining personality traits and student burnout is a worthy undertaking that merits further attention. It is hoped that this study will serve as a catalyst, inspiring other researchers to investigate the connection between personality and burnout among higher education students in Malaysia.

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