PERSONALITY TRAITS AND SOCIOECONOMIC STATUS OF POSTGRADUATE STUDENTS TOWARDS IMPOSTOR SYNDROME

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ABSTRACT

Impostor syndrome (IS) is a psychological phenomenon characterized by feelings of incompetence and self-doubt regarding one's achievements, despite external evidence of success. This study aimed to examine the relationship between the personality trait of neuroticism, socioeconomic status, and impostor syndrome among postgraduate students at the National University of Malaysia (UKM). A total of 365 postgraduate students from various disciplines participated in this study. Data were collected using an online questionnaire that measured neuroticism, socioeconomic status, and impostor syndrome. However, there was a weak association between socioeconomic status and impostor syndrome. These findings suggest that neuroticism plays a crucial role in the development of impostor syndrome among postgraduate students, while socioeconomic status has a minimal influence. The implications of this study are important for developing appropriate interventions to address IS among postgraduate students, focusing on emotional management and enhancing self-confidence.

Keywords: impostor syndrome, neuroticism, socioeconomic status, postgraduate students, National University of Malaysia

1. INTRODUCTION

Mental health is an important aspect of individual well-being, especially in giving birth to a mentally and emotionally healthy generation. The rapid development of the current world, including technological progress, social changes, and economic pressure, has caused society to face an increased risk of mental health problems. The implications of these mental health issues are enormous, not only for the affected individuals, but also for families, communities, and society as a whole (Morgan et al., 2020). Based on statistical reports *World Health Organization* (WHO) in 2019, nearly one billion people worldwide live with a mental disorder, and this figure is expected to rise. Whereas, based on statistics *National Health and Morbidity Survey* (NHMS) by the Malaysian Ministry of Health (MOH) in 2015 showed that mental health disorders among people aged 16 and above was 29.2%. This statistic is something to worry about when more than 1 in 3 Malaysians who experience mental health issues consist of those aged 16-19 and those from low-income families (NHMS, 2019).

Mental health issues are getting more and more attention in higher education institutions (HEIs), especially involving stress such as academic pressure, workload, high expectations from family,

and worry about the future, being contributing factors to this problem. One of the mental health syndromes often associated with university students is impostor syndrome. Impostor syndrome refers to psychological experiences involving feelings of inadequacy or self-deception, despite evidence of success (Bragg & Clance, 2023). According to Leong et al. (2011), university students are faced with various conflicts that can cause them to doubt their potential such as feelings of insecurity, fear of failure, academic competition, social pressure, and so on. Individuals with impostor syndrome often doubt their abilities and fear failure, despite having achieved a high academic level. Studies in Malaysia have shown that impostor syndrome affects students' psychological well-being, including increased levels of stress, anxiety, and depression (Nor et al., 2018; Osman et al., 2020). This is because the transition to university often involves a sudden increase in academic challenges and social expectations that can trigger feelings of inadequacy and self-doubt.

Various indicators affect impostor syndrome among university students, including demographic factors, academic experience, and social support. In this regard, one of the factors that can potentially affect impostor syndrome is personality traits (Bragg & Clance, 2023). Personality traits refer to stable and consistent patterns of thinking, feeling, and behavior within an individual (McCrae & Costa, 1990). Studies have shown that some personality traits may be associated with a higher risk of impostor syndrome (Bragg & Clance, 2023). One of the traits often associated with impostor syndrome is neuroticism, which is the tendency to experience negative emotions such as anxiety, depression, and insecurity (Bragg et al., 2022). A study by Bernard et al. (2002) found that individuals with high levels of neuroticism are more likely to experience impostor syndrome. A study by (Chae et al., 1995; Ross et al., 2001; Bernard et al., 2002; Vergauwe et al., 2015) showed a strong positive relationship between the impostor syndrome scale and neuroticism. Studies in Malaysia show that postgraduate students with high levels of neuroticism are more likely to experience impostor syndrome (Zainal et al., 2021). Although previous studies have shown a significant relationship between neuroticism and impostor syndrome (Bragg & Clance, 2023; Chae et al., 1995; Ross et al., 2001; Bernard et al., 2002; Vergauwe et al., 2015; Zainal et al. al., 2021), but there are some improvements that can be studied. Most of these studies used a cross-sectional design, which limits understanding of the causal relationship between neuroticism and impostor syndrome. Longitudinal studies are needed to examine how neuroticism might predict the development of impostor syndrome over time.

Next, aspects of the individual's background, especially socioeconomic status (SES), also play an important role in influencing mental health. Socioeconomic status (SES) refers to a person's position in society based on various factors such as income, education, employment, and wealth (American Psychological Association, 2023). SES is often associated with mental health, including the risk of developing mental disorders and general psychological well-being. Individuals with low SES are more likely to experience stress, depression, and anxiety (Adler et al., 1994). In the context of postgraduate students, studies have shown that low SES is associated with an increased risk of experiencing impostor syndrome (McLean et al., 2021). This may be due to financial pressure, lack of support resources, and feeling unworthy to be in an academic environment. Therefore, it is important to study more deeply how socioeconomic status affects impostor syndrome among postgraduate students in Malaysia because to understand the factors that contribute to impostor syndrome in this population

The need to understand mental health among students is important to ensure their well-being and academic success. Therefore, this study will examine personality traits, especially neuroticism, and socioeconomic status affecting the experience of impostor syndrome among postgraduate students. Findings from this study are important to the fields of psychology and higher education, providing a solid foundation for the development of more effective impostor syndrome prevention and management strategies. In addition, this study also has the potential to raise awareness about the issue of impostor syndrome among students as well as encourage a more open discussion about mental health in an academic context.

2. LITERATURE REVIEW

2.1. Mental Health of University Students

The mental health of university students is a global issue that is gaining more and more attention. The World Health Organization (WHO, 2022) reports that mental health problems such as depression and anxiety are among the leading causes of disability among young people worldwide. In Malaysia, studies show that about 20% of university students experience symptoms of depression (Ibrahim et al., 2021). University students face various pressures such as the transition to adulthood, high academic demands, financial problems, and difficulty adjusting to campus life (Auerbach et al., 2018). This stress can affect their mental health and interfere with academic performance and overall quality of life.

2.2. Impostor Syndrome

The concept of impostor syndrome was introduced by Clance and Imes (1978) who described it as an internal experience experienced by high-achieving individuals who doubt their own abilities and fear being perceived as imposters. This syndrome is characterized by a feeling of inadequacy and doubt about self-achievement, despite tangible evidence showing the individual's competence. This feeling is often accompanied by a fear of failure and the revelation of a perceived inability. Postgraduate students, who are in a competitive academic environment, are a group prone to this syndrome.

2.3. Impostor Syndrome Among University Students

Studies prove that impostor syndrome is significant among university students. Based on the study of Bernard et al. (2022) involving more than 11,000 students from various countries, showed that the prevalence of impostor syndrome among university students is high with estimates ranging from 10% to 80%. The issue of impostor syndrome postgraduate students in Malaysia tend to doubt their own abilities and fear being considered a fraud, despite being academically successful. A study by Chan (2018) found that this syndrome is related to academic pressure, lack of self-confidence, and a culture of perfectionism. The implications of this issue include disturbing mental health problems such as anxiety and depression, poor academic performance, and lack of life satisfaction among postgraduate students. The study of Brailovskaia et al. (2023) showed a high prevalence of impostor syndrome among postgraduate students, with implications for their academic performance, motivation, and psychological well-being.

According to the latest study by Chakraverty (2020), postgraduate students often experience feelings of not being worthy or not capable enough to be at their academic level, even if they have achieved real success. This phenomenon is closely related to the high academic expectations placed on postgraduate students. They often face pressure to produce high-quality studies, publish articles in leading journals, and present their work at international conferences (Sverdlik et al., 2018). These expectations can cause students to feel unable to meet the standards set, further reinforcing the feeling that they are just 'imposters' who should not be at postgraduate level.

The academic burden faced by postgraduate students also plays an important role in aggravating the symptoms of Impostor Syndrome. A study by Levecque et al. (2017) found that postgraduate students face a higher risk of developing mental health problems than the general population, largely due to the heavy workload and pressure to succeed in a highly competitive academic field. Postgraduate students often have to manage multiple responsibilities simultaneously, including conducting research, attending lectures, teaching as teaching assistants, and in many cases, balancing personal and family commitments (Cornwall et al., 2019). This heavy workload, coupled with uncertainty about career prospects in academia, can increase self-doubt and reinforce feelings that they do not deserve to be at postgraduate level. Therefore, the problem of impostor syndrome becomes very relevant for postgraduate students because it can affect their academic performance, mental well-being, and professional development in the long term (Bravata et al., 2020).

2.4. Personality Traits

Personality traits, referring to a stable and continuous pattern of thinking, feeling, and behavior in a person, become the main focus in personality psychology (McCrae & Costa, 2008). The five main personality traits known as "Big Five" or the Five Factor Model consists of openness to Openness to Experience, Conscientiousness, Extraversion, Agreeableness and Neuroticism (Soto & John, 2017). These traits have been widely used in various studies to understand how a person's personality can affect various aspects of life, including mental health, academic performance, and interpersonal relationships.

One of the traits that often studied is neuroticism, which describes a person's tendency to experience negative emotions such as anxiety, depression, and insecurity (Barlow et al., 2014). Studies have linked neuroticism to various mental health issues, such as generalized anxiety disorder (GAD) and major depressive disorder (Barlow et al., 2014). The study of Kotov et al. (2010) found that individuals with high neuroticism scores were more likely to experience GAD and major depression than individuals with low neuroticism scores. For postgraduate students, high neuroticism can have negative implications for mental health, psychological well-being, and academic performance (McCrae & Costa, 2008). Although there has been much research on neuroticism, there is still a gap in the understanding of how neuroticism can affect the experience of postgraduate students in different cultural and social contexts.

In addition, the personality trait of neuroticism has been linked to impostor syndrome, which is a psychological phenomenon in which individuals doubt their achievements and have a constant fear of being considered a fraud (Sakulku & Alexander, 2011). Individuals with high neuroticism scores are more likely to experience impostor syndrome because they tend to have a negative

perception of themselves and their abilities (Sakulku & Alexander, 2011). A study by Bernard et al. (2018) found that there is a positive relationship between neuroticism and impostor syndrome among postgraduate students. Postgraduate students with impostor syndrome may experience various psychological problems such as anxiety, depression, and lack of motivation, which may affect their well-being and academic performance. This tendency makes them more at risk of impostor syndrome because students are more likely to interpret experiences and feedback negatively, ignore achievements and exaggerate their weaknesses. These persistent negative emotions can create fragile self-confidence and feelings of unworthiness, which are key features of impostor syndrome.

2.5. Socioeconomic Status

Socioeconomic status (SES) refers to a person's position in society based on a combination of economic factors such as income, education, and employment (American Psychological Association, 2018). For postgraduate students, SES can influence many aspects of their academic and life experiences. Students with low SES may face more challenges such as financial burden, limited access to academic resources, and lack of social support (Sirin, 2005). A study by Walpole (2003) found that postgraduate students from low SES backgrounds tend to experience more financial stress and have less time to focus on their studies than students from high SES backgrounds. In addition, SES can also affect the mental health and psychological well-being of postgraduate students. Students from low SES backgrounds are more likely to experience mental health problems such as depression and anxiety (American Psychological Association, 2018).

The implications of SES for postgraduate students are broad, including academic performance, life satisfaction, and mental health. Students with low SES may experience more stress and less support, which may affect their motivation and academic achievement (Sirin, 2005). Furthermore, SES can also influence the development of impostor syndrome among postgraduate students. Students from low SES backgrounds may be more likely to feel unworthy and doubt their abilities than students from high SES backgrounds (Cokley et al., 2017). This feeling of inadequacy can contribute to the development of impostor syndrome, which in turn can affect students' psychological well-being and academic performance. Although many studies on SES and its effects on postgraduate students have been conducted, there is still a gap in the understanding of how SES interacts with other factors such as personality traits, gender, ethnicity, and culture to influence the experience of postgraduate students, especially in the context of Malaysia which has socioeconomic diversity, unique

3. METHODOLOGY

3.1. Research design

This study focuses on a quantitative approach by adapting a survey design. Specifically, a questionnaire was constructed and accessed online (Cohen et al. 2018) to investigate the relationship between personality traits and socioeconomic status with impostor syndrome among postgraduate students. The survey design was chosen because it allows for the collection of extensive data from a large population in a short period of time and at low cost (Creswell, 2014).

In addition, this design is suitable for identifying patterns and relationships between the variables being studied.

3.2. Population and Sample

The population of this study consists of postgraduate students at Universiti Kebangsaan Malaysia (UKM). The estimated population is 6,000 postgraduate students. However, this study will focus on master's level students only. To ensure the reliability and feasibility of the study, simple random sampling will be used. Random sampling is easy to choose because it gives each individual in the population an equal chance to be selected as a sample, which in turn reduces bias and increases the reliability of the study results (Creswell, 2014). To determine the appropriate sample size, the table of Krejcie and Morgan (1970) was used. Based on this table, for a population of 6,000, the required sample size is approximately 361 respondents.

3.3. Study Instrument

This study uses a questionnaire as a research instrument. Instrument selection is important to get accurate information in a study. The questionnaire in this study consists of 3 parts covering Section A, Section B and Section C.

Section A, which is the respondent's demographics, contains five (4) items that aim to obtain information about the respondent's background. There are several items that need to be selected and filled in by the respondent.

Table 1: Demographics of Respondents

Questionnaire	Scale
Section A	Gender
	Age
	Type of Study
	Household Income

Section B aims to survey the level of postgraduate students' personality traits. There are six indicators that include five main personality domains, namely *Openness to Experience*, *Conscientiousness*, *Extraversion*, *Agreeableness*, and Neuroticism. However, this section focuses on one domain only, Neuroticism. This section consists of 24 items selected according to the suitability of the study by adapting the items from the instrument "Measuring Thirty Facets of the Five Factor Model With a 120-item Public Domain Inventory: Development of the IPIP-NEO-120". A five-point Likert scale is used, starting with (5) Accurate, (4) = Moderately Accurate, (3) Neutral, (2) = Moderately Inaccurate, (1) Inaccurate. Cronbach's Alpha value for the IPIP-NEO- instrument 120 reported was 0.89, indicating high reliability.

Table 2: IPIP Personality Traits

Questionnaire Instrument Nilai Alpha C	ronbach
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Section B	IPIP (NEO-120)	0.89	

The questionnaire in part C aims to survey the level of impostor syndrome among postgraduate students. This section consists of 20 items selected according to the suitability of the study by adapting items from the Clance Impostor Phenomenon Scale (CIPS) instrument. This instrument measures the extent to which individuals experience feeling like a fraud or feel unworthy of their achievements. A five-point Likert scale is used, starting with (5) = Very True, (4) = Often, (3) = Sometimes, (2) = Rarely, (1) = Very Not True. The reported Cronbach's Alpha value for this CIPS scale is 0.89, indicating high reliability.

Table 3: Impostor Syndrome

Questionnaire	Instrument	Nilai Alpha Cronbach
Section C	Clance Phenomenon Impostor Scale	0.89

3.4. Data Collection Procedures

The primary data of this study will be collected through an online questionnaire developed using the Google Form platform. This questionnaire will be distributed to postgraduate students at selected universities through the official email of their respective universities. The selection of online questionnaires is in line with the recommendations of Dillman, Smyth, & Christian (2014) because it offers various advantages such as facilitating a fast and efficient data collection process, reducing distribution costs, and reaching a wider target population. In addition, the use of the Google Form platform allows data to be collected automatically and organized, facilitating the subsequent data analysis process.

3.5. Data analysis

The data analysis of this study will use software *Statistic Package for Social Sciences* (SPSS) version 29. Descriptive statistics such as mean, standard deviation, and frequency will be used to identify levels of personality traits (neuroticism), socioeconomic status (SES), and impostor syndrome of postgraduate students. The interpretation of a high neuroticism score indicates the individual's tendency to experience negative emotions, a high SES score reflects a better level of income, education, and employment, while a high impostor syndrome score indicates that the individual feels like a fraud and doubts their own abilities. Spearman's correlation will be used to test the relationship between personality traits (neuroticism) and the level of socioeconomic status against impostor syndrome, with the correlation coefficient showing the strength and direction of the relationship between these variables.

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Table 4: Details of Data Analysis

Research objective	Data analysis
Identifying the level of personality traits (neuroticism) of postgraduate students	Descriptive statistics
Identifying the level of socioeconomic status (SES) of postgraduate students	Descriptive statistics
Identifying the degree of postgraduate student impostor syndrome	Descriptive statistics

3.6. Validity and Reliability

The validity of this instrument was assessed through two stages. The first stage involves an initial review by the academic supervisor to ensure the suitability of the questionnaire items with the constructs to be measured. Next, three expert lecturers from the faculty of education have assessed the content validity of the instrument. These experts reviewed and provided feedback on item appropriateness, clarity of language, and alignment with theory underlying the constructs being measured. Improvement suggestions from the experts were taken into account and integrated into the final instrument to ensure the validity of the instrument's content.

Instrument reliability refers to the consistency and stability of the measurements produced by the instrument. In this study, the reliability of the instrument was measured using Cronbach's Alpha coefficient. The Cronbach's Alpha value reported for the IPIP-NEO-120 instrument is 0.89, indicating high reliability (Goldberg et al., 2006). Meanwhile, Cronbach's Alpha value reported for this CIPS scale is 0.89, indicating high reliability (Clance, 1985). The high value of Cronbach's Alpha for these two instruments shows that the items in the instrument are consistent in measuring the same construct, and the resulting scores are reliable.

3.7. A Pilot Study

A pilot study was conducted to test the reliability and validity of the instrument before it was used in the actual study. A total of 30 postgraduate students from various fields of study were randomly selected to participate in this pilot study. The data collected from this pilot study was analyzed using SPSS software version 29. Reliability analysis was performed by calculating Cronbach's Alpha coefficient for each instrument.

The results of the pilot study show that all the instruments have a high Cronbach's Alpha value, above 0.70, indicating high reliability. This means that the items in the instrument are consistent in measuring the same construct. In addition, feedback from the participants of the pilot study was also taken into account to improve items that were less clear or confusing. Some items have been modified or dropped based on this feedback. This pilot study has successfully improved the quality of the instrument and ensured that it is suitable for use in real studies.

4. FINDINGS

This section will present the results of data analysis that has been collected through an online questionnaire. Based on the demographic data of the respondents, the majority of respondents are female (67.7%) compared to male (32.3%). This shows that this study is dominated by the participation of female. In terms of age, the 30-39-year-old age group is the largest group (48.5%), followed by the 21-29-year-old age group (36.7%) and the 40-49-year-old age group (14.8%). This shows that most of the study participants are in the productive age range.

The type of study most followed by respondents is part-time (65.5%), while 34.5% of respondents follow full-time studies. This shows that this study involves more students who are working while studying.

The Faculty of Education has the highest number of respondents (37.0%), followed by Economics and Management (7.9%), and Social Sciences and Humanities (10.1%). The faculties with the least number of respondents are Information Technology and Science and Law, respectively with 4.1% and 4.4%.

Table 5: Distribution of Respondent Demographic Data

	Frequency	Percent	Cumulative Percentage
Gender			1 ercentage
Male	118	32.3	32.3
Female	247	67.7	100.0
Age			
21 - 29	134	36.7	36.7
30 - 39	177	48.5	85.2
40 - 49	54	14.8	100
Type of Study			
Part-time	239	65.5	65.5
Full-time	126	34.5	100.0
Faculty of Studies			
Economics and Management	29	7.9	7.9
Pharmacy	18	4.9	12.9
Engineering and Built Environment	16	4.4	17.3
Education	135	37.0	54.2
Islamic Studies	22	6.0	60.3
Dentistry	25	6.8	67.1
Medicine	34	9.3	76.4
Health Sciences	18	4.9	81.4
Social Sciences and Humanities	37	10.1	91.5
Information Technology and Science	15	4.1	95.6
Law	16	4.4	100.0
Amount	365	100	

4.1. Socio-Economic Background

The household income of the majority of respondents in table 6 is less than RM4,850 per month, which is 59.7%. A total of 36.2% of respondents have a household income between RM4,850 to RM10,959, while only 4.1% of respondents have an income above RM10,960.

Table 6: Respondent's Household Income

	Frequency	Percent	Cumulative Percentage
Less than RM4,850	218	59.7	59.7
RM4,850 - RM10,959.	132	36.2	100.0
More than RM10,960.	15	4.1	63.8
Total	365	100.0	

4.2. The Level of Personality Traits (Neuroticism) of Postgraduate Students

The data in table 7 shows that the neuroticism score of postgraduate students has a minimum score of 27.00 and a maximum score of 92.00, with a mean of 2.53 and a standard deviation of 0.49. This shows that there is a difference in the level of neuroticism among the postgraduate students studied.

Table 7: Overall Mean Value for Personality Traits (Neuroticism)

	Frequency	Minimum	Maximum	Min	Standard deviation
Personality Trait Score	365	27.00	92.00	2.53	0.491

Table 8 shows the construct of the level of self-weakness among postgraduate students. The mean score for this entire dimension is 2.69, which is categorized as a moderately high level according to Nunnally and Bernstein (1994) compared to other constructs. Item "*Stay calm under pressure*" obtained the highest min score (2.81), indicating the student's tendency to feel depressed. Item "*I feel unable to handle things*" obtained the lowest mean score (2.63), indicating a relatively low level of self-confidence among students.

Table 8: Details of the Highest Mean in the Construct of Personality Traits (Vulnerability)

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	Frequency	Min	Standard deviation
Panic easily	365	2.68	.930
Become overwhelmed by events	365	2.66	.908
Feel that I'm unable to deal with things	365	2.63	.856
Remain calm under pressure	365	2.81	.814

Table 9 shows the level of anxiety among postgraduate students where this anxiety construct shows the lowest mean in personality traits. The mean score for this entire dimension is 2.34, which is categorized as a medium-low level. Item "I am afraid of many things" and "Gets stressed easily"

obtained the highest mean score (2.44), indicating a moderate level of fear and stress among students. The item "Worried about something (from the aspect of work/study)" obtained the lowest mean score (2.15), indicating a relatively low level of anxiety about the aspect of work or studies.

Table 9: Details of the Lowest Mean in the Personality Trait Construct (Anxiety)

	Frequency	Min	Standard deviation
Worried about things (from the aspect of work/study)	365	2.15	1.097
Fear the worst	365	2.33	1.129
Am afraid of many things	365	2.44	1.107
Gets stressed out easily	365	2.44	1.046

4.3. Postgraduate Student Socioeconomic Status Level

Table 10 shows the income distribution of postgraduate students. The mean score for income is 1.44, with a standard deviation of 0.57441. The minimum value is 1.00 and the maximum value is 3.00. This shows that most postgraduate students have incomes in the low to medium category.

Table 10: Overall Mean Value for Household Income

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	Frequency	Minimum	Maximum	Min	Standard deviation	
Income Score	365	1.00	3.00	1.44	.57441	

Table 11 shows the distribution of household income of postgraduate students. The majority of students (59.7%) have a household income of less than RM4,850 per month. A total of 36.2% of students have a household income between RM4,850 to RM10,959 per month, while only 4.1% of students have a household income above RM10,960 per month.

Table 11: Household Income

	Frequency	Percent	Cumulative Percentage
Less than RM4,850	218	59.7	59.7
RM4,850 - RM10,959.	132	36.2	100.0
More than RM10,960.	15	4.1	63.8
Total	365	100.0	

4.4. Levels of Graduate Student Impostor Syndrome

Item "If I'm going to receive a promotion or get recognition of some kind, I hesitate to tell others until it is an accomplished fact" got the highest mean score (2.72), indicating the tendency of students to doubt their achievements and be afraid to share success with others. Item "I have often succeeded on a test or task even though I was afraid that I would not do well before I undertook

the task." and "I rarely do a project or task as well as I'd like to do it." got the same mean score (2.41), showing a moderate level of self-confidence among students in performing tasks.

Table 12: Details of the Highest and Lowest Means for the Impostor Syndrome Scale

	Frequency	Min	Standard deviation
If I'm going to receive a promotion or get recognition of some kind, I hesitate to tell others until it is an accomplished fact	365	2.72	.922
I have often succeeded on a test or task even though I was afraid that I would not do well before I undertook the task.	365	2.41	.972
I rarely do a project or task as well as I'd like to do it.I do projects or tasks the way I want to do them	365	2.41	.862

Table 13: Overall Mean Value of the Impostor Syndrome Scale

	Frequency	Minimum	Maximum	Min	Standard deviation
Shoes Syndrome Impostor	365	20.00	100.00	2.57	.53

The data in table 13 shows the impostor syndrome score of postgraduate students with a mean score of 52.57 and a standard deviation of 0.53. This shows that there is a difference in the level of impostor syndrome among the postgraduate students studied.

5. DISCUSSION

5.1. The Relationship Between Neuroticism and Impostor Syndrome

This study has shown that there is a significant positive relationship between the personality trait of neuroticism and impostor syndrome among postgraduate students (r = .539, p < .001). This strong positive relationship indicates that individuals with high levels of neuroticism are more likely to experience impostor syndrome. This means that postgraduate students who often experience negative emotions such as anxiety, depression, and emotional instability may be more prone to the feelings of inadequacy and self-doubt associated with impostor syndrome. This finding is consistent with previous studies that have shown a similar relationship between neuroticism and impostor syndrome (Bragg & Clance, 2023; Chae et al., 1995; Ross et al., 2001; Bernard et al., 2002; Vergauwe et al., 2015; Zainal et al., 2021).

One possible explanation for this relationship is that individuals with high levels of neuroticism tend to have negative perceptions of themselves and their abilities. They may be more inclined to

doubt their achievements and performance, even though objectively they have achieved success (Sakulku & Alexander, 2011). This tendency to experience persistent negative emotions can create fragile self-confidence and feelings of inadequacy, which are key features of impostor syndrome (Bernard et al., 2018). In the context of postgraduate students in Malaysia, this finding has important implications. A previous study by Zainal et al. (2021) have also shown that postgraduate students in Malaysia who have high levels of neuroticism are more likely to experience impostor syndrome. This shows that this phenomenon does not only exist in the Western context, but is also relevant in the academic environment in Malaysia.

However, it should be noted that this relationship does not necessarily indicate a causal relationship. Although neuroticism may increase one's susceptibility to impostor syndrome, it is also possible that the experience of impostor syndrome itself may increase one's neuroticism traits. This raises questions about the direction of the relationship between these two constructs. Moreover, although the relationship between neuroticism and impostor syndrome has been shown consistently in various studies, it is important to consider other factors that may influence this relationship. For example, a study by Vergauwe et al. (2015) suggested that factors such as perfectionism and self-efficacy may play an important role in the relationship between neuroticism and impostor syndrome.

Nevertheless, it is important not to assume that all individuals with high levels of neuroticism will suffer from impostor syndrome. Instead, neuroticism should be seen as a risk factor that can be managed and its effects reduced through appropriate interventions. In this regard, a more holistic and individualistic approach in dealing with issues of mental health and well-being of postgraduate students may be required. Another aspect to consider is how cultural factors may influence the relationship between neuroticism and impostor syndrome. In the multicultural Malaysian context, different cultural norms and values may influence how neuroticism is expressed and how impostor syndrome is experienced. A study by Cokley et al. (2013) showed that cultural and ethnic factors can influence the manifestation of impostor syndrome. Therefore, future studies in Malaysia may need to take into account these cultural aspects to gain a more comprehensive understanding of the relationship between neuroticism and impostor syndrome in the local context.

Finally, although these studies have shown a strong link between neuroticism and impostor syndrome, it is important to acknowledge that impostor syndrome is a complex and multifaceted phenomenon. It cannot be fully explained by one personality trait alone. Other factors such as life experience, social support, and learning environment also play an important role. Therefore, a more holistic approach in understanding and dealing with impostor syndrome among postgraduate students is needed.

5.2. The Relationship Between Socioeconomic Status (SES) and Impostor Syndrome

Studies show that there is a significant positive relationship between SES and impostor syndrome (r = .169, p < .001), although the strength of this relationship is relatively weak (Clance & Imes, 1978; Bravata et al., 2020). These findings sparked a debate in the academic community about the role of SES in the formation and maintenance of impostor syndrome. Some researchers argue that students from higher SES backgrounds may experience greater pressure to meet the high

expectations set by family and society, thereby increasing the risk of impostor syndrome (Cokley et al., 2017). However, there are opposing views in the literature. Several studies suggest that students from lower SES backgrounds may be more vulnerable to impostor syndrome due to feelings of inadequacy or mismatch in an academic environment dominated by peers from more affluent backgrounds (Lige et al., 2017). Petersen (2019) in his study found that first-generation students from low-income families are more likely to experience impostor syndrome than their peers from high-income families. These conflicting findings suggest that the relationship between SES and impostor syndrome may be more complex than initially expected.

An interesting perspective is presented by Chrousos and Mentis (2020) who suggest that the relationship between SES and impostor syndrome may be curvilinear rather than linear. They argue that individuals from both ends of the SES spectrum may be more prone to impostor syndrome for different reasons, namely those from low SES due to feelings of inadequacy, while those from high SES due to pressure to maintain status. This theory offers a possible explanation for the conflicting findings in the literature and points to the need for a more nuanced approach in understanding this relationship. However, despite the evidence showing a relationship between SES and impostor syndrome, the nature and strength of this relationship is still the subject of academic debate. Future studies need to take a more holistic approach, considering the interaction between SES, personality traits, and other contextual factors such as cultural background and educational experience (Bravata et al., 2020; Chrousos & Mentis, 2020). It is important to acknowledge that while understanding the relationship between SES and impostor syndrome is important, it should not lead to stereotypes or assumptions about individual experiences. Each student has a unique experience, and interventions to address impostor syndrome should be tailored to individual needs, rather than based on generalizations about SES alone.

5.3. Limitations of the Study

This study has several limitations that need to be taken into account. First, the study sample consisted of university students from only one institution, which may not be representative of the university student population as a whole. Therefore, the generalization of study findings should be done with caution. Second, the data collected is based on self-reports through questionnaires, which may be prone to biases such as the tendency to give socially desirable answers. Third, this study only focused on the relationship between personality traits, SES, and impostor syndrome, without considering other factors that may influence impostor syndrome such as life experiences, academic stress, and social support. Therefore, future studies should involve more diverse samples, use various data collection methods, and take into account additional variables to gain a more comprehensive understanding of impostor syndrome among university students.

5.4. Suggestions for Improvement

Studies on the relationship between personality traits, socioeconomic status (SES), and impostor syndrome among university students have contributed to the understanding of this phenomenon. However, there is room for improvement. Future studies may need to involve a more diverse sample, including students from various institutions, ethnic backgrounds, and genders. In addition, the use of various methods such as interviews and observations can provide a more complete

picture of the experience of impostor syndrome. Longitudinal studies that follow students throughout their studies will reveal how impostor syndrome develops over time. Furthermore, taking into account variables such as life experiences, academic stress, and social support can help identify risk and protective factors. Finally, the development of evidence-based interventions such as skills training and counseling can help students overcome impostor syndrome.

6. CONCLUSION

This study found that neuroticism is the main factor contributing to impostor syndrome among postgraduate students at Universiti Kebangsaan Malaysia (UKM). Students with high neuroticism scores, who tend to experience negative emotions such as anxiety and self-doubt, are more likely to experience impostor syndrome. This shows that the emotional state of an individual plays an important role in the development of impostor syndrome. In addition, this study also showed a weak relationship between socioeconomic status and impostor syndrome. Although there is a slightly increased risk of impostor syndrome among students from higher socioeconomic backgrounds, this relationship is not as strong as the relationship with neuroticism. This suggests that psychological factors such as neuroticism may be more influential in the development of impostor syndrome than socioeconomic factors.

Overall, this study provides a deeper understanding of the factors that influence impostor syndrome among postgraduate students in Malaysia. These findings can be used to develop more effective interventions and support programs to help students overcome impostor syndrome. By addressing neuroticism and providing appropriate emotional support, higher education institutions can help students build self-confidence and reach their full potential.

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