

# The impact of Big Five Personality Traits on individual innovativeness among university students during gig economy era

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## Abstract

**Purpose:** To discern the personality traits of Malaysian university students and explore additional factors beyond the Big 5 Personality Traits, these factors including attitudes and behaviors, significantly influence individuals' innovativeness. The study also looks for the relationship between an individual's innovativeness and the Big 5 Personality Traits.

**Design/methodology/approach:** This study used regression analysis to assess the correlation between the Big Five Personality Traits and individual innovativeness among 95 university students. The traits examined were (i) *Extraversion* (ii) *Agreeableness* (iii) *Conscientiousness* (iv) *Neuroticism*, and (v) *Openness to Experience*, through questionnaires.

**Findings:** The empirical data from this study support the theoretical model and align with previous research, showing that openness to new experiences, extraversion, and agreeableness are positively and significantly related to individual innovativeness. This confirms earlier findings that extraverts excel in creative tasks, and agreeableness influences engagement in creative activities.

**Research limitations/implications:** The study has several limitations: (1) A cross-sectional approach was used, but time constraints limited participation to 100 people, potentially affecting accuracy. (2) Reliability is uncertain due to lack of control over respondent demographics and educational backgrounds. (3) The survey was only in English, which may have hindered non-proficient respondents. To improve, future studies should allow more time or involve more participants, and offer questionnaires in both English and Malay to enhance participation.

**Practical implications:** The study offers practical implications: (1) Gig economy employers can consider the Big Five Personality traits. (2) Organizations can design training to enhance traits that foster innovativeness. (3) Understanding innovative traits in the gig economy can lead to more flexible and efficient work arrangements.

**Originality/value:** The study focuses on how the Big Five Personality Traits influence university students' innovativeness within the gig economy. It provides insights into students' tendencies and interest, with many showing a willingness to engage in gig work during this era.

**Keywords:** Big Five Personality Traits, Extraversion, Agreeableness, Conscientiousness, Neuroticism, Openness to Experience GIG economy, Gig Worker, Individual Innovativeness, Gig Economy Era

## **Introduction**

An individual's general pleasure and sense of security over their financial condition is referred to as their satisfaction with their financial well-being. It includes a number of elements including income, savings, debt, and financial objectives. Although one's pleasure with their financial situation might vary from person to person and is subjective, there are a number of elements that can affect this. There are important elements that frequently support financial contentment and well-being such as income, Savings and Investments, Financial Literacy, Life Circumstances, Budgeting and Financial Planning, Debt Management, Financial, as well as Financial Goals.

The Big Five personality traits are also known as the Five Factor Model (FFM), a framework for defining and categorizing human personalities. This model has received widespread recognition. The model is comprised of five overarching dimensions or elements that are designed to capture the most critical and fundamental facets of an individual's personality. It is considered that these characteristics remain essentially unchanged throughout time and that they exert a substantial effect on the actions, ideas, and feelings of individuals. O stands for openness to experience, C for conscientiousness, E for extraversion, A for agreeableness, and N for neuroticism. OCEAN is the abbreviation for the Big Five Traits. Therefore, This research aims to further the understanding of the relationship between financial well-being and satisfaction by utilizing representative variables and offering support through the adoption and modification of the "Big Five" Personality Traits. According to the concept of personality characteristics, people naturally respond to various circumstances in a variety of ways and interact with the world in a variety of different ways. When it comes to management, having an understanding of a person's personality may be beneficial in identifying how best to interact with that individual as well as the sorts of jobs and duties that they would be most suited for. However, personality traits can also be very useful in forecasting other facets of an individual's life, such as creativity and satisfaction with life. (Ahmed, 1998; Eastman et al., 2001; Hsieh et al., 2011; Judge et al., 1999; Loewe et al., 2014; Lounsbury et al., 2003; Sheldon et al., 1997). Furthermore, only a small number of research examined at the conditions and processes through which certain personality traits raise an individual's sense of life satisfaction. Even if these have not been fully investigated, a number of research (Furler et al., 2013; Heller et al., 2004; Hsieh et al., 2011) indicate that there might be significant elements to take into account that explain the relationship between personality traits and life satisfaction. Heller et al. (2004) offer deeper theoretical models with multiple process components to address this problem. As a result, Nimrod and Kleiber (2007) urge for more research on the part personality plays in the relationship between inventiveness and life satisfaction.

## **Literature Review**

### ***Gig Worker***

A person engaged in self-employment, often working on a project basis for multiple clients or firms, is commonly referred to as a gig worker. This term can also encompass freelancers or independent contractors. Unlike regular employees with long-term employment contracts, gig workers typically operate under flexible agreements, allowing them to take on various projects or tasks as opportunities arise.

Gig workers can be found across diverse industries such as creative arts, writing, consulting, delivery services, and information technology, offering a wide range of skills and services. These may include computer programming, graphic design, copywriting, marketing, translation, driving, and more. The proliferation of online platforms and marketplaces has greatly facilitated the gig economy, making it easier for gig workers to connect with clients and discover job prospects.

The key advantage of gig work is its flexibility. Gig workers have the freedom to choose the projects they wish to undertake, set their own schedules, and work from various locations, including their homes. However, this type of employment also comes with downsides, including inconsistent income, a lack of traditional employment benefits, and the constant need to seek new clients or projects to maintain a steady flow of work.

### ***Individual Innovativeness***

Individual inventiveness is a critical component of initiative success, according to a growing body of research (Gokcearslan, Karademir, & Korucu, 2017; Hong, Hwang, Ting, Tai, & Lee, 2013; Jin, 2013; Park & Kim, 2010; Si & Wei, 2012). Advancement and prosperity are reliant on the capacity of people, groups, and civilizations to innovate. As asserted by Benson and Brown (2007), knowledge workers, in particular, are required to cultivate their expertise, navigate uncertainty, take calculated risks, embrace new ideas, and swiftly adapt to evolving information. This underscores the immense significance of innovativeness for knowledge workers. Aldahdouh, Korhonen, and Nokelainen (2017) concur with these perspectives. In simpler terms, knowledge workers are expected to bring creativity and innovation into their work (Drucker, 1999).

"The extent to which an individual adopts an innovation earlier than other members within their system" is one definition of innovativeness (Rogers & Shoemaker, 1971). "Relatively earlier" in this context refers to the adoption date as opposed to how it is perceived. According to Yi et al. (2006), individual innovativeness is a consistent characteristic or attitude that affects the way someone interprets and reacts to an invention. Individuals with higher levels of innovativeness typically exhibit more favorable responses to innovations. The study of individual innovativeness frequently emphasizes its part in the spread of innovation, especially considering the receptiveness of consumers to new and innovative products (Midgley & Dowling, 1978) and the propensity of members of organizations to look outside the company for information (Tortoriello, 2006).

This study approaches individual innovativeness from a wider perspective, encompassing people's perceptions of and reactions to new ideas, inventions, or methods as well as their capacity for improvisation, original thought, as well as taking on obstacles (Hurt, Joseph, & Cook, 1977). This expanded perspective enables a more comprehensive examination of the connection between innovativeness and an individual's life satisfaction.

***The Big Five Personality Traits and Individual Innovativeness***

According to Ahmed (1998), research in the realms of psychology and management has consistently shown that specific personality traits can serve as indicators of creative and inventive individuals. According to Ahmed (1998), these characteristics can typically be categorized as either Extraversion (high energy), conscientiousness (perseverance), agreeableness (ability to accommodate opposites), low neuroticism (self-confidence), or openness to experience (wide interests, attraction to complexity, independence of judgment, curiosity, and a strong sense of oneself as creative) are some examples of these personality traits.

According to Eastman et al.'s (2001) research, a number of studies have suggested that personality traits may be the main element describing innovative and entrepreneurial actions. Some theories suggest that highly creative people are more likely to be "situationists," who make moral decisions pragmatically and with a caring ethic (Bierly, Kolodinsky, & Charette, 2009). According to certain theories, introverts are more likely to be highly creative people. This suggests that a person's values, beliefs, and cultural upbringing may also have a big impact on how innovative they are. However, a significant and expanding body of research provides compelling evidence regarding the influence of personality traits on innovation. (Buchanan, 1998; Hsieh et al., 2011; Kirton & De Ciantis, 1986; Rossberger, 2014; Steel, Rinne, & Fairweather, 2011; Weele, 2013).

**Hypothesis Development*****Relationship between Openness to Experience and Individual Innovativeness***

Openness to Experience is the Big Five personality trait with the strongest and most consistent effect on innovativeness. Intellectual curiosity, open-mindedness, inventiveness, and originality are traits of openness (Weele, 2013), additionally to having a variety of interests and information-seeking tendencies (Bozionelos et al., 2014). According to Rossberger (2014), all of these help people who exhibit a high degree of openness to explore new ideas and challenge preconceptions. Similarly, Openness is often linked to the trait of creativity, another important antecedent of innovativeness (Probst, Romhardt, & Raub, 2000) (Bozionelos et al., 2014; Prabhu, Sutton, & Sauser, 2008; Saucier, 1994). In a similar vein, innovators are described as someone who can tolerate ambiguity and is not reluctant to try new things and take chances by Kirton and De Ciantis (1986). Such a person must have a strong disposition for seeking out novel experiences. The literature consistently demonstrates that Openness exerts a significant and positive influence on innovativeness, impacting both innovation performance (Weele, 2013) and innovation capability (Hsieh et al., 2011), as demonstrated by the literature. Moreover, improved innovative task performance is linked to high levels of openness in teams (Buchanan, 1998). Additionally, it has been found that openness significantly predicts national innovation-supportive practices with regard to innovation inputs, outputs, and national innovativeness (Rossberger, 2014; Steel et al., 2011).

**H1a: Openness to Experience has a positive impact on the individual's level of innovativeness.**

***Relationship between Conscientiousness and Individual Innovativeness***

There is a split body of research on the relationship between innovativeness and conscientiousness, similar to that regarding Agreeableness. Despite the tendency of conscientious people to plan, be organized, and be achievement-oriented, competence, persistence, and self-discipline are necessary for producing successful innovations (McCrae & Terracciano, 2005) (Weele, 2013) might put off innovative behaviors. Accordingly, Hsieh et

al. (2011) found that conscientiousness significantly improves one's capacity for innovation. Furthermore, conscientiousness has been found by Buchanan (1998) to be a significant predictor of task performance in an innovative team. However, conscientiousness and creativity have not been found to be correlated in other studies (Kirton & De Ciantis, 1986; Steel et al., 2011). In the end, the execution of creative ideas necessitates the positive traits of conscientiousness.

**H1b: Conscientiousness has a positive impact on the individual's level of innovativeness.**

#### ***Relationship between Extraversion and Individual Innovativeness***

The positive characteristics of Extraversion, such as sociability, assertiveness, and activity (Weele, 2013), helps people who are extraverted to effectively build and engage with their social network. Additionally, this opens doors for the exploration and exploitation of knowledge, both of which are critical to innovation (Judge et al., 1999). Furthermore, enthusiasm and feelings of positivity that encourage extraverted people to explore new things (Rossberger, 2014). Several studies have demonstrated that individuals with high extraversion have stronger entrepreneurial intentions and are better at innovating (Hsieh et al., 2011; Weele, 2013). (Eastman et al., 2001). However, a number of studies have found that Extraversion has no significant effect on innovativeness (Kirton & De Ciantis, 1986; Steel et al., 2008). In addition, according to research by Buchanan (1998), teams with moderate levels of extraversion generally perform better when it comes to task innovation.

**H1c: Extraversion has a positive impact on the individual's level of innovativeness.**

#### ***Relationship between Agreeableness and Individual Innovativeness***

The relationship between individual innovativeness and agreeableness is intricate. Weele (2013) points out that some characteristics seem to encourage innovation, such as cooperation, kindness, and adaptability, while McCrae & Terracciano (2005) list other characteristics that seem to discourage innovation, which are tolerance and conformity, that might hinder creative tendencies. It is noteworthy that some studies have indicated that agreeableness can have a negligible impact, as demonstrated by Hsieh et al. (2011), or even a detrimental effect on inventiveness, as suggested by Patterson (2002). However, research findings indicate that agreeableness serves as a reliable indicator of national cultural customs that promote creativity and innovation at the national level, as evidenced by Rossberger (2014) and Steel et al. (2011). Rossberger (2014) highlights that the positive traits associated with agreeableness play a significant role in the effective management of social networks and commercial partnerships, which are necessary for the successful implementation of innovations. Despite certain aspects of agreeableness potentially inhibiting innovative behavior, it remains a crucial role in determining a person's acceptance in social circles and their ability to maintain important personal and professional relationships. The success of creative endeavors depends on these relationships. Extraversion can also affect a person's propensity for social interaction, which can further mold their inventive tendencies.

**H1d: Agreeableness has a positive impact on the individual's level of innovativeness.**

#### ***Relationship between Neuroticism and Individual Innovativeness***

The impact of neuroticism on inventiveness is now more apparent. People who exhibit high levels of neuroticism are likely to face obstacles in engaging in innovative behaviors and pursuing innovative ideas. This is due to the presence of negative traits such as anxiety, hostility, self-consciousness, as identified by McCrae & Terracciano (2005), and a tendency to experience feelings of depression, as noted by Rossberger (2014). Research by Kirton and De Ciantis (1986) and Hsieh et al. (2011) has demonstrated that innovative individuals tend to



exhibit emotional stability and self-assurance, both of which are inversely related to high levels of neuroticism.

**H1e: Neuroticism has a negative impact on the individual's level of innovativeness.**

## Methods

### *Sample and data collection*

This research encompasses Malaysian Gig Workers who are university students. Data were collected from a total of 95 respondents from different Malaysian states, including Pahang, Terengganu, Wilayah Persekutuan, Selangor, Pulau Pinang, Melaka, Sabah, and others, using a convenience sampling method. A non-probability method called convenience sampling chooses units according to how easily accessible they are to the researcher (Nikolopoulou, 2021). This approach was selected due to its ease of use, effectiveness, and quick collection of data. It also provides access to individuals who might not be reachable through other sampling methods.

The data were collected through a survey created using "Google Form," sourced from the internet and social media.

### *Variables and Measurements*

This study applies the Big 5 Model Traits (Openness to Experience, Conscientiousness, Extraversion, Agreeableness and Neuroticism) as independent variables while Individual Innovativeness and Satisfaction with Financial Well-Being will be used as dependent variables. Table 1 provides a list of study variables and its abbreviations.

Table 1: The Variables and Measurements of the Study

Variables	Abbreviation
<b>Independent Variables</b>	
Openness to Experience	OE1 - OE10
Conscientiousness	CT1 - CT9
Extraversion	EV1 - EV8
Agreeableness	AB1 - AB9
Neuroticism	NT1 - NT8
<b>Dependent variable</b>	
Individual Innovativeness	II1 - II5

## Findings

### *Reliability*

The reliability analysis is represented in Table 2 The reliability test on the multi-item instruments utilized in this research was carried out as the first test based on the data we obtained. Cronbach's Alpha value is the main component used to assess the reliability of the

item for measuring each of the variables: Openness to Experience, Conscientiousness, Extraversion, Agreeableness, Neuroticism, and Individual Innovativeness. Coefficients are a reliable way to identify the degree of positive correlation between elements in a set.

Table 2: Reliability Analysis

Construct	Num. of Items	Cronbach's Alpha
Openness to Experience (OE)	10	0.898
Conscientiousness (CT)	9	0.716
Extraversion (EV)	8	0.777
Agreeableness (AB)	9	0.695
Neuroticism (NT)	8	0.765
Individual Innovativeness (II)	5	0.773

The reliability analysis findings, as presented in Table 2, were obtained using the Statistical Package for Social Science (SPSS). This software was utilized to carry out the reliability assessment, which assesses the consistency of measurements. According to established standards, a Cronbach alpha value should exceed 0.5 (Nunally & Bernstein, 1978). The Cronbach's Alpha values, shown in the table, confirm that these values measure the 49 items of both independent and dependent variables.

Among the variables, Openness to experience exhibited the highest Cronbach's Alpha value at 0.898, while Agreeableness had the lowest score at 0.695. Extraversion scored a Cronbach's Alpha of 0.777. The study examined Openness to Experience, Conscientiousness, Extraversion, Agreeableness, Neuroticism, and Individual Innovativeness. It was observed that some of these variables had Cronbach's Alpha values lower than 0.50. In such cases, the decision was made to eliminate the respective questions to raise Cronbach's alpha above the 0.50 threshold, as is typically done.

### *Descriptive on Main Variables*

After conducting a descriptive analysis of the primary variables using SPSS software, it was observed that the variable "Individual Innovativeness" (II) had the highest mean, signifying that the majority of respondents expressed agreement on this variable.

Table 3: Descriptive Analysis of the Main Variables

Construct	Min	Max	Mean	Std.Deviation	Skewness	Kurtosis
II	2.60	5.00	3.9807	.62517	.133	-0.915
OE	1.60	5.00	3.7687	.75109	-0.536	.441

CT	2.56	5.00	3.7202	.56506	.645	-0.082
EV	2.50	5.00	3.6461	.63403	.448	-0.787
AB	2.44	5.00	3.6466	.58464	.600	-0.257
NT	1.50	5.00	3.3087	.70124	.450	.645

The data exhibit a wide distribution, as indicated by the highest standard deviation. Notably, the variable "Neuroticism" (NT) had the lowest mean, specifically at 3.3087, reflecting a diverse range of responses from the research participants. This diversity can be attributed to the varying nature of respondents, with some displaying kindness, helpfulness, and sympathy, while others may appear more distant. Kindness, compassion, and understanding are essential traits. Most of the skewness values fall within the range of -0 to +1. Left-skewed data, with the left tail longer than the right, are indicated by negative skewness. Conversely, positive skewness signifies right-skewed data, with a longer right tail compared to the left, as shown in Table 3.

Kurtosis can be negative, zero, or positive. A distribution is considered normal, with a bell-shaped curve and kurtosis of 0. Positive kurtosis characterizes leptokurtic distributions, which have a higher peak and thicker tails than the normal distribution. In simpler terms, this means that more data values are concentrated in the tails, and fewer are close to the mean. The t-distribution is a common example with positive kurtosis. Conversely, a platykurtic distribution has negative kurtosis, featuring a sharper peak and narrower tails than a normal distribution. In this case, more data values are concentrated around the mean, with fewer in the tails.

### Correlation

Using correlation analysis performed with SPSS software, This chapter examines the relationship between six variables using the Pearson Product Moment Correlation, which are, Agreeableness, Neuroticism, Extraversion, Openness to Experience, and Individual Innovativeness. Statistically significant associations are indicated by asterisks (\*), with one asterisk denoting significance at  $p < 0.05$  and two asterisks (\*\*) indicating stronger correlations at  $p < 0.01$ . Absence of asterisks signifies no correlation. Multicollinearity may arise if two independent variables exhibit high correlation, or if an independent variable originates from data previously employed in the research, as shown in Table 4.

Table 4: Correlation Analysis

Constructs	II	SAT	OE	CT	EA	AB	NT
1. II	1.000						
2. SAT	.653**	1.000					
3. OE	.767**	.634**	1.000				
4. CT	.341*	.466**	.422**	1.000			



5. EA	.589**	.661**	.562**	.384**	1.000		
6. AB	.559**	.590**	.520**	.532**	.520**	1.000	
7. NT	.218*	0.214	.225*	.469**	.300**	.443**	1.000

\*\* Correlation is significant at the 0.01 level (1-tailed).

\* Correlation is significant at the 0.05 level (1-tailed)

Openness to Experience, Conscientiousness, Agreeableness, Neuroticism, and Individual Innovativeness were significantly correlated with satisfaction with financial well-being at a p-value of less than 0.05. The only exception was Extraversion, for which there was no asterisk, signifying no correlation. Notably, Openness to Experience displayed the strongest correlation with Individual Innovativeness ( $r=0.767$ ,  $n=100$ ,  $p<0.05$ ). In summary, all factors demonstrated robust connections, except for the absence of a correlation between Conscientiousness and Neuroticism at the  $p > 0.05$  level.

### **Multiple Regression Analysis**

In the final stage, multiple regression analysis was adopted to assess the study's concluding hypothesis. Prior to evaluating the results, seven assumptions had to be verified. Table 5 provides a reference for the multiple regression analysis and its underlying assumptions. In this research, seven specific assumptions were tested, including normality, linearity, multicollinearity, constant variances, outliers, normality of the error component, and autocorrelation. With one exception—the condition index needing to be larger than 30—most of the assumptions were met without any issues.

Table 5: Multiple Regression Analysis

Constructs	B	St. Error	Beta	t	Sig.
OE	.495	.073	.594	6.767	0.000***
CT	-0.088	.095	-0.080	-0.927	0.357
EV	.183	.086	.185	2.133	0.036**
AB	.222	.099	.208	2.245	0.028**
NT	-0.023	.071	-0.026	-0.324	0.746

\*\*\*Sig. at 1%; \*\*Sig at 5%; \*Sig, at 10%

The collected empirical data in this study support the theoretical model presented. These findings align with previous research, revealing a strong and positive connection between individual innovativeness and personality traits such as extraversion, agreeableness, conscientiousness, and openness to new experiences. The findings presented here are in line

with those of other studies, such as those conducted by (Buchanan, 1998; Eastman et al., 2001; Hsieh et al., 2011; Kirton & De Ciantis, 1986; Steel et al., 2008; Weele, 2013), who discovered that extraverts are more capable of completing creative endeavors than introverts. According to Steel et al. (2011) and Rossberger, (2014), one important factor in influencing how much people choose to use their creativity is agreeableness. Conscientiousness has been shown to have a significant and positive impact on innovativeness and is a crucial factor in determining creative work performance, according to Buchanan (1998) and Hsieh et al. (2011). Numerous studies have revealed that a person's capacity for creativity is negatively impacted by neuroticism. The idea that neuroticism is a characteristic that hinders creativity is supported by this finding. For instance, research conducted by Eastman et al. (2001), Hsieh et al. (2011), Kirton and De Ciantis (1986), McCrae and Terracciano (2005), and Rossberger (2014) all came to the conclusion that persons with severely neurotic personality types had a difficult time displaying inventive characteristics and actively pursuing creative ideas. Buchanan (1998), Hsieh et al. (2011), Rossberger (2014), Steel et al. (2011), and Weele (2013) were the ones who eventually established that openness to experience is a potent indication of creativity on an individual basis.

### **Discussion and Conclusion**

The study's limitations were assessed, leading to recommendations for future research. It's advisable for future studies to have larger sample sizes, include respondents from all Malaysian states, and employ multilingual surveys. The study also underlines the importance of individuals having a clear understanding of their personality traits to enhance their well-being and creativity. Organizations can harness their employees' potential by comprehending their unique characteristics, thus gaining a competitive edge. Employees are often overlooked by organizations, despite being crucial stakeholders. Therefore, monitoring and understanding employee traits can provide a substantial advantage.

This research aimed to explore how individuals' personality traits impact their creativity and life satisfaction. Contemporary businesses increasingly focus on the well-being and happiness of their workforce as it contributes to productivity. This study expands upon the theory of personality traits by illustrating how different traits can exert varying influences on individuals in diverse contexts. Extraversion, agreeableness, conscientiousness, and openness to new experiences have been shown to positively correlate with creativity and life satisfaction, whereas neuroticism has the opposite effect. In summary, the study establishes a positive correlation between creativity and one's perspective on life. Based on these findings, management and HR practitioners can promote individual innovation and well-being in their organizations. Employees can be trained to reduce neuroticism and enhance extraversion, agreeableness, conscientiousness, and openness, leading to improved creativity and a valuable return on training investments. During the recruitment process, managers can assess the personalities of potential hires, prioritizing those with desired traits and excluding high neuroticism individuals.

### ***Theoretical Implications***

#### ***Personality Trait Dynamics***

The present study enhances our comprehension of the complex relationship between personality traits and their influence on a person's ability for innovation. It highlights the complex relationship between traits like extraversion, agreeableness, conscientiousness, openness to new experiences, and neuroticism and their influence on innovativeness.

#### ***Applicability of Personality Traits***

The findings highlighted the relevance of the Big Five Personality Traits framework in explaining and predicting individual innovativeness. This framework, initially used in broader personality research, proves valuable in the specific context of the gig economy and university students.

#### *Educational Insights*

Understanding how personality traits affect innovativeness in university students can inform educational strategies. This knowledge can guide educators in creating or modifying their teaching methods to nurture and harness students' creative potential effectively.

#### *Gig Economy Adaptation*

The study clarifies how personality traits can be adjusted to the gig economy. It suggests that certain traits are conducive to thriving in this dynamic work environment, emphasizing the importance of personality fit for gig workers.

#### *Practical and Social Implications*

The Big Five Personality Traits' practical implications for individual innovativeness in the gig economy are highly relevant in influencing work dynamics and improving output.

Employers in the gig economy can consider the Big Five Personality Traits when recruiting and selecting university students for gig work. They can prioritize candidates with high levels of extraversion, agreeableness, conscientiousness, and openness to new experiences, as these traits have been linked to greater innovativeness. This can lead to more innovative and adaptable gig workers.

Organizations can design training programs tailored to enhance specific personality traits that promote innovativeness. For instance, workshops on creativity and risk-taking can help develop traits associated with innovativeness, such as openness to experience. Such training can be particularly beneficial for university students entering the gig economy.

Recognizing the influence of personality traits on innovativeness can lead to more flexible and efficient work arrangements in the gig economy. Allowing individuals to work in ways that align with their personality traits can boost their innovativeness and job satisfaction.

#### *Limitations and Suggestions for Future Research*

It is important to recognize some limitations and potential shortcomings in this study, despite its unique advantages. Firstly, this research relied on a cross-sectional approach to gather data from respondents. While cross-sectional studies are convenient and less prone to biases, the time constraints imposed on this study resulted in a relatively small sample of just 95 respondents, potentially leading to less accurate findings. Extending the time given to respondents or increasing the number of participants may enhance the results.

The second issue pertains to the study's focus on individuals with college degrees engaged in gig employment. However, the reliability of the findings cannot be guaranteed due to the researchers' lack of control over the respondents and their educational backgrounds. The limitations in the research primarily stem from the challenges of generalization, prediction, and generating further insights within the constrained scope of the study.

Additionally, the survey used in this investigation was exclusively available in English. Given Malaysia's linguistic diversity, this language constraint could hinder respondents who aren't proficient in English. To improve future research, questionnaires could be translated into multiple languages or provided with more comprehensive explanations, particularly for participants from Generation X. Subsequent research may consider administering questionnaires in both English and Malay to encourage broader participation.

To broaden the relevance of our findings, future research could involve collecting data from a more diverse group of participants. The study mainly relied on data from college students. In upcoming research, we might explore whether neuroticism could be redefined as another personality trait, like openness to new experiences, or if it exclusively hinders an individual's capacity for innovation and overall life satisfaction. Utilizing longitudinal research methods in subsequent studies could yield more accurate results. If further clarification of this relationship is needed, various contextual factors could be incorporated. Additionally, to better define the connections indicated by this study, increased responsibility for managing and controlling variables could be integrated into the model.

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