Personality Traits and Happiness of University Students in Region XI and Region XII: the Philippine Context
Brandon N. Obenza1, Althea J. Torralba2, Al-Sheree Ann Cantal Eupena1, Gideon S. Sumayo2, Jeeb T. Abelito3

ABSTRACT
This quantitative research study investigates the relationship between personality traits and happiness of 291 University Students in Region XI (Davao Region) and Region XII (SOCCSKSARGEN), Philippines. The respondents of this research were chosen using stratified random sampling. Two reliable and validated questionnaires were used to extract data from the university students. Based on the notable findings of the study, agreeableness, and extraversion have a significant positive relationship with happiness, with respective beta coefficients of 0.282 and 0.347, respectively. On the other hand, neuroticism has a negative significant relationship with happiness, with a beta coefficient of -0.264. Subsequently, conscientiousness and openness to experience have no significant relationship with happiness. The study offers significant and fresh data about the happiness index of university students in two different regions of the peninsula.

INTRODUCTION
Aristotle posited that happiness is the paramount objective of life, making it the most sought and desired human state. Further, happiness is a complex and multifaceted concept shaped by numerous circumstances across different domains. Scholars have analyzed happiness from several viewpoints, with sustainability being highlighted as a critical framework that focuses on balancing current satisfaction with future well-being (Petrović & Murgaš, 2020). Engaging in leisure activities, including relaxation and personal achievements, is crucial in enhancing one's happiness (Liu & Da, 2019; Lobo et al., 2022).

Examining happiness from a global historical perspective demonstrates its universal significance throughout different cultures and periods (Lomas et al., 2021). Utilizing a multidimensional approach emphasizes the intricate nature of happiness, showing how it relies on several aspects such as temperament, health, relationships, cultural norms, economic conditions, and governance systems (Lomas, 2021).

Moral character is a key factor in determining happiness, with both children and adults believing that those with virtuous attributes are happier (Yang et al., 2021). Various aspects of life, including work, family, finances, and living conditions, are strongly linked to people's feelings of happiness (López-Ruíz et al., 2021; Raymundé & Caballo, 2023).

Aside from traditional aspects, the psychological depth of life is highlighted as a significant but frequently disregarded factor in enhancing general well-being (Oishi et al., 2020). The distinction between a purposeful existence and one centered on pleasure highlights the complex relationship between job satisfaction and stress, providing valuable information on enhancing individuals' happiness and well-being (Tandler et al., 2020).

Happiness predisposes creativity and productivity: As individuals become more satisfied with their lives, they are more motivated to pursue resource-building goals to prepare for future challenges. They are also more engaged in activities that produce positive results than avoiding endeavors that are deemed to generate loss or negative outcomes (Booth et al., 2012; Yang, 2008). Thus, happiness is not just a mere emotional state but a marker that determines one's quality of life. It is not only a desire to achieve but also a significant catalyst that directs a person's behavior and outlook. Moreover, happiness is a complex construct summed by emotional and cognitive components. Its emotional component entails that there should be a balance of pleasant and unpleasant feelings as a response to stimuli. The cognitive component, conversely, signifies the assessment of life's meaning and general satisfaction of life according to one's standards; thus, happiness requires cognition (Diener, 2002; Rojas, 2007). Furthermore, Lozano and Solé-Auró (2021) highlighted that happiness is usually used as a subjective index to determine quality of life. Happiness impacts one's physiological state and positively affects life expectancy since happiness prolongs life and motivates people to live healthier (Lawrence et al., 2015; Ryff, 1989).

Meanwhile, happiness has been studied in different seminal research to investigate if personality traits affect it (Amendola et al., 2022; Chung et al., 2019; Saghir et al., 2019). Allport (1961) claims that personality traits consist of different psychophysical systems within an individual that determine how they act and behave. In studying this connection (personality traits and happiness), the Big Five personality model is widely used as it describes personality in terms of five underlying dimensions: extraversion, conscientiousness, agreeableness, neuroticism, and openness to experience. Extraversion is a high degree of friendliness and sociability. Conscientiousness is a tendency to discipline oneself for achievement rather

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than acting in spontaneity. Agreeableness is the opposite of aggression--- it is defined as being considerate of others and being humane. Neuroticism entails irritability, anger, anxiety, and vulnerability. Openness to experience is displayed in adaptability, curiosity, and “preference for variety.”

Numerous research studies consistently show a significant relationship between the Big Five personality traits and students’ happiness. High levels of happiness are more prevalent in certain personalities. Extraversion, openness, agreeableness, and conscientiousness are positively correlated with happiness, while neuroticism is negatively correlated (Khaledian et al., 2013; Bahiraei et al., 2012; Joshanloo & Afshari, 2009; Suklo et al., 2014; Bonab, 2014). Additionally, it has been found that unhappy people are usually neurotic --- they have low self-esteem and a negative outlook on life (Carr, 2004; Ng, 2015; Lauriola & Iani, 2015).

Moreover, despite existing literature on the link between the two constructs (personality traits and happiness), a noticeable gap exists in the literature on the investigation of these variables in the context of university students in the Philippines. These propositions led the researchers to study the multifaceted relationship between personality traits and happiness among university students to provide an in-depth understanding of the factors that could positively impact their lives while in pursuit of tertiary education. Given this rationale, this research aims to study the relationship between the big five personality traits and happiness among university students in two regions of the Philippines and to investigate what specific personality traits are predeterminants of happiness in this specific population and context.

MATERIALS AND METHODS
This research employed a quantitative research methodology, specifically a non-experimental correlational design, in evaluating the relationship between specific personality traits and the happiness of university students in Regions XI and XII. Creswell (2019) asserted that quantitative research is a postpositivist view as it follows the traditional form of research. It uses statistical tools to test objective theories and analyze numbered data to investigate the relationships among variables and support or refute the established hypotheses. Thus, it is a scientific approach to gathering, evaluating, and analyzing data and information, commonly through surveys or experimental studies.

The research instrument utilized in this study is adapted from John and Srivasta’s Big Five Inventory (BFI) (1995) for personality traits and the Oxford Happiness Scale by Hills and Argyle (2002) for happiness. The questionnaires were in the form of a 6-point Likert scale and were administered through an online survey (Google Form) to students at different universities from Region XI and XII, Philippines. A stratified random sampling technique is used in choosing respondents from the different universities in the aforementioned regions. Creswell and Creswell (2017) stated that the Stratified Random Sampling Technique entails dividing the research population into groups or strata based on specifications and characteristics and then taking random samples from each stratum. This method ensures that all relevant subgroups are represented, leading to more accurate and reliable results (Kish, 1965). In testing the hypothesis regarding the relationship between personality traits and happiness among university students of Region XI and Region XII, Priori Power Analysis using G*Power 3.1.9.6 (Faul et al., 2007) determines that an n=89 is required to achieve 95% power for detecting medium effect size (f2= 0.15) at α=0.05. The computed noncentrality parameter was 3.654, with six predictors in the model, a critical t-value of 1.989, and a degree of freedom (DF) of 82. In this study, the actual size is N=295, which significantly exceeded the calculated threshold, underscoring the robustness of this study in explaining the multifaceted relationship between personality traits and happiness among tertiary students’ community.

Pilot testing and expert validation were implemented for these instruments. Furthermore, Cronbach’s alpha was utilized to ascertain the instruments’ reliability and validity. Average Variance Extracted (AVE) was used to assess convergent validity, and Heterotrait-Monotrait Ratio (HTMT) was employed to evaluate discriminant validity. Moreover, descriptive statistics using Jamovi software version 2.0 were utilized to determine the mean and standard deviation to characterize university students’ personality traits and happiness. Also, SmarPLS 4.0 software was utilized to evaluate the hypothesized regression model, implement the bootstrapping standardized algorithm, and assess the model’s direct effect, including the effect sizes of individual paths.

Hypothesis
H1: There is a significant relationship between the Big Five personality traits and the happiness of university students in Regions XI and XII of the Philippines.

RESULTS AND DISCUSSION
Creswell (2019) underscored the importance of assessing the reliability and validity of a measurement model before performing Regression analysis. In examining the constructs’ reliability and validity, several items are considered to be omitted. Table 1 shows the reliability and validity of the instrument utilized in the study. Cronbach’s alpha is employed to measure the internal consistency reliability, indicating how well the items in each scale correlate with each other. The questionnaires’ internal consistency is satisfactorily evident in the Cronbach’s alpha values for Agreeableness (0.762), Conscientiousness (0.800), Extraversion (0.737), Happiness (0.893), Neuroticism (0.745), and Openness (0.821). These values are generally accepted since they are above the suggested threshold of 0.7, suggesting that the items within each scale are reliable in measuring the intended construct. Devellis (2017) asserted that Cronbach’s alpha equal to

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or above 0.7 is generally accepted. However, values that exceed 0.95 may be problematic. Since all values were close to or above 0.7, the instruments are reliable in measuring the constructs of interest. Also, none of the values were above 0.95, implying that none of the items in the questionnaires were redundant; hence, all items were administered.

Moreover, the Average Variance Extracted (AVE) is utilized to evaluate the instrument’s convergent validity (Fornell & Lacker, 1981; Chin, 1998). The AVE values for Agreeableness (0.513), Conscientiousness (0.555), Extraversion (0.58), Happiness (0.511), Neuroticism (0.584), and Openness to Experience (0.525) exceeded 0.5 which is the generally accepted threshold. These values inferred that the observed variables adequately reflected the underlying constructs (Henseler et al., 2015; Hair et al., 2010). Also, Heterotrait-Monotrait Ratio is employed to assess discriminant validity in comparing the correlation between constructs (Personality Traits and Happiness) to ascertain that the constructs are more strongly correlated with their measures than with measures of other constructs. Generally, an HTMT value less than 0.85 is considered indicative of good discriminant validity (Henseler et al., 2015). The HTMT values for happiness and agreeableness (0.687), happiness and conscientiousness (0.617), happiness and extraversion (0.801), neuroticism and happiness (0.68), and openness and happiness (0.534) are less than 0.85, indicating a good discriminant validity. Therefore, these findings empirically suggest that the instruments utilized in this research to measure university students’ personality traits and happiness in Region XI and Region XII are reliable and valid.

Table 1: Construct Reliability and Validity

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cronbach’s alpha</th>
<th>Average variance extracted (AVE)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreeableness</td>
<td>0.762</td>
<td>0.513</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>0.800</td>
<td>0.555</td>
</tr>
<tr>
<td>Extraversion</td>
<td>0.737</td>
<td>0.580</td>
</tr>
<tr>
<td>Happiness</td>
<td>0.893</td>
<td>0.511</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>0.745</td>
<td>0.584</td>
</tr>
<tr>
<td>Openness</td>
<td>0.821</td>
<td>0.525</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Discriminant Validity</th>
<th>Heterotrait-monotrait ratio (HTMT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Happiness &lt;-&gt; Agreeableness</td>
<td>0.687</td>
</tr>
<tr>
<td>Happiness &lt;-&gt; Conscientiousness</td>
<td>0.617</td>
</tr>
<tr>
<td>Happiness &lt;-&gt; Extraversion</td>
<td>0.801</td>
</tr>
<tr>
<td>Neuroticism &lt;-&gt; Happiness</td>
<td>0.680</td>
</tr>
<tr>
<td>Openness &lt;-&gt; Happiness</td>
<td>0.534</td>
</tr>
</tbody>
</table>

Table 2 exhibits the key variables’ mean and other statistical scores gathered and evaluated based on the 295 completed responses. Happiness had a mean score of 4.14, implying that the college students who participated in the survey had moderate happiness and were adequately satisfied with their lives. This result aligns with Lacida et al. (2020), who postulate that university students have a moderate to high level of happiness. These individuals exhibited satisfaction in their lives as they encountered different experiences, both in personal and academic domains. However, this result is negated by Jiang et al. (2022), arguing that students in different colleges demonstrated low happiness as they expressed that life was not gratifying. Their study found that age negatively affects happiness, as first and second-year nursing students were happier than third and fourth-year students.

Agreeableness obtained a mean score of 4.80, indicating that university students demonstrated a balanced tendency toward cooperation, friendliness, and empathy. Big Five Personality Theory asserted that agreeableness reflects the individual’s orientation toward cooperation and empathy. College students’ level of agreeableness personality has been found to have various implications. Yang and Tu (2020) found that higher levels of empathy can suppress the growth of interpersonal relationships for agreeable students, while lower levels of empathy may promote it.

The mean score for conscientiousness is 4.30, which stipulates that there is a moderate level of self-discipline, responsibility, and organization among college students. According to Soto (2018), conscious students perform better in academic endeavors as they have higher grades. Aside from this, conscientious individuals exhibit satisfactory performance in the workforce.

Extraversion attained a mean score of 3.98, indicating that university students have a balanced tendency to interact socially and demonstrate a low level of energy. According to the Big Five Personality Theory, extroverted individuals generally prefer to be in the company of other people, mostly their peers and family. Psychologically, extroverts experience greater subjective wellbeing than introverts—positive emotions are frequently and intensely present in them (Soto, 2018; Diener & Lucas, 2003).

The mean score of neuroticism is 3.36, implying that university students had a low tendency to experience
negative emotions and were less prone to emotional fluctuation. Diener (2002) said that neurotics typically show irritability and emotional instability, leading to an increased risk of anxiety and mood disorders. Openness had a mean score of 4.51, suggesting that students in tertiary education had a balanced tendency to novelty, variety, and intellectual stimulation. According to the Big Five Personality Theory, openness reflects a person's preference to experience a variety of stimulations and their enthusiasm to pursue different endeavors. Soto (2018) argued that openness is “strongly associated with intellectual and creative outcomes.”

Table 2: Status of university students’ personality traits and happiness

<table>
<thead>
<tr>
<th>Trait</th>
<th>N</th>
<th>Mean</th>
<th>SD (s)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Happiness</td>
<td>295</td>
<td>4.14</td>
<td>1.22</td>
<td>Moderate happiness</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>295</td>
<td>4.80</td>
<td>1.14</td>
<td>Balanced tendency</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>295</td>
<td>4.30</td>
<td>1.11</td>
<td>Moderate Level</td>
</tr>
<tr>
<td>Extraversion</td>
<td>295</td>
<td>3.98</td>
<td>1.31</td>
<td>Moderate tendency</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>295</td>
<td>3.36</td>
<td>1.47</td>
<td>Low tendency</td>
</tr>
<tr>
<td>Openness</td>
<td>295</td>
<td>4.51</td>
<td>1.11</td>
<td>Balanced tendency</td>
</tr>
</tbody>
</table>

Notable findings were discovered after the regression analysis, detailed in the accompanying table. In terms of direct effects, a path from agreeableness to happiness entails a substantial significant relationship ($\beta = 0.282, r^2 = 0.088, t = 4.832, p = 0.000$). This suggests that the increase in this construct increases an individual's happiness. This finding is supported by the results of Saghir et al. (2019), Lu and Hu (2005), and Pishva et al. (2011), indicating that the students possessing this personality trait are found to have high levels of happiness. This result is because they find harmony with the people around them and have a positive perspective about life.

Similarly, the path from extraversion to happiness manifests a positive significant relationship ($\beta = 0.347, r^2 = 0.169, t = 6.59, p = 0.000$). This finding implies that extraversion increases the happiness index of a certain person. This finding aligns with Preissler (2020), asserting that acting outgoing and showing a high level of energy in a given moment increases happiness.

On the other hand, the path from neuroticism to happiness demonstrates a negative significant relationship ($\beta = -0.264, r^2 = 0.114, t = 5.843, p = 0.000$). This result postulates that the increase in this construct decreases happiness. According to the Big Five Personality Theory, neuroticism decreases an individual's happiness as they are more susceptible to intense and frequent negative emotions. This finding is further proven by Lucas and Diener (2008), Hellewell et al. (2014), and Cheng, Furnham, and Pan (2013), claiming that neuroticism causes dissatisfaction in life.

Subsequently, the path from conscientiousness to happiness ($\beta = 0.06, r^2 = 0.003, t = 0.902, p = 0.367$) and the path from openness to happiness ($\beta = -0.001, r^2 = 0, t = 0.021, p = 0.983$) manifests no significant relationship. It can be gleaned from the finding that being open to experience and being considerate of people would not positively or negatively impact one's life. Saghir et al., 2019 underscored in their study that these personality traits could in no way affect someone's life, highlighting its consonance with the study's results.

Figure 1: Path coefficients. Results using SmartPLS 4.0

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Based on the value of $R^2 = 0.568$, it can be conjectured that the model effectively elucidates a significant percentage of variability in the observed personality traits affecting one’s happiness. The adjusted $R^2$ value of 0.561 implicates the robustness of the model in evaluating the predictors. Therefore, the results highlight the significance of direct structures in understanding how certain personality traits affect an individual’s happiness.

**Table 3: Path Coefficients and R-squared values of the regression model**

<table>
<thead>
<tr>
<th>Personality Trait</th>
<th>Original Sample (O)</th>
<th>Sample Mean (M)</th>
<th>Standard Deviation (STDEV)</th>
<th>$P_F$</th>
<th>$T$ Statistics (O/STDEV)</th>
<th>$P$ Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreeableness -&gt; Happiness</td>
<td>0.282</td>
<td>0.283</td>
<td>0.058</td>
<td>0.088</td>
<td>4.832</td>
<td>0.001</td>
</tr>
<tr>
<td>Conscientiousness -&gt; Happiness</td>
<td>0.060</td>
<td>0.062</td>
<td>0.066</td>
<td>0.003</td>
<td>0.902</td>
<td>0.367</td>
</tr>
<tr>
<td>Extraversion - -&gt; Happiness</td>
<td>0.347</td>
<td>0.345</td>
<td>0.053</td>
<td>0.169</td>
<td>6.59</td>
<td>0.001</td>
</tr>
<tr>
<td>Neuroticism -&gt; Happiness</td>
<td>-0.264</td>
<td>-0.264</td>
<td>0.045</td>
<td>0.114</td>
<td>5.843</td>
<td>0.001</td>
</tr>
<tr>
<td>Openness - -&gt; Happiness</td>
<td>-0.001</td>
<td>0.003</td>
<td>0.065</td>
<td>0.000</td>
<td>0.021</td>
<td>0.983</td>
</tr>
</tbody>
</table>

$R^2: 0.568$, Adjusted $R^2: 0.561$

**CONCLUSIONS**

In a nutshell, personality traits are significantly associated with individuals’ happiness. The findings of this research conclude that agreeableness and extraversion increase the happiness index. On the other hand, neuroticism decreases an individual’s happiness and leads to dissatisfaction in life. However, these findings can only be applied to Regions XI and XII university students. They must not be used to make inferences about the general facets of personality traits and happiness. Moreover, the model’s $R^2$ value of 0.568 suggests that it effectively explains a substantial portion of the variability in observed personality traits impacting happiness. This accentuates the value of direct structures in deciphering the influence of specific personality traits on an individual’s happiness, particularly in the context of university students.

**RECOMMENDATIONS**

Given the study’s findings, educational institutions should integrate personality assessment and development into their student support services, particularly in Regions XI and XII, Philippines. One approach is to incorporate personality-focused seminars into current mental health and counseling programs to cater to students’ individual needs according to their personality characteristics. Moreover, providing professors and staff with training on how personality factors impact student satisfaction could improve educational approaches and student engagement. Future studies should replicate these results in various cultural and educational settings, investigate how educational interventions affect the happiness of different personality traits, and utilize longitudinal designs to comprehend the changing connection between personality characteristics and happiness as time progresses.

**LIMITATIONS AND FUTURE IMPLICATIONS**

This study is limited in geographical and demographic scope, focusing solely on university students from Regions XI and XII in the Philippines. This peculiarity raises issues about the applicability of the findings to different populations or cultural settings. The study’s cross-sectional design limits the capacity to establish causal correlations between personality factors and happiness. To enhance future study, it is advised to utilize longitudinal designs to gain a deeper understanding of these interactions’ evolution over time. Moreover, broadening the research to encompass various demographics and environments could improve the applicability of the results. Studying how personality traits interact with other psychological or environmental elements could offer a more thorough comprehension of their influence on happiness.

**Acknowledgments**

The researchers are profoundly grateful to the respondents and, most importantly, to the Almighty God.

**REFERENCES**


