

# Eysenckian Personality Profiles as Predictors of Anxiety and Depression in First-Year Undergraduate Students: Evidence from Dong Thap University

**Dr. Pham The Hung**

Faculty of Political Education and Educational Management, Dong Thap University, Vietnam.

Email: phamthehung@dthu.edu.vn; orcid.org/0009-0006-1492-1056

## HOW TO CITE:

Pham The Hung (2026).  
Eysenckian Personality Profiles as  
Predictors of Anxiety and  
Depression in First-Year  
Undergraduate Students:  
Evidence from Dong Thap  
University.  
International Journal of Special  
Education, 41(8s), 727-738

## COPYRIGHT STATEMENT:

Copyright: © 2026 Authors.  
Open access publication under the  
terms and conditions  
of the Creative Commons Attribution  
(CC BY)  
license (<http://creativecommons.org/licenses/by/4.0/>).

## ABSTRACT:

The transition from high school to university represents a critical developmental period characterized by significant academic, social, and psychological changes. First-year undergraduate students often face increased academic pressure, changing interpersonal relationships, and uncertainty about future careers, which may heighten the risk of anxiety and depression. Based on Hans Jürgen Eysenck's personality theory, this study examined the predictive relationship between Eysenckian personality traits and levels of anxiety and depression among first-year students at Dong Thap University.

A quantitative cross-sectional design was employed with 487 first-year students from various academic disciplines during the 2025–2026 academic year. Data were collected through structured questionnaires measuring Eysenck's personality dimensions, particularly extraversion–introversion and neuroticism–emotional stability, together with standardized anxiety and depression scales. Descriptive statistics and correlation analyses were conducted to examine the relationships among variables.

The findings revealed significant differences in students' personality characteristics and psychological well-being. A considerable proportion of participants reported symptoms of anxiety and depression at varying levels. Neuroticism was positively associated with anxiety and depression, whereas emotional stability and extraversion were negatively associated with psychological distress. The study provides empirical evidence for early mental health risk identification and for developing university counseling and psychosocial support programs for first-year students.

**Keywords:** Eysenck personality traits, neuroticism, anxiety and depression, university adjustment, undergraduate mental health.

## 1. Introduction

Student mental health has become a growing concern in higher education, particularly during the transition from high school to university. This period is characterized by increased academic autonomy, new social environments, and evolving career expectations, which collectively contribute to elevated psychological stress among first-year students.

Anxiety and depression are among the most prevalent mental health problems in this population, with significant implications for academic achievement, emotional functioning, and overall adjustment. These conditions are increasingly understood not only as transient emotional responses but also as indicators of broader adaptation difficulties in the university context.

Within personality psychology, Eysenck's model highlights two major dimensions extraversion and neuroticism—that are strongly associated with individual differences in emotional adjustment. Neuroticism reflects heightened sensitivity to stress and a greater tendency toward negative affect, including anxiety and depressive symptoms, whereas extraversion is linked to social engagement and more effective use of social support, which may serve as a protective factor.

Empirical evidence consistently demonstrates a positive association between neuroticism and internalizing problems such as anxiety and depression, while extraversion is generally associated with better psychological well-being. However, in Vietnam, empirical research examining these relationships within specific higher education contexts remains limited, particularly among first-year university students.

Therefore, this study aims to examine the relationship between personality traits based on Eysenck's model and levels of anxiety and depression among first-year students at Dong Thap University. The findings are expected to contribute to a better understanding of personality-based vulnerability factors and to inform the development of targeted mental health support and counseling interventions in higher education.

## **2. Theoretical Background, Literature Review, and Hypothesis Development**

### **2.1. Personality Traits in Eysenck's Theory**

Personality is widely conceptualized as a multifaceted psychological structure that reflects relatively stable individual characteristics, governing how people perceive, feel, and behave across diverse life contexts. Within modern personality psychology, numerous theoretical models have been developed to account for individual differences; however, the model proposed by Hans Jürgen Eysenck remains one of the most influential and empirically grounded frameworks in personality research (Eysenck, 1964, 1987; Eysenck & Eysenck, 1985).

From Eysenck's perspective, personality can be understood along biologically rooted dimensions, most notably Extraversion–Introversion and Emotional Stability–Neuroticism. The dimension of extraversion reflects the extent to which individuals seek stimulation from the social environment, encompassing sociability, activity level, and engagement in interpersonal interactions. Individuals high in extraversion tend to be outgoing, energetic, and socially proactive, whereas

introverted individuals are more inclined toward internal reflection, solitary activities, and reduced social stimulation (Eysenck, 1987).

Equally critical is the dimension of neuroticism, which captures the degree of emotional stability. Individuals high in neuroticism are typically more sensitive to psychological stimuli, more prone to experiencing negative affective states such as anxiety, tension, and sadness, and more reactive to stress-inducing situations (Lazarus & Folkman, 1984). In contrast, emotionally stable individuals demonstrate stronger emotional regulation and resilience in the face of environmental stressors (Beck, 2008).

A distinctive strength of Eysenck's theory lies in its integration of personality psychology with biological and neurophysiological mechanisms. Specifically, personality traits are posited to be associated with levels of activation in the central nervous system and the autonomic nervous system. This biologically informed perspective has enabled Eysenck's model to be extensively applied in research examining the relationships between personality traits and various domains, including social behavior, adaptive functioning, mental health outcomes, and stress responsiveness.

### **2.2. Personality Traits and Anxiety–Depression: Empirical Evidence**

Anxiety and depression are among the most prevalent psychological conditions in contemporary society and are particularly salient within university student populations. The transition to higher education is frequently accompanied by multiple stressors—academic demands, financial pressures, evolving social relationships, and changes in living environments—which collectively heighten vulnerability to psychological distress (Beiter et al., 2015; Eisenberg, Hunt, & Speer, 2013).

A substantial body of research in personality psychology has demonstrated that personality traits serve as robust predictors of mental health outcomes. Among these traits, neuroticism has consistently been identified as one of the strongest predictors of emotional disorders, particularly anxiety and depression. Foundational work by David Watson and Lee Anna Clark highlights the close association between emotional instability and symptoms of anxiety and depression, showing that individuals high in neuroticism tend to experience more frequent and intense negative emotions and exhibit heightened reactivity to stress (Watson & Clark, 1984; Watson, Clark, & Carey, 1988).

Conversely, extraversion has been widely conceptualized as a protective psychological factor. Individuals high in extraversion typically possess broader social networks, greater emotional expressiveness, and a stronger capacity to seek and utilize social support in times of difficulty. Grounded in the Five-Factor Model of personality, extraversion has been consistently identified as a robust predictor of psychological well-being. Specifically, individuals high in extraversion tend to report greater life satisfaction, enhanced emotional stability, and lower levels of depressive symptoms. This pattern reflects their predisposition toward positive affectivity, social engagement, and adaptive coping processes (Costa & McCrae, 1992; Steel et al., 2008). Large-scale reviews also affirm that neuroticism constitutes a major risk factor for emotional disorders, whereas extraversion is linked to well-being and positive mental health (Lahey, 2009).

Within university populations, international studies consistently indicate that personality traits are significantly related to both academic adjustment and psychological well-being. Students with high levels of neuroticism are more likely to experience academic stress, test anxiety, and difficulties in emotional regulation when confronted with academic demands (Lahey, 2009). In contrast, students high in extraversion tend to exhibit better social adjustment, greater engagement in academic activities, and higher levels of life satisfaction.

In the Vietnamese context, research on student mental health has gained increasing attention in recent years. Emerging evidence suggests that personality traits are meaningfully associated with students' academic adaptation and psychological functioning. For instance, Bui Thi Thu Hang (2017) found that personality characteristics significantly influence learning styles and students' adaptability to university environments. Similarly, Nguyen Thi Phuong (2024) reported that certain personality traits are linked to manifestations of anxiety and depression among students. More recently, Vu Đang Hoang et al. (2024) demonstrated that personality traits associated with emotional sensitivity may increase vulnerability to anxiety in social interaction contexts.

Taken together, the existing literature—both international and domestic—consistently indicates that neuroticism is positively associated with anxiety and depression, whereas extraversion tends to show a negative association with negative emotional states (Tran et al., 2024; Le et al., 2024). Nevertheless, empirical studies examining these

relationships specifically within the framework of Eysenck's model and focusing on first-year university students remain relatively limited, particularly within the context of individual higher education institutions in Vietnam (Truong et al., 2012; Nguyen & Dao, 2013; Vo, 2018).

### 2.3. Hypothesis Development

Grounded in Eysenck's biological theory and supported by extensive empirical evidence, personality traits are key predictors of anxiety and depression. Neuroticism, reflecting heightened emotional reactivity, has been consistently identified as a strong vulnerability factor associated with increased negative affect, stress sensitivity, and risk of emotional disorders (Watson & Clark, 1984; Lahey, 2009). In my view, neuroticism represents a core dispositional risk underlying maladaptive psychological outcomes.

This is particularly evident among first-year university students, who face substantial academic and social adjustment demands. Individuals high in neuroticism are more likely to experience stress, emotional dysregulation, and difficulties in adaptation, thereby increasing their susceptibility to anxiety and depression.

In contrast, extraversion is associated with positive affect, social engagement, and effective use of social support, functioning as a protective factor that mitigates stress and reduces vulnerability to negative emotional states (Costa & McCrae, 1992; Steel et al., 2008). From an analytical standpoint, extraversion enhances psychological resilience during transitional periods.

Within the Vietnamese higher education context, where first-year students encounter multiple adjustment challenges, examining the role of personality traits is critical for identifying both risk and protective mechanisms influencing mental health (Tran et al., 2024).

Accordingly, the study proposes: (1) H1: Neuroticism is positively associated with anxiety; (2) H2: Neuroticism is positively associated with depression; (3) H3: Extraversion is negatively associated with anxiety and (4) H4: Extraversion is negatively associated with depression.

### 2.4. Research Model

Grounded in Eysenck's personality theory and supported by prior empirical evidence, this study proposes a structural model to examine the relationships between core personality traits and negative psychological outcomes among first-year university students.

The model includes two independent variables—Extraversion and Neuroticism—and two dependent variables—anxiety and depression. Neuroticism is conceptualized as a primary vulnerability factor associated with heightened stress reactivity and increased risk of negative emotional states (Lahey, 2009), whereas extraversion is positioned as a protective factor linked to social engagement and reduced susceptibility to anxiety and depression (Costa & McCrae, 1992; Steel et al., 2008).

From an analytical standpoint, this dual-path framework—contrasting risk (neuroticism) with protective resources (extraversion)—provides a theoretically coherent and empirically grounded lens for understanding psychological adjustment during the transition to university. This conceptual model is depicted in Figure 1.

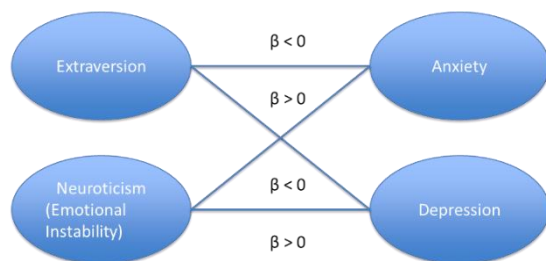


**Figure 1.** Proposed Research Model

Moreover, the framework enables the systematic empirical testing of the hypothesized relationships while offering a robust foundation for the design of targeted interventions, including psychological counseling, adaptation support programs, and preventive mental health strategies within higher education settings.

### 3. 3. Data and Research Methodology

#### 3.1. Research Sample

The present study was conducted with a sample of 487 first-year students currently enrolled at Dong Thap University. Participants were selected using a convenience sampling method during survey administration in first-year courses. While this sampling approach inherently limits generalizability, it remains widely employed in educational and psychological research due to its practical feasibility and accessibility to target populations (Etikan, Musa, & Alkassim, 2016).

The sample included first-year students from a variety of academic majors, thereby ensuring a reasonable degree of diversity in learning characteristics and socio-educational backgrounds. From a methodological standpoint, a sample size of 487 is considered statistically adequate for

analyses such as correlation and regression, and it satisfies minimum sample size requirements commonly recommended in social science research (Hair et al., 2019).

The decision to focus on first-year students is theoretically grounded in developmental psychology, which identifies the transition from high school to university as a critical developmental turning point. During this phase, students must adapt to multiple changes, including a new academic environment, increased autonomy in learning, expanded social networks, and heightened demands for self-regulation in both academic and personal domains (Credé & Niehorster, 2012). These cumulative challenges can generate substantial psychological pressure, thereby increasing vulnerability to mental health issues, particularly anxiety and depression among first-year students (Beiter et al., 2015).

Data were collected by using a self-report questionnaire. Prior to participation, respondents were fully informed about the study's purpose, their voluntary participation rights, and their right to withdraw or decline to answer any question. All personal information was treated with strict anonymity and confidentiality, in accordance with established ethical standards in social science research (APA, 2020). From my perspective, ensuring these ethical safeguards is not merely procedural but foundational to the integrity and validity of psychological research.

#### 3.1.1. Gender Distribution of the Sample

Descriptive analysis of the study sample ( $N = 487$ ) reveals a clear gender imbalance, as illustrated in Figure 2 below. Female students constitute the majority of participants ( $n = 328$ , 67%), whereas male students account for 33% of the sample ( $n = 159$ ). This distribution reflects the structural characteristics of teacher education institutions in Vietnam, where female students are typically overrepresented in education-related disciplines (Ministry of Education and Training, 2023).

From a methodological standpoint, such a gender composition is an important consideration in interpreting the study findings. Previous empirical evidence consistently demonstrates that gender is associated with differences in mental health outcomes, particularly anxiety and depression. Female students are generally more likely to report higher levels of internalizing symptoms compared to their male counterparts, a pattern often attributed to differences in emotional processing,

socialization experiences, and coping strategies (Eisenberg et al., 2013; Altemus et al., 2014).

Accordingly, the predominance of female participants in this sample may have influenced the overall distribution of psychological outcomes, particularly anxiety and depression scores. Therefore, gender should be considered as a relevant contextual variable in the interpretation of the results and in subsequent statistical analyses.

At the same time, this sample structure also enhances the ecological validity of the study within the context of teacher education programs in Vietnam, where such a gender imbalance is not only common but structurally expected. This gender distribution is visually illustrated in Figure 2, which clearly presents the proportion of male and female participants in the sample.

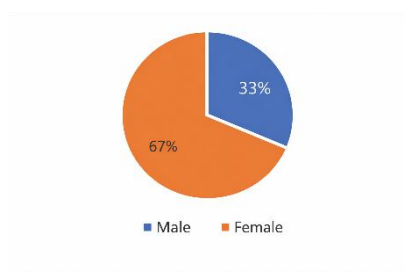


**Figure 2.** Distribution of the Sample by Gender

### 3.1.2. Assessment of Sample Representativeness

Although this study employed a convenience sampling method, the relatively large sample size ( $N = 487$ ) and the inclusion of students from multiple faculties suggest that the dataset is capable of capturing a reasonably diverse range of psychological characteristics among first-year students at Dong Thap University.

However, it is important to note that the uneven distribution across faculties may limit the extent to which the findings can be generalized to the entire student population. From a methodological standpoint, the results should therefore be interpreted with caution, particularly when making broader inferences beyond the sampled group.

## 3.2. Measurement Instruments

In this study, the research variables were measured by using a structured questionnaire comprising two main groups of scales: (1) a personality scale based on Eysenck's model, and; (2) a scale assessing levels of anxiety and depression among students.

The use of standardized psychological instruments is critical in ensuring the reliability and scientific validity of the data, particularly in studies situated within personality psychology and mental health research (DeVellis, 2017). From my perspective, careful instrument selection is foundational to producing robust and interpretable empirical findings.

### 3.2.1. Eysenck Personality Inventory (EPI)

Students' personality traits in this study were assessed using the Eysenck Personality Inventory (EPI), developed by Hans Jürgen Eysenck and Sybil B. G. Eysenck to measure fundamental dimensions of personality (Eysenck & Eysenck, 1964; 1985). The EPI is widely recognized as one of the most established and extensively utilized instruments in both personality and clinical psychology research.

The EPI consists of 57 dichotomous items, with two response options: "Yes" or "No." The scale is structured into three primary components: 24 items measuring Extraversion–Introversion; 24 items measuring Neuroticism–Emotional Stability; 9 items forming the Lie (L) scale, designed to detect social desirability bias

The inclusion of the Lie scale is particularly important, as it enables the identification of respondents who may answer in a socially desirable manner, thereby enhancing the credibility and internal validity of the data (Eysenck & Eysenck, 1985).

EPI scores allow for the assessment of core personality dimensions and facilitate the classification of individuals into the four classical temperament types: Sanguine, Choleric, Melancholic, and Phlegmatic. This typology emerges from the interaction between the dimensions of Extraversion and Neuroticism and remains widely applied in personality and behavioral research (Matthews, Deary, & Whiteman, 2009).

During data collection, participants were instructed to read each item carefully and select the response that best reflected their personal characteristics. Responses were coded and scored according to standard EPI guidelines. Higher scores on the Extraversion scale indicate stronger extraverted tendencies, whereas higher scores on the Neuroticism scale reflect greater emotional instability.

Previous international studies have reported that the EPI demonstrates acceptable to good

reliability, with Cronbach's alpha coefficients typically ranging from 0.70 to 0.85, alongside strong construct validity in research on mental health and social behavior (Francis, Brown, & Philipchalk, 1992).

### 3.2.2. Anxiety and Depression Scale

Students' anxiety and depression were assessed using a 30-item self-report scale developed based on common clinical manifestations of these conditions and informed by the structure of established instruments, including the GAD-7 (Spitzer et al., 2006) and the PHQ-9 (Kroenke et al., 2001). The scale comprises two subscales: 15 items measuring anxiety symptoms and 15 items measuring depressive symptoms.

The items capture a broad range of psychological experiences, such as excessive worry, difficulty controlling thoughts, restlessness, irritability, concentration difficulties, fatigue, low mood, loss of interest, sleep disturbances, feelings of worthlessness, and social withdrawal. Participants rated the frequency of each symptom over the past two weeks on a four-point Likert scale (0 = Not at all, 1 = Several days, 2 = More than half the days, 3 = Nearly every day).

Subscale scores were computed by summing the relevant items (anxiety: 15 items; depression: 15 items), with higher scores indicating greater symptom severity. An overall anxiety–depression score was also calculated by summing all items. This additive scoring approach provides a continuous and reliable index of psychological distress suitable for subsequent statistical analyses.

For interpretative purposes, total scores were further categorized into severity levels based on the distribution of the current sample and guided by classification approaches commonly used in standardized psychological measures. The classification scheme is presented in Table 1 below.

Table 1. Classification of Anxiety–Depression Levels

| Total score | Level                        |
|-------------|------------------------------|
| 0 – 9       | None or Minimal              |
| 10 – 18     | Mild                         |
| 19 – 29     | Moderate                     |
| 30 – 45     | High (Requires Intervention) |

This classification is intended solely to describe patterns of psychological manifestations

among students in the sample and does not have clinical diagnostic value.

### 3.3. Data Collection Methods

The data for this study were collected by using a structured questionnaire administered to first-year students at Dong Thap University. Questionnaire-based surveys are among the most widely used methods in psychology and social sciences for gathering information on attitudes, perceptions, and psychological states within a specified timeframe (Creswell & Creswell, 2018).

Data collection was implemented over the study period through two modalities: in-class (face-to-face) surveys and online surveys via electronic forms. In my view, the combination of these two approaches was methodologically advantageous, as it enhanced accessibility to participants and improved response rates, thereby contributing to the overall robustness of the dataset.

Prior to the main data collection, the questionnaire underwent a pilot test with a small group of students to evaluate item clarity, comprehensibility, and response feasibility. Feedback from this pilot phase was used to refine several items, ensuring the appropriateness and clarity of the measurement instrument, and ultimately improving data quality (DeVellis, 2017).

Participation was entirely voluntary, and respondents were fully informed about the study's purpose, their right to withdraw, and the confidentiality of their personal information. All collected data were processed under strict anonymity and used solely for research purposes. This procedure adheres to established ethical standards in social science research, as recommended by the American Psychological Association (APA, 2020). From a research integrity perspective, these ethical safeguards are indispensable for ensuring both participant trust and data validity.

Following data collection, all questionnaires were screened for validity. Responses that were incomplete or exhibited inconsistent answering patterns were excluded. Valid questionnaires were then subjected to data coding and entered into statistical software for subsequent analysis.

### 3.4. Data Analysis Methods

The collected data were processed and analyzed using IBM SPSS Statistics, a widely adopted tool in psychological and social science research. The analytical strategy was designed to both describe sample characteristics and test the proposed

research hypotheses regarding the relationships between personality traits and students' psychological states.

### (1) Descriptive Statistics

Descriptive statistics were employed to summarize the fundamental characteristics of the dataset by means of key indices, including: Mean (M); Standard Deviation (SD); Minimum and Maximum values

These indicators provide an overview of the central tendency and variability of the research variables, including personality traits (Extraversion, Neuroticism) and levels of anxiety and depression. As noted by Field (2018), descriptive statistics are essential for establishing a foundational understanding of the data prior to conducting inferential analyses.

### (2) Pearson Correlation Analysis

To examine the relationships among the study variables, Pearson's correlation coefficient ( $r$ ) was employed to assess the strength and direction of linear associations between personality traits and levels of anxiety and depression.

Specifically, the analysis investigated the relationships between: Extraversion and anxiety; Extraversion and depression; Neuroticism and anxiety; Neuroticism and depression

The Pearson correlation coefficient ranges from  $-1$  to  $+1$ , where:

- $r > 0$  indicates a positive relationship
- $r < 0$  indicates a negative relationship
- Larger absolute values of  $r$  reflect stronger correlations

According to Cohen's (1988) guidelines, the magnitude of correlations can be interpreted as:

- $0.10 \leq |r| < 0.30$ : small (weak) correlation
- $0.30 \leq |r| < 0.50$ : moderate correlation
- $|r| \geq 0.50$ : strong correlation

The results of the correlation analysis were used to test the proposed hypotheses (H1–H4) and to clarify the relationships between personality traits, as conceptualized in Eysenck's model, and psychological states such as anxiety and depression among first-year students.

From my analytical perspective, these findings provide critical empirical evidence for understanding the predictive role of personality in student mental health. Moreover, they offer a scientifically grounded basis for developing

targeted psychological support, counseling strategies, and preventive interventions within higher education settings.

## 4. Results and Discussion

### 4.1. Personality Characteristics of First-Year Students at Dong Thap University

The findings indicate that first-year students at Dong Thap University exhibit notable variability in personality traits as conceptualized within Hans Jürgen Eysenck's personality framework. This variability reflects the heterogeneous nature of personality structures among students during the critical transition from secondary education to the university environment.

From a developmental psychology perspective, the first year of university represents a significant psychological transitional phase in emerging adulthood. During this period, students are required to adapt to substantial changes, including a new academic environment, more autonomous learning approaches, increased self-regulation demands, and the formation of new social relationships (Arnett, 2015). In my view, these multifaceted adjustments often serve to amplify and make more observable the underlying personality traits of individuals.

Accordingly, the observed differences in personality characteristics among students may not only reflect inherent individual dispositions but also the ways in which these traits are activated and expressed under transitional pressures and novel environmental demands. The descriptive statistical results are presented in Table 2 below.

Table 2. Personality Characteristics of First-Year Students at Dong Thap University

| Research Variables | Mean  | SD    |
|--------------------|-------|-------|
| Lie scale          | 3,21  | 1,03  |
| Extraversion       | 10,71 | 3,55  |
| Neuroticism        | 17,47 | 5,24  |
| Anxiety Level      | 16,90 | 10,14 |
| Depression Level   | 14,15 | 10,44 |

The results indicate that the mean score for Extraversion was 10.71 (SD = 3.55), suggesting that students in the sample exhibit a moderate level of extraversion. This finding implies that, on average, students demonstrate a relatively good capacity for social interaction, communication, and collaborative engagement within the academic environment.

However, the relatively large standard deviation points to substantial inter-individual variability in extraversion levels, reflecting the coexistence of both introverted and extraverted tendencies within the student population. From my perspective, this variability is particularly meaningful, as it highlights the heterogeneous nature of student engagement patterns in higher education contexts.

This result is consistent with prior research indicating that personality traits are closely associated with learning styles, academic participation, and social integration among university students (Chamorro-Premuzic & Furnham, 2003). Students with higher levels of extraversion are generally more likely to actively engage in group activities and extracurricular involvement, thereby facilitating both academic and social adjustment.

With regard to Neuroticism, the mean score was 17.47 (SD = 5.24). This relatively elevated value suggests that a proportion of students exhibit heightened emotional sensitivity, making them more susceptible to experiencing negative emotional states such as anxiety, stress, and mood fluctuations.

In the context of first-year university students—who are navigating significant transitions in academic demands and social environments—higher levels of neuroticism may increase vulnerability to psychological difficulties. From an analytical standpoint, this finding underscores neuroticism as a potential risk factor for mental health challenges during the early stages of university life.

Previous studies similarly indicate that the initial phase of university adjustment is often accompanied by considerable psychological challenges, including academic pressure, changes in living conditions, and the restructuring of social relationships (Pancer et al., 2000). These factors can exert a significant influence on students' emotional well-being and psychological stability, particularly for those with higher levels of emotional instability.

## 4.2. Anxiety and Depression among Students

The findings reveal that a proportion of first-year students exhibit varying levels of anxiety and depression, indicating that mental health concerns are becoming an increasingly significant issue within higher education settings.

In recent years, a growing body of international research has documented a marked increase in

mental health problems among university students. A large-scale study by Auerbach et al. (2018), involving more than 13,000 students across 19 countries, reported that approximately 35% of students experienced at least one mental disorder during their first year of university.

In the Vietnamese context, recent studies similarly suggest that a considerable proportion of students experience stress, anxiety, and depressive symptoms, particularly among first-year students who are in the process of adapting to a new academic and social environment. From my perspective, these findings highlight an urgent need to better understand and address student mental health during this transitional phase.

### 4.2.1. Anxiety Levels among First-Year Students at Dong Thap University

The analysis indicates that the mean anxiety score among students was 16.90 (SD = 10.14). This relatively large standard deviation suggests a high degree of variability in anxiety levels across individuals. While some students exhibit low levels of anxiety and appear to adapt well to the new academic environment, others experience considerably higher levels of anxiety.

Anxiety among first-year students may stem from multiple sources, including academic pressure, changes in living conditions, new social relationships, and concerns about future career orientation. These factors can collectively contribute to psychological strain during the early stages of university life, when students are still developing effective coping strategies.

### 4.2.2. Depression Levels among First-Year Students at Dong Thap University

With regard to depression, the results show a mean score of 14.15 (SD = 10.44). This finding suggests that most students in the sample fall within the low to moderate range of depressive symptoms. However, the relatively large standard deviation again indicates substantial inter-individual differences in emotional experiences.

Some students may exhibit symptoms such as persistent sadness, reduced interest in academic activities, or difficulty maintaining motivation in daily life. These manifestations are likely associated with the challenges of adapting to a new learning environment, as well as the broader pressures inherent in student life.

### 4.3. Correlation Analysis between Personality Traits and Anxiety–Depression

To examine the relationships between personality traits, as conceptualized in Hans Eysenck's model, and levels of anxiety and depression among first-year students, Pearson correlation analysis was conducted among the study variables (Eysenck, 1964). The results of this analysis are presented in Table 3.

Table 3. Correlations between Personality Traits and Anxiety–Depression

| Variables    | Anxiety         | Depression      |
|--------------|-----------------|-----------------|
| Extraversion | $r = -0.21^*$   | $r = -0.24^*$   |
| Neuroticism  | $r = 0.52^{**}$ | $r = 0.48^{**}$ |

Note:  $^*p < 0.05$ ;  $^{**}p < 0.01$

The results of the correlation analysis indicate that neuroticism is positively and statistically significantly associated with both anxiety ( $r = 0.52$ ,  $p < 0.01$ ) and depression ( $r = 0.48$ ,  $p < 0.01$ ). This finding suggests that students with higher levels of emotional instability are more likely to experience elevated levels of anxiety and depressive symptoms.

The magnitude of these correlations, which falls within the moderate range, underscores the substantive role of neuroticism as a predictive factor for negative emotional states among students. From my perspective, this reinforces the conceptualization of neuroticism as a core vulnerability dimension in student mental health.

In contrast, extraversion exhibits a negative correlation with both anxiety ( $r = -0.21$ ,  $p < 0.05$ ) and depression ( $r = -0.24$ ,  $p < 0.05$ ). This indicates that students with higher levels of extraversion tend to experience lower levels of negative emotional states compared to those with lower levels of extraversion.

However, the relatively weak magnitude of these correlations suggests that extraversion plays a more supportive or protective role, rather than a primary predictive factor, in mitigating the risk of anxiety and depression.

Overall, the correlation analysis demonstrates that personality traits within Eysenck's framework are significantly associated with anxiety and depression among first-year students. Notably, neuroticism shows a stronger relationship with negative emotional states than extraversion, highlighting its greater predictive relevance in understanding student mental health outcomes.

### 4.4. The Predictive Role of Eysenckian Personality Traits in Anxiety and Depression Among First-Year Undergraduate Students

The findings of this study indicate that Eysenckian personality traits significantly predict anxiety and depression among first-year undergraduate students at Dong Thap University. Specifically, neuroticism was positively associated with anxiety and depressive symptoms, whereas extraversion showed a negative association with psychological distress. These findings support Eysenck's theoretical assumption that stable personality dimensions play an important role in emotional adjustment and mental health outcomes.

The results are consistent with previous studies on personality and student mental health. Nguyen Thi Phuong (2024) reported that emotionally unstable personality characteristics increase vulnerability to anxiety and depression among university students. Similarly, Huynh Thi Lan Huong et al. (2025) found significant associations between personality traits and depressive symptoms among nursing students, while Vu Dang Hoang et al. (2024) demonstrated that self-esteem sensitivity and self-concealment tendencies were positively correlated with social anxiety. Collectively, these findings reinforce the role of personality traits as psychological predictors of emotional disorders in young adults (Tran et al., 2024).

From Eysenck's perspective, neuroticism reflects emotional instability and heightened sensitivity to stress. Individuals high in neuroticism tend to experience stronger negative affect, maladaptive cognitive biases, and ineffective coping strategies, thereby increasing susceptibility to anxiety and depression (Watson & Clark, 1984). During the transition to university life, academic pressure, social adjustment, and uncertainty about future careers may intensify these psychological vulnerabilities.

In contrast, extraversion appears to function as a protective factor. Extraverted students are generally more socially connected, emotionally expressive, and psychologically resilient, enabling them to adapt more effectively to university-related stressors (Auerbach et al., 2018). Overall, the findings highlight the importance of personality-informed mental health screening and counseling interventions for first-year university students.

## 5. Conclusion and Recommendations

### 5.1. Conclusion

This study provides clear empirical evidence that personality traits, as conceptualized in Eysenck's model, play a decisive role in shaping anxiety and depression among first-year students at Dong Thap University. Based on data from 487 participants, the findings reveal a dual psychological profile: while students generally demonstrate moderate extraversion reflecting adaptive social engagement—a notable proportion exhibits elevated neuroticism, indicating heightened emotional vulnerability.

The transition to university emerges as a psychologically demanding phase, during which students experience varying levels of anxiety and depression. Within this context, personality functions as a critical lens through which individual differences in adjustment can be understood. Specifically, neuroticism shows a strong positive association with both anxiety and depression, whereas extraversion is negatively related to these outcomes, suggesting its role as a protective factor.

From a researcher's perspective, these findings reinforce the centrality of personality as not merely a background variable, but a core psychological mechanism underlying students' mental health trajectories. The consistency of these results with prior literature further strengthens their validity, while also highlighting the need to move beyond generalized support models toward more personalized, personality-informed interventions.

In sum, this study underscores that effective psychological support in higher education must be grounded in a nuanced understanding of individual personality profiles, particularly during the critical first year of university life.

### 5.2. Recommendations

#### References

- Altemus, M., Sarvaiya, N., & Epperson, C. N. (2014). Sex differences in anxiety and depression clinical perspectives. *Frontiers in Neuroendocrinology*, 35(3), 320–330. <https://doi.org/10.1016/j.yfrne.2014.05.004>.
- American Psychological Association. (2020). *Publication manual of the American Psychological Association* (7th ed.). American Psychological Association.
- Arnett, J. J. (2015). *Emerging adulthood: The winding road from the late teens through the twenties* (2nd ed.). Oxford University Press.
- Auerbach, R. P., Mortier, P., Bruffaerts, R., Alonso, J., Benjet, C., Cuijpers, P. et al. (2018). WHO World Mental Health Surveys International College Student Project: Prevalence and distribution of mental disorders. *Journal of Abnormal Psychology*, 127(7), 623–638. <https://doi.org/10.1037/abn0000362>.
- Beck, A. T. (2008). The evolution of the cognitive model of depression and its neurobiological correlates. *American Journal of Psychiatry*, 165(8), 969–977. <https://doi.org/10.1176/appi.ajp.2008.08050721>.

The findings point to several key priorities for higher education institutions and future research in student mental health.

First, universities should strengthen professional mental health services, particularly for first-year students who are most vulnerable during academic and social transition. Services should emphasize early detection, accessible counseling, and structured interventions for stress and emotion regulation.

Second, mental health education should be systematically integrated into university programs to enhance psychological literacy, early recognition of anxiety and depression, and timely help-seeking behavior, in line with WHO recommendations on campus mental health promotion.

Third, institutions should enhance structured social and extracurricular engagement as a protective factor against psychological distress. Peer networks, clubs, and group activities should be intentionally designed to reduce isolation and strengthen social support.

Fourth, personality-informed intervention approaches should be adopted, particularly considering traits such as neuroticism. Tailored strategies focusing on emotion regulation and coping skills are essential for high-risk students.

From a research perspective, the findings highlight an urgent need for longitudinal, predictive, and mechanism-based studies examining how personality, stress, and emotion regulation interact over time. Future work should also evaluate the effectiveness of campus-based mental health interventions.

Overall, the results call for a shift toward preventive, personalized, and evidence-based mental health systems in higher education, addressing student well-being as a core institutional priority rather than a supplementary service.

- Beiter, R., Nash, R., McCrady, M., Rhoades, D., Linscomb, M., Clarahan, M., & Sammut, S. (2015). The prevalence and correlates of depression, anxiety, and stress in a sample of college students. *Journal of Affective Disorders*, 173, 90–96. <https://doi.org/10.1016/j.jad.2014.10.054>.
- Bui, Đ. K., Dang, H. A. T., Tran, Q. T., Vu, T. T. Q., Nguyen, N. P. T., Phạm, L. D., Phạm, B. C., Nguyen, T. T. H., Nguyen, T. T. T., & Nguyen, N. V. (2024). Physical and mental health characteristics of first-year medical students based on cardiopulmonary exercise testing and the depression–anxiety–stress scale. *Can Tho Journal of Medicine and Pharmacy*, 82, 52–53. <https://doi.org/10.58490/ctump.2024i82.3260>.
- Bui, T. T. H. (2017). The relationship between personality traits and learning styles of students at Hanoi University of Science and Technology. *Journal of Educational Sciences*, 139, 80–84. [http://vjes.vnies.edu.vn/sites/default/files/bai19\\_04\\_2017.pdf](http://vjes.vnies.edu.vn/sites/default/files/bai19_04_2017.pdf).
- Chamorro-Premuzic, T., & Furnham, A. (2003). Personality traits and academic examination performance. *European Journal of Personality*, 17(3), 237–250. <https://doi.org/10.1002/per.473>.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
- Costa, P. T., Jr., & McCrae, R. R. (1992). Revised NEO Personality Inventory (NEO PI-R) and NEO Five-Factor Inventory (NEO-FFI): Professional manual. Psychological Assessment Resources.
- DeVellis, R. F. (2017). *Scale development: Theory and applications* (4th ed.). Sage Publications.
- Eisenberg, D., Hunt, J., & Speer, N. (2013). Mental health in American colleges and universities: Variation across student subgroups and across campuses. *Journal of Nervous and Mental Disease*, 201(1), 60–67. <https://doi.org/10.1097/NMD.0b013e31827ab077>.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4. <https://doi.org/10.11648/j.ajtas.20160501.11>.
- Eysenck, H. J., & Eysenck, S. B. G. (1964). *Manual of the Eysenck Personality Inventory*. University of London Press.
- Eysenck, H. J. (1967). *The biological basis of personality*. Charles C. Thomas.
- Eysenck, H. J., & Eysenck, S. B. G. (1985). *Personality and individual differences: A natural science approach*. Plenum Press.
- Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). Sage Publications.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Pearson.
- Huynh, T. L. H., Tran, T. K. L., Dang, T. M. P., & Vu, N. X. (2025). The relationship between personality traits and risk of depression among Vietnamese nursing students. *Ho Chi Minh City Journal of Medicine*, 28(7), 24–32.
- Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine*, 16(9), 606–613. <https://doi.org/10.1046/j.1525-1497.2001.016009606.x>.
- Lahey, B. B. (2009). Public health significance of neuroticism. *American Psychologist*, 64(4), 241–256. <https://doi.org/10.1037/a0015309>.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer Publishing Company.
- Le, T. H. (2026). The relationship between personality traits and mental health among first-year students at several universities in Northern Vietnam. *Journal of Education*, 26(2), 30–35. <https://tcgd.tapchigiaoduc.edu.vn/index.php/tapchi/article/view/4678/1344>.
- Le, T. V. H., Tran, T. H., Cao, T. P. D., & Nguyen, T. H. (2024). Anxiety disorders among preventive medicine students at Hanoi Medical University in 2023 and related factors. *Vietnam Medical Journal*, 535(1), 158–162. <https://doi.org/10.51298/vmj.v535i1.8546>.
- Matthews, G., Deary, I. J., & Whiteman, M. C. (2009). *Personality traits* (3rd ed.). Cambridge University Press.
- Nguyen, T. P. (2024). The relationship between personality traits and mental health problems among students at the University of Languages and International Studies, Vietnam National University, Hanoi. *Journal of Foreign Studies*, 40(2), 104–115. <https://jfs.ulis.vnu.edu.vn/index.php/fs/article/view/5255/4508>.
- Nguyen, T. T., & Đào, T. D. D. (2013). Life difficulties among first-year students at Ho Chi Minh City University of Education. *Ho Chi Minh City University of Education Journal of Science*, 50, 120–132. <https://journal.hcmue.edu.vn/index.php/hcmuejos/article/view/260/252>.

- Pancer, S. M., Hunsberger, B., Pratt, M. W., & Alisat, S. (2000). Cognitive complexity of expectations and adjustment to university in the first year. *Journal of Adolescent Research*, 15(1), 38–57. <https://doi.org/10.1177/0743558400151003>.
- Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: The GAD-7. *Archives of Internal Medicine*, 166(10), 1092–1097. <https://doi.org/10.1001/archinte.166.10.1092>.
- Steel, P., Schmidt, J., & Shultz, J. (2008). Refining the relationship between personality and subjective well-being. *Psychological Bulletin*, 134(1), 138–161. <https://doi.org/10.1037/0033-2909.134.1.138>.
- Tran, V. T., Nguyen, T. M. L., Nguyen, T. B. T., Đang, B. N., Nguyen, T. T., & Mac, Đ. T. (2024). The status of stress, anxiety and depression among medical students at University of Medicine and Pharmacy – Vietnam National University studied at Hoa Lac in 2022–2023. *Vietnam Journal of Community Medicine*, 65(Special Issue 5), 193–200. <https://doi.org/10.52163/yhc.v65iCD5.1272>
- Truong, T. N. Đ., Huynh, M. H., Vo, T. H., & Ho, P. T. (2012). Advantages and difficulties in learning among first-year students at Can Tho University. *Can Tho University Journal of Science*, 21A, 78–91. <https://ctujsvn.ctu.edu.vn/index.php/ctujsvn/article/view/1158/2661>
- Vo, V. V. (2018). Measuring first-year students' adaptation to the university environment: A study at Nong Lam University, Ho Chi Minh city. *VNU Journal of Education Research*, 34(3), 1–13. <https://doi.org/10.25073/2588-1159/vnuer.4169>.
- Vu, Đ. H., Ha, T. H. Y., Nguyen, P. A., & Bui, T. N. D. (2024). The relationship between vulnerable narcissism and social interaction anxiety among students. *Journal of Psychology*, 304(7), 70–80.
- Watson, D., & Clark, L. A. (1984). Negative affectivity: The disposition to experience aversive emotional states. *Psychological Bulletin*, 96(3), 465–490. <https://doi.org/10.1037/0033-2909.96.3.465>.
- Watson, D., Clark, L. A., & Carey, G. (1988). Positive and negative affectivity and their relation to anxiety and depressive disorders. *Journal of Abnormal Psychology*, 97(3), 346–353. <https://doi.org/10.1037/0021-843X.97.3.346>.