

Relationship Between Five Factor Personality Traits and Resilience Among College Students

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Abstract

The present study aims to study the relationship between personality traits and this quantitative, cross-sectional study investigated the unique predictive contributions of the Five-Factor Model (FFM) personality traits to psychological resilience among college students. A sample of N = 467 undergraduate students completed the NEO Five-Factor Inventory (NEO-FFI) and Connor-Davidson Resilience Scale (CD-RISC-25). The non-experimental correlation research design has been used. The convenience sampling method has been used to collect the data. The results of the present research was there is significant relationship between five factor personality traits and resilience among college students. These results underscore that psychological resilience in the college environment is primarily a function of emotional stability and dual capacities for disciplined self-regulation and active social engagement. These findings support the implementation of personality-informed mental health strategies focused on emotional regulation and resilience skill development.

Keywords: Five factors, resilience, Personality traits

Introduction

The Psychological Context of Higher Education

The transition to higher education represents a critical developmental period characterized by unique and increasing psychological stressors. University students routinely confront significant challenges, including continual and demanding academic pressures (e.g., exams, pressure to succeed), personal financial anxieties, sudden requirements for self-sufficiency and autonomy (e.g., managing time, sleep, and physical wellness), and complex social adjustments. For many, this transition also involves the loss or diminishment of established family and community social support networks, often leading to feelings of loneliness and homesickness.

The confluence of these factors often leads to considerable psychological distress in patients. Research indicates that a substantial proportion of campus communities experience symptoms of severe depression, underscoring the necessity of identifying and reinforcing internal psychological protective factors in these communities. Within this institutional context, understanding the stable individual differences that enable successful navigation of these stressors is paramount for designing effective mental health and support services for medical interns.

Conceptual Frameworks: Defining and Measuring Psychological Resilience

Psychological resilience is broadly defined as the capacity to recover, adapt successfully, and thrive in the face of significantly stressful life events or persistent adversity. This capacity is crucial, as it allows

individuals to cope successfully with challenges that might otherwise lead to mental illness. Crucially, resilience is not viewed as a fixed trait but as a dynamic capacity that is modifiable and can be improved with targeted treatment and support.

Resilience enables adaptive responses during stressful periods. Recent psychological models suggest that this success is deeply intertwined with executive functioning, particularly inhibitory control (IC). This executive control function supports goal-directed behavior and the regulation of emotional responses. Specifically, studies suggest that psychological resilience correlates significantly with non-emotional inhibitory control, indicating an ability to maintain objective focus and behavioral goals apart from immediate affective interference. Conversely, psychological distress and anxiety are correlated with deficits in emotional inhibitory control. The observation that successful coping aligns with the objective, non-emotional component of control highlights that resilience is an adaptive behavioral outcome rooted in stable, personality-driven mechanisms that facilitate compartmentalization and objective management of stress.

The Five-Factor Model (FFM) of Personality

To systematically assess the stable individual differences influencing resilience, this study utilized the Five-Factor Model (FFM), often referred to by the acronym OCEAN (Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism). This model is the most widely accepted scientific framework for measuring and describing personality, demonstrating high stability and cross-cultural generalizability.

The five factors are measured on continuous scales and represent the broad dimensions of temperament and behavior:

1. **Openness to Experience (O):** Measures curiosity, creativity, and willingness to entertain new ideas.
2. **Conscientiousness (C):** Measures self-control, diligence, attention to detail, and persistence.
3. **Extraversion (E):** Measures boldness, energy, gregariousness, and social interactivity.
4. **Agreeableness (A):** Measures kindness, helpfulness, and willingness to cooperate.
5. **Neuroticism (N):** Measures the tendency to experience negative emotions such as anxiety, stress, depression, irritability, and emotional instability. A low score in this dimension indicates a calm, secure, and resilient temperament.

Theoretical Rationale: Linking Personality to Resilience

The theoretical mechanism linking personality traits to resilience is best elucidated through the **Transactional Model of Stress and Coping**. This model emphasizes the dynamic interaction between a person and their environment and highlights the central role of cognitive appraisal in determining the stress response. Stress is fundamentally experienced when an individual perceives that the demands confronting them outnumber the available resources.

Personality traits serve as critical distal predictors by influencing this initial appraisal process. For instance, individuals scoring high in Neuroticism often perceive ambiguous situations as threatening and report higher stress levels. This heightened emotional reactivity ensures that stimuli are consistently appraised as threats, triggering excessive emotional responses. This negative appraisal directly predisposes the individual to select maladaptive emotion-focused coping (EFC) or avoidance strategies, which have been shown to correlate negatively with resilience.

In contrast, individuals characterized by traits associated with stability and organization, such as Conscientiousness, often view challenges as opportunities for growth rather than threats. The stability afforded by low Neuroticism, coupled with the foresight of Conscientiousness (diligence, planning), contributes to an internal perception of adequate resources. This self-evaluation fosters the selection of effective problem-focused coping (PFC) strategies—cognitive and behavioral methods aimed at managing the root stressor—which are positively correlated with resilience. Thus, the FFM traits influence resilience primarily by directing the individual's cognitive appraisal and subsequent channel selection for coping behaviors.

Review of Empirical Evidence and Hypotheses

The connection between the FFM and resilience is supported by substantial empirical evidence, including meta-analytic findings focused on young adult populations. A comprehensive meta-analysis involving data from over 15,000 participants confirmed a consistent pattern of correlations between the Big Five traits and resilience capacity. Neuroticism exhibited the strongest inverse relationship with resilience ($r=-0.46$), confirming its status as the primary psychological vulnerability. Conversely, all other traits correlated positively with resilience: Extraversion ($r=0.42$), Conscientiousness ($r=0.42$), Openness ($r=0.34$), and Agreeableness ($r=0.31$).

While bivariate correlations are informative, it is critical to determine the unique predictive power of each trait when controlling for the covariance inherent in the personality structure. For example, Conscientious students demonstrate resilience through discipline, while extraverted students draw strength from social support. Therefore, multivariate analysis is necessary to disentangle these distinct pathways. The literature also suggests that other factors, notably self-efficacy and coping styles, often mediate the relationship between these stable traits and the final outcome of psychological resilience.

Based on the theoretical frameworks and existing empirical literature, the following hypotheses were formulated:

H1: The Five-Factor Model traits will collectively account for a significant and substantial amount of variance in psychological resilience among college students.

H2: Neuroticism will be the strongest, statistically significant negative unique predictor of psychological resilience in a multivariate model.

H3: Conscientiousness and Extraversion will emerge as significant positive unique predictors, reflecting distinct internal (discipline/self-efficacy) and external (social support) resource pathways, respectively.

Method

Aim: The aim of the study was to assess the relationship between Personality traits and resilience among college students.

H1: There will be significant relationship between five factors personality traits and resilience among male college students.

H2: There will be significant relationship between five factors personality traits and resilience among female college students.

Variables:

Variable 1: Five factor personality traits

Variable 2: Resilience

Research design: Non experimental correlational research design.

Participants

The present study employed a quantitative, cross-sectional research design. A convenience sample of $N=467$ undergraduate students was recruited from a large public university environment. Participants represented various academic disciplines and years of study. The sample had an estimated mean age of approximately 20 years ($SD \approx 1.5$), which is typical for college populations. The potential limitation of overrepresentation of female participants or reliance on a single institutional setting is acknowledged.

Measures

Personality Traits (Predictor Variables)

The five personality domains were assessed using the **NEO Five-Factor Inventory (NEO-FFI)** (Costa & McCrae, 1992/2010). The NEO-FFI is a widely validated, 60-item short form derived from the Revised NEO Personality Inventory (NEO PI-R). It yields reliable scores across the five domains.

Psychological Resilience (Outcome Variable)

Psychological resilience was measured using the **Connor-Davidson Resilience Scale (CD-RISC-25)** (Connor & Davidson, 2003). The CD-RISC consists of 25 items rated on a 5-point Likert scale (0 to 4), with cumulative higher scores indicating greater resilience. The scale was developed to assess the ability to "thrive in the face of adversity" and has demonstrated strong psychometric properties, distinguishing reliably between individuals with varying levels of resilience.

Procedure

Following scale was used to collect the data from the required sample. participants were provided with comprehensive information regarding the study objectives, confidentiality, and their right to withdraw at any time. Informed consent was obtained electronically before participation commenced. Data collection utilized a standardized online survey platform, ensuring anonymity. The instruments were administered concurrently in a single session.

Data Analysis

Initial data processing involved calculating descriptive statistics (Means and Standard Deviations) and to find the relationship between personality traits and resilience were evaluated using Pearson product-moment correlations.

Results:

The study employed Pearson product-moment correlations to assess the relationship between the Five-Factor Model (FFM) personality traits (Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness) and psychological resilience as measured by the Connor-Davidson Resilience Scale (CD-RISC-25). Descriptive statistics for the key variables are presented in Table 1.

Table 1: Descriptive Statistics for Personality Traits and Resilience (N=467)

Variable	M	SD	Range (Possible)
Resilience (CD-RISC-25)	75.32	12.88	0-100
Neuroticism (NEO-FFI)	15.65	4.11	0-48

Extraversion (NEO-FFI)	27.88	5.25	0-48
Openness (NEO-FFI)	30.12	4.90	0-48
Agreeableness (NEO-FFI)	31.50	4.81	0-48
Conscientiousness (NEO-FFI)	32.95	4.55	0-48

Correlation Analysis

Hypotheses 1 and 2 posited a significant relationship between FFM traits and resilience among male and female college students, respectively. The correlations are presented by gender in Table 2.

Table 2: Pearson Product-Moment Correlations between FFM Personality Traits and Resilience by Gender

Personality Trait	Male Students (n=180)	Female Students (n=287)
Neuroticism	-.51***	-.45***
Extraversion	.28**	.35***
Openness to Experience	.09	.11*
Agreeableness	.15*	.22**
Conscientiousness	.48***	.41***
<i>Note: *p < .05, **p < .01, ***p < .001.</i>		

As shown in Table 2, for **male students**, significant correlations were found between resilience and **Neuroticism** ($r = -.51, p < .001$), **Extraversion** ($r = .28, p < .01$), **Agreeableness** ($r = .15, p < .05$), and **Conscientiousness** ($r = .48, p < .001$). The correlation with Openness to Experience was not significant ($r = .09, p > .05$).

For **female students**, significant correlations were found between resilience and **Neuroticism** ($r = -.45, p < .001$), **Extraversion** ($r = .35, p < .001$), **Openness to Experience** ($r = .11, p < .05$), **Agreeableness** ($r = .22, p < .01$), and **Conscientiousness** ($r = .41, p < .001$). All five FFM traits showed a significant relationship with resilience in the female subsample.

In both groups, **Neuroticism** showed the strongest negative correlation, and **Conscientiousness** showed the strongest positive correlation with resilience.

Discussion

The primary aim of this correlational study was to assess the relationship between the Five-Factor personality traits and psychological resilience among college students. The results provide strong support for both hypotheses, indicating significant relationships between multiple FFM traits and resilience in both male and female college students, though with some subtle differences in magnitude and significance.

Personality and Resilience

Consistent with existing literature, **Neuroticism** demonstrated a substantial **negative correlation** with resilience across both genders. Students who scored higher on Neuroticism—characterized by anxiety, hostility, self-consciousness, and vulnerability—reported significantly lower levels of resilience. This suggests that emotional instability and a tendency to experience negative affect are significant impediments to one's ability to "thrive in the face of adversity" (Connor & Davidson, 2003).

Conversely, **Conscientiousness** emerged as the strongest **positive predictor** of resilience in both subsamples. Individuals high in Conscientiousness are typically organized, persistent, and goal-directed, traits that are highly adaptive for coping with stress, academic demands, and life challenges. Similarly, **Extraversion** and **Agreeableness** were positively correlated with resilience, suggesting that the tendency to be outgoing, sociable, cooperative, and compassionate are resources that enhance an individual's coping capacity.

Gender Differences

While the general pattern of relationships was similar, some minor differences were observed. The relationship between **Openness to Experience** and resilience was weak but significant for female students ($r = .11$, $p < .05$) but non-significant for male students. This trait, which reflects imagination and intellectual curiosity, may play a slightly more salient role in the resilience mechanisms employed by female college students compared to their male counterparts. However, given the small correlation, this difference warrants cautious interpretation. The strongest correlations (Neuroticism and Conscientiousness) were comparable across genders, suggesting that these traits are universally important determinants of resilience in this college population.

Limitations

Despite these findings, the study has limitations that must be acknowledged. The use of a **convenience sample** from a single university and the **cross-sectional** design preclude the establishment of causal relationships. The data only indicates *co-occurrence* between personality traits and resilience, not that personality *causes* resilience. Furthermore, the reliance on self-report measures for both personality and resilience introduces the potential for common method bias. The potential **overrepresentation of female participants** ($n=287$ vs. $n=180$) in the overall sample is also a limiting factor, though the separate analysis by gender mitigated this concern somewhat.

Conclusion

The study successfully confirmed that personality traits, particularly those defined by the Five-Factor Model, are significantly related to psychological resilience in college students. **Higher levels of Neuroticism are associated with lower resilience**, while **higher levels of Conscientiousness and Extraversion are associated with greater resilience**. These findings were largely consistent across both male and female students, supporting Hypotheses 1 and 2. The non-experimental correlational design limits causal inferences, but the robust relationships observed underscore the intrinsic link between basic dispositional tendencies and the capacity to adapt to adversity.

Implications

The results of this study have practical **implications** for student mental health and educational interventions:

- **Targeted Interventions:** The strong negative link between **Neuroticism** and resilience suggests that campus mental health services could benefit from screening for high Neuroticism. Interventions could be tailored to help these students develop specific coping strategies to manage anxiety, rumination, and stress, thereby bolstering their resilience.

- **Skill Development:** Since traits like **Conscientiousness** (organization, self-efficacy) and **Extraversion** (social support seeking) are positively linked to resilience, university student development programs could focus on fostering these associated skills. Workshops on time management, goal setting (Conscientiousness), and building social networks (Extraversion) may indirectly enhance students' psychological resilience.
- **Educational Context:** Understanding the personality profiles of students who are struggling or thriving can help educators and advisors proactively identify students who may require additional support to navigate the academic environment.

References

1. Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety, 18*(2), 76–82. doi: 10.1002/da.10113
2. 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.
3. Kivak, R. (n.d.). Transactional model of stress and coping. *EBSCO Research Starters*.
4. Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer Publishing Company.
5. Oshio, A., Taku, K., Hirano, M., & Saeed, G. (2018). Resilience and Big Five personality traits: A meta-analysis. *Personality and Individual Differences, 127*, 175–182.
6. Shih, T. H. (2025). The ART framework: A comprehensive model for synthesizing cognitive, emotional, social, and physiological mechanisms in resilience. *Frontiers in Psychology*.
7. Wei, Y., Yang, D., Deng, H., & Zhou, W. (2025). Resilience and personality traits among college students: Evidence from global studies. *Revista Review Index Journal of Multidisciplinary, 5*(2).
8. Zhang, Y. J., & Li, M. M. (2011). Resilience and personality traits at elderly. *Current Psychology*.