

Relationship Between Personality Traits and Self-Differentiation with Psychological Hardiness in Students

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ABSTRACT

Purpose: The present study aimed to investigate the relationship between personality traits and self-differentiation with psychological hardiness among university students.

Methods and Materials: This study employed a descriptive correlational design. The statistical population consisted of university students in Tehran, from whom 384 participants were selected using multistage cluster sampling based on the Morgan sampling table. Data were collected using the NEO Personality Inventory developed by Costa and McCrae, the Psychological Hardiness Questionnaire developed by Suzanne Kobasa, and the Differentiation of Self Inventory developed by Drake. The reliability of the instruments was confirmed using Cronbach's alpha coefficients. Data were analyzed using descriptive statistics, Pearson correlation coefficients, and simultaneous multiple regression analysis.

Findings: The findings indicated that neuroticism had a significant negative relationship with psychological hardiness ($r = -.61, p < .01$) and self-differentiation ($r = -.52, p < .01$). In contrast, extraversion, openness to experience, agreeableness, and conscientiousness demonstrated significant positive correlations with psychological hardiness and self-differentiation. Multiple regression analysis revealed that extraversion ($\beta = .35$), agreeableness ($\beta = .18$), and conscientiousness ($\beta = .18$) significantly predicted psychological hardiness, whereas neuroticism and openness to experience were not significant predictors. The regression model explained 52% of the variance in psychological hardiness. Furthermore, neuroticism ($\beta = -.34$), extraversion ($\beta = .52$), and conscientiousness ($\beta = -.34$) significantly predicted self-differentiation, while openness to experience and agreeableness did not significantly contribute to the prediction model. Personality traits explained 42% of the variance in self-differentiation.

Conclusion: The findings demonstrated that personality traits play a significant role in predicting psychological hardiness and self-differentiation among university students. Extraversion, agreeableness, and conscientiousness were associated with greater psychological resilience and emotional adjustment, whereas neuroticism was associated with lower levels of hardiness and differentiation.

Keywords: Psychological hardiness, self-differentiation, students, personality traits.

1. Introduction

University students encounter a wide range of developmental, academic, interpersonal, and

psychological challenges during their educational years. Transitioning into adulthood, managing academic responsibilities, adapting to social expectations, and coping

with uncertainty regarding future career prospects expose students to considerable psychological pressure. In recent decades, psychological researchers have increasingly emphasized the importance of positive psychological constructs and protective personality factors that enable individuals to cope effectively with stressful life events and maintain psychological well-being. Among these constructs, psychological hardiness has attracted substantial attention due to its significant role in stress management, emotional adjustment, mental health, and adaptive functioning (Chuning et al., 2024; Kobasa & Puccetti, 2023). Psychological hardiness is generally conceptualized as a resilient personality orientation characterized by commitment, control, and challenge, which enables individuals to interpret stressful experiences as manageable and meaningful rather than threatening. Individuals with high levels of psychological hardiness tend to demonstrate greater emotional stability, better coping skills, stronger resilience, and more adaptive behavioral responses when confronted with stressful situations (Enzelicht et al., 2021; Kobasa & Puccetti, 2023).

The concept of psychological hardiness was originally developed within existential and personality psychology frameworks and has since been widely investigated across clinical, educational, occupational, and health-related contexts. Research findings have consistently demonstrated that psychological hardiness functions as a protective factor against anxiety, depression, burnout, psychosomatic symptoms, and maladaptive coping responses. Individuals with higher levels of hardiness usually experience greater psychological well-being, life satisfaction, and emotional regulation abilities (Abdolkarimi et al., 2024; Liu et al., 2024). In educational settings, hardiness is particularly important because university students often experience stress arising from academic competition, financial concerns, interpersonal conflicts, and identity-related developmental tasks. Students who possess greater psychological hardiness are more capable of adapting to academic stressors, maintaining emotional balance, and preserving psychological health despite environmental pressures (Kurniawan et al., 2024; Ramazani & Hejazi, 2020).

Recent studies have also emphasized the relationship between psychological hardiness and mental health outcomes. For instance, hardiness has been identified as an important protective factor in reducing depression, anxiety, emotional exhaustion, and psychological vulnerability (Chuning et al., 2024). During highly stressful situations

such as the COVID-19 pandemic, healthcare workers with higher hardiness levels demonstrated greater posttraumatic growth, emotional resilience, and adaptive coping capacities (Enzelicht et al., 2021). Similarly, studies among medical students and nurses have shown that hardiness is associated with lower psychosomatic symptoms, improved mental health, and reduced occupational stress (Abdolkarimi et al., 2024; Liu et al., 2024). These findings suggest that psychological hardiness plays a critical role in psychological adaptation and emotional functioning across different populations and contexts.

Personality traits constitute another major factor associated with psychological functioning and adaptation. Personality traits represent enduring patterns of cognition, emotion, and behavior that influence how individuals perceive themselves, interact with others, and respond to stressful situations. The Five-Factor Model of personality, including neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness, is among the most widely accepted frameworks for understanding personality structure. These dimensions have been extensively associated with psychological adjustment, emotional regulation, coping styles, resilience, and mental health outcomes (Khadse et al., 2024; Skoglund et al., 2023). Neuroticism generally reflects emotional instability, anxiety, vulnerability, and susceptibility to stress, whereas extraversion is associated with sociability, positive affect, energy, and interpersonal engagement. Openness to experience reflects curiosity, creativity, and cognitive flexibility, while agreeableness and conscientiousness are related to empathy, responsibility, organization, and self-discipline.

Several empirical studies have demonstrated significant relationships between personality traits and psychological hardiness. Individuals with lower neuroticism and higher extraversion, agreeableness, and conscientiousness often report greater levels of hardiness and resilience (Khadse et al., 2024; Khanjani et al., 2018). Neurotic individuals tend to perceive stressful situations as threatening and uncontrollable, making them more vulnerable to anxiety and psychological distress. In contrast, extraverted and conscientious individuals typically exhibit stronger coping abilities, optimism, and adaptive behavioral strategies, all of which contribute to greater psychological hardiness (Khadse et al., 2024; Skoglund et al., 2023). Research conducted among athletes also demonstrated that individuals with higher hardiness experienced lower post-fatigue stress and better emotional adjustment (Kurniawan et al., 2024).

Likewise, studies among nurses and healthcare professionals revealed that personality characteristics significantly influence hardiness, coping patterns, and occupational satisfaction ([Abdolkarimi et al., 2024](#); [Khanjani et al., 2018](#)).

In addition to personality traits and psychological hardiness, self-differentiation represents another important construct associated with emotional maturity and psychological adjustment. Self-differentiation refers to an individual's ability to maintain emotional autonomy and a stable sense of self while simultaneously preserving emotional intimacy within interpersonal relationships. According to Bowen's family systems theory, individuals with high differentiation are capable of balancing emotional and rational functioning, regulating emotional reactivity, and maintaining psychological independence in stressful interpersonal situations. Conversely, individuals with low differentiation often experience emotional fusion, interpersonal dependency, heightened emotional reactivity, and difficulty separating thoughts from emotions ([Rahimi & Afshari-Nia, 2017](#); [Roshannejhad et al., 2019](#)).

Self-differentiation has been linked to various dimensions of mental health, interpersonal functioning, and emotional stability. Research findings indicate that highly differentiated individuals demonstrate greater emotional regulation, higher self-esteem, stronger coping capacities, and lower psychological distress. In contrast, low differentiation has been associated with anxiety, emotional dependency, relationship conflicts, and maladaptive coping behaviors ([Roshannejhad et al., 2019](#)). Since university students are in a critical developmental period characterized by identity formation and increasing independence, self-differentiation may play a substantial role in their psychological adaptation and emotional functioning. Students with higher differentiation levels are generally more capable of handling academic and interpersonal stressors effectively while preserving emotional balance and autonomy.

A growing body of research has examined the relationship between psychological hardiness and self-differentiation. Both constructs are considered important indicators of psychological resilience and adaptive functioning because they involve emotional regulation, cognitive flexibility, and effective coping with stress. Individuals with high hardiness are usually capable of perceiving stressful situations as opportunities for growth and challenge rather than threats, while differentiated individuals maintain emotional stability and autonomy during stressful interpersonal interactions. Consequently,

these two constructs appear theoretically interconnected ([Raeisi, 2024](#); [Rahimi & Afshari-Nia, 2017](#)). Empirical studies have supported this assumption by demonstrating significant positive relationships between psychological hardiness and self-differentiation across different populations. For example, research among elderly individuals indicated that differentiation levels significantly predicted psychological hardiness and emotional adaptation ([Rahimi & Afshari-Nia, 2017](#)). Similarly, recent findings showed that hardiness and resilience were significant predictors of psychological differentiation among adolescent students ([Khanjani et al., 2024](#)).

The interaction between personality traits, psychological hardiness, and self-differentiation is also theoretically meaningful. Personality traits influence how individuals regulate emotions, interpret stressful events, and establish interpersonal relationships, which may subsequently affect both hardiness and differentiation levels. Neuroticism, for instance, is commonly associated with emotional instability and poor stress tolerance, which may weaken psychological hardiness and impair emotional differentiation. Conversely, traits such as extraversion and conscientiousness may enhance adaptive coping capacities, emotional regulation, and interpersonal effectiveness, thereby strengthening both hardiness and self-differentiation ([Khanjani et al., 2018](#); [Skoglund et al., 2023](#)). Studies investigating marital adjustment have further demonstrated that personality traits, differentiation of self, and psychological hardiness jointly contribute to interpersonal adaptation and emotional well-being ([Roshannejhad et al., 2019](#)).

Moreover, recent psychological literature increasingly emphasizes the protective role of hardiness personality in various domains of psychological and organizational functioning. Hardiness has been associated not only with mental health and resilience but also with occupational adjustment, job attitudes, and extra-role behaviors in organizational settings ([Yasini et al., 2025](#)). Similarly, athlete populations with higher hardiness and resilience levels have demonstrated better mental health outcomes and emotional functioning compared to individuals with lower hardiness levels ([Ramazani & Hejazi, 2020](#)). Young adults experiencing family-related stressors, such as parental divorce, also showed significant relationships between hardiness and psychological adaptation ([Agustini, 2020](#)). These findings collectively indicate that hardiness functions as a broad psychological resource contributing to emotional stability, adaptive functioning, and effective coping across diverse life domains.

Despite the growing body of literature concerning personality traits, psychological hardiness, and self-differentiation, limited research has simultaneously examined the relationships among these variables within university student populations. Given the increasing psychological pressures experienced by students and the importance of protective psychological resources in maintaining emotional well-being and academic adjustment, investigating these relationships appears highly important. Understanding how personality dimensions relate to psychological hardiness and self-differentiation may contribute to the development of preventive psychological interventions, counseling programs, and educational strategies designed to improve students' resilience, emotional regulation, and psychological health.

Therefore, the present study aimed to investigate the relationship between personality traits and self-differentiation with psychological hardiness among university students.

2. Methods and Materials

2.1. Study Design and Participants

The present study employed a descriptive correlational research design to examine the relationship between personality traits, self-differentiation, and psychological hardiness among university students. The statistical population consisted of university students studying in Tehran. Based on statistics reported by the Ministry of Science, Research and Technology, the target population included approximately 12,000 students. According to the Morgan sampling table, the required sample size was estimated to be 384 participants. The participants were selected using a multistage cluster sampling method to ensure adequate representation of students from different academic settings. Data collection was conducted in both library-based and field-based phases. In the library phase, theoretical foundations and literature related to personality traits, psychological hardiness, and self-differentiation were reviewed through digital databases, scientific books, and academic articles. In the field phase, the research questionnaires were distributed among the selected participants, and the completed questionnaires were collected for statistical analysis. Participation in the study was voluntary, and the respondents were informed about the purpose of the research prior to completing the questionnaires.

2.2. Measures

The NEO Personality Inventory developed by Costa and McCrae in 1985 was used to assess personality traits. This instrument evaluates the five major dimensions of personality, including neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness. The questionnaire consists of 60 items scored on a Likert-type scale, with higher scores indicating stronger expression of each personality trait. The NEO Personality Inventory has been widely used in psychological research and has demonstrated acceptable psychometric properties in previous studies. In the present study, the reliability of the questionnaire was assessed using Cronbach's alpha coefficient, and the obtained alpha value was 0.781, indicating satisfactory internal consistency.

Self-differentiation was measured using the Differentiation of Self Inventory developed by Drake in 2011. This questionnaire is designed to assess an individual's ability to maintain emotional independence and psychological balance in interpersonal relationships. The instrument includes 20 items scored on a Likert scale, with higher scores reflecting greater levels of self-differentiation. The questionnaire has been used extensively in studies related to family functioning and emotional regulation. In the current study, the Cronbach's alpha coefficient for the self-differentiation questionnaire was 0.821, demonstrating high reliability and strong internal consistency among the questionnaire items.

Psychological hardiness was assessed using the Hardiness Questionnaire developed by Suzanne Kobasa in 1982. This instrument measures the personality characteristics associated with resilience and effective coping with stressful situations. The questionnaire contains 20 items designed to evaluate the dimensions of commitment, control, and challenge. Responses are provided on a Likert-type scale, and higher scores indicate greater psychological hardiness. In the present study, the reliability of the psychological hardiness questionnaire was evaluated using Cronbach's alpha, and the obtained coefficient was 0.772, indicating acceptable reliability.

To assess the reliability of the research instruments, Cronbach's alpha coefficient was used as an indicator of internal consistency. Cronbach's alpha is commonly employed for questionnaires designed with Likert-type scales and measures the degree of consistency among the items of a scale. The coefficient ranges from 0 to 1, with values closer to 1 indicating greater internal consistency.

among the questionnaire items. As a general guideline, an alpha coefficient of 0.70 or higher is considered acceptable for research purposes, indicating that the measurement instrument possesses satisfactory reliability and that the obtained results can be interpreted with confidence.

2.3. Data Analysis

The collected data were analyzed using descriptive and inferential statistical methods. Descriptive statistics, including means and standard deviations, were used to summarize the characteristics of the variables under investigation. Inferential statistical analyses included Pearson correlation coefficients to examine the relationships between personality traits, psychological hardiness, and self-differentiation. In addition, multiple regression analysis was conducted to determine the predictive role of personality traits in explaining variations in psychological hardiness and

self-differentiation. Reliability analyses for the research instruments were performed using Cronbach's alpha coefficients to evaluate internal consistency. All statistical analyses were conducted using appropriate statistical software, and the significance level for hypothesis testing was set at $p < .05$.

3. Findings and Results

Table 1 presents the descriptive statistics, including the mean and standard deviation of personality traits, psychological hardiness, and self-differentiation among the participants. The findings indicated that among the personality dimensions, openness to experience obtained the highest mean score, whereas neuroticism demonstrated the lowest mean score. In addition, the overall mean scores of psychological hardiness and self-differentiation suggested a moderate level of these variables among the students.

Table 1

Descriptive Statistics of Research Variables

Variables	Mean	Standard Deviation	N
Neuroticism	23.89	7.27	200
Extraversion	21.65	8.39	200
Openness to Experience	24.53	4.83	200
Agreeableness	24.31	6.30	200
Conscientiousness	24.19	5.96	200
Total Personality Traits	120.45	13.79	200
Commitment	13.71	3.92	200
Control	10.69	3.29	200
Challenge	5.94	2.53	200
Psychological Hardiness	30.34	7.70	200
I-Position	2.53	5.95	200
Fusion with Others	17.54	4.02	200
Emotional Cutoff	10.60	3.53	200
Emotional Reactivity	21.08	4.35	200
Self-Differentiation	69.75	9.84	200

Prior to inferential analyses, the normality of the research variables was examined using the Kolmogorov-Smirnov test. The results indicated that the Kolmogorov-Smirnov statistics for all variables were not significant at the $p < .05$

level. Therefore, it was concluded that the distributions of the study variables were normal and the use of parametric statistical tests was appropriate.

Table 2

Correlation Matrix of Research Variables

Variables	1	2	3	4	5	6	7
1. Neuroticism	1						
2. Extraversion	-.68**	1					
3. Openness to Experience	-.36**	.33**	1				
4. Agreeableness	-.51**	.61**	.25**	1			
5. Conscientiousness	-.53**	.59**	.34**	.52**	1		
6. Psychological Hardiness	-.61**	.64**	.33**	.40**	.52**	1	
7. Self-Differentiation	-.52**	.56**	.17*	.32**	.53**	.52**	1

$p < .05^*$, $*p < .01$.

As shown in Table 2, neuroticism had a significant negative correlation with psychological hardiness ($r = -.61$, $p < .01$), indicating that students with higher levels of neuroticism reported lower psychological hardiness. In contrast, extraversion, openness to experience, agreeableness, and conscientiousness showed positive and significant relationships with psychological hardiness. Furthermore, neuroticism demonstrated a significant

negative correlation with self-differentiation ($r = -.52$, $p < .01$), whereas extraversion, openness to experience, agreeableness, and conscientiousness were positively and significantly associated with self-differentiation.

To examine the predictive role of personality traits in psychological hardiness and self-differentiation, simultaneous multiple regression analyses were conducted.

Table 3

Summary of Multiple Regression Analyses for Predicting Psychological Hardiness and Self-Differentiation Based on Personality Traits

Criterion Variable	Predictor	B	Beta	SE	R	R ²	F	t	Sig.
Psychological Hardiness	Neuroticism	-0.08	-0.07	0.07	.72	.52	42.08	-1.09	.274
	Extraversion	0.32	0.35	0.07				4.53	.001
	Openness to Experience	0.14	0.09	0.08				1.72	.090
	Agreeableness	0.22	0.18	0.08				2.79	.006
	Conscientiousness	0.23	0.18	0.08				2.81	.005
Self-Differentiation	Neuroticism	-0.45	-0.34	0.14	.64	.42	18.82	-4.32	.001
	Extraversion	0.62	0.52	0.09				6.08	.001
	Openness to Experience	-0.30	-0.10	0.12				-0.25	.802
	Agreeableness	0.02	0.01	0.11				0.21	.830
	Conscientiousness	-0.55	-0.34	0.11				-4.71	.001

The results presented in Table 3 revealed that among the five personality dimensions, neuroticism ($\beta = -.07$) and openness to experience ($\beta = .09$) were not significant predictors of psychological hardiness. Extraversion ($\beta = .35$) emerged as the strongest predictor of psychological hardiness, followed by agreeableness and conscientiousness ($\beta = .18$). Collectively, personality traits explained 52% of the variance in psychological hardiness.

The regression analysis for self-differentiation demonstrated that neuroticism, extraversion, and conscientiousness significantly predicted self-differentiation among students. Extraversion showed the strongest positive predictive role ($\beta = .52$), whereas neuroticism ($\beta = -.34$) and conscientiousness ($\beta = -.34$) negatively predicted self-differentiation. However, openness to experience and

agreeableness were not significant predictors of self-differentiation. Overall, personality traits accounted for 42% of the variance in self-differentiation.

4. Discussion and Conclusion

The present study aimed to investigate the relationship between personality traits, psychological hardiness, and self-differentiation among university students. The findings demonstrated that personality traits were significantly associated with both psychological hardiness and self-differentiation. Specifically, neuroticism showed a significant negative relationship with psychological hardiness and self-differentiation, whereas extraversion, openness to experience, agreeableness, and

conscientiousness demonstrated positive relationships with these variables. Furthermore, the regression analyses indicated that extraversion, agreeableness, and conscientiousness significantly predicted psychological hardiness, while neuroticism and openness to experience did not significantly contribute to the prediction model. In addition, neuroticism, extraversion, and conscientiousness significantly predicted self-differentiation, whereas openness to experience and agreeableness were not significant predictors. Overall, the results highlight the important role of personality dimensions in shaping students' resilience, emotional regulation, and adaptive psychological functioning.

One of the major findings of the study was the significant negative relationship between neuroticism and psychological hardiness. Students with higher levels of neuroticism reported lower levels of hardiness, suggesting that emotionally unstable individuals may be more vulnerable to stress and psychological pressure. Neuroticism is commonly associated with anxiety, emotional instability, pessimism, and maladaptive cognitive patterns, all of which can reduce an individual's capacity to cope effectively with stressful circumstances. Individuals high in neuroticism often perceive environmental challenges as threatening and uncontrollable, which weakens their sense of commitment, control, and challenge, the three fundamental components of psychological hardiness. This finding is consistent with previous studies indicating that neuroticism negatively affects resilience, stress tolerance, and psychological adaptation (Khadse et al., 2024; Khanjani et al., 2018). The results also align with the findings of (Abdolkarimi et al., 2024), who reported that personality traits characterized by emotional instability were associated with greater psychosomatic symptoms and stress vulnerability. Similarly, (Liu et al., 2024) found that hardiness was positively related to mental health among students experiencing financial difficulties, suggesting that emotionally stable individuals possess stronger coping capacities and adaptive functioning.

Another important finding was the positive relationship between extraversion and psychological hardiness. Among all personality dimensions, extraversion emerged as the strongest predictor of hardiness. Extraverted individuals typically possess higher levels of social interaction, optimism, positive emotionality, and psychological energy, which may enhance their ability to manage stressful experiences effectively. Such individuals are generally more capable of seeking social support, maintaining positive attitudes toward adversity, and interpreting stressful

situations as opportunities for growth rather than threats. Consequently, these characteristics strengthen psychological hardiness and resilience. The present findings are consistent with studies demonstrating that extraversion contributes significantly to stress management and psychological well-being (Khadse et al., 2024; Skoglund et al., 2023). Research among healthcare professionals and athletes has similarly shown that individuals with greater hardiness exhibit stronger psychological adaptation and emotional adjustment under stressful conditions (Enzelicht et al., 2021; Ramazani & Hejazi, 2020). Moreover, (Chuning et al., 2024) emphasized that hardiness and resilience function as protective factors against anxiety and depression, particularly among individuals with stronger adaptive personality characteristics.

The study also revealed that agreeableness and conscientiousness positively predicted psychological hardiness. Agreeable individuals are generally characterized by empathy, cooperation, emotional warmth, and interpersonal trust, which may facilitate adaptive interpersonal relationships and emotional support systems. These characteristics can strengthen resilience and reduce psychological distress during stressful situations. Likewise, conscientious individuals typically demonstrate self-discipline, responsibility, persistence, and effective self-regulation, all of which contribute to better stress management and stronger hardiness. These findings are consistent with prior studies indicating that conscientiousness and agreeableness are positively associated with resilience, coping effectiveness, and psychological well-being (Khanjani et al., 2018; Skoglund et al., 2023). The findings further support the theoretical perspective that psychologically resilient individuals are more organized, goal-oriented, and emotionally balanced in their responses to life stressors (Kobasa & Puccetti, 2023).

Contrary to expectations, openness to experience did not significantly predict psychological hardiness in the regression model, although it demonstrated a positive correlation with hardiness. One possible explanation is that openness to experience primarily reflects intellectual curiosity, creativity, and cognitive flexibility rather than emotional resilience or stress tolerance directly. Although individuals high in openness may possess broader cognitive perspectives and greater adaptability to new experiences, these characteristics may not necessarily translate into stronger commitment, control, or challenge orientations under stressful conditions. Therefore, when the effects of other personality dimensions such as extraversion and

conscientiousness are statistically controlled, openness may lose its predictive power. This finding partially differs from some previous studies that suggested positive associations between openness and adaptive coping capacities (Khadse et al., 2024). However, it also indicates that emotional and behavioral dimensions of personality may exert stronger effects on hardiness than purely cognitive personality tendencies.

Another major finding of the study was the significant relationship between personality traits and self-differentiation. Neuroticism negatively predicted self-differentiation, whereas extraversion positively predicted it. Individuals high in neuroticism generally experience emotional instability, heightened emotional reactivity, and difficulty regulating interpersonal emotions, all of which may interfere with the development of a differentiated sense of self. Such individuals often struggle to separate emotions from rational thinking and may become emotionally fused with others during interpersonal conflicts. Consequently, their ability to maintain emotional autonomy and psychological independence becomes weakened. This finding is highly consistent with Bowen's theoretical framework regarding differentiation of self and emotional functioning. It also aligns with previous studies demonstrating that emotionally unstable individuals tend to exhibit lower differentiation levels and poorer emotional regulation capacities (Rahimi & Afshari-Nia, 2017; Roshannejhad et al., 2019).

The positive predictive role of extraversion in self-differentiation can also be interpreted within the context of interpersonal and emotional functioning. Extraverted individuals are usually more socially confident, emotionally expressive, and capable of establishing balanced interpersonal relationships. These characteristics may facilitate emotional autonomy while simultaneously preserving interpersonal connectedness, which represents a central component of self-differentiation. Extraverted individuals are often more successful in expressing personal beliefs and maintaining individuality without excessive emotional dependency on others. The findings support previous research suggesting that personality characteristics associated with positive emotional functioning contribute to higher differentiation levels (Roshannejhad et al., 2019). Furthermore, the findings correspond with recent evidence showing that psychological hardiness and resilience significantly predict psychological differentiation among adolescents (Khanjani et al., 2024).

An unexpected finding of the study was the negative predictive role of conscientiousness in self-differentiation. Although conscientiousness positively predicted psychological hardiness, it negatively predicted self-differentiation in the regression analysis. This result may indicate that excessively conscientious individuals sometimes prioritize external expectations, perfectionistic tendencies, and rigid self-control to such an extent that emotional flexibility and authentic emotional expression become restricted. In interpersonal contexts, highly conscientious individuals may become overly concerned with responsibility, social approval, or adherence to standards, potentially limiting emotional autonomy and differentiation. Although previous studies have generally linked conscientiousness with adaptive psychological functioning, the current finding suggests that under certain interpersonal circumstances, excessive conscientiousness may contribute to emotional rigidity or dependency patterns. This interpretation may partially align with findings linking perfectionistic tendencies and psychological pressure with reduced emotional flexibility (Abdolkarimi et al., 2024).

The present findings also demonstrated a significant positive relationship between psychological hardiness and self-differentiation. This result supports the theoretical assumption that both constructs share common psychological foundations related to emotional regulation, resilience, cognitive flexibility, and adaptive coping. Individuals with high hardiness tend to perceive stressful experiences as manageable and meaningful, while differentiated individuals maintain emotional balance and autonomy during stressful interpersonal interactions. Both constructs involve the capacity to regulate emotional responses effectively and preserve psychological stability under pressure. The findings are consistent with earlier research reporting significant associations between hardiness and differentiation levels (Raeisi, 2024; Rahimi & Afshari-Nia, 2017). The current results therefore suggest that students who possess stronger emotional autonomy and psychological differentiation are more capable of demonstrating resilience and adaptive coping behaviors.

The overall findings of the present study emphasize the important role of personality structure in shaping psychological resilience and emotional functioning among university students. Given the increasing psychological pressures experienced by students in academic environments, understanding the factors that contribute to psychological hardiness and self-differentiation is highly important. The findings suggest that adaptive personality

traits such as extraversion, agreeableness, and conscientiousness may strengthen students' resilience and emotional stability, whereas neurotic tendencies may increase psychological vulnerability. These results have important implications for psychological counseling, educational interventions, and mental health promotion programs in university settings. Interventions designed to improve emotional regulation, coping skills, resilience, and interpersonal autonomy may help students develop stronger psychological hardiness and higher differentiation levels, ultimately contributing to better mental health and academic adjustment.

One limitation of the present study was the use of a correlational design, which prevents causal interpretations regarding the relationships among personality traits, psychological hardiness, and self-differentiation. In addition, the data were collected using self-report questionnaires, which may have increased the likelihood of response bias and socially desirable responding. The study sample was limited to university students in Tehran, which may reduce the generalizability of the findings to other populations and cultural contexts. Furthermore, demographic and contextual variables such as socioeconomic status, family functioning, academic achievement, and mental health history were not controlled and may have influenced the results.

Future research is recommended to employ longitudinal and experimental designs to examine causal relationships among personality traits, psychological hardiness, and self-differentiation over time. Researchers may also investigate the mediating and moderating roles of variables such as resilience, emotional intelligence, coping styles, and social support in these relationships. Conducting comparative studies across different age groups, occupational populations, and cultural settings could provide a more comprehensive understanding of the generalizability of the findings. Additionally, qualitative approaches may offer deeper insights into students' lived experiences related to resilience, emotional autonomy, and personality functioning.

The findings of the present study suggest several practical implications for educational and psychological settings. Universities and counseling centers can design intervention programs aimed at enhancing psychological hardiness, emotional regulation, coping strategies, and self-differentiation among students. Workshops focusing on stress management, resilience training, interpersonal communication skills, and emotional autonomy may help

students better adapt to academic and social challenges. Psychological screening programs may also identify students with high neurotic tendencies who may be at greater risk for psychological distress. Strengthening supportive educational environments and promoting mental health awareness can further contribute to improving students' psychological well-being and adaptive functioning.

Authors' Contributions

All authors significantly contributed to this study.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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Declaration of Interest

The authors report no conflict of interest.

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Ethical Considerations

In this study, to observe ethical considerations, participants were informed about the goals and importance of the research before the start of the study and participated in the research with informed consent.

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