



Psychological Well-Being and Its Relationship to The Dark and Light Triad of Personality Among University Students: A Cross-sectional Study

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Abstract

Background: Psychological well-being (PWB) is an essential aspect of students' mental health and adjustment in university settings. The dark triad of personality (DTP) and light triad of personality (LTP) play contrasting roles in shaping PWB, yet their combined effects among university students remain underexplored.

Objectives: This study aimed to explore the level of PWB and its relationship to the prevalence of personality triad among university students.

Methods: A cross-sectional observational design was employed, and the study sample consisted of 513 participants (234 male students and 279 female students), selected through convenience sampling from various colleges and academic levels during the first semester of the 2025/2026 academic year. To collect data, PWB and personality triad scales were used.

Results: Students experience a moderate level of PWB, and the environmental mastery dimension is the highest. The prevalence of DTP was low, whereas LTP was high. Results showed no statistically significant differences in PWB and personality triad levels based on gender or academic level variables. Finally, personality triad explained (38%) of the variation in PWB, and the dimensions of LTP were positively associated with PWB, whereas the dimensions of DTP were negatively associated with PWB to varying degrees.

Conclusions: The results of this study contribute to understanding how personality disposition is associated with students' PWB.

Keywords: Mental Health, Positive Traits, Negative Traits, Personality Traits.

1. Background

Psychological well-being (PWB) has long been considered a cornerstone of mental health and subjective well-being, encompassing a sense of life purpose, positive functioning, and overall life satisfaction (1, 2). It suggests not only the absence of psychological distress but also the presence of optimal psychological functioning, enabling individuals to deal with life's challenges, form and maintain healthy and meaningful relationships, and maximize their potential

(3). Psychological well-being is essential for university students, as this transitional phase of development often presents significant academic, social, and emotional challenges (4). The transition from adolescence to adulthood involves new responsibilities related to social identity, social groups or contexts, and career options, all of which can either facilitate or inhibit PWB (5). Therefore, understanding the factors that may promote or inhibit students' PWB is necessary to enhance the mental health and academic success of this population group (6).

In the past several years, personality psychology has been a central explanation for individual differences in PWB. Personality triad affects how people perceive, interpret, and respond to life events, shaping subsequent patterns of emotion and behaviour (7). Ermis et al., Kaufman et al., and Furnham et al. have focused on positive traits in a person's personality, including conscientiousness, agreeableness, and emotional stability (4, 8, 9). Recently, interest has grown in studying the personality triad aspects of personality. When viewed together, these two lines of inquiry offer a holistic view of both the malevolence and benevolence within our humanity, along with examinations of how various personality configurations can be either helpful or harmful to a person's PWB (8). Building on this literature, the present study adopts a conceptual framework in which maladaptive DTP is expected to undermine PWB through emotional instability and interpersonal conflict, whereas adaptive light triad of personality (LTP) is expected to enhance PWB through empathy, prosocial orientation, and positive relational functioning.

DTP refers to three socially aversive traits: Machiavellianism, Narcissism, and Psychopathy, with manipulation, entitlement, and callousness representative of these traits (10, 11). Individuals who exhibit high levels of these traits tend to view their relationships with others in an egocentric manner, lack empathy, and frequently take advantage of others with no regard for the consequences. While these traits are often noted as maladaptive, there is an association between positive experiences and specific aspects of DTP (e.g., confidence associated with Narcissism), including higher self-esteem or momentary academic success (8, 12). However, the overarching view is that they have an overall negative impact on mental health and PWB due to their contributions to conflict, emotional instability, and lower life satisfaction (13, 14).

Light Triad of personality draws on a more positive psychological framework focused on compassion, empathy, and morality; these dimensions closely align with aspects of PWB, specifically positive relationships and self-acceptance. Kaufman et al. posit that LTP is correlated with increased happiness, prosocial behaviour, and life satisfaction, and it may serve as a proxy indicator for positive mental functioning (8). Individuals with high levels of Narcissism may display high self-esteem and a feeling of immunity during times

of short-term stress. However, from a PWB perspective, the necessary strategies may lack the same adaptive methods and authenticity required to maintain mental health (4, 15). Furthermore, psychopathy is associated with emotional coldness and impulsiveness, which are expected to be negatively correlated with aspects of PWB, such as impulse control and moral coherence. Despite the implications of DTP, such as Psychopathy and Narcissism, the constructs associated with LTP are anticipated to promote a more integrated and comprehensive form of PWB for individuals while enhancing their emotional health in the long run (16).

Studies have given greater attention to how this connection between an individual's DTP and LTP influences their levels of PWB, academic success, and emotional adjustment. Researchers in this area have created a theoretical and empirical basis for understanding how personality characteristics affect students' psychological functioning and well-being. Song and Liu examined the relationships among DTP, academic cheating, anxiety, and procrastination, as well as their subsequent effects on frustration, negative thinking, and generative artificial intelligence use, using self-reported data from 504 Chinese university students studying the arts. Findings indicate that DTP was significantly associated with academic cheating, anxiety, and procrastination, and that these types of poor academic behaviors lead to higher levels of frustration, negative thinking, and generative artificial intelligence usage (17). Ulus et al. investigated the extent to which the relationship between types of DTP functions and PWB is mediated by cognitive flexibility and emotional regulation. A short form of DTP, the difficulties with emotion regulation-short, and the cognitive control and cognitive flexibility measurements were used to collect data from 408 participants aged 19 - 60 years. Results indicated that Narcissism had a positive correlation with PWB, while Machiavellianism and Psychopathy were negatively correlated with PWB. Additionally, there were significant mediating associations of issues with regulating emotions on the relationship between PWB as it relates to Machiavellianism and Psychopathy; however, there were small, significant mediating relationships of cognitive flexibility on these two constructs (1).

Wan et al. examined the level of PWB among university students in relation to gender, family background, year in their degree program, level of

financial aid received, and household income. The online questionnaires were administered at a single point in time to measure five aspects of PWB (engagement, perseverance, optimism, connectedness, and happiness, using the EPOCH Measure of Adolescent Well-being). Results showed that both first-year, only-child, and urban university students had significantly higher levels of PWB than non-only-child students, students in later years, and rural students. Furthermore, students who received the most financial aid also reported significantly higher levels of PWB than those who received less (18).

Yu et al. explored the relationships between the Big Five personality dimensions and social support, and their association with individuals' PWB, yielding substantial results. The study included a sample of 848 university students (570 females) recruited through convenience sampling in Taiwan. The findings suggest important distinctions between male and female students in the degree to which they demonstrate conscientiousness, neuroticism, and social support. There was no gender difference in the other traits or in PWB among male and female students. Additionally, the mediation analysis, conducted on the entire sample controlling for gender, showed that only social support mediated the relationship between the two personality traits, extraversion and agreeableness. Therefore, while the Big Five traits, except for agreeableness, directly affect students' PWB when social support is controlled for, conscientiousness, neuroticism, and openness also directly affect their PWB without social support as a mediator; and extraversion exhibited both direct and indirect relationships with students' PWB. Finally, agreeableness fully mediated the relationship between social support and PWB for both genders (19).

Moreover, Ermis et al. examined the relationship between DTP and LTP among university students in a College of Sports Science. The study sample consisted of 518 students (208 females and 310 males). Personality triad scales were employed, and the association of gender and age with DTP and LTP was evaluated using various statistical methods. The results indicated a positive association with DTP, while LTP showed associations that are more complex. It was also found that gender and age significantly affected certain personality traits. Studies have primarily focused on personality triad and PWB through the lens of DTP and on the negative relationships between DTP traits and

mental health. At the same time, there has been much less exploration of LTP that could lead to increased PWB (4). However, despite these findings, prior studies have not consistently integrated personality triad within a single analytical framework to examine their simultaneous and comparative contributions to PWB, nor have they clearly articulated directional expectations across these constructs.

There have been a few studies that have examined various broad personality models, but none have examined the combined or comparative association of DTP and LTP with PWB. In addition, most of the literature has been conducted within Western/East Asian contexts, and little has been done to explore the relationship between personality triad and PWB in Arab cultures. Therefore, this study examines the relationships among personality triad and PWB among university students to provide a more balanced understanding of personality triad and PWB that is culturally appropriate for the study population. This theoretical consideration posits a differential association between personality triad and PWB, which provides the basis for specifying a priori hypotheses in this study. Based on the reviewed literature, the study explicitly hypothesizes that:

H1. DTP is negatively associated with PWB among university students. H2. LTP is positively associated with PWB among university students. H3. Significant differences in levels of PWB and personality triad are expected across gender and academic level among university students.

1.1. Statement of Problem

University students who encounter stressors academically, socially, or personally exhibit varying levels of PWB, influenced by personality traits. Some students may face challenges without psychological distress, frustration, or anxiety. Other students, with characteristics such as openness to experience or self-efficacy, tend to adapt better to whatever they find themselves surrounded by. PWB is a primary component that improves an individual's ability to manage psychological distress and adapt to life challenges, particularly by improving adaptive coping, emotional regulation, and overall mental health. Ramos-Vera et al. note that factors related to PWB are complex and multidimensional, especially regarding specific personality traits, such as DTP (20). DTP is a set of

socially aversive traits and has been linked to adverse psychological manifestations, such as emotional instability, interpersonal conflict, and maladaptive coping mechanisms.

Additionally, LTP includes empathy, compassion, and social cooperation, and has been linked to positive psychological outcomes and healthy personal relationships, based on theorizing the relationship between personality and PWB. Song and Liu associated DTP with anxiety, frustration, and negative thinking in university students. Few studies in this area have utilized university students (17). Psychological well-being components, including positive cognitive style, emotion regulation, and sense of coherence, have been insufficiently associated with DTP and LTP, in addition to the role of potential cultural or other social factors. University students are in a transitional phase regarding their personality traits, and their PWB levels continue to be influenced by new experiences. Therefore, university students are a unique and valuable sample for understanding and exploring the components of their PWB. The study's problem is to explore the level of PWB among university students and examine the extent to which it is related to personality triad.

1.2. Significance of the Study

This study contributes to the literature on personality and PWB in a student context by integrating the dual perspectives of personality triad. This dual framework enhances understanding of personality duality, maladaptive and adaptive traits, and their association with PWB, while also supporting the cultural and contextual validity of these constructs within an Arab university setting. In an academic environment, the study was used to better understand personality systems, moral beliefs, and PWB across students' developmental stages. These results can assist educators, counselors, and university administrators in promoting PWB by educating them about the early and ongoing maturation of psychological systems. Personality triad models can advance mental health interventions and counseling programs designed to support emerging adults in achieving PWB. Additionally, methods have been established to identify maladaptive patterns of functioning using personality triad models. Findings of this study support the mission of psychology and counseling programs to promote the holistic development of emerging youths, specifically by

developing students' cognitive, emotional, and moral capacities while adhering to university policies that establish a healthy academic environment, including fostering students' PWB, prosocial behaviors, and moral personalities.

2. Objectives

This study was designed to examine the level of PWB among university students and to investigate the prevalence of personality triad, in addition to exploring the relationships between PWB and personality triad, and investigating whether students' gender and academic level affect their level of PWB, DTP, and LTP. Accordingly, these objectives are examined as prespecified analytical aims derived from the theoretical framework outlined above.

What is the level of PWB among university students? What is the level of prevalence of personality triad among university students? To what extent can personality triad be associated with the level of PWB among university students? Are participants' gender and academic levels associated with the level of PWB and personality triad among university students?

3. Methods

3.1. Study Design

A cross-sectional observational design was employed due to its suitability for the study's objectives and topic, with a questionnaire used to collect data. The researchers then entered the information they obtained into the computer program for analysis using the "Statistical Package for the Social Sciences (SPSS)".

3.2. Participants

The study sample consisted of 513 participants, 234 male students and 279 female students; they were voluntarily selected by convenience sampling from various colleges and academic levels at Isra University, The Jordan University, Al-Ahliyya Amman University, and Al-Zaytoonah University during the first semester of the 2025/2026 academic year. These universities include both public and private universities in Jordan. An online questionnaire was distributed via the students' WhatsApp groups, through student representatives and university-affiliated academic groups, ensuring that the invitation reached students across different faculties

and academic levels; the purpose of the study was explained to them before they completed it. The inclusion criteria required that participants be currently enrolled university students and willing to participate voluntarily in the study. The students were undergraduates who were typically within the age range of 18-25 years and able to complete the questionnaire. The exclusion criteria included incomplete questionnaire responses, duplicate submissions, and responses from individuals who were not enrolled as undergraduate university students. Participants were recruited across different academic levels to better reflect the general university student population. Data collection was conducted across the participating universities using the same online procedure, and participation was voluntary and open to students who received the survey link, resulting in variation in participation rates across institutions as reflected in Table 1.

Table 1. Sample Details

Variables	No (%)
Gender	
Male	234 (45.6)
Female	279 (54.4)
Academic level	
First	115 (22.4)
Second	130 (25.3)
Third	141 (27.5)
Fourth year and more	127 (24.8)
University	
Isra University	218 (42.49)
The Jordan University	109 (21.24)
Al-Ahliyya Amman University	89 (17.34)
Al-Zaytoonah University	97 (18.90)

3.3. Study Tools

For data collection, the researchers relied on the following scales:

First, Ryff's PWB scale, which was supported and extended by Sun, Goldberg, Lin, Qiao and Operario: The scale consists of 42 items, which are divided into autonomy 1, 2, 3, 4, 5, 6, 7, environmental mastery 8,9,10,11,12,13,14, personal-growth 15,16,17,18,19,20,21, positive-relationship 22,23,24,25,26,27,28, purpose in life 29,30,31,32,33,34,35, and the self-acceptance dimension represented in items numbered 36,37,38,39,40,41,42. The negative direction items in this scale were: 3,4,6,9,10,12,13,15,17,19,21,23,24,27,29,31,32,35,38,40,41, and

the original scale demonstrates good internal consistency Cronbach's alpha for the sub-dimensions, ranging from 0.70 to 0.85. Also, the scale uses a five-point rating for each item, ranging from 1 = strongly disagree to 5 = strongly agree (21, 22).

Second, the Dirty Dozen DTP scale consists of 12 items divided into three dimensions: the Machiavellianism dimension 1, 2, 3, 4 and the Psychopathy dimension 5, 6, 7,8. Finally, the Narcissism dimension is represented by items 9, 10,11,12; all the items of the scale are positively oriented. The original Cronbach's alpha of the scale was 0.86 and it follows a five-point rating scale for each item, ranging from 1= does not apply to me at all to 5 = applies to me strongly (23).

Third, the LTP scale, which consists of 12 positive direct items divided into: Faith in humanity 1, 4, 7, 10, Humanism 2, 5, 8, 11, and Kantianism 3, 6, 9,12. The original Cronbach's alpha of the scale was 0.83. Moreover, it uses a five-point rating scale for each item, ranging from 1 = strongly disagrees to 5 = strongly agrees (8).

3.4. Validity and Reliability in the Current Study

The three scales were translated into Arabic by a professional translator, and the translation was checked and reviewed by 8 psychology professors. A back-translation procedure was conducted to ensure the accuracy and equivalence of the Arabic version with the original instruments. Also, Cronbach's alpha and the split-half method were examined: PWB Scale and its dimensions ranged from 0.82 to 0.86, and the split-half method ranged from 0.77 to 0.80. The value of Cronbach's alpha for the DTP scale and its dimensions was between 0.79 and 0.82, and the split-half value was between 0.75 and 0.79; furthermore, the values of LTP Cronbach's alpha and split-half reliability were 0.84 to .88 and 0.78 to 0.82, respectively. A pilot test was conducted on a small group of university students to evaluate the clarity and comprehensibility of the translated items and to ensure cultural appropriateness without altering the intended meaning. The correlation coefficients between the items and the total scores of the three scales were calculated; the results indicate that the items are acceptable, with values ranging from 0.43 to 0.78. In addition to internal consistency, construct validity was assessed through item-total correlations, which supported the adequacy of the measurement structure in the current sample.

3.5. Study Variables

In this study, total PWB was an independent variable, while DTP and LTP were dependent variables. Composite scores were computed based on the scoring procedures of the respective scales. Subdimensions were considered exploratory rather than primary confirmatory outcomes.

3.6. Procedure

The data were collected using an online questionnaire designed in Google Forms. The instruments were adapted for administration in the study context. The final draft of the Google Form was disseminated via official university emails, student organizations, and social media groups to maximize participation. When the questionnaire first began, the participant received informed consent, which included an explanation of the study's purpose, confirmation that participation was voluntary, assurance regarding the confidentiality of their responses, specifically that reports of findings would not identify their responses without consent, and the right to withdraw at any time; only those participants who agreed to the statement completed the questionnaire. Responses were automatically collected and stored in a secure database, with access limited to the researcher to maintain anonymity and confidentiality throughout the research process. Data were collected using self-report questionnaires administered in a single online session, which may introduce shared-method variance and increase the likelihood of common-method bias.

3.7. Data Analysis

The final sample size $N = 513$ represents all complete responses received during the data collection period after applying the inclusion and exclusion criteria. No missing data were present in the dataset. Although no formal a priori power analysis was conducted, the sample size is considered adequate for the planned statistical analyses, including multiple regression and subgroup comparisons, based on commonly recommended sample size guidelines for regression analyses, e.g., minimum cases per variable. The data were analyzed using the SPSS program to achieve the study objectives and answer the questions. A one-sample *t*-test was used to examine the level of PWB and

the prevalence of personality triad. One-sample *t*-tests were calculated using a test value of 3.00, which represents the midpoint of the Likert scale used in the study and was adopted as a reference point for interpreting PWB and personality triad levels as low, moderate, and high. In addition, independent-samples *t*-tests and one-way ANOVA were calculated to examine differences in PWB and personality triad levels among students based on gender and academic level. The underlying assumptions of regression, including normality, linearity, homoscedasticity, and independence of errors, were checked before proceeding with the regression analyses. The results of these diagnostic tests indicated that the assumptions were satisfactorily met, with no significant violations observed. In addition, to evaluate whether there is multicollinearity among the variables, multicollinearity diagnostics were performed using both tolerance and variance inflation factor (VIF) measures. Multicollinearity diagnostics showed acceptable levels, with tolerance values ranging from .55 to .71 and VIF values ranging from 1.40 to 1.81, indicating no multicollinearity concerns. The regression model examined the association of DTP and LTP across all its dimensions with PWB. Demographic variables such as age, gender, and academic level were not included as covariates in the regression model, as they were analyzed separately using group comparison tests (independent-samples *t*-tests and one-way ANOVA). A multiple linear regression model was used to examine PWB levels based on the prevalence of personality triad.

3.8. Ethical Approval

Ethical approval was obtained from Isra University in Jordan on 19 August 2025, approval No. H S. K. A/341.

4. Results

4.1. What is The Level of PWB Among University Students?

To answer this question, a one-sample *t*-test was used; the results are presented in [Table 2](#). As shown in [Table 2](#), students reported a moderate level of PWB across all dimensions. Environmental mastery recorded the highest level, whereas self-acceptance was the lowest. All results were statistically significant.

4.2. What is the Prevalence of Personality Triad Among University Students?

Table 2. One-Sample t-Test for the Level of Psychological Well-Being Among University Students

Scale	Mean ± SD	df	t	P-Value	Cohen's d
Autonomy	3.31 ± 0.56	512	12.40	< 0.001 ^a	0.55
Environmental mastery	3.36 ± 0.55	512	14.70	< 0.001 ^a	0.65
Personal growth	3.35 ± 0.53	512	15.00	< 0.001 ^a	0.66
Positive relationships	3.31 ± 0.54	512	13.00	< 0.001 ^a	0.57
The purpose of life	3.33 ± 0.55	512	13.60	< 0.001 ^a	0.60
Self-acceptance	3.16 ± 0.55	512	6.60	< 0.001 ^a	0.29
Total PWB	3.30 ± 0.46	512	14.80	< 0.001 ^a	0.65

^a P ≤ 0.05.

To answer this question, a one-sample t-test was also used, with the results presented in Table 3. Table 3 presents the prevalence of personality triad among university students. The findings indicate that DTP levels were below the test value, whereas LTP levels were above it. Among LTP dimensions, humanism showed the highest level, while faith in humanity was the lowest. All differences were statistically significant.

4.3. Are Participants' Gender and Academic Level Associated with the Level of Psychological Well-Being and Personality triad Among University Students?

The t-tests were conducted to examine the association of the gender variable with PWB and personality triad. Moreover, a one-way ANOVA analysis was used to investigate the association of the academic level variable, with the results presented in Table 4 and Table 5.

As indicated in Table 4, no statistically significant differences were found between males and females in PWB and personality triad. Similarly, Table 5 shows that no statistically significant differences were found across academic levels for PWB and personality triad.

4.4. To What Extent Can Personality Triad be Associated with the Level of Psychological Well-Being Among University Students?

Multiple linear regression equations were applied, and all regression assumptions were met, supporting the validity of the regression model. Multicollinearity diagnostics confirmed acceptable ranges: tolerance values ranged from .55 to .71 and VIF values from 1.40 to 1.81, indicating stable parameter estimates and no multicollinearity concerns. The results are presented in Table 6.

As shown in Table 6, the regression model was statistically significant and explained a substantial proportion of variance in PWB. LTP dimensions were positively associated with PWB, whereas DTP dimensions were negatively associated with it. The results showed that a higher level of LTP is associated with a higher level of PWB, whereas a higher level of DTP is associated with a lower level of PWB.

5. Discussion

The study's findings indicated that university students, in general, have a moderate degree of PWB. It implies that, for the most part, students can achieve a reasonably healthy balance of positive feelings, personal growth, and performance in daily living. The findings imply that, while students can manage their academic domain and social environment reasonably well, they may have trouble with self-acceptance and internal feelings of contentment. It suggests a stage of development in which students are still forming an identity and a sense of purpose while simultaneously tackling academic difficulties and everyday responsibilities. In terms of the underlying dimensions of PWB, the highest values were observed in students' ability to effectively organize their environment, make reasonable decisions, and adapt to life's demands. It indicates that university students possess a reasonable level of maturity and responsibility necessary to address the challenges in their academic and personal lives. However, the lower level of self-acceptance was observed. This pattern may reflect challenges related to self-perception or adjustment during the university years, although these interpretations should be considered with caution given the cross-sectional nature of the data.

Table 3. One-Sample *t*-Test for the Prevalence of Dark Triad of Personality and Light Triad of Personality

Scale	Mean ± SD	df	t	P	Cohen's d
Machiavellianism	1.89 ± 0.57	512	-43.70	< 0.001 ^a	-1.93
Psychopathy	1.89 ± 0.58	512	-42.50	< 0.001 ^a	-1.88
Narcissism	2.36 ± 0.65	512	-22.00	< 0.001 ^a	-.97
Total DTP	2.04 ± 0.49	512	-41.00	< 0.001^a	-1.81
Kantianism	4.15 ± 0.56	512	46.30	< 0.001 ^a	2.05
Humanism	4.16 ± 0.54	512	48.50	< 0.001 ^a	2.14
Faith in humanity	3.90 ± 0.45	512	45.20	< 0.001 ^a	2.00
Total LTP	4.07 ± 0.40	512	60.00	< 0.001^a	2.65

^a P ≤ 0.05.

Table 4. Independent Samples *t*-Test for Differences in Levels of Psychological Well-Being, Dark Triad of Personality, and Light Triad of Personality by Gender

Variables	N	Mean ± SD	t	P-Value	Cohen's d
PWB			-1.10	0.27	-0.09
Male	234	3.28 ± 0.44			
Female	279	3.32 ± 0.47			
DTP			-1.60	0.11	-0.15
Male	234	2.01 ± 0.46			
Female	279	2.08 ± 0.51			
LTP			-1.05	0.30	-0.15
Male	234	4.04 ± 0.39			
Female	279	4.10 ± 0.42			

Abbreviations: LTP, light triad of personality; DTP, dark triad of personality; PWB, psychological well-being.

Table 5. One-Way ANOVA for Differences in Levels of Psychological Well-Being, Dark Triad of Personality, and Light Triad of Personality by Academic Level

Variables and Sources of variance	Sum of Squares	df	Mean Square	F	P-Value	η ²
PWB				0.14	0.93	0.001
Between Groups	0.10	3	0.03			
Within Groups	108.49	509	.21			
DTP				0.38	0.77	0.002
Between Groups	0.26	3	0.09			
Within Groups	121.78	509	0.24			
LTP				0.59	0.62	0.003
Between Groups	0.29	3	0.10			
Within Groups	84.15	509	0.17			

Abbreviations: LTP, light triad of personality; DTP, dark triad of personality; PWB, psychological well-being.

In terms of DTP, it was overall low among university students, and levels of LTP were high, indicating the existence of positive personality triad traits that promote cooperation, empathy, and moral consciousness. Most participants likely value kindness,

honesty, and respect for others, which represents an adaptive experience for their psychological adjustment as university students. DTP collectively indicates a low prevalence of traits such as manipulation, self-interest, and emotional coldness, suggesting that engaging in

Table 6. Multiple Linear Regression Analysis Predicting Psychological Well-Being from Dark Triad of Personality and Light Triad of Personality Dimensions^a

Models	B	SD. E	Beta	t	P	Tolerance	VIF
Constant	1.72	0.18	-	9.55	< 0.001	-	-
Faith in Humanity	0.28	0.04	0.31	7.00	< 0.001	0.62	1.61
Psychopathy	-0.17	0.05	-0.16	-3.40	0.001	0.714	1.40
Narcissism	-0.09	0.04	-0.10	-2.25	0.025	0.68	1.47
Kantianism	0.21	0.05	0.24	4.20	< 0.001	0.55	1.81
Humanism	0.25	0.05	0.27	5.00	< 0.001	0.58	1.72
Machiavellianism	-0.14	0.05	-0.13	-2.80	0.005	0.66	1.52

^a In the table, the values of $R = 0.62$, $R^2 = 0.38$, adjusted $R^2 = 0.37$, and $F(6, 56) = 52.41$ with a significance level of $P = 0.00$ are reported.

such behaviours is not commonplace among university students. Additionally, the results indicated no significant differences in PWB and personality triad between males and females. It suggests that both males and females likely experience similar levels of emotional stability, social understanding, and moral orientation, indicating no substantial gender differences in the university context. Similarly, there were no differences by academic level, meaning the amount of time someone has been in university did not substantially affect PWB or personality triad. This further suggests that personality triad appears relatively stable across academic levels in the sample of the study.

The absence of statistically significant differences is further supported by the very small effect sizes observed, suggesting that any differences between groups are likely trivial rather than practically meaningful. The study may have limited sensitivity to detect very small subgroup differences; although the observed effect sizes indicate that such differences, if present, are minimal. These findings may reflect contextual or cultural similarities within the sample, leading to more homogeneous patterns across gender and academic levels than in studies conducted in different settings.

In addition to statistical significance, the magnitude of the observed association provides important insight into its practical relevance. The positive beta coefficients for LTP across all its dimensions indicate a moderate and meaningful association with PWB, suggesting that these traits play a substantive role in enhancing students' PWB. In contrast, the negative beta coefficients of DTP across all its dimensions, although statistically significant, were relatively small in magnitude, indicating weaker practical associations. This pattern suggests that LTP has a stronger association with PWB

than maladaptive traits in the study sample. Overall, the explained variance reflects a moderate model, indicating that personality triad accounts for a meaningful, though not exhaustive, proportion of variation in students' PWB.

Finally, the overall pattern of findings portrays university students as individuals with moderate PWB and strong moral and humanitarian tendencies. Their management of environmental demands and ability to maintain meaningful social relationships suggest that many students demonstrate relatively positive psychological functioning, as illustrated by the level of PWB. The presence of moderate PWB and high LTP tendencies suggests that university students possess the psychological and emotional resources to maintain balance, optimism, and relational health in their academic and personal lives. These findings are consistent with previous studies, such as Wan et al., who reported moderate to high levels of PWB among university students (18). Also, they are consistent with Ermis et al., who found that LTP predominated among university students, especially those of social or academic relevance, which focused on cooperation and moral behaviour. In addition, there were no significant differences in PWB and personality triad by gender or academic level (4). However, these findings differ partially from those of Yu et al. and Wan et al., who found gender-based differences in PWB levels. Such differences may have been due to cultural differences, differences in institutional environments, or differing stressors across the educational systems (18, 19). Additionally, the perceived relationships between DTP and PWB corroborate Ulus et al., who indicated that Narcissism had weak, positive associations with PWB and that Machiavellianism and Psychopathy were negatively associated with PWB (1).

5.1. Conclusions

The results of this study suggest that students are likely to be altruistic and possess a discernible moral orientation, which may promote their sense of PWB and satisfaction with life. Moreover, it has been established that neither gender nor academic level affected PWB, DTP, or LTP. As a result, students tend to demonstrate similar characteristics across PWB and personality triad, regardless of gender and academic level. It supports the notion that one's PWB may be more closely associated with internal personality characteristics than with external factors such as academic level or gender. This study highlighted the importance of personality in PWB and adjustment to university life. Students who have high scores on LTP are likely to exhibit emotional stability, resilience, and healthy relationships, and are less likely to experience stress and maladaptive behaviours if they have low scores on DTP. It indicates the need for universities to promote the development of ethical values, empathy, and self-development through the postsecondary experience to support students' academic and psychological thriving. Therefore, the findings of this study contribute to understanding how personality disposition is associated with students' PWB.

5.2. Limitations, Recommendations, and Suggestions for Further Studies

Several limitations of the present study should be acknowledged. The data were collected using self-report tools, which may be subject to response biases such as social desirability or subjective interpretation of questionnaire items. The cross-sectional design of the study limits the ability to draw causal conclusions regarding the relationships between personality triad and PWB; therefore, the observed relationships should be interpreted as associative rather than causal. The study was conducted within a specific cultural and educational context, which may influence the expression of personality triad and PWB; thus, caution should be exercised when generalizing the findings to other cultural or institutional settings. The generalizability of the findings should be interpreted with caution. The use of convenience sampling and online data collection from selected universities in Jordan may limit the extent to which the results can be generalized to all university students, either within Jordan or across broader Arab contexts. Therefore, the

findings are more appropriately applicable to similar educational and cultural settings rather than to the entire young adult population. Future research is encouraged to employ longitudinal designs and more diverse, multi-institutional samples to enhance the robustness and generalizability of the findings. The use of self-report measures collected at a single time point may introduce common-method bias, social desirability bias, and response-style effects, potentially inflating observed associations among PWB and personality triad. As a result, the strength of the regression relationships should be interpreted with caution. In addition, the regression model did not include demographic variables (e.g., age, gender, academic level, and university) as covariates, which may limit the ability to fully control for potential confounding factors; therefore, the observed associations may be partially influenced by unmeasured or uncontrolled variables. Further studies may also explore potential mediating or moderating variables, such as social support, emotional intelligence, and academic stress, or adopt qualitative approaches to provide deeper insights into the relationship between LTP and students' PWB experiences.

Footnotes

AI Use Disclosure: The authors declare that no generative AI tools were used in the creation of this article.

Authors' Contribution: M. A. designed the study and analyzed the data. M. A. and other authors collected data and wrote up the manuscript.

Conflict of Interests Statement: The authors declare that they have no conflict of interest.

Data Availability: The dataset presented in the study is available on request from the corresponding author during submission or after publication.

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References

- Ulus İÇ, Avcı M, Akçıl S. The dark triad and mental well-being: The mediating role of cognitive flexibility and emotion regulation. *Pers Individ Dif*. 2025;**246**. <https://doi.org/10.1016/j.paid.2025.113325>.
- Akhter S. Psychological Well-Being in Student of Gender Difference. *Int J Indian Psychol*. 2015;**2**(4). <https://doi.org/10.25215/0204.040>.
- Ryff CD. Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *J Pers Soc Psychol*. 1989;**57**(6):1069-81. <https://doi.org/10.1037/0022-3514.57.6.1069>.
- Ermis SA, Boyanmis AH, Kesilmis I, Toros T, Ogras EB, Akin M, et al. Exploring the Influence of Dark Triad and Light Triad Traits on Sport Sciences Students. *Medicina (Kaunas)*. 2024;**60**(8). [PubMed ID: 39202550]. [PubMed Central ID: PMC11356030]. <https://doi.org/10.3390/medicina60081269>.
- Chaudhry S, Tandon A, Shinde S, Bhattacharya A. Student psychological well-being in higher education: The role of internal team environment, institutional, friends and family support and academic engagement. *PLoS One*. 2024;**19**(1). e0297508. [PubMed ID: 38271390]. [PubMed Central ID: PMC10810468]. <https://doi.org/10.1371/journal.pone.0297508>.
- Rafeek Badawy K. The General Structure of The Dark Personality of University Students. *Int J Instruc Tech Educ Stud*. 2025;**6**(2):1-13. <https://doi.org/10.21608/ihites.2025.319398.1207>.
- Joshanloo M. Revisiting the Empirical Distinction Between Hedonic and Eudaimonic Aspects of Well-Being Using Exploratory Structural Equation Modeling. *J Happiness Stud*. 2015;**17**(5):2023-36. <https://doi.org/10.1007/s10902-015-9683-z>.
- Kaufman SB, Yaden DB, Hyde E, Tsukayama E. The Light vs. Dark Triad of Personality: Contrasting Two Very Different Profiles of Human Nature. *Front Psychol*. 2019;**10**:467. [PubMed ID: 30914993]. [PubMed Central ID: PMC6423069]. <https://doi.org/10.3389/fpsyg.2019.00467>.
- Furnham A, Richards SC, Paulhus DL. The Dark Triad of Personality: A 10 Year Review. *Soc Personal Psychol Compass*. 2013;**7**(3):199-216. <https://doi.org/10.1111/spc3.12018>.
- Bueno-de la Fuente C, Nunez-Rodriguez S, de la Fuente-Anuncibay R, Gonzalez-Bernal JJ. Relationship Between Leadership, Personality, and the Dark Triad in Workplace: A Systematic Review. *Behav Sci (Basel)*. 2025;**15**(3). [PubMed ID: 40150192]. [PubMed Central ID: PMC11939815]. <https://doi.org/10.3390/bs15030297>.
- Eaton AD, Chan Carusone S, Murzin K, Hui J, McCullagh JW, Walmsley SL. Cognitive screening considerations for psychosocial clinical trials in HIV, aging, and cognition. *Clin Trials*. 2023;**20**(2):176-80. [PubMed ID: 36924070]. <https://doi.org/10.1177/17407745221136970>.
- Maneiro L, Navas MP, Van Geel M, Cutrin O, Vedder P. Dark Triad Traits and Risky Behaviours: Identifying Risk Profiles from a Person-Centred Approach. *Int J Environ Res Public Health*. 2020;**17**(17). [PubMed ID: 32858996]. [PubMed Central ID: PMC7503275]. <https://doi.org/10.3390/ijerph17176194>.
- Nocera TR, Dahlen ER. Dark Triad Personality Traits in Cyber Aggression Among College Students. *Violence Vict*. 2020;**35**(4):524-38. [PubMed ID: 32788334]. <https://doi.org/10.1891/VV-D-18-00058>.
- Blais J, Pruyers S. The power of the dark side: personality, the dark triad, and political ambition. *Pers Individ Dif*. 2017;**113**:167-72. <https://doi.org/10.1016/j.paid.2017.03.029>.
- Grijalva E, Harms PD, Newman DA, Gaddis BH, Fraley R. Narcissism and Leadership: A Meta-Analytic Review of Linear and Nonlinear Relationships. *Pers Psychol*. 2014;**68**(1):1-47. <https://doi.org/10.1111/peps.12072>.
- Mengelkoch S, Ehlebracht D, Bucker S. The light triad of personality: A systematic review and meta-analysis. *Pers Individ Dif*. 2022;**187**. <https://doi.org/10.1016/j.paid.2021.111389>.
- Song J, Liu S. Dark personality traits are associated with academic misconduct, frustration, negative thinking, and generative AI use habits: the case of Sichuan art universities. *BMC Psychol*. 2025;**13**(1):633. [PubMed ID: 40598633]. [PubMed Central ID: PMC12210804]. <https://doi.org/10.1186/s40359-025-02949-w>.
- Wan J, Wee LH, Siau CS, Wong YH. Psychological well-being and its associated factors among university students in Sichuan, China. *Front Psychol*. 2025;**16**:1473871. [PubMed ID: 40083756]. [PubMed Central ID: PMC11905163]. <https://doi.org/10.3389/fpsyg.2025.1473871>.
- Yu M, Chang Y, Li R. Relationships between Big Five Personality Traits and Psychological Well-Being: A Mediation Analysis of Social Support for University Students. *Edu Sci*. 2024;**14**(10). <https://doi.org/10.3390/educsci14101050>.
- Ramos-Vera C, O'Diana AG, Villena AS, Bonfá-Araujo B, Barros LDO, Noronha APP, et al. Dark and Light Triad: A cross-cultural comparison of network analysis in 5 countries. *Pers Individ Dif*. 2023;**215**. <https://doi.org/10.1016/j.paid.2023.112377>.
- Abbott RA, Ploubidis GB, Huppert FA, Kuh D, Wadsworth ME, Croudace TJ. Psychometric evaluation and predictive validity of Ryff's psychological well-being items in a UK birth cohort sample of women. *Health Qual Life Outcomes*. 2006;**4**:76. [PubMed ID: 17020614]. [PubMed Central ID: PMC1634744]. <https://doi.org/10.1186/1477-7525-4-76>.
- Sun S, Goldberg SB, Lin D, Qiao S, Operario D. Psychological well-being and its association with mental health outcomes: A meta-analysis. *J Affect Disord*. 2022;**298**:153-62. <https://doi.org/10.1016/j.jad.2021.11.089>.
- Jonason PK, Webster GD. The dirty dozen: a concise measure of the dark triad. *Psychol Assess*. 2010;**22**(2):420-32. [PubMed ID: 20528068]. <https://doi.org/10.1037/a0019265>.