

Research Article

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The Predictive Ability of the Big Five Personality Traits in Self Among University Students

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Abstract

Background/purpose. This study aimed to identify the level of self among Al al-Bayt University students in Jordan based on gender and academic specialization and examine the predictive ability of the Big Five personality traits (extraversion, neuroticism, openness to experience, conscientiousness, and agreeableness) in students' general self-scores.

Materials/methods. A sample of 630 students participated in the study. The Big Five Personality Traits scale (Jaradat & Abu Ghazal, 2014) and the Self Scale (Atoum et al., 2023) were administered to collect data.

Results. The findings revealed a medium level of general self-scores among students, with statistically significant differences favoring males. Additionally, the big five personality traits collectively predicted 47.7% of the variance in general self-scores.

Conclusion. The study underscores the significant role of personality traits in predicting self-levels among university students, with notable gender differences. These findings contribute to understanding the relationship between personality and self, offering implications for psychological and educational interventions.

1. Introduction

The concept of "self" has been debated by numerous psychologists and philosophers over time, including James, Cooley, Mead, Maslow, Bandoura, McDougall, and others. However, despite the significance of the considerable work done by earlier scholars to clarify the notion of the self and its development, Rogers made the most outstanding contribution to the clinical field when he made the self, the cornerstone of his indirect counselling theory and the primary driver of an individual's disorder or wellbeing (Corsin & Auerbach, 1996).

Numerous definitions have been given to the term "self". Kihlstrom and Klein (1997) define the self as the mental representation of ourselves; that is, the self represents our knowledge of ourselves. Moreover, Reber and Reber (2001) defined it as the sum of personal experience, personal expression, awareness, self-perception, or identity. Abdel-Khalek (2014) defined it as the characteristics that encompass a person's psychological, mental, and physical aspects. Therefore, the self allows for our awareness of who we are and what we can do.

Based on the previous definitions, the significance of the self comes from the fact that it symbolizes what makes a person different and unique. And the individual's distinction and success in life mainly result from their understanding of the qualities, traits, and capacities that make up who they are as a whole, including both the good and the bad, the strong and the weak. Also, once we fully understand and accept ourselves, we succeed in realizing ourselves; that is, we realize the full potential of our skills, which enables us to live in harmony with ourselves and with our environment (Mostafawi & Iassoued, 2021). Atoum et al. (2023) indicated that high scores of the self indicate that the individual is well adjusted in his environment, highly aware of his strengths and weaknesses, and compassionate to self and other people.

Furthermore, the importance of the concept of self also lies in the fact that it is part of the outward aspect on which the distinctive behaviour of the individual is determined. The way in which we perceive ourselves determines our personality type or traits. A person's idea of himself is the main pillar upon which his personality is based (Abdul Amir, 2011).

Studies have not focused enough on the term "self" in general, but many studies have identified different forms of the self. Most of those forms are positive, such as self-concept and self-esteem, and few are negative, such as self-handicapping and self-alienation. The following are the most common forms or components of the self:

- **Self-Concept:** It refers to the way people see themselves and their abilities to deal with others. Its primary function is to seek the integration and consistency of one's personality so that the individual adapts to the environment in which he lives (Abu Shamala, 2016).
- **Self-Esteem:** It is a primary emotion that occupies a considerable position in the hierarchy of an individual's personality, shaped by the interaction of various internal and external factors (Maria & Harnish, 2000).
- **Self-efficacy:** Self-efficacy is one of the most powerful self-regulation processes and an important basis for determining the level of motivation, the level of psychological health, and the ability for personal achievement (Pajares, 1996).
- **Self-Worth:** It plays a major role in shaping an individual's beliefs and behaviours, the organization of his learning and growth processes, and its relation to the individual's mental health. The growth of self-worth is closely linked to social interactions and the extent to which others are respected, glorified, and recognized (Gillespie, 2004).

- **Self-Regulation:** It represents an integral part of the personality and contributes to determining the behaviour practised by the individual and how they respond to various situations. It helps individuals to attain individual harmony with self and society (Al-Shehri & Khalifa, 2020).
- **Self-Actualization and Acceptance:** Self-actualisation and acceptance are fundamental demands that a person seeks to fulfil by doing what achieves his self-worth, capabilities, self-confidence, and ability to do fruitful work (Ismail, 2021).
- **Self-Management and Self-Control:** It refers to a strong will and capabilities that can be managed and restructured to accomplish various personal and social achievements (Al-Khatib, Maliki & Abdel-Hamid, 2021).
- **Self-monitoring** refers to a person's capacity to adjust and control his behaviour to fulfil his needs in social circumstances (Maser, 2021).

Based on the previous forms or components of self, the researchers conclude that the concept of the term “self” is thought of as the individual awareness of the various components that make up their internal and external personality and which is reflected in the individual's academic, physical, social, and psychological aspects. The strength of self can be interpreted as a means of coping mechanisms for life challenges and obstacles, since those who score high in self are expected to be more adjusted and in control of their lives and environment. Therefore, the strength of individual self is expected to be affected by various personality traits or types.

The study of personality in general and personality traits is one of the most important topics since it represents the main source for knowing the essence of man and the manifestations of human behavior and is closely related to responses towards others and the nature of relationships with them and interaction with them, and it also represents a pattern and system for all the different forms of behavior practiced by the individual. According to Kolawole (2013), the Big Five personality traits are used to categorize a person's personality. Each personality trait affects all facets of a person's life and impacts their behaviour. The big five personality traits have been covered in numerous definitions. However, according to McCrae and John (1992), a perception through which personality can be accurately and thoroughly described through primary factors: neuroticism, extraversion, agreeableness, the vigilance of conscience, and openness to experience.

Filip et al. (2002) indicated that the big five personality traits are among the most important concepts related to the behaviour of individuals. Its importance comes from the role it plays in influencing all the different activities the individual goes through, his interaction with the environment in general, and his social interactions in particular. Every person has distinctive qualities that let them engage with a specific environment better than others, and the environment may also promote specific attributes over others. For instance, a person with a high level of neuroticism may experience a wide range of unpleasant emotions when exposed to many external stimuli, including aggression and anxiety.

The Big Five personality traits fall into five categories, which are:

1. **Neuroticism:** refers to unfavourable behavioural experiences, events, and characteristics that a person reports, such as anxiety, dread, a predisposition toward hostility or wrath toward others, as well as a tendency toward melancholy, loneliness, depression, guilt, or hatred (Costa, Terracciano & McCrae, 2001).
2. **Extraversion** refers to the scope of a person's behaviour and interpersonal interactions. He has a good attitude, cares about other people, is more engaged during social interactions, and is impulsive, active, assertive, and uninterested (Stefan & Eth, 2008).

3. Openness to Experience: Refers to a generally extroverted individual who tends to appreciate art, music, beauty, and nature, has a great desire for variety in his life, has a moderate level of intellectual (or emotional) curiosity, and is generally reasonable in his social, political, and moral beliefs (Costa, Terracciano & McCrae, 2001).

4. Agreeableness: Agreeableness is characterized by good mood, cooperation, and trust and reflects social warmth, love, care, and emotional support. It refers to an individual who trusts himself and others quickly since they assume goodwill from anyone he meets without reservation (Costa, Terracciano & McCrae, 2001).

5. Conscientiousness: It refers to an individual who is competent, organized, cautious, self-disciplined, strong-willed, determined, generally sensitive, logical in decision-making, persistent, methodical, goal-oriented, reliable, honest and trustworthy in fulfilling obligations or duties following his conscience, able to resist temptations and incentives, act wisely in different situations, and strictly adhere to moral values, (Costa, Terracciano & McCrae, 2001).

1.1. Problem Statement

The primary function of the self is to strive for integration and consistency, to be in harmony with one's surroundings, and to have a unique identity that sets one apart from others. As a result, the self is seen as the foundation of personality. The traits of a self-integrated person include living a life guided by positive plans, leading a healthy lifestyle consistent with their beliefs and aspirations, and directly confronting problems and finding solutions. University students should learn to define themselves through social interaction and relationship building. Therefore, the present study aimed to explore the concept of self and the relationship between the self and personality traits. The research specifically aimed to respond to the following questions:

1. What is the level of self among Al al-Bayt University students?
2. Are there statistically significant differences in the level of self among Al al-Bayt University students due to gender and academic specialization?
3. What is the predictive ability of the big five personality traits with scores of the general self among Al al-Bayt University students?

1.2. Study Importance

The theoretical importance of this study is highlighted by the lack of studies that study the relationship between self and different personality traits. This study is expected to open new avenues for more research that focuses on the self and its relationship with other related variables. Its practical significance lies in the potential to use the findings to support faculty members in considering the psychological state of the student in terms of the relationship between the big five personality traits and self as a source on internal power; and in developing a counselling-training program for university students that assists them in raising their level of self.

1.3. Definitions

Self: It entails examining the cognitive, emotional, and social representation of what the person perceives in his skills, traits, and personality during interactions with his environment. The development of a person's motivations, cognitive processes, and social and emotional conduct depends heavily on it. Therefore, most psychologists view the self as the culmination of an individual's behaviour that reflects their unique cognitive, physical, social, or emotional traits, despite disparities in how they define it. Operationally, the score students obtain on the self-scale built for this study consists of the following sub-dimensions: Positive self-concept, self-esteem, self-efficacy, self-worth, self-regulation, self-actualization, and self-management dimension (Atoum et al., 2023).

The Big Five Personality Traits: This is a theoretical perception through which a complete and accurate description can be made through five essential factors: extraversion, neuroticism, openness to experience, conscientiousness, and agreeableness (McCrae & John, 1992). Operationally, it is the score that the student obtains on the scale of the Big Five major personality traits used in this study.

1.4. Limitations

The study was limited to a sample of undergraduate students at Al al-Bayt University who were enrolled during the first semester of the academic year (2022/2023). Therefore, the validity and reliability of the criteria utilized in the current research and the degree of the responses provided by the respondents on the measures determine the likelihood of generalizing the study results.

2. Literature Review

A few studies dealt with the concept of self in general. For instance, Abdel-Khalek (2014) attempted to form a scale that measures the self, and his research revealed a statistically significant and negative correlation between positive self-measures in general and neuroticism, and most positive self-measures (negative) predict neuroticism. Also, Abdel-Khalek (2018) revealed that the positive self is intrinsically negatively linked to neuroticism and that the predictors of the positive self are happiness and lack of neuroticism. Recently, Atoum et al. (2023) reported eight main dimensions forming a general level of self (positive self-concept, self-esteem, self-efficacy, self-worth, self-regulation, self-actualization and acceptance, self-management and self-control, self-monitoring).

Many studies focused on one or more dimensions of the self. For example, Mahasneh, Al-Awan, and Al-Adamat (2022) showed an average level of self-regulation, while Masser (2021) revealed a high level of self-monitoring, and Al-Kafaween (2019) indicated a medium level of self-esteem, while Ryan et al. (2013) indicated an average level of self-worth.

Previous studies did not address the relationship between the general self-concept and the Big Five personality traits, but many studies have addressed this relationship between one component of the self and the Big Five personality traits. Neff et al. (2007) reported a positive and significant correlation between self-compassion and the dimensions of kindness, extraversion, and conscientiousness, in addition to a negative and significant correlation with the neuroticism dimension.

Kharnoub (2015) indicated statistically significant positive relationships between students' scores in self-compassion, self-esteem, extraversion, openness to experience, kindness, conscientiousness, and a negative association with neuroticism. Also, Mohamed (2015) indicated a statistically significant positive correlation between depression and neurotic traits, between social characteristics, calmness, and the self-disclosure variable, and a statistically significant negative relationship between aggressiveness, excitability, and self-disclosure.

Al-Ayed (2019) indicated a statistically significant inverse correlation between neuroticism and self-management dimensions, except for the social relations management dimension. The results also showed no association between self-management and the extraversion factor, except for the dimension of social relations. Also, Al-Shehri and Khalifa (2020) found a statistically significant correlation between self-regulation and the big five personality traits in the study sample. Ismail (2021) reported a positive correlation between psychopathic personality and self-actualization.

3. Methodology

3.1. Approach

The descriptive correlational approach was used since it is the most appropriate method to achieve the objectives of this study.

3.2. Population and Sample

The study population comprises all (18,147) male and female undergraduate students at Al al-Bayt University registered in the first semester of the academic year 2022/2023, according to the data issued by the Admission and Registration Department. However, 630 students selected using the convenience sample method participated in this study. Data are illustrated in Table 1 below.

Table 1. Results of Frequency and Percentage Analysis by the Study Variables

Variable		Frequency	%
Sex	Male	192	30.5
	Female	438	69.5
Academic specialization	Scientific	366	58.1
	Humanities	264	41.9
Total		235	100.0

3.3. Instruments

Two instruments were used in this study as follows:

1. Self-Scale: The self-scale developed by Atoum et al. (2023) was used in this study consisting of (48) items within eight dimensions, namely: positive self-concept (1-5), self-esteem (6-11), Self-efficacy (12-20), self-worth (21-24), self-regulation dimension (25-28), self-actualization and acceptance dimension (29-37), self-management and self-control dimension (38-44), and self-monitoring dimension (48 -45). The original scale was tested recently on the same population and showed good indications of validity and reliability.

The validity and reliability of the self-scale in this study:

1. Construct Validity: It was applied to a pilot sample (n=48) of students to check the measure's construct validity. Pearson correlation coefficients were calculated between the item, dimension, and total scale scores. Correlations ranged from 0.86 to 0.34, which gives acceptable validity indicators.

2. Reliability: Cronbach's alpha equation was used to verify the self-scale reliability by calculating the internal consistency coefficients. The scale was administered to the previous pilot sample, comprising 48 male and female students. The values of the reliability coefficients in the internal consistency method (Cronbach's alpha) for the dimensions ranged from 0.87 to 0.62 and 0.94 for the total scale, which are considered acceptable.

2. The Big Five Personality Traits Measure: The Big Five Personality Traits measure developed by John, Donahue & Kentle (1991) and modified by Jaradat & Abu Ghazal (2014) to suit the Jordanian environment, was used, consisting of 44 items within five dimensions: neuroticism (1-8), extraversion (16-9), openness to experience (26-17), acceptability (35-27), and conscientiousness (44-36). In addition, the scale validity was tested previously by (John, Donahue & Kentle, 1991; Jaradat & Abu Ghazal, 2014), and they both presented acceptable evidence of validity and reliability.

The validity and reliability of the Big Five Personality Traits measure in this study:

- Content Validity: The measure was presented to a panel of nine faculty members at Yarmouk University who are specialists in educational psychology, measurement and evaluation. They were asked to evaluate the items' applicability, clarity, and grammatical soundness and to provide any thoughts they deemed relevant, adopting the criterion of 80%. Based on this norm, 12 items were deleted, and several items were corrected in terms of wording or grammar.

- **Construct Validity:** The instrument was applied to a pilot sample (n=48) of male and female students to verify the construct validity. Pearson correlation coefficients were calculated between the scores of the items and the dimension to which they belong, and ranged between 0.88 and 0.34. Both content and construct validity gave the study acceptable indicators for using the scale.

- **Scale Reliability:** The Cronbach's alpha equation was used to verify the scale's reliability by calculating the internal consistency coefficients. The scale was distributed to a pilot sample of 48 male and female students from outside the study sample. The values of the reliability coefficients for the dimensions ranged between 0.82 and 0.64, which are considered acceptable.

3.4. Procedures

To achieve the objectives of the study, the following procedures were followed:

- Developing the study instruments and verifying their validity and reliability.
- Determine the study population and choose a sample that represents them.
- Distributing the instrument to the sample, explaining the study's goals, giving them enough time to respond to the scale, urging them to be honest in their responses, and assuring them that the data will be kept strictly confidential and used only for scientific research.
- Collecting valid questionnaires and entering the data into the computer to perform the appropriate statistical analyses.
- Discuss the results and make appropriate recommendations and conclusions based on the study results.

4. Results

Question One: What is the level of self among Al al-Bayt University students? To answer this question, means and standard deviations were computed, as shown in Table 2.

Table 2. Means and Standard Deviations of the Self-Power Scale

Rank	No	Domain	Mean	Standard deviation	Level*
1	6	Self-actualization and acceptance	3.82	.494	High
2	2	Self-esteem	3.58	.466	Medium
3	3	Self-efficacy	3.51	.572	Medium
4	7	Self-control and Self-management	3.35	.571	Medium
5	1	Positive self-concept	3.32	.493	Medium
6	4	Self-worth	3.31	.463	Medium
7	5	Self-regulation	3.30	.578	Medium
8	8	Self-monitoring	3.22	.556	Medium
		Total self	3.24	.389	Medium

Note. 1 – 2.33 = Low, 2.34 – 3.67 = Medium, 3.68-5= High

Results in Table 2 show that the mean scores ranged between 3.22 and 3.82. The self-actualization and acceptance dimension ranked first with the highest score (mean=3.82) and a high

level. In contrast, the self-monitoring dimension ranked last (mean=3.22) with a medium level. The overall mean score of the level of self-scale was 3.24, with a median level.

Question Two: Are there statistically significant differences ($\alpha = 0.05$) in the level of self-power among Al al-Bayt University students attributable to the variables (gender and academic specialization)? Means and standard deviation were calculated to answer this question, as shown in Table 3.

Table 3. Results of Means and Standard Deviation of Self-Power Scale by Gender and Academic Specialisation

Variables	Category	Mean	Standard deviation
Sex	Male	3.30	0.41
	Female	3.21	0.38
Academic specialization	Scientific	3.24	0.40
	Humanities	3.23	0.38

Results showed that gender and academic specialization significantly differed in the means and standard deviations of the level of self among Al al-Bayt University students. Two-way ANOVA analysis was utilized to determine the statistical differences between the means, as shown in Table (4).

Table 4. The Results of the Tree-Way ANOVA for the Self-Power Scale

Source of variance	SS	Df	MS	F-value	Sig
Sex	.981	1	.981	6.553	.011
Academic specialization	.008	1	.008	.052	.820
Error	93.387	624	.150		
Total	95.212	629			

The results of Table 4 demonstrate:

- Statistically significant gender differences ($\alpha = 0.05$) were observed. The f-value was 6.553 with a statistical significance of 0.011, the differences favouring males.
- No statistically significant differences ($\alpha = 0.05$) were attributable to the effect of academic specialization, as the f value was 0.052 and the statistical significance was 0.820.

Question Three: What is the predictive ability of the big five personality traits in self-efficacy among Al al-Bayt University students? The Pearson correlation coefficient was obtained as shown in Table 5 to answer this question.

Table 5. Results of The Pearson Correlation Coefficient for the Five Big Personality Traits

Domain	S1	S2	S3	S4	S5	S6	S7	S8	TS	P1	P2	P3	P4	P5
S1	1													
S2	.626**	1												
S3	.537**	.564**	1											
S4	.504**	.579**	.531**	1										
S5	.459**	.530**	.633**	.528**	1									
S6	.535**	.587**	.643**	.595**	.657**	1								
S7	.519**	.484**	.672**	.530**	.618**	.609**	1							
S8	.255**	.232**	.319**	.369**	.308**	.381**	.395**	1						
TS	.723**	.758**	.864**	.725**	.784**	.850**	.820**	.421**	1					
P1	-.016	-.020	-.010	.092*	.018	.041	.109**	.189**	.039	1				
P2	.538**	.483**	.536**	.455**	.525**	.580**	.527**	.290**	.656**	.106**	1			
P3	.334**	.351**	.397**	.359**	.438**	.449**	.404**	.340**	.494**	.205**	.567**	1		
P4	.210**	.235**	.218**	.312**	.235**	.327**	.304**	.418**	.332**	.409**	.349**	.443**	1	
P5	.313**	.308**	.289**	.312**	.296**	.308**	.358**	.271**	.389**	.405**	.396**	.442**	.490**	1

Note. ** Correlation is significant at the .01 level (2-tailed).

*Correlation is significant at the .05 level (2-tailed).

Domain Self-Power: S1: Positive Self-Concept; S2: Self-Esteem; S3: Self –Efficacy; S4: Self-Worth; S5: Self-Regulation; S6: Self-actualization and acceptance; S7: Self-Management and Self-control; S8: Self-Monitoring.

Domain Big Five Personality: P1: Neuroticism; P2: Extraversion; P3: Openness to Experience; P4: Agreeableness; P5: Conscientiousness.

The results of Table 5 exhibited a positive and negative relationship, significant and not statistically significant, between the Big Five personality traits and the total score of self and its dimensions. Multiple linear regression analysis was used to assess the predictability of the Big Five personality traits in total self-scores among Al al-Bayt University students. The predictor variables were included in the regression equation using a stepwise approach, as shown in Table 6.

Table 6. Results of the Multiple Linear Regression Analysis (Stepwise)

Predictor variables	(R)	Cumulative interpreted contrast ratio	(R2)	(β)	F value	T value	Intercept	Sig
Extraversion	.656	.431	.431	.434	475.083	21.796	1.799	.000
Openness to Experience	.673	.453	.022	.114	259.285	5.019	1.631	.000
Conscientiousness	.681	.463	.01	.090	179.976	3.485	1.505	.000
Neuroticism	.688	.473	.01	-.071	140.513	-3.513	1.599	.000
Agreeableness	.691	.477	.004	.057	114.051	2.189	1.560	.000

Dependent variable: Self-Power measure

Results in Table 6 showed that all four independent variables were involved in predicting the total self-scores (extraversion, openness to experience, conscientiousness, neuroticism, and agreeableness). They explain (47.7%) of the variance of the total self-scores. Extraversion was the most predictive of the Self scores as it explained (43.1%) of the variance, followed by Openness to experience, which explained (0.022%), Conscientiousness explained (0.01%), Neuroticism explained (0.01%), and Agreeableness explained (0.004%) of the variance. The percentage of variance explained by these variables was statistically significant at the significance level ($\alpha = 0.05$).

Table 6 illustrates that an increase in extraversion by one standard unit (standard deviation) increases the self-scores by 0.434 standard units. And that the increase in openness to experience by one standard unit (standard deviation) increases the measure of self by 0.114. The increase in conscientiousness by one standard unit (standard deviation) increases the self-scores by 0.090 standard units. The rise in neuroticism by one standard unit (standard deviation) decreases self-score by (.071). Furthermore, the increase in acceptability by a standard unit (standard deviation) increases the scores of self-power by .057. Stating that these predictive variables were statistically significant at the significance level ($\alpha = 0.05$).

5. Discussion

The results of the first question demonstrated that Al al-Bayt University students have a medium level of total self-scores and all of its dimensions, except self-actualization and acceptance, which got a high level.

The researchers attributed this result to the characteristics of the age group of the sample, as adolescents, who are frequently eager to elevate themselves, distinguish themselves from others, and protect themselves from feelings of inferiority, as well as progress towards social maturity, acquisition of behavioral and social standards, assuming responsibility, forming new social relationships, and making decisions regarding education, which push them to elevate themselves. It may also be attributed to the impact of positive reinforcement on the student's successful reaction, as high self-efficacy is influenced by the intensity of motivation in achievement and its effect on conquering all difficulties.

This result is consistent with Mahasneh et al. (2022), which showed a medium level of self-regulation, and with Al-Kafaween (2019), which reported a medium level of self-esteem, and Ryan et al. (2013), which exhibited a medium level of self-worth. In contrast, it disagrees with the finding of Masser (2021), which revealed a high level of self-monitoring.

The results of the second question revealed statistically significant gender-related differences in total self-scores in favour of males. The researchers attributed this finding to the traits of the masculine society, which places obligations on students' shoulders and forces them to face difficulties that let them enjoy a high self, reflected in their personal self-confidence. When compared to Western societies, Jordanian society exhibits more gender stereotypes and places more limits on the activities of men and women. Female social engagement is less common in Jordanian society than in men since women are subject to stricter restrictions on their social activities (Atoum, 1997).

The academic specialization variable has no statistically significant impact on self-power level. The researchers may explain this finding by noting that no apparent differences exist between the scientific and human disciplines' activities and incentives for raising students' self-esteem. The complexity and character of the material in scientific disciplines increase students' initiative and tenacity. Ensuring their success will result in their elevation and capacity to deal with the challenges they encounter. In contrast, the academic disciplines in the humanities have a direct impact on daily life. They have human significance and individual and societal experiences, positively impacting students' self-esteem.

The results of the third question revealed that extraversion, openness to experience, conscientiousness, neuroticism, and agreeableness are the factors that predict the general scores of the self, and they jointly account for 47.7% of the scale's explanatory variance. Again, the self-general score was most well predicted by extraversion, which accounted for 0.431% of the variation. The extraversion dimension is the most reliable predictor of self. The researchers explain the regression model's findings about the order of the five big five personality traits' influence on self-scores by the fact that extroversion is a personality trait that reflects the social side of a person's nature. It encompasses a love of social interaction, an active approach, sympathy, cooperation, altruism, and positive feelings toward others. Extroverts also enjoy working hard and prefer learning environments that inspire them and boost their activity.

The dimension of openness to experience in the second order has an impact on the self, where those who are open to experience are characterized by broad imagination in visualizing their goals, contemplative and open in their thinking, seeking challenges and expecting more diverse life experiences and having the desire to improve and change the current situation. All of these qualities help in self-improvement. The conscientiousness dimension comes in the third order as having an impact on the self, as conscientiousness describes individuals who control their motives, and those with a vigilant conscience are characterized by an orientation towards achievement and motivation for goal-directed behaviour. All of these factors positively affect each other.

The neuroticism dimension comes in the fourth order as it affects the self, as neurotic individuals are characterized as anxious and frustrated and are characterized by maladjustment or

maladjustment in forming relationships with others and maintaining these relationships. All of these factors form a negative attitude toward the self. The acceptability dimension in the fifth order impacts the self, as acceptability refers to how individuals interact with others in various fields, such as trust, integrity, altruism, compliance, and humility. They also procrastinate on matters for others and do not compromise on their positions.

This result is consistent with (Abdel-Khalek, 2014; Abdel-Khalek, 2018), which indicated negative self-correlation in the neuroticism dimension.

6. Recommendation

Considering the results of this research, the researchers recommend the following:

1. Holding counselling and training programs for students to develop their self-efficacy effectively.
2. Enhancing self-levels in female students by motivating them to invest their energies in social and academic interactive contexts.
3. Benefiting from the correlation and the predictive ability of the extraversion factor, particularly in developing training programmes that enhance university students' self-esteem and train them to develop their personality traits.

Declarations

Conflicts of Interest. The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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References

- Abdel-Khalek, A. (2014). Positive self and its relationship to neuroticism. *Journal of Psychology*, 113, 47-31.
- Abdel-Khaleq, A. (2018). The positive self is an indicator of the good life. *The Egyptian Journal of Psychological Studies*, 99 28, 15-1.
- Abdul Amir, N. (2011). Self-esteem and its relationship to the skilful performance of junior and youth basketball players. *Journal of Physical Education Sciences*, 4(3), 295-330.
- Abu Shamala, R. (2016). Quality of Life and Its Relationship to Self-Esteem and Life Skills among the Wives of the Martyrs in the Gaza Strip. Master's Dissertation, The Islamic University, Gaza
- Al-Ayed, A. (2019). The Relation between Self-Management and the Five Big Personality Factors among Secondary School Students in Rass, Saudi Arabia. *Journal of Social Studies*, 25(2), 23–1. <https://doi.org/10.20428/jss.v25i2.1533>
- Al-Kafaween, A. (2019). Self-esteem and its relationship to academic specialization, family dissolution, and place of residence among a sample of female students at Al-Hussein Bin Talal University. *Scientific Journal - Assiut University*, 35(9), 294–321.
- Al-Khatib, N., Maliki, K., & Abdel-Hamid, A. (2021). Self-management and its relationship to professional competence among kindergarten teachers. *Educational and Social Studies*, 27(8), 76-29.
- Al-Shehri, M., & Khalifa, H. (2020). Self-Regulation and Its Relation to the Big Five Factors of Personality among a Sample of Students at King Abdul-Aziz University in Jeddah. *Journal of King Abdulaziz University, Saudi Arabia*, 28(5), 268-245.

- Atoum, A. (1997). Effect of public and private commitment and the counter persuasive message on attitude change. *Dirasat*, 24(1), 201-210.
- Atoum, A., Al-Adamat, O., & Al-Shraifin, N. (2023). Constructing a comprehensive self- scale among Jordanian universities students. *Journal of Umm Al-Qura University for Educational and Psychological Sciences*, 16(2), 136-153. <https://doi.org/10.54940/ep35349336>
- Corsin, R., & Auerbach, A. (1996). Concise Encyclopedia of Psychology, John Wiley & Sons, London.
- Costa, P., Terracciano, A., & McCrae, R. (2001). Gender differences in Personality traits across cultures: Robust and surprising findings. *Journal of Personality and Social Psychology*, 81, 322-331. <https://doi.org/10.1037//0022-3514.81.2.322>
- Filip, L., Pol, C., Filip, D., & Jan, D. (2002). Medical Students' Personality Characteristics and Academic Performance: A Five Factor Model Perspective. *Medical Education*, 36(11), 1050–1056.
- Gillespie, A. (2004). Self-Affirmation Intervention for Self-worth Protective Student. The Degree of Doctor of Philosophy in psychology. United States International University.
- Ismail, H. (2021). Psychopathic personality and its relationship to self-actualization among female students at Majmaah University. *Saudi Journal of Social Studies*, 7, 134-117.
- Jaradat, A., & Abu Ghazal, M. (2014). Differences in the Big Five of personality according to gender and need for cognition. *Journal of Educational and Psychological Sciences*, 15(3), 152-126.
- John, O. P., Donahue, E. M., & Kentle, R. L. (1991). The big five inventory-versions 4a and 54. Technical Report, IPAR, University of California.
- Kharnoub, F. (2015). Self-esteem and the five major factors of personality as predictors of self-pity, a field study among a sample of students of the Faculty of Education at Damascus University. *Damascus University Journal*, 31(2), 315-285.
- Kihlstrom, J. F., & Klein, S. B. (1997). Self-knowledge and self-awareness. In J. G. Snodgrass & R. L. Thompson (Eds.), *The Self across psychology: Self-recognition, self-awareness, and self-concept* (pp. 5 – 17). New York: The New York Academy of Sciences. <https://doi.org/10.1111/j.1749-6632.1997.tb48242.x>
- Kolawole, O. (2013). The Influence of Big Five Personality Factors on Lecturers – Students' Interpersonal Relationship. *The African Symposium*, 13(1), 28-33.
- Mahasneh, A., Al-Awan, A., & Al-Adamat, O. (2022). Academic burnout and its relationship with self-regulation and emotional regulation among Hashemite University Students. *The Jordanian Journal of Educational Sciences*, 18(2), 242-217.
- Maria, K., & Harnish, D. (2000). Self-Esteem in Children, *British Journal of Educational Psychology*, 70(1), 229–242.
- Masser, N. (2021). Emotional extortion and its relationship to self-monitoring among students of the College of Education for Girls. *Al-Qadisiyah Journal of Arts and Educational Sciences*, 1, 274–241.
- McCrae, R. R., & John, O. P. (1992). An introduction to the five-factor model and its applications. *Journal of personality*, 60(2), 175–215. <https://doi.org/10.1111/j.1467-6494.1992.tb00970.x>
- Mohamed, G. (2015). Personality traits and their relationship to self-discovery among adolescents. *Zakho University Journal*, 4(2), 151–134.

- Mostafawi, M., & Iassoued, Z. (2021). Quality of life and its relationship to self-concept among students of El-Wadi University. *Journal of Human Sciences of Oum El Bouaghi University*, 8(1), 868-851.
- Neff, K. D., Kirkpatrick, K. L., & Rude, S. S. (2007). Self-compassion and adaptive psychological functioning. *Journal of research in personality*, 41(1), 139-154. <https://doi.org/10.1016/j.jrp.2006.03.004>
- Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Review of educational research*, 66(4), 543–578. <https://doi.org/10.3102/00346543066004543>
- Reber, A. S., & Reber, E. S. (2001). *The Penguin Dictionary of Psychology* (3rd ed.). London: Penguin Books.
- Ryan, A. M., Shim, S. S., & Makara, K. A. (2013). Changes in academic adjustment and relational self-worth across the transition to middle school. *Journal of youth and adolescence*, 42(9), 1372-1384. <https://doi.org/10.1007/s10964-013-9984-7>
- Stefan, W., & Eth, Z. (2008). Personality on Social Network Sites: An Application of the Five Factor Model. *Sociology Working*, (7), 1-16.

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