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The Big Five Traits of Personality and Some Demographic Variables as Predictors of Internet Addiction

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ABSTRACT

This study aims to reveal the relationship between the Big Five Personality Traits and some demographic variables predicting Internet addiction among students of the Faculties of Science and Arts at Port Said University, and to identify the differences between males and females in internet addiction, and to identify the differences between males and females in the Big Five Personality Traits. The study was conducted on a sample of (300) male and female students in the Faculties of Science and Arts from regular students in the academic year 2024/2025 – 1446 AH. The researcher used the Big Five Personality Traits Scale prepared by Costa and McCurry (2002), and the Internet Addiction Scale for University Students prepared by Moataz Sayed and Al-Hussein Muhammad (2019). The reliability and validity of the tools were verified, and reliance was placed on the descriptive analytical approach, and the results came as follows: (1) There is a correlation between internet addiction and the Big Five personality traits among students in the Faculties of Science and Arts. (2) There are significant differences between males and females in internet addiction and the Big Five personality traits, with males being more internet addicted than females. (3) The Big Five personality traits differ according to gender (male-female) among students in the Faculties of Science and Arts, with male students in the Faculties of Science being more introverted than male students in the Faculties of Arts. (4) The Big Five personality traits differ according to academic specialization (science or literature) among students in the Faculties of Science and Arts, with students in the science department being more open to experience than students in the literature department.

Introduction

This research explores a significant topic in the field of personality psychology, focusing on a growing segment of the population: individuals addicted to the Internet."

Internet addiction is a distinct psychological disorder that warrants both clinical and research attention. The significance of this issue—often

referred to as internet addiction or problematic internet use—has grown alongside the rapid advancements in information and communication technology. These developments have made Internet access easier and more widespread, enabling individuals to connect from virtually anywhere. The Internet has become an integral part of daily life—at home, on the street, in social clubs, and even in the workplace—and now plays a central role in various aspects of social interaction, both virtual and real.

Interest in the personality model began with the study of the Big Five personality traits, each of which encompasses a wide range of sub-traits. The development of this model can be traced back to the work of Gordon Allport, who focused on measuring personality traits and identified several key dimensions, including extroversion, introversion, agreeableness, and openness to experience. The Big Five personality traits have since become a foundational model for understanding the relationship between personality and various behaviors, including academic performance.

Numerous studies have explored the relationship between Internet addiction and the Big Five personality traits, examining how excessive Internet use may influence an individual's personality—potentially leading to increased introversion or heightened neuroticism. Research also considers demographic factors such as gender (male vs. female) and academic specialization (scientific vs. theoretical), as well as the individual's motivation for Internet use—whether for obtaining information, browsing, studying, working, shopping, or entertainment through chat rooms and other platforms. Additionally, economic status (low, medium, or high) is examined for its potential influence on patterns of Internet usage.

The issue of addiction arises from the fact that most internet users are unaware of the boundaries and dangers associated with this phenomenon, putting them at risk of addiction without recognizing it. Internet addiction is like other forms of addiction. In its broadest sense, addiction is the compulsive engagement in a behavior and the inability to stop it. The consequences of addiction are severe, including spending excessive hours online to the detriment of daily responsibilities and decision-making. Internet addiction can lead to social isolation, mood swings, and the breakdown of family relationships. As a result, many American universities and research institutions have begun to define and raise awareness about internet addiction by organizing scientific seminars and offering counseling, recognizing that it is no different from other forms of addiction.

Many individuals acknowledge their addiction to the internet and feel powerless to stop for various reasons. They lack the strength to quit and are unable to go a single day without it. Thus, internet addiction is a serious condition that needs early detection and treatment. Numerous studies on internet addiction have shown high relapse rates among addicts. The danger of relapses stems from the reactivation of their schema index, which reflects the strength of the links between activation and deactivation processes, influencing relapse outcomes. Therefore, studying personal characteristics and utilizing specific theories, such as schema therapy, in relapse prevention during addiction treatment, can support the recovery process and ensure the continuity of treatment.

Subject of Study

This study examines the widespread use of the Internet among young people and its impact—both positive and negative. It highlights the nature of the Internet as a fast-paced means of communication that has introduced a simplified and abbreviated vocabulary commonly used among youth. Given that the Internet represents a major aspect of the rapid development in information technology over the past decade, the researcher found it essential to investigate its influence on young people's thinking, particularly in relation to websites, blogs, and chat rooms. The study also aims to raise awareness about the importance of preserving language integrity. To achieve this, the research focuses on a random sample of university students aged 18 to 21, as they represent the demographic with the highest Internet usage."

This study addresses several key questions that it seeks to answer:

1. What is the correlation between internet addiction and the Big Five personality traits among students in the Faculty of Science (as a model for practical study) and students in the Faculty of Arts (as a model for theoretical study)?
2. Does the level of internet addiction vary by gender among students in the Faculties of Science and Arts?
3. Do the Big Five personality traits differ by gender among students in the Faculties of Science and Arts?
4. Do the Big Five personality traits vary according to scientific versus theoretical specialization among students in the Faculties of Science and Arts?

Aims

This study aims to achieve the following:

- Identify the extent of Internet penetration among university students.
- Testing the differences between students regarding Internet addiction according to the variable of gender and academic specialization.
- Examine differences in the level of internet addiction based on gender and educational level.
- Acquaintance of the most demographic variables predicting internet addiction among the study sample.

Significance

Theoretical Significance

1. Address the significant phenomenon of internet addiction, which is relatively uncommon, particularly in Arab societies, due to its recent emergence.
2. Clarify the role of addiction specialists in education and raise awareness about the importance of educating individuals, governments, and society on the dangers of compulsive internet use.

Practical Significance

1. Provide support to young individuals struggling with internet addiction and guiding them toward overcoming harmful online habits.
2. Support health and psychological professionals in offering interventions to reduce the negative impacts of internet addiction, while promoting the positive and purposeful use of social media.
3. Raise awareness and educate university students about the dangers of internet addiction, equipping them to navigate the digital age responsibly and contribute to community development.
4. Assist professionals in identifying personality traits that act as protective factors against internet addiction, with the goal of designing effective guidance and prevention programs.
5. Emphasize the critical role of psychological clinics in involving families in the treatment and recovery process for internet-addicted children.
6. Highlight the effectiveness of cognitive behavioral therapy (CBT) in addressing and treating internet addiction.
7. Help specialists identify personality traits that serve as protective factors against internet addiction, with the aim of developing guidance programs to promote healthier internet use.

Terms

1. Internet Addiction - Internet Addiction Disorder

Addiction refers to a strong, habitual tendency to engage in certain behaviors. In modern usage, the term addiction extends beyond substance such as drugs, alcohol, or medications alone to include internet addiction and television addiction. (Al-Ghoul, 2011, 193:92).

"The operational definition of Internet addiction in this study refers to an individual who spends more than eight hours per day on the Internet. This is measured by the score obtained on the Internet Addiction Scale, where a higher score indicates a greater level of addiction, and a lower score reflects a lesser degree of addiction."

2. The Big Five Personality Traits

They represent a unique pattern of thinking, feeling, and behavior that is relatively stable across time and circumstances. They can be

designated within a framework of five major traits called the Big Five Personality Traits: *neuroticism, extroversion, openness to experience, acceptance,* and *conscientiousness* (David, 2014).

"The operational definition of the Big Five Personality Traits refers to the score obtained by the examinee on the Big Five Personality Traits Scale. A high score reflects a strong presence of these traits in the individual, while a low score indicates a weaker presence of the traits."

3. Demography

Demography, also known as population studies, is a subfield of sociology and human geography concerned with the scientific study of population characteristics, including size, distribution, density, composition, ethnicities, and growth components (births, deaths, migration, disease rates, socioeconomic status, age and sex ratios, income levels, etc.) in a specific region (Majid Othman, 2016, 33).
Operational definition of demographic factors/group of variables included by the researcher in the current study, namely (gender - academic specialization) for female university students.

Theoretical Framework and Literature Review

Axis I - The Big Five Traits of Personality

The model of the Big Five Traits of personality is one of the most widely recognized and accepted frameworks in the study of human personality. It categorizes personality into five broad dimensions, also known as traits, that psychologists have used to describe and name personality traits. These traits represent the underlying structure behind all personality traits. The Big Five consists of five broad traits of personality traits: extroversion, acceptance, conscientiousness, neuroticism, and openness to experience (Carducci & Nave, 2020, 158).

Maknon, Allport, and Eysenck agreed in their conceptualization of personality as the stable and integrated organization of the individual traits. The temperamental traits reflect the degree of stability in the individual's emotional behavior. Cognitive traits represented by intelligence and

indicative of mental consistency. Physical traits pertain to the individual's bodily constitution and role in how the person adapts to their environment. (Sufyan, 2014).
The concept of character strengths focuses on studying the virtues and strengths that enable individuals and societies to flourish and develop. Positive psychology emphasizes three basic concerns: positive emotions, positive individual traits, and positive institutions. (Abu Halawa 2014, 117, 17).

Relevant Literature

- "The study by Noftle and Shaver (2006) aimed to examine the relationship between adult attachment dimensions and the Big Five Personality Traits. The sample included 5,417 female and 2,901 male university students aged between 18 and 24. The researchers utilized the Big Five Personality Inventory and the Experiences in Close Relationships Scale to assess personality traits and attachment dimensions. The results indicated that while most correlations were statistically significant, they were generally weak due to the large sample size. The study also found that males were less neurotic than females. Additionally, there was a strong correlation between anxious attachment and neuroticism. Avoidant attachment showed a strong negative correlation with agreeableness and moderate correlations with extraversion, agreeableness, and conscientiousness, while its correlation with openness was weaker."

- Hassan and Yousef (2023) explored the causal relationships between creativity, the Big Five personality traits and future time perspective. Utilizing a **path analysis model**, the study was grounded in theoretical frameworks and supported by previous research findings. The sample consisted of (368) students from Al-Qasemi College students inside the Green Line. Some tools were used, including the Academic Creativity Scale of Al-Zaghbi (2018), the Future Time Perspective Scale by (Zimbarde and Boyd, 1999) and translated by Rabi et al. (2019), and the Big Five Personality Scale of Jaradat and Abu Ghazal (2014). The analysis confirmed

that the model indicators could be achieved after modifying the proposed model, and the presence of statistically significant direct effects and statistically significant indirect effects of some of the Big Five Traits on some dimensions of the future time perspective, and the presence of a statistically significant indirect effect of some of the Big Five personality Traits and some dimensions of the future time perspective on academic advancement.

Axis II - Demographic Variables Demography is the science that studies with population structure.

It is a branch of sociology and human geography that focuses on the scientific study of population characteristics. These characteristics include size, distribution, density, composition, ethnicities, components of growth (such as fertility, mortality, and migration), disease rates, economic and social conditions, age and sex ratios, income levels, and other factors in a specific region.

The primary aim of population studies is to understand the underlying causes behind demographic trends- for example why families have many children, the factors contributing to increased death rates, the reasons behind migration and geographical distribution of population. Gaining insights into these issues is essential for identifying and planning for current and future human needs (Majid Othman, 2012, 33).

Relevant Literature

- A study conducted by Akram, 2019 aimed to examine the differences in the quality of life among female university students based on selected demographic variables, including academic specialization, marital status, educational level, and parents' educational level. The research sample consisted of (186) female students from Taif University enrolled in both scientific and literary departments and spanning the first and fourth years in the second semester of the academic year (1432-1433 AH). The participants ranged in age from 18 to 25 years, with a mean age of

(21.37) and a standard deviation of (1.548). The study utilized a quality-of-life scale, and the results revealed statistically significant differences between female students of scientific and literary specializations in the dimensions of learning and study quality-specifically in favor of female students from the literary specialization. Additionally, statistically significant differences were found between the first- and fourth-years students in the dimensions of quality of mental health and time management with fourth-year students scoring higher in both areas.

- "The study by Al-Ammar (2014) aimed to examine Internet addiction among students at Damascus University, Daraa branch, in relation to several variables: gender (male vs. female), academic specialization, level of education, economic status, number of hours spent online, and preferred websites. The researcher adopted a descriptive analytical approach, using a newly developed Internet Addiction Scale. The sample consisted of 674 male and female students from various colleges and institutes. The results indicated no significant relationship between Internet addiction and gender. Similarly, there were no significant differences in addiction levels based on academic specialization, except for some distinctions between arts students and those in education, law, science, and economics, with higher addiction levels observed among arts students. The average daily time spent online was reported as 2.78 out of a maximum of 4 points."

Axis III - Internet Addiction

Tori. D 2000 defined Internet addiction as a condition involving pathological and maladaptive use of the internet that results in behavioral disturbances. This condition is characterized by various symptoms, including a progress increase in the number of hours spent online and consistently exceeding the time limits originally set by the individual.

1. Internet Abuse

Sadek (1986) defines abuse as excessive,

continuous, or periodic use of the Internet, with the aim of achieving a sense of comfort or specific desired effects, which the individual voluntarily seeks.

2. Habituation

According to Fayed (2010, pp. 29-31), habituation refers to a state in which an individual develops strong desire to engage in a particular behavior due to the comfort it provides. Unlike addiction, this desire is not driven by an aversive force, which is a key distinction between habit and addiction.

3. Dependence

The distinction between addiction and habituation has long been debated by expert committees at the World Health Organization. As a resolution, the term **"dependence"** was adopted to encompass the shared characteristics of both concepts while avoiding the ambiguity associated with their separate usage. Fathy (2011, p. 33) defines dependence as a psychological and sometimes physical condition resulting from the interaction between a living organism and a psychoactive substance. It is characterized by behavioral and physiological responses, often including a compulsion to use the substance either continuously or intermittently, driven by the pursuit of its psychological effects or to avoid the discomfort caused by its absence.

Relevant Literature

- A study by Al-Zaidi (2014) aimed to examine the relationship between Internet Addiction, social communication, and academic achievement among students at the University of Nizwa. The study employed a descriptive correlational approach. The total study population consisted of 1,632 male and female undergraduate students. An exploratory sample of (50) students was initially selected, while the main sample included 412 students representing (25.2%) of the total population. Participants were randomly selected from the university's four departments and colleges. The results indicated a very weak correlation between Internet addiction and academic achievement among the study participants.

- "Sami Tayeh (2000) conducted a study on Internet usage in the Arab world, using a sample of 5,000 university students from Egypt, Saudi Arabia, the United Arab Emirates, Bahrain, and Kuwait. A descriptive analytical approach was employed. The results revealed that 72.6% of the participants used the Internet. For the majority (91.5%), the Internet was regarded as an important source of information. Entertainment and leisure activities were the second most common use, reported by 88.8% of the sample, followed by communication via email, which accounted for 59.9%. The study found no significant differences in Internet usage between male and female participants."

Methodology

The researcher employed a descriptive analytical approach to analyze the Big Five Personality Traits and several demographic variables that predict internet addiction.

Sample

It consisted of (300) male and female students from the Faculties of Arts and Sciences at Port Said University Age ranged between (18-21) years, consisting of 150 males and 150 females from different segments of society. A random method was adopted to select samples.

"All university students in the study sample were single. The sample included 150 male and 150 female students from the Faculty of Arts, and 150 male students from the Faculty of Science. The economic level of the Science students ranged from average to above average, while the economic level of the Arts students ranged from low to above average. None of the participants reported having any chronic illnesses or disabilities, nor had they visited a mental or neurological health clinic or undergone any behavior modification programs."

Tools

To achieve the research objectives, the researcher employs two scales:

First: The Internet Addiction Test (IAT).

This scale consists of 20 items and is based on a five-point Likert scale. It is considered the first validated instrument for assessing Internet addiction. The scale demonstrates strong reliability and provides essential diagnostic characteristics. Respondents are instructed to consider only the time spent on the Internet for non-academic and non-work-related purposes when completing the scale.

To assess the level of addiction, addicted individuals must answer the questions using this scale. (0 = not applicable, 1 = rarely, 2 = sometimes, 3 = frequently, 4 = very often, 5 = always) Internet Addiction Test: (Prepared by Muhammad, 2019).

❖ Psychometric properties of the scale in this study

The researcher examined the psychometric properties of the Internet Addiction Scale as follows:

1. Validity of the scale
- **Internal Consistency**

To assess the internal consistency of the scale, the researcher administered it to a sample of 46 students from Faculties of Science and Arts at Port Said University. The correlation coefficients between each item and the total scale score were calculated using the Statistical Package for Social Sciences (SPSS), version 28. The results of the item- total correlations are presented in Table 1.

Table (1)
Values of correlation coefficients of scale items with the total score

Item No.	Correlation coefficient value	Item No.	Correlation coefficient value	Item No.	Correlation coefficient value	Item No.	Correlation coefficient value
1	**0.755	6	**0.727	11	**0.722	16	**0.761
2	**0.721	7	*0.211	12	**0.710	17	**0.735
3	**0.717	8	**0.719	13	**0.747	18	**0.766
4	*0.216	9	**0.736	14	**0.716	19	*0.210
5	**0.718	10	**0.733	15	**0.719	20	**0.751

(*) Significant at 0.05 level (**) Significant at 0.01 level

Table 1 shows that the correlation coefficients between the individual items and the total score of the scale are statistically significant at the 0.01 level for most items, while some are significant at the 0.05 level. This indicates a satisfactory level of internal consistency among the items, suggesting that the scale demonstrates an appropriate degree of reliability and coherence in measuring Internet addiction.

2. Scale Reliability
A- Cronbach's Alpha Coefficient Method

The researcher employed Cronbach's Alpha Coefficient to assess the reliability of the scale. When calculating the overall alpha value with no items removed, the scale demonstrated a reliability coefficient of 0.776, indicating an acceptable level of internal consistency. Additionally, the reliability coefficient for each individual item was computed. The values of these item-level reliability coefficients are presented in Table 2.

Table (2)
Alpha coefficient values for scale items

Item No.	Alpha coefficient value	Item No.	Alpha coefficient value	Item No.	Alpha coefficient value	Item No.	Alpha coefficient value
1	0.771	6	0.775	11	0.771	16	0.774
2	0.775	7	0.774	12	0.774	17	0.772
3	0.774	8	0.774	13	0.772	18	0.775
4	0.773	9	0.772	14	0.773	19	0.771
5	0.775	10	0.775	15	0.775	20	0.775

Table 2 shows that all item-level reliability coefficients are lower than the overall reliability coefficient of the scale, indicating that each item contributes positively to the scale's overall internal consistency and that the items demonstrate an appropriate degree of stability.

B- Split-Half Method

To further verify the reliability of the scale, the split-half method was employed. The correlation coefficient between the two halves of the scale was 0.565. After adjusting for the split using the Spearman-Brown prophecy formula, the corrected reliability coefficient was 0.736. These results confirm that the scale possesses an acceptable level of reliability.

Based on the results of the validity and reliability analyses, the final version of the scale consists of 20 items designed to measure Internet addiction among university students. In its current form, the scale is deemed appropriate for administration to the main study sample.

Second: The Big Five Personality Traits Scale

This scale was developed by Costa, McCrae, and Al-Ansari (2002) and is recognized as the first objective instrument designed to measure the fundamental dimensions of personality. It comprises 60 items divided equally into five subscales: neuroticism, extraversion, openness, acceptance, and conscientiousness. Each subscale contains 12 items, with respondents rating each statement on a five-point Likert scale (5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree).

*Psychometric properties of the scale

The researcher examined the psychometric properties of the Big Five Personality Traits scale as follows:

[1] Validity

- Internal Consistency

The researcher administered the scale to a sample of 46 students from the Faculties of Arts and Sciences at Port Said University to assess internal consistency. This was done by calculating the correlation coefficients between the score of each item and the total score of its respective subscale, using the Statistical Package for the Social Sciences (SPSS), version 28. The resulting correlation coefficients are presented in Table 3.

Table (3)
Values of correlation coefficients of the scale items with the total score of the subscale

Item No.	Correlation Coefficient Value	Item No.	Correlation Coefficient Value	Item No.	Correlation Coefficient Value	Item No.	0
1	**0.557	16	**0.606	31	**0.663	46	**0.700
2	**0.654	17	**0.616	32	**0.674	47	**0.691
3	**0.519	18	**0.611	33	**0.673	48	**0.584
4	**0.357	19	**0.672	34	**0.653	49	**0.652
5	**0.653	20	**0.721	35	**0.703	50	**0.649
6	**0.433	21	**0.762	36	**0.688	51	**0.625
7	**0.738	22	**0.707	37	**0.650	52	**0.708
8	**0.753	23	**0.653	38	**0.722	53	**0.703
9	**0.612	24	**0.659	39	**0.647	54	**0.698
10	**0.582	25	**0.702	40	**0.704	55	**0.717
11	**0.608	26	**0.693	41	**0.706	56	**0.690
12	**0.705	27	**0.717	42	**0.644	57	**0.729
13	**0.697	28	**0.582	43	**0.730	58	**0.682
14	**0.758	29	**0.694	44	**0.719	59	**0.671
15	**0.628	30	**0.678	45	**0.666	60	**0.647

(**) Significant at 0.01 level

Table 3 shows that the correlation coefficients between the items and the total score of each subscale are statistically significant at the 0.01 level. This indicates a satisfactory level of internal consistency between the items and their respective subscales, confirming that the scale demonstrates an appropriate degree of reliability.

Scale Reliability
A- Cronbach's Alpha Coefficient Method

The researcher calculated the scale's reliability using Cronbach's Alpha coefficient. When individual item scores were removed, the overall alpha coefficient for the entire scale reached 0.813, indicating good internal consistency. Additionally, the reliability coefficient for each item was computed, with the corresponding values presented in Table 4.

Table (4)
Alpha Coefficient Values for the Scale Items

Item No.	Alpha coefficient value	Item No.	Alpha coefficient value	Item No.	Alpha coefficient value	Item No.	Alpha coefficient value
1	0.811	16	0.809	31	0.813	46	0.810
2	0.813	17	0.811	32	0.810	47	0.809
3	0.810	18	0.810	33	0.809	48	0.811
4	0.809	19	0.808	34	0.811	49	0.810
5	0.811	20	0.811	35	0.812	50	0.809
6	0.812	21	0.810	36	0.810	51	0.811
7	0.810	22	0.811	37	0.812	52	0.812
8	0.812	23	0.812	38	0.810	53	0.810
9	0.810	24	0.810	39	0.809	54	0.811
10	0.809	25	0.809	40	0.809	55	0.813
11	0.811	26	0.811	41	0.811	56	0.810
12	0.810	27	0.812	42	0.810	57	0.809
13	0.808	28	0.810	43	0.808	58	0.811
14	0.811	29	0.812	44	0.812	59	0.811
15	0.810	30	0.809	45	0.810	60	0.810

Procedures

- **Study Methodology:** The nature of this study requires reliance on the descriptive analytical approach, which aims to gather scientific descriptions of the phenomenon under study in its current state and to study the relationships that exist between various phenomena.

Limitations

- **Objective Limits:** The study focused on the following variables: the Big Five personality traits, Internet addiction, and demographic factors among students from the Faculties of Science and Arts at Port Said University.
- **Human Limits:** The sample was restricted to students enrolled in the Faculties of Science and Arts at Port Said University.
- **Temporal Limits:** The study was conducted during the second semester of the academic year 2024, spanning approximately two months (November 10–December 11). The research will continue into the year 2025 (1447 AH).

Sample: The Big Five Personality Traits Scale and the Internet Addiction Scale were applied to students of the Faculties of Science and Arts at Port Said University, with ages ranging from (18-21) years, consisting of males and females from different departments of the university student body, numbering (300) male and female students.

Statics Used

Using the Statistical Package for the Social Sciences (SPSS.V.28), the researcher calculated the following:
1. Pearson's Correlation Coefficient
2. Cronbach's Alpha Coefficient
3. T-Test

Discussion of Hypotheses

Hypothesis I

To test the first hypothesis, which states that "*there is a statistically significant relationship between Internet addiction and the Big Five personality traits among students in the faculties of Science and Arts*," the researcher employed Pearson's sequential correlation coefficient using

the Statistical Package for the Social Sciences SPSS Version 28. The results of this analysis are presented in Tables 6 and 7.

Table (5)
Correlation coefficients between Internet addiction and the Big Five personality traits among Faculty of Science students

Variable	The Big Five Personality Traits				
	Neuroticism	**Extroversion**	**Openness**	**Acceptance**	**Conscientiousness**
	**0.321	**0.462	**0.396	**0.483	**0.575-

(**) Significant at 0.01 level

Table (6)
Correlation coefficients between Internet addiction and the Big Five personality traits among students in the Faculty of Arts

Variable	The Big Five Personality Traits				
	Neuroticism	**Extroversion**	**Openness**	**Acceptance**	**Conscientiousness**
	**0.455	**0.512-	**0.429	**0.432	**0.369

(**) Significant at 0.01 level

Table 5 shows statistically significant positive correlations at the 0.01 level between the five major personality traits (neuroticism, extraversion, openness to experience, acceptance, and conscientiousness) and Internet addiction among students in the Faculty of Science.

"Table 6 shows statistically significant differences between students from the Faculty of Arts and Science on the Big Five Personality Traits scale. Specifically, Arts students scored higher in the dimensions of Neuroticism and Extraversion. Additionally, significant differences were found in the Openness to Experience dimension, again favoring Arts students. Conversely, in the Agreeableness dimension, Science students scored higher than Arts students."

Specifically, the highest correlation was observed with conscientiousness (r = 0.575), which is statistically significant at the 0.01 level, while the lowest was neuroticism (r = 0.321). The results indicate no significant differences among Faculty of Science students in terms of the Big Five personality factors and Internet addiction. Furthermore, no significant gender differences (male vs. female) were found regarding motives for Internet use.

While it is clear from Table 5 that there are statistically significant positive correlations at 0.01 level between the five major personality traits (neuroticism - extroversion - openness to experience - acceptance - conscientiousness) and Internet addiction among students of the Faculty of Arts.

Specifically, the highest correlation was observed with conscientiousness (r = 0.575), which is statistically significant at the 0.01 level, while the lowest was neuroticism (r = 0.321). The results indicate no significant differences among Faculty of Science students in terms of the Big Five personality factors and Internet addiction. Furthermore, no significant gender differences (male vs. female) were found regarding motives for Internet use.

Similarly, Table 6 reveals statistically significant positive correlations at the 0.01 level between the Big Five personality traits and Internet addiction among students of the Faculty of Arts. The highest correlation was with extraversion (r = 0.512), followed by neuroticism

(r = 0.455), acceptance (r = 0.432), and conscientiousness with the lowest value (r = 0.369), all statistically significant at the 0.01 level.

These findings confirm a significant relationship between Internet addiction and the Big Five personality traits among Faculty of Arts students. Additionally, no fundamental differences were found within this group regarding Internet addiction and personality traits.

The researcher notes that the Big Five personality model is widely accepted in psychology as a comprehensive framework to describe human personality traits. It comprises five broad dimensions, also known as factors—that reflect the underlying structure of personality. While terminology has varied among researchers, extensive research over many years has revealed common themes in personality descriptions, leading to the broad acceptance of these five factors.

Testing the Fourth Hypothesis

To test the fourth hypothesis, which states that *"there is a statistically significant difference between the average scores of practical major students and theoretical major students on Internet addiction and the Big Five personality traits,"* the researcher employed the independent samples t-test using the Statistical Package for the Social Sciences (SPSS), version 28. The results related to Internet addiction are presented in Tables 7 and 8.

Table (7)
Means, standard deviations, t-values, and significance levels for practical major students and theoretical major students on Internet addiction

Sample \ Variable	Specialization						T Value	Significance
	Practical			Theoretical				
	Number	Mean	Standard Deviation	Number	Mean	Standard Deviation		
Internet Addiction	155	45	5.3	150	45.5	5.4	0.26	Null

Table (8)
Mean, standard deviations, t-value, and significance level for practical and theoretical students on the Big Five personality traits.

Sample \ Variable	Specialization						T Value	Significance
	Practical			Theoretical				
	Number	Mean	Standard Deviation	Number	Mean	Standard Deviation		
Neuroticism	155	42.7	9.2	150	43.2	8.8	0.46	Null
Extraversion	155	43.6	8.8	150	43.5	9.3	0.32	Null
Openness	155	44.8	8	150	45.5	7.1	0.79	Null
Acceptance	155	43.3	8.3	150	43.8	9.5	0.49	Null
Conscientiousness	155	43.4	9.2	150	44.7	8.9	1.3	Null

Table 8 shows that the t-value is not statistically significant, indicating that there is no significant difference between the average Internet addiction scores of students in practical (scientific) specializations and those in theoretical (literary) specializations.

It is clear from Table 7 that there are no statistically significant differences in Internet addiction due to the gender variable (male - female), and there are no statistically significant differences in Internet addiction due to the academic specialization variable, except for some differences between students of the Faculty of Arts on the one hand and students of the Faculty of Science on the other hand in favor of the Faculty of Arts.

Specifically, the t-value of 0.26 between students from the Faculty of Arts and the Faculty of Science is statistically insignificant. Additionally, the average Internet addiction scores for Faculty of Science students (M = 45) and Faculty of Arts students (M = 45.5) are very close, further confirming the absence of a significant difference. This suggests that Internet addiction levels are similar across scientific and theoretical specializations.

Table 8 shows that the t-values are not statistically significant, indicating no significant differences between practical (science) and theoretical (arts) specialization students in the Big Five personality traits.

Specifically, there are no statistically significant differences between science and theoretical majors across all five personality factors. This suggests a high degree of internal consistency among the personality dimensions regardless of specialization. The t-values for each factor are as follows: neuroticism (t = 0.64), extraversion (t = 0.32), openness to experience (t = 0.79), agreeableness (t = 0.49), and conscientiousness (t = 1.3)—all of which are statistically insignificant.

Regarding mean scores, openness to experience ranked highest with an average of 44.8, followed by extraversion at 43.6, agreeableness at 43.3, conscientiousness at 43.4, and neuroticism at 42.2. The results confirm that there are no statistically significant differences between scientific and theoretical students in the extraversion and openness dimensions.

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