

The Relationship between Five Factors Personality Traits of Nursing Students and Their Attitudes towards Mental Patients

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Received: January 25, 2024 Accepted: May 5, 2024 Published: September 24, 2024

doi:10.5296/ije.v16i3.21340 URL: <https://doi.org/10.5296/ije.v16i3.21340>

Abstract

This study aimed to reveal the relationship between the personal traits of nursing students and their attitudes toward mental Patients. The randomized sample consisted of (144) selected students in the Faculty of Nursing at Al al-Bayat University, their ages ranged from (18 to 22) years. The result concluded that nursing students' attitudes toward mental patients were negative. It also indicated that the trait openness to experience has a significant negative correlation on all domains of attitudes toward mental patients scale, the correlation of the conscientiousness trait with the domains of attitudes toward mental disorders is not significant, and the extraversion trait has significant positive correlation with stereotyping, pessimism and stigma domains. The agreeableness trait has a significant negative correlation with all domains of attitudes toward mental disorders scale. The neuroticism trait has a significant negative correlation with the domain of the tendency towards pity in students' attitudes toward mental patients, while the rest of the domains of students' attitudes toward mental patients were not significant.

The results also indicated that there are significant differences in all domains of the attitudes toward mental patients scale due to the gender variable in favor of males; That is, males had more negative attitudes toward mental patients than females. It is also clear that there are no significant differences for the variables of academic level and cumulative average in the dimensions of attitudes toward mental disorders.

The study recommends creating educational programs to educate students about the importance of carrying positive attitudes toward mental patients, which contributes to reducing the problems of mental patients.

Keywords: personality traits, nursing students, attitude towards mental disorders

1. Introduction

Studies conducted in developed countries on the attitudes of health workers towards mental patients contributed to reducing negative attitudes, where these studies provided recommendations about the negative effects on the subjectivity of the patient and the degree of improvement and the treatment they receive. It indicated that attitudes about mental disorders would change positively if we correct some of the myths about it, by increasing students' theoretical and practical knowledge in the health sector and allowing them to contact this group of patients.

The theoretical literature on attitudes indicates that they develop early in childhood and, later in life, societies continue to modify those attitudes (Hamaide & Mudallal, 2009). Attitudes have two functions: they direct behavior toward different goals away from negative outcomes, and they help individuals process complex information about the social world efficiently (Schomerus G, Schwahn C, Holzinger, Corrigan, Grabe, Carta, and Angermeyer, 2012).

One of the things that individuals seem to have negative attitudes toward is mental disorders, which become a common health problem in any society (Brown & Wolf, 2018). The World Health Organization indicates a significant increase in mental disorders recorded in recent years (Zitoun, Alnaser, Niazi, Saquib, & Rosenheck, 2021). Despite effective prevention and treatment options, most people with mental disorders do not have access to effective care. And many suffer from negative attitudes like stigma, discrimination, and human rights violations (Moitra, Santomauro, Collins, Vos, Whiteford, Saxena, and Ferrari, 2022). The study (Shehata, and Abdeldaim, 2020) aimed to assess attitudes towards mental disorders among students of medicine, pharmacy, and science faculties at Tanta University in Egypt. The results indicated that pharmacy students have more negative beliefs about mental disorders than other students do. They also suggested that science students show a more positive belief towards mental disorders, followed by medicine students, then pharmacy students.

Napolitano argues that there are five factors affecting attitudes about mental disorders among health workers, which are classroom teaching, age of students, previous contact with mental patients, fear of dealing with them, and duration of practical training in mental health (Clark & Bink, 2004).

(Sreeraj, Parija, Uvais, Mohanty, and Kumar, 2017) conducted a study aimed at assessing attitudes toward mental disorders among nursing students. The sample consisted of (100) students in nursing colleges. The results indicated that there are negative attitudes among nursing students toward mental disorders, criminals, people addicted to drugs and alcohol, and schizophrenics.

Moreover, despite the knowledge and training of health workers about the importance of positive interaction and its impact on patient's access to a state of wellness, many studies indicate that they have negative attitudes toward mental disorders (Kotera, Gilbert, Asano, Ishimura, & Sheffield, 2019). Which may negatively affect their treatment (Lagunes, Lagunes, Fresan, Gonzalez, Jarrett, Thornicroft, and Henderson, 2020). For example, the study

conducted by (Bennett & Stennett, 2015) indicated that nursing students showed many negative attitudes toward people with mental disorders because of their beliefs that they are dangerous. Other studies found that nurses' attitudes ranged from fear, avoidance, exclusion, benevolence, and care (Adewuya & Makanjuola, 2008). In a study conducted on students of a Nigerian university towards mental disorders, it found that 97% of Nigerian students confirmed that they would not marry a person suffering from mental disorders in the future. While this percentage reached 75.2% in Canada, 77% in Germany. In addition to that, 64% of Nigerian students said they were upset about sharing a room with a mentally disordered person (Gureje, Lasebikan, Ephraim, Olley, and Kola, 2005).

Numerous studies have also indicated that limited training and personal factors, like nurses' low self-confidence and the existence of using primary self-defense mechanisms, clearly contribute to adopting negative attitudes toward mental disorders (Newton, Weaver, & Tyrer, 2008). Grover, Jameel, and Dhiman, (2019) study aimed to know the effect of training nursing students on changing their attitudes toward mental disorders. The sample consisted of (235) nursing students whose attitude toward mental disorders and psychiatry was assessed before and after training, as the measures showed negative attitudes toward mental disorders before training. The results showed a significant change in attitudes after training.

Al Ma'ani, Hamaideh, and Hamdan, (2022) conducted a study on nursing students' attitudes toward mental disorders and evaluated the contact-based intervention (CBI) in changing attitudes. The data was collected from (81) nursing students, An Aquasi-experimental, pre-post, two-group design has used. The results indicated that contact-based intervention improves nursing students' attitudes toward mental illness, and this suggests that such experiences based on direct interaction with the mental illness patient are considered promising methods for changing nursing students' attitudes toward mental illness, which can be recommended before the students take courses such as psychiatric-mental health.

Arvaniti, Samakouri, Kalamara, Bochtsou, Bikos, and Livaditis, (2009) the study aimed to investigate the attitudes of employees in the medical sector and nursing students who are in the field of training in a hospital in a Greek university with a psychiatric sector. The sample consisted of (361 employees, and 231 students). The results of the study indicated that the less educated employees have negative attitudes. In addition, the attitudes toward people with mental disorders are more positive among nursing students and individuals with higher educational levels. Poreddi, Thimmaiah, and Math, (2015) study on a sample consisting of ($n = 115$) who were exposed and ($n = 61$) students who were not exposed to psychiatry training the results showed improvement in students' attitudes after exposure to psychiatry in benevolent and stigmatization domains.

Barman, Hossan & Saha (2021) study aimed to study university students' attitudes toward individuals with a mental illness. To collect data, the measure of perception of mental illness was applied to a sample of 120 subjects, 60 males and 60 females. The results indicated that a large percentage of the respondents had stigmatizing attitudes towards marrying those who have Mental illness working with them and should prevent them from getting married also preventing them from having children also they are unable to make decisions. The majority

of the sample indicated that mental illness is caused by drug abuse or bad things happened to the patient or divine punishment more than it is a physical illness or its genetic causes. The results also indicated that the majority of participants indicated that information and services about mental illness are not available in their countries.

On the other hand, many studies indicated that preparing nursing students, especially in their clinical education in ways that focus on helping individuals suffering from mental disorders would change their attitudes. Therefore, this will be reflected in the adoption of a positive attitude (Dessoki, & Hifnawy, 2009). Some studies also indicated that the level of education has a positive effect in looking at this category of individuals (Penny, Kasar, & Sinay, 2001). As for the gender variable, the results of some studies indicated that there were no differences between the sexes in their attitude toward this category (Aghanwa, 2004). Regarding the age variable, the results of studies have been conflicting, although most of them believe that the age variable has no effect, some studies showed that the elderly and young individuals view this group in an inferior and negative way, and they represent a danger to society (Murphy, Black, Duffy, Kieran, et al 1993). This may be due to the type of patients and the subject of their admission to medical care (Sreeraj, et al., 2017).

Negative attitudes toward individuals with mental disorders may create difficulties in recovery and full integration of these patients into society (Sherwood, 2018). In addition, attitudes toward mental disorders may be affected by many variables. A study conducted by Hogberg & Magnusson, Lütznén, & Ewalds-Kvist (2011) aimed to investigate the attitudes toward mentally disordered patients in Swedish society in a sample consisting of (2391), the results indicated that there is a positive attitude toward this category and that there is acceptance of coexistence with them, especially among those who had personal experience with mental disorders.

In addition, Pusey-Murray, (2017), her study aims to examine undergraduate nursing students' attitudes toward individuals with mental illness. a stratified random sample consisting of (110) university students, The results showed that nursing students' attitudes can be both positive and negative, as students who are still in the theoretical courses have negative attitudes, while students who have spent more hours caring for psychiatric patients have more positive attitudes. This result indicates the necessity of revision of the teaching strategies and modification of mental health educational programs of nursing schools, to increase the positive attitudes of students toward psychiatric patients.

Aghanwa (2004) conducted a study aimed at knowing the attitude toward mental disorders and its relationship to demographic variables in Fiji. The study sample consisted of (980) market sellers, urban residents, professional staff, and other workers in hospitals and clinics. The results indicated that the majority of the participants attributed the causes of mental disorders to addiction. They believe in the diversity of mental disorders and consider that hospitals are an important source of assistance and awareness of the effectiveness of medication. Less than one-fifth of the study subjects expressed their satisfaction with the marriage or employment of the psychiatric patient. The respondents with good professions, unmarried, females, young people, and those living in urban areas have a positive attitude

towards mental disorders.

Another thing that can influence attitudes is personality traits (Zaninotto, Rossi, Danieli, Frasson, Meneghetti, Zordan, Tito, Salvetti, Conca, Ferranti, Salcuni, and Solmi, 2018). Although there is somewhat agreement that personality traits are genetically determined, many studies have found that there are other factors that may influence personality traits, such as self-esteem, family, and social environments, also personality traits reflect the basic dimensions in which people differ (Matthews, Deary, & Whiteman, 2003).

Personality traits are characterized by consistency, stability, and individual differences (Ashton & Lee, 2007). In other words, to consider it as a personality trait, individuals must be to some extent consistent across situations in their behaviors related to that trait (Caspi, Roberts, and Shiner, 2005). Therefore, those personality traits reflect the distinctive patterns of people's thoughts, feelings, and behaviors (Donnellan, Oswald, Baird, & Lucas, 2006). Thus, psychology relies on the idea that people differ from one another in terms of where they stand on a set of core trait dimensions that persist over time and across situations (Ettema, & Nieuwenhuis, 2017).

The most widely used trait model is the Five Factor Model. Which includes five general traits that can be remembered by using the acronym O.C.E.A.N: openness, conscientiousness, extraversion, agreeableness, and neuroticism. Each major trait of the Big Five can be divided into dimensions to give a more accurate analysis of a person's personality (Matthews et al., 2003). In addition, some trait theorists argue that other traits cannot be fully captured by the Five Factor Model. Moreover, Critics of the traits theories argue that people do not act consistently from one situation to another and that people are highly influenced by situational forces. Thus, one of the major arguments in this field concerns the relative strength of people's traits versus the situations in which they find themselves as predictors of their behavior (McCrae & Costa, 1987).

These five factors can be described in detail as follows: (Roccas, Sagiv, Schwartz, & Knafo, 2002)

1. Neuroticism: Proneness to anxiety, worry, guilt, and emotional instability vs. relaxed, calm, secure, and emotionally stable.
2. Extraversion: Outgoing, friendly, enthusiastic, fun-loving vs. solitary, shy, serious, reserved.
3. Openness: Imaginative, curious, intellectual, open to nontraditional values vs. conforming, practical, conventional.
4. Agreeableness: Sensitive, warm, tolerant, easy to get along with, concerned with other feelings and needs vs. cold, suspicious, hostile, and callous.
5. Conscientiousness: Reliable, responsible, self-disciplined, ethical, hardworking, ambitious vs. disorganized, unreliable, lax, impulsive, and careless.

Personal traits are predisposition concepts that refer to tendencies to act or respond in a

certain way. People differ in their behaviors because of their different personal traits (Van, 2006). Personal traits are considered real biophysical formations; Allport defines it as a neuropsychological structure that can extract functionally equivalent stimuli and initiate continuous directing of equivalent forms in a consistent sense of harmonious and expressive behavior (Matthews et al., 2003). Due to the importance of positive attitudes in treating mental illness and social integration, many studies conducted on the relationship between attitudes and personality traits, for example Babamohamadi, Tafreshi, Khoshtakht, Ghorbani, and Asgari, (2022) conducted a study to find out the relationship between personality traits and professional competence among Iranian nursing students. The study sample consisted of (224) students in nursing colleges at Semnan University of Medical Sciences. The results indicated that there are no statistically significant differences in the variables of age, academic semester, and practical experience. The results also indicated that more than 70% of nursing students are qualified to provide spiritual care.

Wolska, and Malina, (2020) aim to determine the interdependencies between personality traits and attitudes towards people with mental disorders, the sample consisted of (204) people who participated in the research: 133 women and 71 men, aged 18-65 years. The results revealed that there is a relationship between the five factors of personality traits and an attitude toward people with mental disorders

(Gamze, & Zohre, 2020) the study aimed to determine the relationship between personality traits and life goals for nurses and teachers in Turkey, as well as identify the differences between nurses and teachers in terms of personality traits and life goals. The sample consisted of (308) students. The results indicated that there is a positive correlation between personality traits and life goals for teachers and nurses. It also indicated that professional happiness had a significant effect on the emotional stability personality trait. There was a significant difference between the participants in terms of external life goals in favor of the nurses. The study (Baldacchino, 2012) aimed to assess the personal traits of nursing students at the University of Malta. The sample consisted of (116) students in nursing faculties. The results of the study indicated that there were no statistically significant differences among the five-factor personality traits, and there was no effect of gender and age on their attitudes toward patients.

From the foregoing, it becomes clear that some studies indicated a negative attitude toward mental disorders and mental patients. However, other studies indicated a positive attitude towards mental patients, especially people who had previous experience with mental patients, whose educational specializations related to psychology, or who have personal experience with mental disorders. In addition, some studies indicated that there are differences in personality traits due to gender and specialization. Regarding the relationship of some demographic variables with the attitudes towards mental disorders and patients, there were conflicting results, some of which confirm the existence of a relationship such as age, gender, level of education, residence, and academic specialization, and some deny it.

1.1 Study Problem

Negative attitudes about mental illness are not limited to ordinary members of the public;

even well-trained professionals from most mental health specialties share stereotypes about mental disorders. The stigma of mental illness is still prevalent among society and health care professionals; therefore, it is necessary to increase knowledge about their perceptions, knowledge, and attitudes towards mental health disorders in addition to preparing a mental health education campaign at the universities through anti-stigma campaigns. Where many people with mental illness face a double challenge, on the other hand, they suffer from the symptoms and disabilities that result from the disease. They are challenged by stereotypes and prejudice generated by misconceptions about mental illness. Therefore, the study attempted to answer the following questions:

- What are the attitudes of nursing students towards mental disorders?
- Is there a relationship between personality traits and the attitudes of nursing students toward mental disorders?
- Is there a difference in the attitudes of nursing students towards mental disorders due to the variables (sex, academic level, and cumulative average)?

1.2 Objectives of the Study

- This study aimed to reveal the attitude of a sample of nursing students toward mental disorders.
- Detecting the relationship between the demographic factors of nursing students and their attitudes toward mental disorders.

1.3 The Importance of the Study

The importance of the current study lies in the following:

- The study highlights the importance of personality traits in shaping attitudes toward mental disorders among nursing students. In addition, the research could point the finger at interventions that reinforce positive attitudes by developing targeted personality traits, leading to better patient care outcomes.
- A comprehensive perspective can be presented by evaluating the relationship between personality traits and nursing students' attitudes towards mental disorders and professional happiness later on.
- This study can contribute to reducing negative attitudes and that attitudes about mental disorders will change positively if we correct some of the myths around it by increasing students' theoretical and practical knowledge in the health sector and allowing them to contact this group of patients.
- This study helps theoretically in forming clearer concepts about personality traits and attitudes on the one hand, and mental disorders on the other hand, and the link between them.

1.4 The Study Limitations

- The study was limited to a randomized sample of nursing students at Al al-Bayt

University during the second semester of the academic year 2022-2023.

- The results of the study are limited by the psychometric characteristics of the scales used in the study (scale of attitude towards mental disorders and personality traits scale).

2. Terminology of Study

A personality trait is a characteristic pattern of thinking, feeling, or behaving that tends to be consistent over time and situations, significantly affecting many aspects of health life. (Kang, Steffens, Pineda, Widuch & Malvaso, 2023). It can be determined by the score obtained by the respondent on the personality traits scale used in this study.

Attitudes towards the mentally disordered: The attitude is an organized tendency to think, feel, perceive, and behave in a specific way, in the attendance of a reference or a cognitive object, being a stable structure of beliefs that influence individuals to behave in a selective way facing attitudinal referents. In this case, people are affected by mental illnesses (Salve, Goswami, Sagar, Nongkynrih, & Sreenivas, 2013). It can be determined by the score obtained by the respondent on the attitude towards mental patients scale used in this study.

2.1 Methodology and Procedures

The descriptive method was used, as it is the most appropriate method for the nature and objectives of the study. The randomized study sample consisted of (144) male and female students. Their ages ranged between 18-22 years, with an average of 19.5.

2.3 Study Tools

2.3.1 Personality Traits Scale

The scale developed by (Donnellan, et al., 2006) was used, which consists of (20) items, distributed among the five factors of personality. That is, (4) items for each trait. After it was translated to Arabic, the scale was presented to (8) arbitrators specialized in psychological and educational measurement, educational psychology, and mental health and counseling. To judge the appropriateness of the items to measure the personality traits according to the five factors, the item belonging to the characteristic under which they placed, the appropriateness of the translation, and the amendments recommended by the arbitrators. Thus, the scale was characterized by face validity. The scale was also applied to a pilot sample consisting of (30) students from outside the study sample. The correlation coefficient of the items is calculated with the total score of the domain to which they belong. It found that the items related to the domain that was placed under them, as the correlation coefficients ranged between (0.41-0.54), and all of them are statistically significant. Thus, the scale is characterized by construct validity.

The reliability of the scale was conducted in two methods. The first method is the method of internal consistency (Cronbach alpha) for the domains, which ranged from (75-83). The second method is the test-retest method by re-application of the scale on the pilot sample after (10) days, as the Correlation coefficients ranged between the two applications for

domains from (88-90). It was statistically significant.

The scale is corrected by assigning the following marks: 1 = Not accurate at all, 2 = somewhat inaccurate, 3 = Sometimes, 4 = Average accuracy, 5 = Very accurate. Items must reverse 6, 7, 8, 9, 10, 15, 16, 17, 18, and 20. The score of the five factors was conducted as follows: Openness: Add items 5, 10, 15, and 20. Consciousness Add items 3, 8, 13, and 18. Extraversion: Add items 1, 6, 11, and 16. Agreeableness: Add Items 2, 7, 12, and 17. Neuroticism: Add items 4, 9, 14, and 19. The total score used on each dimension, or the individuals can be divided by every trait as follows: (19-20) very high, (14-18) high, (11-13) medium, (8-10) low, (4-7) very low.

2.3.2 The Scale of Attitude Towards Mental Disorders

The current study adopted the attitudes toward mental disorders scale prepared by Mohammad and Al-Salmouni (2014). The scale aims to obtain a quantitative estimate of the individual attitude toward mental patients. In its initial form, the scale included (56) items distributed over six sub-domains: (isolation, stereotyping, restriction, tendency to pity, pessimism, and stigma). Mohammad and Al-Salamouni (2014) verified the content validity of the scale by presenting it to five arbitrators of psychology professors. This is to ensure the accuracy of the wording of the items in the light of the operational definition specified for each sub-domain in the measure of attitude towards mental patients, and the possibility of amending the wording of some phrases and modifying others. In addition, they used factorial analysis using the principal components method to (60) items representing the items of the scale. The sample of the analysis was (180) university students, graduates, and employees in the age range of (18-54). The results of the factorial analysis, after being rotated varimax, resulted in the presence of (6) factors that absorbed (48.72%) of the total variance. (4) items whose saturation did not reach (0.3) of any of the factors were removed, they also calculated the reliability of the attitude toward mental disorders and its sub-dimensions, using Cronbach's alpha reliability coefficient, which amounted to (0.78). The split-half reliability of the half-partition (Odd and even) was calculated for the items of the scale and its six sub-dimensions, and the length correction using the Spearman-Brown equation and it amounted to (0.97). The reliability coefficients are considered high and reassuring.

To verify the indications of the validity and reliability of the scale. The researchers in this study presented the scale to (8) arbitrators specialized in psychological and educational measurement, educational psychology, mental health, and counseling, to judge the appropriateness of the items to measure the attitudes of individuals towards mental disorders, and the belonging of the items to the domain under which they were placed, and the recommended modifications were made. Therefore, the scale has face validity. The scale was also applied to a pilot sample consisting of (30) students from outside the study sample, then the correlation coefficient of each item with the total score for the domain to which they belong was extracted, as the item whose correlation coefficient with the total score for the domains was weak or negative were deleted. Thus, (10) items were deleted, so the scale in the final version consists of (46). Thus, the scale is characterized by construct validity.

The reliability of the scale was extracted in two methods, the first method is the method of

internal consistency (Cronbach alpha) for the domains, and the total score on the scale, (Cronbach alpha) for the domains ranged between (85-88), while it was for the total score (90). The second method is the test-retest method by re-application of the scale on the pilot sample after (10) days, where the correlation coefficients ranged between the two application times for the domains from (78-84) and the total score (87).

The Likert scale was used to correct the scale, whereby the respondent was allowed to determine the degree of his agreement with the item through five levels: “Very agree = 5, agree = 4, sometimes = 3, disagree = 2, strongly disagree = 1”. There are negative items where the scale reversed, so the scale's total score ranges from (46 to 230), and a high score on the scale indicates a negative attitude toward mental patients. Negative Items must reverse 11, 13,18,19,27, 32, 38, 41 and 45. The score of the six domains was conducted as follows: Tendency to isolate, Add Items 2, 5, 6, 14, 20, 25, 28, 33, and 39. Stereotyping, Add Items 1, 8, 12, 18, 26, and 31. Tendency to restrict, Add Items 3, 9, 15, 21, 34, and 42. Tendency to pity, Add Items 11, 13, 19, 27, 32, 37, 38, 41, and 45. Pessimism, Add Items 4, 7, 16, 22, 29, 35, and 44. Stigmatism, 10, 17, 23, 24, 30, 36, 40, 43, and 46. To determine the attitudes of individuals towards mental disorders, the total score on each dimension, and the total score on the all scale were used in this study.

3. Results and Discussion

The first question: What are the attitudes of nursing students at Al al-Bayt University towards mental patients?

To answer this question, means and standard deviations of the respondents' responses about the nursing students' attitudes toward mental patients were calculated for the domains of the nursing students' attitudes toward mental patients scale. One-Sample T-Test for the differences between the means of the domains and the assumed average of the scale (2), which is the average distance between the lowest score (1) and the highest score (5), that can be obtained by the respondent. Table 1, shows this:

Table 1. Means, Standard Deviations, and One-Sample T-Test of the Respondents' Responses about Nursing Students' Attitudes toward Mental Patients

domains of the nursing students' attitudes toward mental patients scale	N	t value = 2					
		Means	S.D	t	df.	Sig.	
Tendency to isolate	144	73.0	80.0	16.054	143	0.000	
Stereotyping	144	83.1	2.60	22.654	143	0.000	
Tendency to restrict	144	33.1	.810	16.663	143	0.000	
Tendency to pity	144	52.4	1.50	10.534	143	0.000	
Pessimism	144	3.07	.750	17.181	143	0.000	
Stigmatism	144	22.9	5.80	12.929	143	0.000	

Table 1 shows that there are statistically significant differences at the significance level ($\alpha = 0.01$) in favor of the nursing students' responses in all domains of the attitudes toward mental patients scale, compared to the assumed mean (2), which is, the nursing students' attitudes to all domains of the scale were negative.

This result is consistent with the result of the study (Sreeraj et al, 2018), the study (Shehata, and Abdeldaim, 2020), and the study of Mohammad and Al-Salmouni (2014). This explained the negative attitudes towards mental disorders, either because of a lack of getting the correct information and good training about mental disorders or as a result of a lack of contact with such patients. And differed from a study by (Hamaide, and Mudallal, 2009), In which the subjects received training and good information about mental disorders or lived in communities that seemed to provide support for such patients.

This result can be explained by the fact that Developing countries still view mental patients as mentally retarded and cannot be cured. So they put social barriers for him as a result of fear of him or even dealing with him, while they are unaware that mental disorders are similar to organic diseases that may affect a person at any time and can be cured. These negative attitudes toward mental patients were also shaped by the media represented by films that showed the psychiatrist and psychologist to be abnormal and suffering from mental disorders, which distorted the image in front of individuals. The nature of society, customs, and traditions have decreed that everyone who sets foot in a psychiatric clinic will be madness. In addition, the majority of individuals cannot differentiate between cases of mental disorders and some simple psychological problems.

The negative attitudes of nursing students were formed, grew, and developed through the interaction of this student with his environment with its elements, components, and origins, and this environment has a negative view towards mental patients. In addition, nursing students learn about mental disorders through indoctrination that transfers the experiences indirectly about mental disorders, and through the stories circulating in the community, that carry many gestures about negativity towards mental patients.

This is consistent with the study of Barman, Hossan & Saha (2021), the study of Arvaniti, Samakouri, Kalamara, Bochtsou, Bikos, and Livaditis, (2009), and the study of Al Ma'ani, Hamaideh, and Hamdan, (2022), which showed that the lack of information and services and the lack of education work to increase negative attitudes towards mental illness. While contact-based intervention (CBI) with mental illness can work to change attitudes toward mental illness to positive ones.

The second question: Is there a relationship between personality traits and the attitudes of nursing students toward mental patients?

To answer this question, Pearson correlation coefficients extracted between the domains of the attitudes towards mental patients scale and the scores obtained by the students on the scale of the five factors traits of personality, and Table 2 shows this:

Table 2. Pearson Correlation Coefficients between the Domains of the Attitudes Towards Mental Patients Scale and the Scores on the Scale of the Five Factors Traits of Personality

Personality traits	Attitudes toward mental patients						
	Tendency to isolate	Stereotyping	Tendency to restrict	Tendency to pity	Pessimism	Stigmatism	
Openness	-0.299**	-.354**	-.239**	-.127	-.401**	-.434**	
Consciousness	-0.030	-.048	.017	-.045	-.123	-.120	
Extroversion	0.144	.186*	.067	.106	.250**	.175*	
Agreeableness	-.256**	-.216**	-.198*	-.174*	-.269**	-.383**	
Neuroticism	.054	-.065	.069	-.283**	-.014	-.045	

Correlation is significant at the 0.05 level (2-tailed).

Correlation is significant at the 0.01 level (2-tailed).

Table 2, shows that the openness trait is related to a statistically significant negative relationship at the level ($\alpha = 0.01$) with all domains of the attitudes towards mental patients scale. Pearson's correlation coefficients ranged between (-0.239 - -0.434). Except for the tendency to pity, which was negatively related to the openness trait, but not statistically significant, the Pearson correlation coefficient was (-0.127). This result may be explained because the students who showed a great degree of openness trait have a wide degree of imagination, curiosity, intelligence, and openness to nontraditional values. These characteristics make the students able to create or imagine a mental environment which helps them to view mental patients logically. In addition, they tend to consider high social values in their judgment of mental patients. Moreover, Intellectual curiosity and a preference for variety enable these students to accept mental patients as a source of diversity, and It makes them look to mental patients as a new source of information through which they can satisfy their intellectual needs.

As for the Consciousness trait, the correlation coefficients with the domains of the attitudes toward mental patients scale ranged between (0.017--0.123), which is not statistically significant. This trait is characterized by being reliable, responsible, self-disciplined, ethical, hardworking, and ambitious, which makes these individuals unsure about their decisions about mental patients because they need more information about mental disorders, which are considered scarce in developing societies, to have a clear idea about mental patients.

As for extraversion, it related a positive relationship with all domains of the attitudes towards mental patients scale, but it was statistically significant with profiling, pessimism, and stigma. The correlation coefficients were (0.186, 0.250, 0.175), respectively. If the characteristics that fall under the extrovert trait are taken into consideration, such as, Outgoing, friendly, enthusiastic, and fun-loving, it can be noted that these individuals are largely directed by society whose attitudes are negative towards mental patients. Therefore, most of the dimensions of the response scale are positively related to the trait of extraversion.

The agreeableness trait is related to all domains of students' attitudes towards mental patients

scale with a negative relationship, and Pearson's correlation coefficients ranged between (-0.174 - -0.383), taking into account the characteristics of the agreeableness trait, like sensitivity, warm, tolerant, easy to get along with, concerned with other. It can be said that the sensitivity of these individuals and their concern for others made them more sympathetic to mental patients, which led to a supportive attitude toward them.

The neuroticism trait also related to a statistically significant negative relationship between the domain of tendency toward pity and the students' attitudes towards mental patients. Pearson's correlation coefficient was (-0.283), while the rest of the dimensions of students' attitudes towards mental illness were not statistically significant, as Pearson's correlation coefficients ranged between (-0.014 -0.069).

This could be explained by the fact that high levels of neuroticism in nursing students mean a high level of anxiety, worry, guilt, and emotional instability, and this may lead them to perceive patients with mental disorders as difficult to care for and negatively affect their attitudes. That is why these students did not sympathize with them, so, they did not look at them with pity, because they could be a source of anxiety to them.

All the above interpretations agree with what McCrae & Costa, (1987), Roccas, Sagiv, Schwartz, & Knafo, (2002), and Zaninotto, Rossi, Danieli, Frasson, Meneghetti, Zordan, Tito, Salvetti, Conca, Ferranti, Salcuni, and Solmi, (2018) indicated that the five personality traits which is genetically determined can affect the individual's behavior across and through different situations, as well as his feelings and attitudes.

These results agree with the result of the study of Gamze, and Zohre, (2020) and the study by Baldacchino, (2012). Which explained the relationships of some personality traits, whether positively or negatively, with the attitudes toward mental patients, by referring to the characteristics of each of these traits.

The third question: Are there statistical differences in the attitudes of nursing students toward mental patients due to the variables (gender, academic level, and cumulative average)?

To answer this question, means and standard deviations of the domains of the attitudes toward mental patients scale extracted according to the variables (gender, academic level, and accumulative average). Table 3 shows this.

From Table 3 it is clear that there is an apparent variation between the averages according to the variables of the study (gender, academic level, and cumulative average), for example, M for males in the tendency to isolate was (3.37), with SD (0.76), while M for females was (2.87), with SD (0.76). While lowest M according to the variable of the academic level was (2.36) with an S.D of (0.51) for the first year in the domain of compassion, while the highest M for the same domain was (2.54) with an SD (0.45) for the third year level. As for the accumulative average variable, the highest M (3.42) with SD (0.90) for the domain tendency to restrict to the cumulative average excellent, while the lowest M for the same domain is (3.08) for the accumulative average pass or less and good with SD (1.07, 0.82), respectively. To find out if these differences were statistically significant, multiple analyses of variance were used, and Table 4 shows this.

Table 3. Means and Standard Deviations of the Domains of the Attitudes Toward Mental Patients Scale According to the Variables (gender, academic level, and accumulative average)

Variable	Levels		Isolate	Stereotyping	restrict	pity	Pessimism	Stigmatism	
Gender	Males	M	3.37	3.38	3.36	22.5	3.32	93.2	
		S.D	0.76	0.51	9.70	50.0	3.70	8.70	
	Females	M	2.87	13.	82.9	402.	22.9	92.6	
		S.D	0.76	.660	.790	.510	3.70	.810	
academic level	First-year	M	3.58	93.3	13.3	2.36	23.3	3.24	
		S.D	.740	.630	5.80	60.0	.940	9.80	
	Second year	M	902.	63.1	63.0	42.4	92.8	2.82	
		S.D	.800	.630	4.80	.530	3.70	.880	
	Third year	M	2.97	73.0	73.1	42.5	2.99	92.7	
		S.D	4.60	3.60	.730	.450	.640	.740	
	Fourth-year	M	3.24	3.27	13.1	82.3	53.3	3.09	
		S.D	.900	6.0	7.80	.510	.760	9.80	
	accumulative average	Pass or less	M	82.9	3.33	83.0	2.35	33.0	52.9
			S.D	1.90	.610	71.0	.560	.960	.990
		Good	M	2.97	33.1	3.08	2.45	3.05	92.7
			S.D	.790	6.60	.820	.540	.710	.810
Very good		M	53.1	13.2	3.13	2.48	93.0	3.004	
		S.D	8.70	1.60	3.70	.450	.750	.850	
Excellent and above	M	3.34	3.18	23.4	2.30	3.21	3.24		
	S.D	.810	5.50	.900	0.50	.840	90.0		

From Table 4, it is clear that there are statistically significant differences at ($\alpha = 0.05$) in all domains of the attitudes toward mental patients scale due to the gender variable. Referring to the averages in Table 3, it can be seen that these differences were in favor of males; That is, males had more negative attitudes toward mental patients than females.

It is also clear that there are no statistically significant differences at ($\alpha = 0.05$) for the variables (academic level and cumulative average) in the domains of attitudes toward mental patients.

This result can be explained by referring to the different socialization processes of males and females. Where the processes of socialization in developing countries focus on the traditional roles of males and females. This is why males develop characteristics such as hostility, pessimism, controlling, allowing them to interact greatly with the surrounding society. Which leads to negative thoughts and attitudes toward mental patients. As for females, they are socialized to sympathize, show love and affection towards others, and obedience to those around them. They also reduce their contact with the surroundings around them. This is why their thoughts toward mental patients are more sympathetic than males. Therefore, the

attitudes towards mental patients were more negative among males than females.

Table 4. Multiple Variance Analysis of Differences According to Variables (gender, academic level, and accumulative average) Means of the Domains of the Attitudes Toward Mental Patients Scale

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Gender Hotelling's Trace= 0.151 Sig. = 0.005	Isolate	5.589	1	2.690	8.998	.0020
	Stereotyping	2.718	1	5.078	12.090	.0080
	Restrict	5.550	1	5.589	9.868	.0040
	Pity	1.238	1	2.718	7.205	.0290
	Pessimism	3.394	1	5.550	8.725	.0120
	Stigmatism	9.757	1	1.238	4.846	.0000
academic level Wilks' Lambda=0.85 Sig. =0.063	Isolate	4.019	1	3.394	6.475	.0740
	Stereotyping	.2540	1	9.757	15.149	.8790
	Restrict	1.753	3	1.340	2.365	.4340
	Pity	1.189	3	.0850	.2250	.2040
	Pessimism	3.598	3	.5840	.9190	.0810
	Stigmatism	1.075	3	.3960	1.551	.6450
accumulative average Wilks' Lambda=0.901 Sig. =0.727	Isolate	1.273	3	1.199	2.288	.5240
	Stereotyping	.4350	3	.3580	.5560	.7640
	Restrict	.6430	3	.4240	.7490	.7990
	Pity	.3650	3	.1450	.3850	.7000
	Pessimism	.0630	3	.2140	.3370	.9890
	Stigmatism	1.685	3	.1220	.4760	.4570
Error	Isolate	77.018	3	.0210		
	Stereotyping	51.302	3	.5620		
	Restrict	86.514	136	.5660		
	Pity	34.751	136	.3770		
	Pessimism	71.295	136	.6360		
	Stigmatism	87.594	136	.2560		
Total	Isolate	1444.012	136			
	Stereotyping	1510.278	136			
	Restrict	1500.111	144			
	Pity	898.444	144			
	Pessimism	1441.612	144			
	Stigmatism	1326.864	144			

This result differs from the results of the study by Baldacchino, (2012) and Aghanwa, (2004),

which indicated that there is no difference between the sexes in attitudes towards mental illness, and this may be because the courses given to nursing students are unable to change the effect of socialization.

The other two variables of the study (the academic level and the accumulative average), did not affect the attitudes toward mental patients. Because these attitudes formed early through childhood, and through the prevailing ideas in society, therefore, the university years were not sufficient to change these attitudes, and therefore the cumulative average did not have an effect on attitudes either, that is, students who obtain high rates have the same attitudes as students with low rates. This is because attitudes consist of social variables. In addition, the nature of the courses taught to nursing students focuses on the theoretical aspects related to the symptoms of mental disorders rather than the practical and applied aspects through which it is possible to focus on the opportunities available to the mental patient at the therapeutic and social levels. That is why society remained the main driver of nursing students' ideas about mental patients.

Therefore, this study may recommend, as did Al Ma'ani, Hamaideh, and Hamdan, (2022) study, that the courses given to nursing students, especially those related to mental illness, should be reviewed to change their attitudes towards mental illness, which was confirmed by Grover, Jameel, and Dhiman, (2019) study when it indicated that training can work to change attitudes towards mental illness.

4. Recommendations

- Creating educational programs that educate students about mental disorders, to form positive attitudes towards mental disorders, which contributes to reducing the problems of mental patients.
- Providing accurate information to remove the ambiguity associated with mental disorders in terms of chances of recovery and their integration into societies
- Involving specialists in broadcasting psychological programs on television channels, to convey correct ideas about mental disorders.
- Paying attention to mental health through publishing and distributing pamphlets, booklets, and scientific medical periodicals related to mental health.
- Including the curricula, whether in schools or universities, topics related to mental disorders, especially practical and applied aspects to develop positive attitudes towards mental disorders.

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Acknowledgments

Not applicable.

Authors contributions

Not applicable.

Funding

Not applicable.

Competing interests

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.

Informed consent

Obtained.

Ethics approval

The Publication Ethics Committee of the Macrothink Institute.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

Provenance and peer review

Not commissioned; externally double-blind peer reviewed.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

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