JOURNAL OF
PSYCHIATRIC NURSING

DOI: 10.14744/phd.2022.25593
J Psychiatric Nurs 2023;14(2):155-164

Original Article

The relationship between the beliefs of students studying at the faculty of health sciences toward mental illnesses and their personality types

Şulenur Eski,[1] Hazal Sevindik,[1] Merve İnan Budak,[2] Vesile Adıgüzel[3]

[1]Şişli Hamidiye Training and Research Hospital, İstanbul, Türkiye
[2]İstanbul Medeniyet University, İstanbul, Türkiye
[3]İstanbul Health and Technology University, İstanbul, Türkiye

Abstract

Objectives: This study aims to determine the beliefs of students studying at the Faculty of Health Sciences toward mental illnesses, how their sociodemographic characteristics affect these beliefs, and the relationship between their personality types and these beliefs.

Methods: Students from the Faculty of Health Sciences (Nutrition and Dietetics, Social Work, Health Management, Audiology, and Nursing) studying at a state university were included in the sample of the descriptive study (n=491). The Personal Information Form, Beliefs Toward Mental Illness (BMI) Scale, and Type A and Type B Personality Questionnaire were used as data collection tools. The evaluation of the obtained data was performed using the SPSS 24.0 program, number and percentage distribution frequency, Spearman correlation, Mann–Whitney U test, Kruskal–Wallis, and the t-test. The limit of statistical significance was $p<0.05$.

Results: Of the student participants, 42.2% had type A personality behavior, and 57.8% had type B personality behavior. It was seen that the negative beliefs of the students toward mental illness were moderate (45.7±15.1). There was a significant difference between the total score of the students on the BMI scale and their personality types ($p<.000$). It was determined that individuals with type B personality behavior had fewer negative beliefs about mental illnesses than individuals with type A personality behavior ($p<.000$).

Conclusion: According to the results of the research, it was determined that there was a significant relationship between personality types and beliefs toward mental illnesses. Nurses, in their role as researchers, can examine the relationship between personality type and stigma in mental illness. Based on the studies showing that negative beliefs and attitudes toward mental illnesses are reduced with education, nurses as trainers can organize awareness trainings for mental illnesses, which is an important component of their profession.

Keywords: Beliefs; mental illness; stigma; students; personality.

According to the World Health Organization, mental health is a state of well-being in which an individual becomes aware of his own abilities, is able to cope with the normal tensions of life, works productively and efficiently, and is able to contribute to the society in which they live. Mental health is essential for the well-being and effective functioning of individuals and society.[1]

According to the Diagnostic and Statistical Manual of Mental Disorders-5, mental illness is "a syndrome characterized by a clinically distinct impairment in an individual's cognition, emotion regulation, or behavior, reflecting a dysfunction in

Address for correspondence: Merve İnan Budak, Istanbul Medeniyet University, İstanbul, Türkiye
Phone: +90 000 000 00 00 **E-mail:** merve.inan@medeniyet.edu.tr **ORCID:** 0000-0002-4334-6779
Submitted Date: January 02, 2022 **Revised Date:** October 08, 2022 **Accepted Date:** October 29, 2022 **Available Online Date:** June 15, 2023

What is presently known on this subject?

- When the national and international literature was reviewed, few studies were found on the relationship between the beliefs of students studying in the field of health toward mental illness and their personality types. Therefore, there is not enough information in the literature on this subject.

What does this article add to the existing knowledge?

- Studies on beliefs about mental illnesses have investigated the relationship between sociodemographic characteristics, previous encounters with a mental illness, or an individual with a mental illness and stigma. In this article, the relationship between the personality types of students in the field of health and their beliefs toward mental illness is examined.

What are the implications for practice?

- Our study is important in terms of contributing to a feature that is rarely studied in the literature and directing intervention studies regarding beliefs toward mental illness to be conducted.

the psychological, biological, or developmental processes underlying mental functioning."[2]

Along with the concept of mental illness, the concepts of belief, attitude, and stigma usually come across. Belief and attitude function as a driving force if they are positive, but if they are negative, it causes the individuals to be isolated from the society.[3] Negative beliefs toward individuals with a mental illness often include beliefs that patients with a mental illness do not have a real illness such as a heart disease, that they can be employed in low-income jobs, that they should be kept away from society, that there is a potential for dangerousness, and that they can never be cured.[4] With the stereotypes caused by fear, false beliefs, and negative attitudes toward individuals with mental illness, it becomes difficult to understand what the disease really is. These are all issues related to stigma.[5] According to the American sociologist, Goffman, stigma is the behavior of valuing less.[6] Stigmatized individuals are less accepted and understood.[7] Individuals with a mental illness are adversely affected by stigma, show reluctance to seek treatment, and exhibit incompatibility in the treatment process. As a result, deterioration occurs in the social relations of individuals with a mental illness, and their quality of life decreases significantly.[8] It has been stated that the reasons for the stigma toward individuals with mental illness can be personal, social, and political, and the fear felt toward these individuals is one of the most important reasons leading to stigma.[9]

Studies have shown that there are many different reasons for stigma, one of which is sociodemographic characteristics.[9,10] Although studies have given different and contradictory results, the general opinion is that a low socioeconomic level and social class reduce the recognition of mental illnesses and negatively affect social distancing from diseases.[11,12,13]

The beliefs and attitudes of professionals working in the field of health toward individuals with a mental illness may also be negative from time to time.[14,15] Negative beliefs and attitudes are major factors that prevent individuals with mental illness from receiving the help and treatment they need.[16] Some studies have shown that students studying in the field of health have similar negative beliefs and attitudes as the health professionals working in the field of health.[17,18]

Personalities and personality types are thought to form the basis of an individual's feelings, thoughts, and behaviors.[19] Personality is defined as "the characteristics and tendencies that determine the differences in the psychological responses of individuals such as thoughts, feelings and behaviors, and that show continuity in them that cannot be explained only by the moment lived, the biological situation and the social environment."[20]

Many theories have been developed by scientists in order to explain the basis of personality, and through these theories, they have tried to determine the personality tendencies of individuals. Although scientists have expressed different opinions on the variables that may have an effect on personality, there are some points that they accept as common. These are the biological–physiological structure of the individual, the geography in which they live, the social structure and social class features in which they are located, their hereditary characteristics, and their group membership and family.[21,22,23]

One of the theories used to explain personality is the Type A and Type B personality, which was developed by Meyer Friedman and Rosenman in 1976 by establishing a relationship between stress and heart disease.[24,25] According to this theory, people with a type A personality are competitive, fully dedicated, time-sensitive, aggressive, impatient, and perfectionists. The most distinctive features of type A behavior are mobility, impulse and ambition, competition, and aggression and hostility.[19,25]

On the other hand, individuals with a type B personality do not like to compete and assert themselves with others; they are more relaxed, docile, and less aggressive.[19] Friedman and Rosenman stated that when creating these two personality types, people would not show type A or type B personality behavior, but they might be more inclined toward one of these two.[19,22,25]

Studies on the stigma of mental illnesses investigated the relationship between sociodemographic characteristics, previous encounters with a mental illness or an individual with a mental illness, beliefs, attitudes, and stigma.[8,26,27,28,29] Based on the statement that personality and personality types form the basis of individuals' thoughts, feelings, and behaviours,[19] when it is considered that the fear felt toward individuals with a mental illness is an emotion, stereotyped thinking is a thought, and stigma is a behaviour, the idea that there may be a relationship between personality types and beliefs about mental illness arises.[29,30]

In the national literature, few studies that examine the relationship between personality traits and beliefs about mental illness have been found. According to a thesis study, there is a moderately significant relationship between personality traits and beliefs about mental illness, and the personality structures of individuals have a role in shaping beliefs about mental illness in society.[30] In another study, the relationship between teachers' personality traits and stigma levels were

examined through five-factor personality traits, and it was found that there is a weak relationship between personality traits and stigmatizing behavior.[31]

In the international literature, only a limited number of studies on beliefs, stigma, and personality traits toward mental illness have been conducted, and they have shown that there may be a relationship between beliefs, stigma, and personality traits about mental illnesses.[14,15]

This study aims to determine the beliefs of students studying at the Faculty of Health Sciences toward mental illnesses, how their sociodemographic characteristics affect these beliefs, and the relationship between their personality types and these beliefs.

Materials and Method

Study Design

This is a descriptive and relationship-seeking study that consisted of students studying in the Faculty of Health Sciences of a state university in Istanbul during 2019–2020 (n=900). Every student from all departments in the Faculty of Health Sciences (Nutrition and Dietetics, Social Work, Health Management, Audiology, and Nursing), who did not have any physical or mental obstacles to participating in the study and who agreed to participate in the study with an appropriate sampling method,[32] was included in the study (n=500).

Study data were collected between January 2020 and October 2020. Due to the COVID-19 pandemic that emerged during the data collection process, some of the data were collected face-to-face while others were collected online via Google Forms. As a result of the examinations, the data of 491 students was taken into consideration, and nine of them were excluded from the sample due to incomplete filling.

Data Collection Tools

In the study, the Personal Information Form, Beliefs Toward Mental Illness (BMI) Scale, and the Type A and B Personality Questionnaire were used as data collection tools.

The Personal Information Form

The Personal Information Form, which was developed by the researchers after examining the literature, consists of a total of 10 questions.[18,26,33,34]

The participants' learning information includes sociodemographic characteristics (age, sex, social environment, economic status, etc.), family and immediate family history of mental illness, and help-seeking behavior.

BMI Scale

The 6-point Likert-type scale developed by Hirai and Clum consists of 21 items. This scale, which was conducted by Bilge and Çam in the Turkish validity and reliability study, consists of three subscales: dangerousness, helplessness and deterioration in interpersonal relationships, and shame. The Cronbach alpha coefficient of the scale is 0.82; however, in our study, Cronbach's alpha coefficient was calculated as.81. The lowest score that can be obtained from the scale is 6, and the highest score is 105. The interpretation of the scale is based on both subscales and total scores. Since the statements on the scale include negative beliefs about mental illness, the high score obtained from the scale shows the level of negative beliefs toward mental illness. The BMI scale has no cutting points. For this reason, it is interpreted by comparing it to the maximum score achievable on the scale.[35]

Type A and Type B Personality Questionnaire

This questionnaire was developed by Durna and consists of 20 items of the 5-point Likert-type, consisting of "Always," "Most of the time," "Sometimes," "Rarely," and "Never," which were rated 5, 4, 3, 2, and1, respectively. The lowest value that can be taken from the scale is 20, and the maximum value is 100. Those whose scores are close to the highest value (100) tend to have a type A personality structure; those close to the lowest score (20) will tend to have a type B personality structure.[24]

The Cronbach's alpha coefficient calculated for this questionnaire was 0.712. The fact that this value is in the range of $0.60 \leq 0.712 \leq 0.80$ shows that the questionnaire used is reliable.[25] In our study, the Cronbach's alpha coefficient was 0.79.

Research Questions

1. What are the beliefs of the students of the Faculty of Health Sciences toward mental illness?

2. What is the effect of sociodemographic characteristics on their beliefs toward mental illnesses?

3. How do the personality types of these students relate to their beliefs about mental illness?

Statistical Analyses

The SPSS Windows version 24.0 package program was used for statistical analysis. As descriptive statistics, mean±standard deviation values are given for numerical variables, and number and percentage values are given for categorical variables. The Mann–Whitney U test was used to compare the normal non-dispersive features of the obtained data in two independent groups, and the Kruskal-Wallis test was used to compare numerical data in more than two independent groups when the data did not follow a normal distribution and did not have equal variances. The relationship between numerical variables was tested using Spearman correlation. In the analysis of the obtained data, the t-test was applied. $p<0.05$ was considered statistically significant.

Ethical Considerations

Permission for conducting the study was obtained from the Social Sciences and Humanities Ethics Committee of the relevant university on November 8, 2019. The institution's permission was obtained from the Faculty of Health Sciences of the same university on December 10, 2019. In the data collected

Table 1. Sociodemographic Data

Sociodemographic Data	N	%
Gender	422	85.9
Female	69	14.1
Male		
Department	280	57.0
Nursing	78	15.9
Nutrition and Dietetic	40	8.1
Audiology	40	8.1
Health Management	53	10.8
Social Work		
Settlement where they grew up	421	85.7
Urban	70	14.3
Rural		
Employment Status	39	7.9
Employed	452	92.1
Not employed		
Family type	390	79.4
Nuclear family	85	17.3
Extended family	16	3.3
Broken family		
Economic status	91	18.5
Income less than expense	342	69.7
Income equal to expense	58	11.8
Revenue more than expense		
Interest in psychology/ psychiatry	273	55.6
I'm interested	218	44.4
I'm not interested		
Previously applied for psychiatric help	124	25.3
Yes	367	74.7
No		
A history of psychiatric illness in the vicinity	141	28.7
Yes	350	71.3
No		
The first profession to which you will seek psychiatric help		
Psychiatrist	176	35.8
Psychologist	281	57.2
Nurse/midwife	4	0.8
General practitioner	6	1.2
Haji/Hodja	5	1.0
Other	19	3.9

face-to-face, the purpose of the study was explained to the participants, and oral and/or written consent was obtained from them. In the data collected online, written consents were obtained by using the participant checkbox at the beginning of the digital survey page. The study was conducted in accordance with the Declaration of Helsinki, emphasizing that the personal information of the participants would be kept confidential and that they could leave the research at any time.

Results

Of the students who participated in our research, 85.9% were women, 57% were nursing students, 85.7% grew up in an urban area, 92.1% did not work, 79.4% had nuclear families, and 69.7% had equal income and expense. In addition, 55.6% of the students were interested in the field of psychiatry/ psychology; 25.3% had previously consulted a psychiatrist/ psychologist; 28.7% had a relative who was diagnosed with a mental illness; and 57.2% answered that they would ask for help from a psychologist if they or a relative had a symptom of a mental illness (Table 1).

In order to determine the personality types of the students participating in the study, their distribution according to the answers they gave in the personality questionnaire was examined (Table 2). Accordingly, it was determined that 42.2% of the participants had type A personality traits and 57.8% had type B personality traits.

As shown in this table, the mean BMI total score was 45.7±15.1, and the average scores of the dangerousness, helplessness and interpersonal deterioration in relationships, and shame subscales were 13.6±4.3, 23.2±9.4, and 1.1±1.9, respectively (Table 3). Since 6 as the lowest and 105 as the highest points were obtained from the BMI without cutting scores, the average score was calculated as 55.

There was a significant relationship between the scale and sub-scale of beliefs toward mental illnesses of the students participating in the research. Accordingly, significant positive relationships were found between the dangerousness subscale and Type A and Type B personalities (r=.768, p<.000). Similarly, the helplessness and interpersonal deterioration in relationship subscale showed a strong positive correlation with the positive force between Type A and Type B personalities (r=.937, p<.000). The shame subscale also displayed a

Table 2. Personality Types of Students

Personality Types	N	%
Type A Personality	207	42.2
Type B Personality	284	57.8
Total	491	100

Table 3. BMI Total Score and Subscale Score Averages

Scales	Min-Max	Mean±SD
Dangerousness	2-25	13.6±4.3
Helplessness and Interpersonal deterioration in relationship	2-55	23.2±9.4
Shame	0-10	1.1±1.9
BMI Total	6-105	45.7±15.1

Table 4. The Relationship Between Personality Structure and Beliefs toward Mental Illness Scale (BMI) and its Sub-Dimensions

Scales	r	p
Dangerousness	2-25	13.6±4.3
Helplessness and Interpersonal deterioration in relationship	2-55	23.2±9.4
Shame	0-10	1.1±1.9
Scale of Beliefs in Mental Illness (BMI)	6-105	45.7±15.1

moderately positive relationship with Type A and Type B personality types (r=.484, p<.000). Additionally, a positive relationship was observed between the total score on the beliefs toward mental illness scale and Type A and Type B personalities (r=.567, p<.000). (Table 4).

A significant difference was found between the total mean scores and all subscales and personality types of the students who participated in the study (p<0.00). Accordingly, individuals with Type B personality were found to have lower average scores in dangerousness (12.9±4.3), helplessness and interpersonal deterioration in relationships (21.0±8.8), shame (0.9±1.7), and average BMI total score compared to individuals with Type A personality. (Table 5).

The sociodemographic characteristics of the students participating in the study and their distribution according to the mean BMI total score are given in Table 5. There was a significant difference between the sex of the students participating in the study and the mean scores they received from the BMI. It was determined that the male students' mean total score was higher than that of the female students (49.2±17.6; p<0.05). There was a significant difference between the department the students studied in and the mean BMI scores (p<0.05). Accordingly, health management students had the highest average score (51.1±16.4). Furthermore, there was a significant difference between the areas where the students grew up in and the mean BMI total score (p<0.05). The average total score of the students growing in the rural area was higher (49.4±15.6) than that of students growing up in the urban area (Table 6). However, there was no significant difference between the employment status, family type, and family income levels of the students and the average total score they received from the BMI total scale (p>0.00). In addition, there was a significant difference between the psychiatry/psychology interest status of the students and their mean BMI scores (p<0.05). The mean total score of the students who were not interested in psychiatry/psychology was higher (47.6±15.4). There was no significant difference between the mean BMI total score and the students' previous status of receiving psychiatric assistance and the first profession/formation to which they would apply for help in case of any psychiatric symptoms (p>0.05).

There was a significant difference between the dangerousness subscale of the BMI scale of the students and the department where the students studied, the kind of area where they grew up in, and their interest in psychology/psychiatry (p<0.05). Nursing students had the lowest average score in the dangerousness subscale (12.9±4.2). In addition, there was a significant difference between the area where the students grew up in and the dangerousness subscale (p<0.05); the average score of the dangerousness subscale of the students who grew up in rural areas was higher (14.7±4.4). Furthermore, there was a significant difference between the interest of the students in the field of psychiatry/psychology and the dangerousness subscale (p<0.05); the average score of the dangerousness subscale of the students who were not interested in the field of psychiatry/psychology was higher (14.1±4.4). (Table 6).

There was a significant difference between the helplessness and interpersonal deterioration in relationship subscale and the department in which the students studied (p<0.05). The mean scores of the health management students on the help-

Table 5. Total Scores of Personality Types and Beliefs Towards Mental Illness Scale (BMI) and Sub-Dimensions

Scales	Personality Types	N	Mean±SD
Dangerousness Subscale	B types	284	12.9±4.3
	A Types	207	14.6±4.0
	p		0.000*
Helplessness and Interpersonal deterioration in relationship Subscale	B types	284	21.0±8.8
	A Types	207	26.3±9.3
	p		0.000*
Shame Subscale	B types	284	0.9±1.7
	A Types	207	1.5±2.2
	p		0.000*
Scale of Beliefs in Mental Illness (BMI)	B types	284	42.0±14.3
	A Types	207	50.7±14.7
	p		0.000*

Table 6. Total Scores of Sociodemographic Data on the Beliefs Towards Mental Illness Scale (BMI)

Sociodemographic Data	N	Dangerousness Subscale	Helplessness and Interpersonal deterioration in relationship Subscale	Shame Subscale	Scale of Beliefs in Mental Illness (BMI)
Gender	422	13.5±4.2	22.9±9.2	1.0±1.8	45.1±14.5
Female	69	14.3±4.9	25.1±10.3	1.7±2.7	49.2±17.6
Male		.152	.070	.012*	.034*
p	280				
Part	78	12.9±4.2	23.1±9.2	1.3±2.0	45.0±15.1
Nursing	40	14.6±3.9	23.2±9.1	1.1±1.8	46.8±14.0
Nutrition and Dietetics	40	12.9±3.6	19.0±6.6	0.8±1.3	39.5±10.9
Audiology	53	16.3±4.7	25.7±10.7	0.9±1.9	51.1±16.4
Health Management		14.3±4.6	25.1±10.6	1.0±1.9	48.0±16.4
Social Work		.000**	.011**	.413	.007**
P					
Settlement where they grew up	421	13.4±4.3	22.9±9.4	1.1±1.8	45.0±2.9
Urban	70	14.7±4.4	25.0±8.9	1.6±2.3	49.4±15.6
Rural		.022*	0.82	.059	.025*
p					
Employment status					
Employed	39	14.1±4.0	25.0±10.0	0.8±1.6	47.6±14.9
Not employed	452	13.6±4.3	23.1±9.3	1.2±1.9	45.5±15.1
p		.477	.226	.222	.415
Family type					
Nuclear family	390	13.4±4.2	23.0±9.0	1.1±1.9	45.1±14.4
Extended family	85	13.9±4.5	24.1±10.6	1.4±2.2	47.6±16.8
Broken family	16	15.8±4.6	24.5±12.8	1.0±1.7	49.4±19.7
p		.073	.532	.367	.245
Economic status					
Income less than expense	91	14.5±4.7	23.8±10.0	1.0±1.7	47.0±15.5
Income equal to expense	342	13.4±4.2	23.0±9.2	1.1±1.9	45.3±14.9
Revenue more than expense	58	13.4±4.2	23.6±9.5	1.5±2.0	45.7±15.3
P		.110	.761	.347	.638
Interest in psychology/psychiatry					
I'm interested	273	13.2±4.2	22.6±9.3	0.8±1.5	44. 2±14.7
I'm not interested	218	14.1±4.4	24.0±9.5	1.6±2.2	47.6±15.4
p		.018*	.093	.000*	.013*
Previously applied for psychiatric help		13.5±4.7	22.7±9.0	0.9±1.8	45.0±15.2
Yes	124	13.6±4.2	23.4±9.5	1.2±1.9	45.9±15.0
No	367	.724	.502	.178	.540
p					
A history of psychiatric illness in the vicinity					
Yes	141	13.2±4.5	22.3±9.9	0.7±1.6	44.1±15.6
No	350	13.8±4.2	23.6±9.2	1.3±2.0	46.3±14.8
p		.644	.178	.002*	.140
Your first occupation/formation to apply for psychiatric help					
Psychiatrist	176	13.5±4.6	23.4±10.1	1.3±2.2	46.3±16.5
Psychologist	281	13.7±4.1	23.1±9.0	1.0±1.8	45.3±14.4
Nurse/midwife	4	15.7±3.4	20.0±11.1	0.7±0.9	42.0±15.5
General practitioner	6	12.8±2.4	25.0±5.3	0.5±0.8	47.0±9.1
Haji/Hodja	5	15.0±3.4	30.6±8.3	1.2±2.6	57.0±11.6
Other	19	12.4±5.0	21.1±8.5	1.6±1.7	42.5±13.0
p		.649	.445	.487	.491

lessness and interpersonal deterioration in relationship subscale were higher than those of students from other departments (25.7±10.7). (Table 6).

There was a significant difference between the shame subscale and the sex of the students ($p<0.05$). The average score of male students from the shame subscale was higher and 1.7±2.7. There was a significant difference between the students' interest in psychiatry/psychology and the shame subscale ($p<0.05$). When examining their help-seeking behaviors, it was observed that students who were not interested in psychiatry/psychology had a higher average score on the shame subscale (1.6±2.2) compared to their help-seeking behaviors in other areas. Furthermore, was a significant difference between the average shame subscale score and the fact that one of their relatives had a history of mental illness ($p<0.05$). The average score of the shame subscale of the students who did not have relatives with a history of mental illness was higher (1.3±2.0). (Table 6)

Discussion

In this study, the relationship between the beliefs of Faculty of Health Sciences students toward mental illnesses and their personality types and sociodemographic data was examined.

Since the highest score that can be obtained from the BMI is 105, the negative beliefs of the students toward mental illnesses are average (45.7±15.1).

When examined in terms of sociodemographic data, the mean total and subscale scores of the BMI scale of male students are higher than those of the female students. Male students have more negative beliefs toward mental illnesses compared with female students. In addition, male students have higher average scores on the shame subscale than female students. Male students tend to see mental illness as something to be ashamed of. Although there is no significant difference between negative beliefs and sex toward mental illnesses in some studies, other studies have found that male students have more negative beliefs than female students.[8,27,28,36,37,38] In this context, it is difficult to say that sex is an influential factor in beliefs toward mental illness.

In our research, health management students have more negative beliefs compared with students in other departments. Parallel to our study, another study conducted in our country found that the stigmatization tendencies of health management students were higher than those of students in other departments.[39] In theliterature, negative beliefs toward mental illnesses decrease and there is a positive change in attitudes in students taking psychiatric nursing courses.[18,40,41] Based on this result, courses on psychiatry/psychology can be added to the curriculum of the health management department. Regular meetings, trainings, and seminars can be organized to increase the awareness of students studying at the faculty of health sciences.

Students who grew up in rural areas have more negative beliefs toward mental illnesses than students who grow up in urban areas. In addition, students living in rural areas are seen to consider individuals with mental illness as dangerous. In their systematic review study, Çam and Bilge (2013) revealed that individuals living in rural areas in our country tend to have more negative beliefs, attitudes, and stigmatization toward mental illnesses than individuals living in urban areas.[3] In urban areas, negative beliefs toward these individuals are more common and are considered dangerous because individuals with mental illness who live in rural areas continue to live in the community and other individuals witness behaviors that are not welcomed by the society. In urban areas, individuals with mental illness are treated in hospitals and continue their lives away from the society. Another study found that patients who applied to a psychiatric clinic were worried that they would be seen by others,[42] an anxiety that can cause these individuals to isolate themselves from society.

In our research, no significant relationship was found between income levels and beliefs about mental illness. However, in another study, individuals with lower income levels have more negative beliefs toward mental illnesses.[12] In another study, it was found that students with moderate financial income had difficulty in communicating with individuals with mental illness and felt helplessness.[17] In another study, students with moderate financial income believe that individuals with mental illness are dangerous.[8] In this context, it is not possible to use a definitive statement about the effect of income status on beliefs toward mental illness.

Students who are interested in psychiatry/psychology have fewer negative beliefs toward mental illnesses. Students who are not interested in the field have beliefs that tend to be dangerous and shameful. The negative thoughts about mental illnesses are caused by the fact that the field of mental health is unknown. In the literature, mental health literacy has a positive effect on negative beliefs toward mental illnesses and behaviors such as stigmatization.[43] In this context, initiatives can be taken to improve the mental health literacy of individuals.

In our research, the previous application to seek psychiatric help has no effect on negative beliefs toward mental illness. In a previous study, students with mental illness were found to be less prone to shame.[43] In another study, students with a history of psychiatric illness had fewer negative thoughts.[37] However, findings of our research do not correspond to the literature. The meaning attached to mental illness and the results of the studies may have differed as a result of the experience in this field. In larger samples, this feature can be examined.

In our study, there was no relationship between who to seek for psychiatric help and the negative beliefs toward mental illness No similar findings were found in other literature. However, the majority of the students stated that they would first prefer to seek help from a psychologist. In the research conducted by Uzman and Telef (2015), the participants stated that they would prefer psychologists over other professions.[44]

In our study, students who do not have a psychiatric history

have a higher tendency to be ashamed of mental illnesses. In some studies conducted in parallel with our research, individuals with a psychiatric history have less tendency to be ashamed of mental illnesses, while in some studies, no significant difference was found.[8,17,34,45] In this context, research results vary. Mental illness characterized as a shameful situation is an obstacle in sharing problems and seeking help. For this reason, students who tend to be ashamed of mental illnesses will have difficulty in seeking help, considering that if they have a psychiatric patient from their own family/relative, they will try to hide it.

Type A and Type B personalities were close to each other (type A: 42.2% and type B: 57.8%). There is a positive relationship between the Type A and Type B Personality Questionnaire and the BMI scale (Table 4). The average scores taken from the total score and subscales of the BMI were higher in the students who showed type A personality (50.7±14.7). In this context, students with type A personality have more negative beliefs toward mental illnesses compared with students with type B personality. In other research, individuals who are compatible and open to change have less stigmatizing behavior toward mental illnesses.[14] In our study, individuals with type B personality, who exhibit more compatible and more comfortable characteristics than those with type A personality, have fewer negative beliefs toward mental illnesses. Type B personality individuals have better empathy skills in different situations. In another study conducted with health professionals, individuals with personality traits such as emotional stability and openness to new experiences have fewer avoidant attitudes toward patients.[46] Individuals with type A personality may be more aggressive, impatient, and aggressive than individuals with type B personality; that is, they have less emotional determination. The results of our research are in parallel with the literature.

In our study, personality types were found to have an effect on beliefs about mental illness. In relation to our research, it is noteworthy that there are few studies in the literature investigating the relationship between Type A and Type B personalities and beliefs toward mental illnesses. According to the results of our research, personality types may be an important factor for future intervention studies. As a result of intervention studies, the personality tendencies of individuals may also affect this situation if the desired rate of change does not develop in their attitudes and thoughts.

Limitation

The fact that the study was conducted at a single university limited the generalizability of the results. A few studies in the literature examining Type A and Type B personalities and beliefs toward mental illness have limited the discussion of the results.

Conclusion

In the study, the beliefs of the Faculty of Health Sciences students toward mental illnesses and the relationship between these beliefs and personality types were investigated. The negative beliefs of the students toward mental diseases were at a moderate level. Individuals with Type A and Type B personalities showed differences in beliefs toward mental diseases, showing that individuals with type A personalities have more negative beliefs than those with type B personalities. Nurses as researchers can investigate the other factors that may affect negative beliefs and attitudes toward mental illnesses in future studies. In addition, studies can be conducted on larger samples using the same measurement tools, and the relationship between personality types and stigma can be investigated. In the intervention studies to be conducted, it is recommended to consider that personality types may also affect the results of the research. There are studies showing that negative beliefs and attitudes toward mental illnesses decrease with education.[46,47,48,49] In light of this information, nurses can provide awareness training about mental illnesses and psychoeducation for individuals with mental illnesses.

Conflict of interest: There are no relevant conflicts of interest to disclose.

Peer-review: Externally peer-reviewed.

Authorship contributions: Concept – M.İ.B., H.H.S., Ş.N.E., V.A.; M.İ.B., H.H.S., Ş.N.E., V.A.; Supervision – M.İ.B., H.H.S., Ş.N.E., V.A.; Fundings - H.H.S., Ş.N.E.; Materials – M.İ.B., H.H.S., Ş.N.E.; Data collection &/or processing – M.İ.B., H.H.S., Ş.N.E.; Analysis and/or interpretation – V.A.; Literature search – M.İ.B., H.H.S., Ş.N.E.; Writing M.İ.B., H.H.S., Ş.N.E., V.A.; Critical review – M.İ.B., H.H.S., Ş.N.E.,V.A.

References

1. World Health Organization. Promoting mental healt: Concepts, emerging evidence, practice: Summary report. In: Ayvan O, Coşkun B, linguistic editor. Ruh sağlığını güçlendirme: Kavramlar, kanıtlar, uygulamalar. Ankara: Psychiatric Association of Turkey; 2020. Available at: https://apps.who.int/iris/bitstream/handle/10665/42940/9241591595-tur.pdf?ua=1. Accessed May 16, 2023.
2. American Psychological Association. The diagnostic and statistical manual of mental disorders-5 (DSM-5). In: Köroğlu E, linguistic editor. Ankara: Hekimler Yayın Birliği; 2013.
3. Çam O. Bilge A. The process of stigmatization, attitude, and belief about mental illness and patient in Turkey: A systematic review. J Psy Nurs 2013;4:91–101.
4. Sağduyu A, Aker T, Ozmen E, Uğuz S, Ogel K, Tamar D. Relatives' beliefs and attitudes towards schizophrenia: An epidemiological investigation. Turk Psikiyatri Derg 2003;14:203–12.
5. Baysal GÖD. Stigmatization and mental health. Arch Med Rev J 2013;22:239–51.
6. Özmen S, Erdem R. Conceptual framework of the stigmatization. Suleyman Demirel Univ J Fac Econ Adm Sci 2018;23:185–208.
7. Ergün G. Hasta Savunuculuğu ve stigma. In: Oflaz F, Yıldırım N, editörler. Psikiyatri hemşireliği sertifika konuları. Ankara: Ankara Nobel Tıp Kitabevleri; 2020. s.533–62. [Turkish]

8. Ünal S. Hisar F. Çelik B. Özgüven Z. Beliefs of university students on mental illness. Düşünen Adam J Psy Neurol Sci 2010;23:145–50.
9. Bilge A. Çam O. The fight against stigma toward mental illness. TAF Preventive Med Bull 2010;9:71–8.
10. Çam O, Bilge A. Attitudes, beliefs toward mental illness. Anatol J Psy 2007;8:215–23.
11. Aydemir Ö. Attitudes and stigma towards bipolar disorder. J Psychiatr Psychol Psychopharmacol [Article in Turkish] 2004;12:61–4.
12. Çam O. Bilge A. Determination of beliefs and attitudes toward mental illness and patients of public who live in western part of Turkey. New Symp 2011;49:131–40.
13. Taşkın TO. Şen SF. Özmen E. Aydemir Ö. The public attitudes towards the patients with depression in a rural area: Social distance and related factors. Psy Turkey 2006;8:11–7.
14. Yuan Q, Seow E, Abdin E, Chua BY, Ong HL, Samari E, et al. Direct and moderating effects of personality on stigma towards mental illness. BMC Psychiatry 2018;18:358.
15. Solmi M, Granziol U, Danieli A, Frasson A, Meneghetti L, Ferranti R, et al. Predictors of stigma in a sample of mental health professionals: Network and moderator analysis on gender, years of experience, personality traits, and levels of burnout. Eur Psychiatry 2020;63:e4.
16. Arkan B. Bademli K. Duman ZÇ. Attitudes of health professionals towards mental disorders: Studies in Turkey during the last decade. Curr App Psychiatr 2011;3:214–31.
17. Tarım HŞ. Yılmaz M. Investigation in terms of socio-demographic variables of beliefs about mental illness of university students studying in health field. Mersin Univ J Health Sci 2018;11:134–46.
18. Öztürk A, Softa HK, Karaahmetoğlu GU. Belifs towards to mental illness and influence of psychiatric nursing course in nursing students of Kastamonu University. Int J Psy Psychol Res 2015;4:146–66.
19. Durna U. A tipi ve B tipi kişilik yapıları ve bu kişilik yapılarını etkileyen faktörlerle ilgili bir araştırma. J Econom Adminitr Sci [Article in Turkish] 2005;19:275–90.
20. Taymur İ. Türkçapar MH. Personality: Description, classification and evaluation. Curr App Psychiatr [Article in Turkish] 2012;4:154–77.
21. Özsoy E, Yıldız G. Importance of the concept of personality in terms of organizations: A literature review. J Bus Sci [Article in Turkish] 2013;1:1–12.
22. Tokat B. Kara H. Kara MY. Research on the predisposition to a probable organizational change of workers who have A-B type personality features. Turk Stud-Int Peridic Lang Lit Hist Turk Turkic 2013;8:1973–88.
23. Akıncı Z. Güven M. Demirel ON. The relationship between type A and B personality, mobbing and depression among students. Financ Poli Econom Rev [Article in Turkish] 2015;604:55–74.
24. Bulgur NE. Bal Y. An evaluation of the effects of A and B personality structures on career planning process. J Soc Sci [Article in Turkish] 2020;47:582–95.
25. Durna U. Stress, type A and type B personality charasteristics and A research on the relationship between stress and the two types. Manag Econom 2004;11:191–206.
26. Çıtak EA, Budak E, Kaya Ö, Öz Ş, Şahin S, Taran N, et al. Determination of the beliefs towards to mental illness in nursing students in Baskent University. Hacettepe Univ Fac Health Sci Nurs J [Article in Turkish] 2010;17:68–73.
27. Günay S, Bekitkol T, Ekitli BG, Yıldırım S. Determination of the mental disorder beliefs of students in a nursing facul. J Psy Nurs 2016;7:129–34.
28. Şahin G, Amancalı M, Sayın SA, Yakar A, Buzlu S. Undergraduate nursing students' attitudes towards patients with mental disorders and related factors. Acıbadem Univ Health Sci J [Article in Turkish] 2019;10:218–24.
29. Avcil C. Bulut H. Sayar GH. Psychiatric disease and stigmatization. Üsküdar Univ J Soc Sci [Article in Turkish] 2016;2:175–202.
30. Patikula M. Kişilik inançlarının ruhsal hastalığa yönelik inançlar üzerine etkisi. Yüksek Lisans Tezi. İstanbul: Fatih Sultan Mehmet Üniversitesi, Sosyal Bilimler Entitüsü; [Article in Turkish] 2017.
31. Bayramlık HA, Uluğ F. An investigation of the relationship between personality characteristics and stigmatization behaviors of teachers. J Contemp Adm Sci 2019;6:4–17.
32. Dawson B, Trapp RG. Basic & Clinical Biostatistics. 3rd ed. New York: McGraw-Hill Lange/Medical Books; 2001. p.69–72.
33. Gedik A. Üniversite öğrencilerinin ruhsal hastalıklara yönelik inançlarının araştırılması. Yüksek Lisans Tezi. İstanbul: İstanbul Bilim Üniversitesi, Sosyal Bilimler Enstitüsü; [Article in Turkish] 2015.
34. Dal Ü, Güleryüz İÖ, Ülker E, Demiray T. Beliefs of nursing students for mental illnesses. J Nurs Sci 2018;1:14–8.
35. Bilge A, Çam O. Validity and reliability of beliefs towards mental illness scale. Anatol J Psy 2008;9:91–6.
36. Sönmez İ, Tosun Ö, Köşger F. Attitudes of medical faculty students in Northern Cyprus towards mental illnesses. Cukurova Med J 2018;43:115–21.
37. Oban G, Küçük L. Factors affecting stigmatization about mental disorders among adolescents. J Psy Nurs [Article in Turkish] 2011;2:31–9.
38. Murat M, Öz A, Güner E, Köse S. The relationship between university students' beliefs toward mental illness and stigmatization. Florence Nightingale J Nurs 2020;28:194–204.
39. Erdoğan Ö, Işıl Ö, İlhan N, Cural KG, Gül Ş, Yazgan M, et al. Perspectives and stigmatization tendencies of university students studying in health-related departments towards different groups exposed to stigmatization. Haliç Univ J Health Sci 2021;4:187–99.
40. Büyükbayram AA, Arabacı LB, Taş G, Kurt A. The opinions of nursing students who have taken and not taken the psychiatric nursing courses towards psychiatric stigma. İzmir Katip Çelebi Univ Fac Health Sci J [Article inTurkish] 2020;5:263–75.
41. Öz F, İnci F. The effect of mental health and psychiatric nursing course on attitudes of nursing students towards individuals with mental health problems. J Crisis 2009;17:39–47.
42. Arslantaş H, Gültekin BK, Söylemez A, Dereboy F. First-time psychiatric outpatients' attitudes toward stigmatization re-

lated to the concept of mental disease. J Adnan Menderes Univ Health Sci Fac [Article in Turkish] 2010;11:11–7.
43. Jung H, von Sternberg K, Davis K. The impact of mental health literacy, stigma, and social support on attitudes tow mental health help-seeking. Int J Ment Health Promot 2017;19:252–67.
44. Uzman E, Telef BB. Prospective teachers' mental health and their help-seeking behaviours. Düşünen Adam J Psy Neurol Sci 2015;28:242–54.
45. Granados-Gámez G, López Rodríguez MD, Corral Granados A, Márquez-Hernández VV. Attitudes and beliefs of nursing students toward mental disorder: The significance of direct experience with patients. Perspect Psychiatr Care 2017;53:135–43.
46. Zaninotto L, Rossi G, Danieli A, Frasson A, Meneghetti L, Zordan M, et al. Exploring the relationships among personality traits, burnout dimensions and stigma in a sample of mental health professionals. Psychiatry Res 2018;264:327–33.
47. Kara N. Social work students' beliefs towards mental illnesses and the effects of theoretical education about mental illnesses. J Cognit Behav Psychother Res 2015;2:69–77.
48. Evli M. The effect of psychiatric nursing education on the relationship between belief and attitude towards mental diseases. Ordu Univ J Nurs Stud 2021;4:64–74.
49. Şengün İnan F, Günüşen N, Çelik İnce S, Çetinkaya Duman Z. The effect of a peer education program on nursing students' beliefs toward mental illnesses and their career choices. Perspect Psychiatr Care 2021;57:1774–81.