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# Is Somatization Escape From Stigmatization? A Cross-Sectional Study

## Somatizasyon Damgalamadan Kaçış mı? Kesitsel Bir Çalışma

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**ABSTRACT**

Somatization is a psychiatric condition characterized by repetitive bodily symptoms that cannot be fully explained by the medical condition of the individual and cannot be attributed to another mental disorder. This research aims to examine the relationship between the somatic symptoms of nursing students and their tendency to stigmatize**.**

The research was conducted at two different universities and a total of 438 students participated. The data were collected using the personal information form, the "Somatization" subscale of the SCL-90-R scale, and the Stigma Tendency Scale**.** The average score of somatization of students was 0,98±0,70 and the average score of Stigma Tendency Scale was 45,39±11,69. It was found that female students, those who did not share their problems, those who had previously applied to a psychiatrist or psychologist and received mental therapy, those who took medication, those who recently felt the need for a psychiatrist or psychologist, students with a diagnosis of mental illness in their family and who knew about mental health and diseases had more somatic problems ($p<0,01$). A weak negative statistically insignificant relationship was found between the general and subscale scores of somatization and Stigma Tendency Scale.

The students who got high scores from the stigma tendency scale were found to get high scores from the somatization scale, although not statistically significant. Based on this result, it can be said that students with a high stigma tendency experience more somatic symptoms.

**Keywords:** Nursing Students, Somatization, Stigma

**ÖZ**

Somatizasyon bireyin tıbbi durumu ile tam olarak açıklanamayan ve başka bir ruhsal bozukluğa

atfedilemeyen yineleyici bedensel semptomlar ile karakterize psikiyatrik bir durumdur. Bu araştırmanın amacı hemşirelik öğrencilerinin somatik belirtileri ile damgalama eğilimi arasındaki ilişkinin incelenmesidir.

Araştırma iki farklı üniversitede yapılmış olup toplam 438 öğrenci katılmıştır. Veriler; kişisel bilgi formu, SCL-90-R ölçeğinin "Somatizasyon" alt boyutu ve Damgalama Eğilimi Ölçeği kullanılarak toplanmıştır. Öğrencilerin Somatizasyon ortalama puanı 0.98±.70, Damgalama Eğilimi Ölçeği puan ortalaması 45.39±11.69'dır. Kadın öğrencilerin, sorunlarını paylaşmayanların, daha önce psikiyatrist veya psikoloğa başvuran ve ruhsal tedavi alanların, ilaç kullananların, son zamanlarda psikiyatrist veya psikoloğa ihtiyaç hissedenlerin, ailesinde ruhsal hastalık tanısı olan ve ruh sağlığı ve hastalıkları ile ilgili bilgisi olan öğrencilerin somatik yakınmalarının daha fazla olduğu tespit edildi ($P<0.01$). Somatizasyon ile Damgalama Eğilim Ölçeği genel ve alt boyut puanları arasında, istatistiksel olarak anlamlı olmayan negatif yönlü zayıf bir ilişki belirlendi.

Damgalama eğilimi ölçeğinden yüksek puan alan öğrencilerin istatistiksel olarak anlamlı olmamakla birlikte somatizasyon ölçeğinden de yüksek puan aldıkları saptandı. Bu sonuca dayanarak damgalama eğilimi yüksek olan öğrencilerin, somatik belirtileri daha fazla yaşadıkları söylenebilir.

**Anahtar Kelimeler:** Hemşirelik Öğrencileri, Somatizasyon, Damgalama

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## INTRODUCTION

Somatization is defined as a specific disorder with numerous medical attention-seeking behaviors, which are seen with bodily complaints and symptoms that cannot be explained by physical findings.[1]

There are different explanations for the cause of somatization. One of them is about the cultural dimension. There are forms of expression accepted by members of the society that each culture uses to express its experiences, troubles, and feelings.[2] In the study of Şahin et al. titled 'Cultural and Sociological Factors in Somatization', it is stated that while somatization is seen as a disease rather than a communication path in western societies, it can be seen as a form of communication that activates social assistance mechanisms rather than a disease in eastern societies.[3] In fact, Kirmayer stated that the somatic expression of stress can even be a wise choice in cultures where the stigma for mental illness is high.[4] It also plays a relaxing and therapeutic role, serving the individual to express his/her distress and to gain the right to receive health care.[4, 5] Somatization is a cultural form of communication and behavior in this respect.[4] However, studies indicate that somatization can be seen anytime, anywhere.[3, 6, 7]

It has been emphasized that university students are frequently exposed to stressful events and exhibit somatic symptoms in response to stress that cannot be explained by physical disorder.[8, 9] University students who chose the nursing profession defined intense stressors resulting from the nursing profession consisting of courses involving theoretical knowledge and skills, problems adapting to vocational courses in school nurses, not being useful enough during clinical studies, not being able to transfer what they have learned in theory to practice, working under unfavorable conditions, having an intense and one-to-one relationship with sick individuals, negative emotions such as agony, pain, desperation, and trainers, nurses, working teams, application environment, and private life.[10] On the other hand, they can be in stressful situations such as leaving the family, being able to solve the problems they face alone, and adapting to new environments.[11] In stressful situations, students experience body-related symptoms such as palpitations, dyspeptic complaining, sleep disorders, headache, difficulty swallowing, difficulty breathing, hot flashes, and so on.[11, 12] The disruptions in the social roles of the students with high somatic symptoms and their frequent resorting to health services regardless of the psychological source of the problem arise as a problem both individually and socially.[13] Additionally, individuals diagnosed with somatization not only change their doctor frequently but also use different drugs.[2, 14] It has been reported that 10-20% of health expenses are used by this patient group.[15] It is widespread in the general population and it is shown that the prevalence of somatic symptoms in basic health services varies between 19% and 57.5%.[16]According to a study conducted among university students on the somatic presentation of concerns about mental health, stigmatization, and the belief in the effectiveness of mental health therapy; somatic symptoms showed a significant correlation with depression and stigma and personal stigma and social stigma were negatively related to the belief in the effectiveness of therapy and were positively associated with depression anxiety and personal stigma.[17] Accordingly, some of the individuals who present with somatic symptoms may experience such symptoms but choose not to express them, while some may not be able to express these symptoms due to their cultural and individual characteristics or because they can speak out about their emotional state in a limited way, or may not express these symptoms due to concerns of stigma by receiving a psychiatric diagnosis despite being aware of emotional problems.[2]

Stigma is defined as an attitude towards a person or an event that includes discrediting, derogatory, despising negative behavior. Stigma is based on negative beliefs and the resulting prejudice, starting with labeling and

ending with discrimination and exclusion.[18] One of the most important consequences of stigma is that individuals with mental problems choose not to seek treatment for fear that they will be labeled as a result of treatment.[19] Therefore, stigma is defined as an obstacle to participation in treatment. Stigma limits the number of resources allocated to these diseases, deepens problems of finding accommodation and employment, social interaction, which creates a vicious circle that increases stigma again. Besides, stigma leads to low self-esteem, depression, delaying treatment, prolonged disease, social withdrawal, low self-sufficiency and decreased quality of life.[20, 21]

Although the relationship between somatization and stigma is theoretically explained in the literature, very few studies have been found that examine the two subjects together. One of them is the study conducted by Mc Nealy and Lombardero that examined the relationship between somatic symptoms and personal stigma on 184 undergraduate university students in the United States and found no relationship, and the other one is the study conducted by Raguam and et al. on a different sample with psychiatric patients in India, which noted that there was a negative relationship between stigma and somatic symptoms.[17, 22] In the review studies, it is recommended to examine stigma and somatization considering their cultural dimensions. [3, 6] Considering that Turkish society is a country of cultural diversity, the way culture-related diseases are understood and conceptualized by the people may also vary. In this study, we seek to find an answer to the question "Is Somatization a Way of Cultural Protection from Psychological Stigma?". Somatic symptoms can be a precursor to mental illness for nursing students. Evaluation and handling of symptoms of nursing students who will take part in preventive and rehabilitative services as well as curative services in the early period and performing their roles as educators, counselors, decision-makers, managers, and coordinators more actively are important in terms of their ability to provide qualified service and their well-being.[23]

Purpose of the Study: This study aims to examine the relationship between somatic symptoms and stigma tendencies of nursing students.

The study seeks answers to the following questions:

1. What are the introductory characteristics of nursing students that affect their level of somatization and stigma tendency (school, gender, age, class, problem sharing, having a relative with mental illness, previously seeing and currently needing a psychiatrist/psychologist, taking medication due to mental illness, knowledge of mental diseases)?

2. Is there a relationship between somatization and stigma levels of nursing students?

## MATERIAL AND METHOD

### Type of Research

This is a descriptive study to examine the relationship between somatization and stigma of nursing students.

### Sample

The universe of the research consisted of students enrolled in a foundation and a public university in the 2020-2021 academic year. The sample size required for the correlation coefficient reported in the referenced article regarding sample size was calculated as 418 with Type I Error (Alpha) 0.05 and 95% power.[17] A total of 438 volunteers were included in the study. The data was collected between September 2020 and January 2021 using the surveys and scale generated through Google Forms. The form was directed to students via social networks.

### Instruments

*General Information Form:* The General Information Form used in the study was prepared by the researchers and contains questions about the introductory characteristics of the student.

*Mental Symptom Check List (SCL 90-R) - Somatization Subscale:* SCL-90-R was developed by Derogatis et al. as a psychiatric symptom screening tool to detect symptom levels, especially in "seemingly normal" people, and the validity and reliability study was carried out by Dağ Each of the symptoms expressed in 90 items of the scale is evaluated by the subject with a Likert-type rating of "not at all," "a little bit," "Moderately," "Quite a bit" and "Extremely", taking into account the situation in the last 15 days, and scale scores are reached by scoring between 0 and 4, respectively.[24, 25] The scale consists of 10 different subscales: (1) somatization, (2) obsessive-compulsive disorder, (3) interpersonal sensitivity, (4) depression, (5) anxiety, (6) hostility, (7) phobic anxiety, (8) paranoid thinking, (9) psychoticism, (10) additional substances.[26] The subscale scores of the scale are obtained by summing up the score values of the answers to the relevant items and dividing them by the number of items that make up that subscale. The "somatization" sub-scale of the SCL-90-R scale was used in the research. Somatization involves many repetitive somatic complaints that go on for years, which are apparently not due to any physical disorder. Somatization includes symptoms such as fainting, chest pains, abdominal pain, nausea, shortness of breath, numbness in the body. The subscale of somatization consists of 9 items. The subscale score can range from 0.00 to 4.00. A score above 1.00 indicates the presence of somatization. The Cronbach's alpha value of the scale in this study was found to be 0.88.

*Stigma Tendency Scale:* The stigma tendency scale developed by Yaman & Güngör to measure psychological stigma tendencies consists of four sub-scales: discrimination and exclusion, labeling, psychological health, prejudice.[27] A 5-point Likert-type scoring system was used in the scale consisting of 22 items (1= strongly disagree, 2= disagree, 3= somewhat agree, 4= agree, 5= strongly agree). The lowest score to be obtained from the scale is 22 and the highest score is 110, and there are no reversely coded items on the scale. It can be said that individuals with a scale score below 55 have a low stigma tendency. A total of 6 items measure the discrimination and exclusion factor, 6 items the labeling factor, 5 items the psychological health factor, and 5 items the prejudice factor. The reliability coefficient of the scale was calculated as 0.84. The internal consistency coefficient was calculated as 0.77 for discrimination and exclusion, 0.68 for labeling, 0.66 for psychological health and 0.54 for prejudice. In this study, the Cronbach's alpha value of the scale was determined as 0.86. The reliability coefficients of the subscales were determined as 0.61 for discrimination and exclusion, 0.72 for labeling, 0.62 for psychological health and 0.79 for prejudice.

## Data Evaluation

Descriptive statistical methods (mean, median, frequency, percentage) were used in the evaluation of the study data. Kolmogrov-Smirnov test was used to analyze the distribution of data. Comparisons of quantitative variables were made with the Mann-Whitney U test and Kruskal-Wallis H test, and the correlation was detected with Spearman's rho test. For all statistical analyses, the p-value is taken as less than 0.05 ($p<0.05$) for statistical significance. IBM © SPSS 24 program is used to analyze the data.

## Ethical Aspect of the Research

The Ethics Committee approval was obtained from the Ethics Committee of the foundation university with the decision number 2020/10-10. Written permission was obtained from the relevant institutions for the study to be carried out. A consent page containing the information regarding the purpose of the study, confidentiality of the answers, and participation based on the principle of volunteerism was formed, and the participants were required to give consent before participating in the study. In other words, if the participant did not give consent, he did not reach the form and was not included in the study.

## Limitations of the Research

Pandemic-related constraints such as the collection of study data through electronic forms, the inability to have face-to-face interviews, and students' inability to perform clinical practice in this process are the limitations of this study.

## RESULTS AND DISCUSSION

It was determined that 75.6% of the students in the study studied at a public university, 76% were women, 50.5% were over 21 years old, and 30.6% were 4th classes. While 66.2% shared their problems, 12.8% had previously consulted a psychiatrist/psychologist and received treatment, 30.4% needed a psychiatrist/psychologist recently, and 13.5% had a relative with a mental illness (Table 1).

**Table 1.** Distribution of introductory characteristics of students

| Characteristics of Students | | n | % |
|---|---|---|---|
| **University** | State University | 331 | 75,6 |
| | Foundation University | 107 | 24,4 |
| **Gender** | Female | 333 | 76,0 |
| | Male | 105 | 24,0 |
| **Age** | 17-20 | 217 | 49,5 |
| | 21 and above | 221 | 50,5 |
| **Grade** | 1st Grade | 121 | 27,6 |
| | 2nd Grade | 71 | 16,2 |
| | 3rd Grade | 112 | 25,6 |
| | 4th Grade | 134 | 30,6 |
| **Economic status** | Low | 42 | 9,6 |
| | Medium | 386 | 88,1 |
| | High | 10 | 2,3 |
| **Place of longest residence** | Province | 251 | 57,3 |
| | District | 386 | 29,5 |
| | Village | 10 | 13,2 |
| **Status of physical discomfort** | Yes | 9 | 2,1 |
| | No | 429 | 97,9 |
| **Status of sharing problems** | Yes | 290 | 66,2 |
| | No | 148 | 33,8 |
| **Previous status of seeing a psychiatrist/psychologist and receiving treatment** | Yes | 56 | 12,8 |
| | No | 382 | 87,2 |
| **Status of Needing a psychiatrist/psychologist lately** | Yes | 133 | 30,4 |
| | No | 305 | 69,6 |
| **Status of having a relative with a mental illness** | Yes | 59 | 13,5 |
| | No | 379 | 86,5 |
| **Status of having information about mental illness** | Yes | 124 | 28,3 |
| | No | 314 | 71,7 |
| | **Total** | 438 | 100,0 |

Somatization Scale mean score is 0.98±0.70 (min: 0.10-Max:3.60), Stigma Tendency Scale mean score is 45.39±11.69 (min:22.00- Max:88.00); looking at the subscales, the mean score for prejudice is 14.62±3.75, 12.03±4.09 for Labeling, 10.52±3.68 for Psychological health, and 8.23±3.38 for Discrimination/Exclusion which is the lowest score (Table 2).

**Table 2**. Students' mean scores of somatization and stigma tendency scale (N=438)

| | Mean±SD | Min-Max |
|---|---|---|
| **Somatization Scale** | **0.98±.70** | **0.10-3.60** |
| **Discrimination/Exclusion** | 8.23±3.38 | 6.00-29.00 |
| **Labeling** | 12.03±4.09 | 6.00-25.00 |
| **Psychological Health** | 10.52±3.68 | 5.00-21.00 |
| **Prejudice** | 14.62±3.75 | 5.00-24.00 |
| **Stigma Tendency Scale Overall Score** | **45.39±11.69** | **22.00-88.00** |

In this study, the mean of the Somatization Symptom Score was found to be low (0.98±0.70). Our study finding was similar to the somatization score average (0.73±0.70) obtained in the study in which Demirel et al.[10] evaluated the mental state of university students, while it was found to be lower than the study result (1.52±0.67) of Yıldırım et al.[11] where they assessed the mental state of nursing students. It can be said that the low number of somatic symptoms in nursing students at both universities, which constituted the sample in our study, is the result of students being able to express their problems, feelings comfortably and cope effectively with stress.

It is seen that students studying at the state university scored higher than students studying at the foundation university in the subscales of labeling and psychological health in the Stigma Tendency Scale. It should be taken into account that the families of the majority of students studying at the foundation university also reside in this city located in the west of the country and the students grew up in this culture. The state university was a university with social, cultural and economic diversity, located in Anatolia and accepting students from every city of the country. A Swedish study reported that functional somatic symptoms increased due to socioeconomic inequalities.[28] While somatic depression in Western societies is seen as infantile, regressive, primitive, and not sophisticated at all, it is reported that somatic depression in traditional Eastern societies can be considered as a more developmental and adaptation-oriented mechanism as it ensures adaptation with the social environment and sociocultural support.[3] The relevant literature and the current situation of the students in the study suggest that this may be due to cultural differences.

It was determined that the average scores of students from the labeling and psychological health sub-scales of the stigma scale differed by the school of education ($p<0.05$). It was determined that female students had higher scores than male students ($p=0.001$) and that the subscales of discrimination ($p=0.001$), labeling ($p=0.001$), psychological health ($p=0.001$) in the Stigma Tendency Scale, overall scores ($p=0.001$) differed by the gender variable. Students aged 21 and over were found to have higher scores in the labeling subscale of the Stigma Tendency Scale, and their labeling and prejudice scores differed by the classes variable ($p<0.05$). As a result of the post hoc pairwise Mann-Whitney analyses, it was determined that the significant difference in the labeling subscale was caused by the difference in scores between the 2nd and 4th classes, and the difference in the prejudice subscale was due to the score difference between the 1st and 3rd classes.

It was found that students who did not share their problems, who had previously consulted to a psychiatrist/psychologist and received treatment, who are currently on medication, who have recently felt the need for a psychiatrist or psychologist, who had a relative with a mental problem, and who received information about mental illnesses scored higher on the somatization scale and that the difference was statistically significant ($p<0.05$).

It is seen that the subscale of discrimination and exclusion in the Stigma Tendency Scale was affected by the status of sharing problems; labeling and prejudice subscales and overall score by the status of previously consulting a psychiatrist or psychologist and receiving treatment; and labeling tendency by the status of current use of medication (Table 3).

In the study, there was no correlation between the class level of nursing students

and their somatic symptoms, which is similar to the studies carried out in the literature.[14, 29] Another finding in the study is that the stigma tendencies of 1st and 4th classes students differed from each other. Since the Stigma Scale determines the tendency, the fact that the prejudice score is high in first-classes and the labeling score in fourth classes suggests that students in these grades are at risk for stigma. It can also be said that a more detailed examination of the reasons for this result is needed, as prejudice and labeling constitute the first steps of the stigma process.

Female students had higher somatization mean scores than male students. It was also explained in the study of Tan and Şahin that women had a high rate of somatic symptoms and that this was especially related to the specific characteristics of women in our society such as their social position, lifestyles, and greater use of body language. It is emphasized that the symptoms of somatization in women may be more common due to the male-dominant structure of society and their exposure to oppression from childhood.[14, 30] Our study result is compatible with the literature. Male students' overall scores and the scores of discrimination and exclusion, labeling, psychological health subscales in the Stigma Tendency Scale were higher than those of the female students. In line with the results of this study, Kayma et al. found that men had higher averages of discrimination and exclusion, labeling, and psychological health and prejudice scores than women, while

**Table 3.** Somatization and stigma tendency scale scores by some characteristics of students

| | | | Somatization Scale | Stigma Tendency Scale | | | | |
|---|---|---|---|---|---|---|---|---|
| **Groups** | | | | **Discrimination and Exclusion** | **Labeling** | **Psychological health** | **Prejudice** | **_Overall Score** |
| | | **n** | **Median** | **Median** | **Median** | **Median** | **Median** | **Median** |
| **University** | State University | 331 | ,80 | 7,00 | 12,00 | 10,00 | 15,00 | 45,00 |
| | Foundation University | 107 | ,80 | 7,00 | 11,00 | 9,00 | 15,00 | 43,00 |
| | U | | 17441,5 | 16683 | 15362* | 14045*** | 17228,5 | 15191,5 |
| **Gender** | Female | 333 | ,80 | 7,00 | 11,00 | 10,00 | 15,00 | 43,00 |
| | Male | 105 | ,60 | 9,00 | 13,00 | 11,00 | 14,00 | 48,00 |
| | U | | 12462,5*** | 11242,5*** | 11915,5*** | 13385,5*** | 16660 | 12648*** |
| **Age** | 17-20 | 217 | ,80 | 7,00 | 11,00 | 10,00 | 15,00 | 44,00 |
| | 21 and above | 221 | ,80 | 7,00 | 12,00 | 10,00 | 14,00 | 45,00 |
| | U | | 22632 | 22805,5 | 21178* | 23065 | 22120,5 | 22420,5 |
| **Grade** | 1st Grade | 121 | ,80 | 7,00 | 12,00[a,b] | 10,00 | 15,00[a] | 46,00 |
| | 2nd Grade | 71 | ,80 | 7,00 | 10,00[a] | 10,00 | 14,00[a,b] | 42,00 |
| | 3rd Grade | 112 | ,80 | 7,00 | 11,00[a,b] | 10,00 | 14,00[b] | 43,00 |
| | 4th Grade | 134 | ,70 | 7,00 | 12,00[b] | 10,00 | 15,00[a,b] | 46,00 |
| | H | | ,692 | 1,278 | 4,875* | ,797 | 3,973* | 5,897 |
| **Status of physical discomfort** | Yes | 9 | 0,70 | 7,00 | 11,50 | 10,00 | 15,00 | 44,00 |
| | No | 429 | 0,90 | 7,00 | 12,00 | 10,00 | 15,00 | 44,00 |
| | U | | 17716,5** | 18618,5* | 19862 | 20936 | 19949 | 19831 |
| **Previous status of consulting a psychiatrist/psychologist and receiving treatment** | Yes | 56 | 1,20 | 7,00 | 13,50 | 10,00 | 15,00 | 47,00 |
| | No | 382 | ,80 | 7,00 | 11,00 | 10,00 | 15,00 | 44,00 |
| | U | | 7042*** | 10482 | 8458,5* | 10299 | 8522,5* | 8959,5* |
| **Current status of taking medication for mental therapy** | Yes | 30 | 1,05 | 7,00 | 14,00 | 10,00 | 15,00 | 49,00 |
| | No | 74 | ,80 | 7,00 | 11,00 | 10,00 | 15,00 | 44,50 |
| | U | | 794,5* | 1049,5 | 794,5* | 1010,5 | 931 | 874,5 |

**Table 3.(Continued)** Somatization and stigma tendency scale scores by some characteristics of students

| | | | Somatization Scale | Stigma Tendency Scale | | | | |
|---|---|---|---|---|---|---|---|---|
| **Groups** | | | | **Discrimination and Exclusion** | **Labeling** | **Psychological health** | **Prejudice** | **_Overall Score** |
| | | **n** | **Median** | **Median** | **Median** | **Median** | **Median** | **Median** |
| **Status of needing a psychiatrist/psychologist lately** | Yes | 133 | 1,30 | 7,00 | 12,00 | 10,00 | 15,00 | 44,00 |
| | No | 305 | ,70 | 7,00 | 12,00 | 10,00 | 15,00 | 44,00 |
| | U | | 10085,5*** | 20051,0 | 20221,5 | 18892 | 18551,5 | 20280 |
| **Status of having a relative with a mental illness** | Yes | 59 | 1,30 | 7,00 | 11,00 | 10,00 | 14,00 | 43,00 |
| | No | 379 | 0,80 | 7,00 | 12,00 | 10,00 | 15,00 | 44,00 |
| | U | | 7969*** | 10581,5 | 10895,5 | 10985 | 10335,5 | 10694 |
| **Status of having information about mental illness** | Yes | 124 | 0,95 | 7,00 | 12,00 | 10,00 | 15,00 | 46,00 |
| | No | 314 | 0,80 | 7,00 | 11,00 | 10,00 | 15,00 | 44,00 |
| | U | | 16990* | 18948 | 17586 | 18732,5 | 18323 | 17514,5 |

*p<0.05, **p<0.01, ***p<0.001
[a,b] post hoc pairwise Mann-Whitney analyses; groups with the same superscript letter do not differ from each other
U: Mann Whitney U test, H:Kruskall Wallis H Test

Uğurlu et al. reported that the variable of male gender increased the risk of stigma compared to the female gender by 2,880 times.[31, 32] This can be explained by the different cultural expectations from boys and girls in the process of socializing and the different ways of raising in Turkish society. In girls, sympathy, passiveness, sensuality, sensitivity to the feelings of others are reinforced; while, in boys, the behaviors of being strong, enduring pain, self-control, being able to overcome problems alone, not needing others are reinforced. Since men may be perceived as weak and powerless when seeking psychological help, they can characterize seeking psychological help as a perception of failure and may not seek psychological help by developing a negative attitude towards seeking psychological help.[33, 34] The high level of stigma tendencies in male students in our study is thought to be due to these reasons.

In this study, it was determined that students who did not share their problems had more somatic symptoms. The individual's sharing about his/her own feelings, thoughts, and behaviors cause him/her to experience the feeling that he/she is loved, understood, cared for by the people around him/her, and not alone. It develops different perspectives on his/her problems, solves his/her problems, and increases the psychological well-being of the individual.[11] It is seen that it is important to share stress factors that can lead to the deterioration of the mental or physical health of students. The results of the studies in the literature are in parallel to the results of our study.[9, 10, 30] In Doğan's study on social support and well-being as the predictor of psychological symptoms, it was determined that the variable that best predicted somatization symptoms was family support, followed by the variable of self-directedness, and then the variable of affection.[29] According to this result, it can be said that nursing students show somatic symptoms using body language instead of sharing many stressful situations such as being away from family, having too many course hours, and so on. The fact that students who do not share problems exhibit stigma tendencies can lead to reduced self-sufficiency in effectively coping with problems.[12] It can be said that problem sharing allows students to turn negative thoughts towards themselves, thus reducing their somatic symptoms.

It was determined in this study that the students who had previously consulted a psychiatrist or psychologist and received treatment showed somatic symptoms. There are studies in the literature that report negative attitudes are developed towards the treatment of mental illnesses with medication.[7, 14, 35] It can be said that students express themselves through somatization because individuals who develop a negative attitude towards seeking help due to psychological problems are less likely to talk

about their problems, express their problems, and seek help.[35, 36] It is also reported that patients with somatic symptoms receive a lot of medical and surgical treatment and if physicians examine the patient in more detail, such interventions will not be necessary and they can diagnose somatization disorder in the early period.[14-15] It is stated in the literature that patients with somatization complaints use health services frequently.[37] It can be said that students also engage in the behavior of seeking help with these symptoms.

The study found that students who needed a psychiatrist or psychologist had more somatic symptoms than those who did not. It is reported that nursing students experience psychiatric problems in their education processes.[11, 35, 36] One of these problems is the somatic complaint; therefore, it is reported that 67.8% of the students intend to seek professional psychological help if they need it, and 32.2% do not.[36] According to the literature; changes in emotions, thoughts and behaviors in mental illnesses are considered deviations from normal in many cultures and are generally not accepted by society and can lead to the exclusion of individuals.[18, 19] In our study, it is very important that students with high somatic symptoms can express their need for mental support.

The somatic symptoms of the students with relatives diagnosed with mental illness were higher than the students without such relatives while they had fewer Stigma Tendencies. According to the study conducted by Tarım and Yılmaz, students who did not have a family member with a mental illness thought that individuals with mental illness were dangerous, experienced frustration and desperation and that they had negative thoughts about mental illness in general.[38] In their study, Tan and Şahin reported an increase in somatic symptoms in individuals between the ages of 18 and 65 who had a family member or relative with a mental illness.[14] In many studies in the literature, it has been shown that the presence of a mental illness in the individual, his family, and environment reduces the stigmatizing negative attitude.[36-38] Our study results are in line with the literature.

It is seen that students who receive information about mental health have somatic symptoms. In the study of Tan and Şahin, it is stated that the developing personality structure and increased communication ability with an increase in the level of education reduce the risk of somatization of the individual. In the study, it is known that 4$^{th}$ graders took courses related to mental health.[14] Students taking mental health courses became conscious about the fact that changes in the body would be a predictor of mental illness, which may have let them realize their somatic complaints. The inclusion of some courses for improving empathy, stigma, and communication skills given within the scope of nursing education

in theoretical and applied programs may have contributed positively to the stigmatizing attitudes of nursing students. Aydogmuş's (2020) study supports this idea.[39]

A very weak statistically insignificant correlation was found between somatization and the Stigma Tendency Scale overall and subscale scores (Table 4). In this study, no significant correlation was found between the overall and subscale scores of the Somatization and Stigma Tendency Scale (r: -0.009; p >0.05). Raguam et al. found that there was a negative relationship between stigma and somatic symptoms in their study of psychiatric patients in India (r = -0.32, p≤0.05).[22] While Mc Nealy and Lombardero found no significant relationship between somatic symptoms and personal stigma in their study with university students in the USA (r:-0.12 p>0.05), they reported a statistically significant relationship between perceived social stigma and somatic symptoms (r:0.16; p≤00.05).[17] These differences may have been due to the cultural impact on the presentation of somatic complaints. Studies in countries such as India and China, for example, report that, unlike Western societies, depressive sentiment is culturally disapproved of, while somatization is accepted.[22] This is explained by the fact

that societies somatically express their feelings as a way to avoid dealing with the potential stigma due to psychiatric disease labeling.[40] It is reported that the Chinese can delay the seek for help, especially from outside the immediate family circle, until the disease severely progresses, and that problems that can often be prevented result in personal and familial suffering.[6]

**Tablo 4.** Correlations between the overall and subscale scores of somatization and stigma tendency scale

| | | | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|
| Spearman's rho | 1. | **Somatization** | 1,000 | | | | | |
| | 2. | **Discrimination and Exclusion** | -,040 | 1,000 | | | | |
| | 3. | **Labeling** | -,016 | ,484*** | 1,000 | | | |
| | 4. | **Psychological health** | -,046 | ,519*** | ,596*** | 1,000 | | |
| | 5. | **Prejudice** | ,036 | ,250*** | ,505*** | ,477*** | 1,000 | |
| | 6. | **Stigma_overall** | -,009 | ,653*** | ,847*** | ,832*** | ,722*** | 1,000 |

*p<0.05, **p<0.01, ***p<0.001

It was determined that the difference between the medians of the somatization scale of the students who scored 55 or above and 54 points or below on the Stigma Tendency Scale was not statistically significant. However, it was determined that the average somatization score of students who scored 55 or above on the scale was above 1.00 (1.044±0.84) (Table 5).

Studies on somatization in Turkish society are usually carried out on the migrant and female populations and it is stated that there is a high rate of somatic complaining.[41, 42] However, there is no study carried out in our country that examines the relationship between somatization and stigma in Turkish society. In the study of Heredia Montesinos et al., the relationship between stigma and somatic symptoms was examined in depressed and non-depressed migrant women of Turkish origin, and no significant relationship was found similar with the findings of our study.[43] Although no relationship was found between stigma and somatization in our study, it is noteworthy that students who scored 55 and above, the cut-off value of the Stigma Tendency Scale, also got high scores from the somatic symptoms scale. Although there is no statistically significant difference, this finding suggests that students with high stigma tendency will also have more somatic complaining and should be supported more psychologically.

**Table 5**. Comparison of somatization scores by the cut-off value of the stigma tendency scale

| | | Somatization Scale | | |
|---|---|---|---|---|
| | | **n** | **x̄ ±SD** | **Median** |
| **Stigma Tendency Scale** | 54 points and below | 357 | 0,968±0,67 | 0,800 |
| | 55 points and above | 81 | 1,044 ± 0,84 | 0,800 |
| | U | | | 14375,5 |

## CONCLUSION AND RECOMMENDATIONS

In this study, the relations between somatic symptoms and stigmatization tendencies of nursing students were evaluated, and the variables affecting the somatization and stigmatization tendencies were examined. The study findings showed that somatic complaints of the female students, those who do not share problems, those who applied to psychiatrists or psychologists previously, and those who received mental treatment, those who used drugs, those who needed psychiatrists or psychologists recently, and those with a family history of mental illness and

knowledge on mental health and diseases. Although the relations between somatization and stigmatization tendency were not statistically significant, it can be argued that nursing students who have high stigmatization tendency face more somatic symptoms. As nursing students will take responsibility for patient care in their future lives, it is important for them to include mental health awareness trainings in nursing curricula. Considering that the students with a high Stigma Tendency Score also had a high number of somatic symptoms; we can say that stigma can manifest itself with somatic symptoms. Therefore, providing the necessary support/guidance services to designated risk groups in a timely manner will make it easier for students to become aware of their somatic symptoms. This awareness will lead students to seek mental support and contribute to the completion of the treatment process. As a result, more serious mental problems can be prevented. This study will also contribute to increasing the awareness of nursing students not only of themselves but also of the impact of cultural environment and cultural values of the patients they care for when evaluating the somatic symptoms of the patients. Studies involving universities in different parts of the country and with a higher number of students, and even studies involving individuals who are familiar with different international cultures, can contribute to the understanding of cultural differences. Thus, awareness can be raised about the importance of cultural-based health services

There are very few studies in the literature that investigate the relationship between stigma and somatization. All of these studies were carried out outside our country. The strength of the study is that it is the first study conducted in Turkey. It is also a valuable study in terms of revealing the effect of the cultural difference between Turkey's East and West on stigma tendency and somatic symptoms.

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