

Somatization Level Among Psychosomatic Dermatology Patients: Relationship With Dyadic Adjustment, Gratitude, Forgiveness, and Perfectionism

ABSTRACT

Objective: This study aimed to investigate the relationship between the somatization level and dyadic adjustment, gratitude, forgiveness, and perfectionism in patients with psychosomatic dermatologic complaints.

Methods: In this correlational survey study, participants were recruited using the purposive sampling method from patients with psychosomatic dermatologic complaints, who were 18 or older, married, and living in the Turkish Republic of Northern Cyprus. Data were collected from patients diagnosed as having a dermatological disease with probable psychological etiology by a dermatologist at the dermatology outpatient unit of Nicosia Dr. Burhan Nalbantoğlu Hospital during April-December 2018. The demographic information form, symptom checklist, dyadic adjustment scale, gratitude questionnaire, Heartland forgiveness scale, and almost perfect scale were administered to the participants.

Results: In this study, female sex, low education level, being an immigrant, low dyadic adjustment, perfectionism with a high level of discrepancy, low forgiveness of self and situations, and low gratitude levels were found to be probable risk factors for somatization.

Conclusion: During the psychiatric treatment of patients with somatic complaints, marital problems, forgiveness, and perfectionism with a high level of discrepancy should be considered.

Keywords: Psychosomatic, dermatology, marriage, adjustment, forgiveness, perfectionism

Introduction

The skin is an organ that functions as a border between people and the external world, which reflects conscious or unconscious psychological and sociological problems and also acts as a mediator of nonverbal communication. It has been stated that psychological and sociological issues attribute to the occurrence of skin diseases.¹ As the skin and the brain are from the same germ layer, a disorder in one system inevitably affects the other. The manner in which these two systems affect each other in different ways has been a subject of multiple studies.²

The expression of emotions, conflicts, and psychological needs via somatic symptoms and the body is defined as psychosomatics.³ It is accepted that mental factors are important determinants in the etiology of psychosomatic diseases and in the exacerbation and regression of the symptoms.⁴ In studies conducted in patients with dermatologic problems affected by psychogenic factors, depression,⁵ alexithymia,⁶ and anxiety⁷ were reported to be the most common psychiatric disorders.

Marital adjustment is a process in which an individual or a couple changes and adapts their behavioral patterns and interactions to gain satisfaction from their relationships. Marital adjustment can be affected by individuals' mutual interactions and consensus.⁸ Studies have generally found a significantly negative relationship between marital adjustment and somatization.^{9,10}

Gratitude is the tendency to recognize when a benefit is gained from other people or beings and to respond to this through positive experiences.¹¹ Studies have shown that gratitude has



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a protective effect on mental health,¹² strengthens physical health,¹³ increases life satisfaction,¹⁴ and has a protective effect on depression.¹⁵

Forgiveness is defined as the replacement of negative feelings resulting from not forgiving¹⁶ with strong and positive emotions oriented toward others. Forgiveness has dimensions of forgiveness of oneself, others, and situations. Self-forgiveness is an increase in positive feelings toward oneself by decreasing resentment, anger, and rage toward oneself.¹⁷ The fact that the individual does not forgive himself for his mistakes increases the level of feelings such as guilt, shame, and regret that negatively affect mental health.¹⁸ Low life satisfaction,¹⁹ increased perceived stress, depression symptoms,²⁰ and suicidal tendency have been reported in individuals with low forgiveness.²¹

Perfectionism is the effort of the individual to reach the high-performance standards set for himself and others by the individual himself and also by the others for him.²² Perfectionism has a multidimensional structure and has adaptive and maladaptive types.²³ Perfectionism plays a role in causing and maintaining various psychological disorders. Studies have shown that perfectionism is associated with depressive symptoms,²⁴ post-traumatic stress,²⁵ and anxiety disorder.²⁶

Although many factors that determine marital adjustment have been defined, it still continues to be a matter of interest for researchers. Although there is a relationship between somatization, gratitude, forgiveness, perfectionism, and dyadic adjustment, it remains unclear how these findings affect each other in determining dyadic adjustment. This study aimed to examine the relationship between somatization level and dyadic adjustment, gratitude, forgiveness, and perfectionism among patients with psychosomatic skin problems. We tried to answer the following questions in this context:

Does somatization differ significantly according to sex, marriage type, income level, a history of chronic disease in the family, and education level?

Are there any significant relationships between somatization, couple harmony, gratitude, forgiveness, and perfectionism?

Do dyadic adjustment, gratitude, forgiveness, and perfectionism predict somatization significantly?

Methods

Sample

In this study that used a correlational survey model, participants were selected via the purposive sampling method. The participants were individuals who were married and living together, aged 18

or above, and residing in the Turkish Republic of Northern Cyprus (TRNC). The participants were patients diagnosed as having a dermatological disease with probable psychological etiology (eczema, urticaria, erythroderma, pruritis, neurodermatitis-atopic dermatitis, seborrheic dermatosis, acne vulgaris, alopecia areata, vitiligo, psoriasis, and so on) by a dermatologist at the dermatology outpatient unit of Nicosia Dr. Burhan Nalbantoğlu Public Hospital during April-December 2018.

Instruments

Demographic information form, symptom checklist (SCL-90), dyadic adjustment scale (DAS), gratitude questionnaire (Q Grat), heartland forgiveness scale (HFS), and almost perfect scale (APS) were applied for data collection.

Demographic Information Form: It included questions about the participants' age, sex, nationality, marriage age, duration of marriage, number of children, and so on.

Dyadic Adjustment Scale: It was developed by Spanier²⁷ and adapted to Turkish by Fıfıloğlu and Demir.²⁸ The scale included 32 items developed to evaluate the relationship quality of married or cohabiting couples. The DAS has 4 subscales, namely dyadic satisfaction, dyadic cohesion, dyadic consensus, and affectional expression. The total score is the sum of all items of the test, which reflects marital satisfaction and satisfaction level, and ranges between 0-151. Higher scores indicate better adjustment in the relationship. The reliability coefficient for the whole scale is 0.96. In the validity and reliability study for the Turkish sample, the internal consistency reliability coefficient of the scale was found to be 0.92, which is close to the original result.

Heartland Forgiveness Scale: It was developed by Thompson et al²⁹ to determine the level of forgiveness of individuals. The scale has 3 sub-dimensions: forgiving self, others, and the situation. The scale includes 18 items rated with a 7-point Likert-type scale. High scores indicate high levels of forgiveness. Adaptation studies for Turkish culture were carried out by Bugay and Demir.³⁰ The Cronbach's alpha values for the subscales are 0.64 for self-forgiveness, 0.79 for forgiving others, and 0.76 for forgiving a situation. The Cronbach's alpha coefficient for the total score of the scale was calculated as 0.81.

Gratitude Questionnaire: It is a 7-point Likert-type scale developed by McCullough et al³¹ to evaluate individual differences in the tendency to experience gratitude in daily life. As a result of the adaptation study of the scale to Turkish conducted by Yüksel and Oğuz-Duran³² among university students, a 5-item measurement tool was obtained that explained 53.27% of the total variance. The Cronbach's alpha value for the scale was reported as 0.77, whereas the correlation coefficient calculated for the test-retest reliability study was reported as 0.66.

Almost Perfect Scale: The scale, developed by Slaney and Johnson³³ to distinguish between adaptive and maladaptive perfectionism, has been adapted into Turkish by Sapmaz.³⁴ It is 7-point Likert-type scale and consists of 4 sub-dimensions, namely high standards, order, discrepancy, and discontentment. In terms of grouping adaptive and maladaptive perfectionists, the score obtained from the combined high standards and order subscales was used to iden-

MAIN POINTS

- Somatization level is higher among participants who are female, who have lower education level and whose place of birth is other than Turkey or TRNC.
- Somatization level increases as the level of dyadic adjustment, gratitude, thoughts of forgiveness of self and situation decreases.
- Low dyadic adjustment and high maladaptive perfectionism are significant predictors of high somatization level among dermatology patients.

tify “adaptive perfectionists,” and the scores from the combined discrepancy and discontentment subscales were used to identify “maladaptive perfectionists.” The Cronbach’s alpha value was found to be 0.79 for adaptive perfectionism and 0.82 for maladaptive perfectionism.

Symptom Checklist: It was developed by Derogatis³⁵ to determine the distribution and severity of mental symptoms that participants have in both clinical and research situations. The scale is a self-report scale consisting of 90 items and 10 subscales answered in 5-point Likert type. The questions are answered according to the past month, including the current day. A total of 9 subscales are included as follows: Somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid thinking, and psychotism. The Turkish validity and reliability study was conducted by Dağ.³⁶ The Cronbach’s alpha internal consistency of the scale was found to be 0.97, the test-retest reliability ranged between 0.65 and 0.87, and it was calculated as 0.90 according to the GSI score. The somatization subscale was used in this study.

Procedure

Before commencing the study, after obtaining approval from the Ethics Committee of Near East University (Approval Date: March 29, 2018; Approval Number: YDÜ/SB/2018/133), an application was made to Nicosia Burhan Nalbantoğlu State Hospital to collect data, and approval was also obtained from the ethics committee of the hospital. Research data were collected between April and December 2018. Before the application, the participants were informed about the research, it was explained that the participation was on a voluntary basis, the privacy of personal information would be ensured, and they could withdraw from the study at any stage. The participants who agreed to participate in the study were given an informed consent form and research scales in a sealed envelope when they came to the hospital for treatment, and they returned in a closed envelope after completion. At the end of the data collection process, 136 participants were included in the study.

Statistical Analysis

For statistical analysis of the study SPSS version 21 (IBM Corp.; Armonk, NY, USA) was used. For comparing sociodemographic data and somatization level, the Mann-Whitney U test was used because the data did not show normal distribution. The correlation levels of the SCL-90 somatization subscale with the gratitude scale, HFS sub-scales, and perfectionism subscales scores were determined by Spearman correlation analysis. Multiple regression analysis was used to determine the variables predicting the somatization level.

Results

A total of 136 married individuals participated in the study, of whom 93 (68.4%) were women and 43 (31.6%) men. The average age of the participants was 42.41 (SD = 11.9) (20-78) years. Of the participants, 77 (56.6%) were born in TRNC, 48 (35.3%) in Turkey, and 11 (8.1%) in another country, and 79.3% of the participants had a high school or higher education level (Table 1).

Somatization scores were found to be significantly higher in female participants than in male participants. The somatization scores of participants with high school or higher education level were found to be significantly lower when compared with the participants with lower

education level according to the Mann-Whitney U test (Table 2). Somatization scores were found to be significantly higher in participants whose place of birth was outside Turkey and the TRNC (Table 3).

There was no significant difference in the somatization level according to marriage style (arranged, arranged but agreed, dating/love), age groups (20-30, 31-40, 41-50, 50 years and above), with or without children, and living in a village or city (Table 2). There was no significant difference in the somatization level in terms of the way the family assessed the income level (low, medium, or high). Although the somatization score was found to be higher if a family member had a chronic disease, the difference was not significant.

The study found that SCL-90 somatization subscale had a moderate negative correlation with HFS self ($r = 0.310, P = .001$) and HFS situation ($r = -0.310, P = .030$), a negative mild correlation with Q Grat total ($r = -0.199, P = .030$), and a moderate positive correlation with APS maladaptive ($r = 0.505, P < .001$) (Table 4).

In the multiple regression analysis, the variables of dyadic adjustment; gratitude; forgiveness of self, others, and situation; and adaptive and maladaptive perfectionism had a significant relationship with the somatization score ($R = 0.704, R \text{ squared} = 0.444, P < .001$). The 7 above mentioned variables together explain about 44% of the total variance in somatization. According to the standardized regression coefficient, the relative importance order of predictor variables on somatization is dyadic adjustment; forgiveness of self, others, and the situation; maladaptive perfectionism; adaptive perfectionism; and gratitude. When the t-test results of the significance of the regression coefficients are examined, it is observed that only dyadic adjustment and maladaptive perfectionism are significant predictors of the somatization level. The variables of forgiveness of situation, others, and self; adaptive perfectionism; and gratitude do not have a significant effect (Table 4).

Table 1. Distribution of Demographic Characteristics

Demographic variables	Frequency (%)
Sex	
Women	93 (68.4)
Men	43 (31.6)
Birthplace	
Cyprus	77 (56.6)
Turkey	48 (35.3)
Other	11 (8.1)
Education level	
Secondary school and below	28 (20.7)
High school	48 (35.3)
Graduate	39 (28.7)
Postgraduate	20 (14.8)
Marriage style	
Arranged	23 (16.9)
Arranged but agreed	30 (22.1)
Dating/love	83 (61.0)
Chronic disease in the family	
Yes	30 (22.4)
No	104 (77.6)
Residence	
Village	35 (24.7)
City	99 (72.8)

Table 2. The Relationship Between Scores of SCL-90 Somatization, DAS, APS, HFS, and Q Grat

		1	2	3	4	5	6	7	8
SCL-90	r	1.000	-0.385 ^a	-0.199 ^b	-0.310 ^a	-0.126	-0.310 ^a	-0.024	0.505 ^a
Somatization	P		.000	.030	.001	.165	.000	.807	.000
DAS	r		1.000	0.289 ^a	0.213 ^a	0.204 ^b	0.276 ^a	0.239 ^b	-0.298 ^a
	P			.002	.023	.208	.003	.016	.002
Q Grat	r			1.000	0.203 ^b	0.296 ^a	0.384 ^a	0.101	-0.240
	P				.028	.001	.000	.308	.012
HFS									
Self	r				1.000	0.330 ^a	0.466 ^a	-0.010	-0.399 ^a
	P					.000	.000	.922	.000
HFS									
Other	r					1.000	0.629 ^a	-0.042	-0.155
	P						.000	.668	.105
HFS									
Situation	r						1.000	0.046	-0.336 ^a
	P							.637	.000
APS adaptive	r							1.000	0.292 ^a
	P								.003
APS maladaptive	r								1.000
	P								

Abbreviations: SCL-90, symptom check list; DAS, dyadic adjustment scale; Q Grat, gratitude questionnaire; HFS, Heartland forgiveness scale; APS, almost perfect scale.

^aP < .001.

^bP ≤ .5.

Table 3. The Somatization Mean Scores of the Participants According to Education Level

Education Level		N	Mean (SD)	T	df	P
Education	Below high school	24	14.0000 (10.94651)	2.86	28.23	.31
	Above high school	103	8.6408 (7.50536)			

Table 4. Examination of Somatization in Terms of Risk Factors

	B	Std. error	Beta	T	P	ΔR ²	Adjusted R ²	F
DAS	-0.171	0.041	-0.401	-4.130	.000	0.496	0.444	9.57
Q Grat	0.064	0.099	0.065	0.644	.522			
HFS self	-0.115	0.114	-0.108	1.003	.319			
HFS others	0.206	0.129	0.224	1.602	.114			
HFS situation	0.206	0.167	-0.308	-1.903	.061			
APS adaptive	-0.048	0.060	-0.082	-0.801	.426			
APS maladaptive	0.128	0.049	0.294	2.597	.012			

Abbreviations: SCL-90, symptom check list; DAS, dyadic adjustment scale; Q Grat, gratitude questionnaire; HFS, Heartland forgiveness scale; APS: almost perfect scale.

Discussion

In the study, it was found that the level of somatization is seen at a higher rate in women. Studies have reported that being a woman is an important risk factor for somatization,³⁷ women report more somatic symptoms than men,³⁸ and women have a higher somatization level than men.³⁹ Expectations with respect to women's gender roles and their socioeconomic disadvantage compared with men make women more vulnerable in terms of the prevalence of psychological disorders in most cultures. The finding of the study that somatization scores are higher in women than in men is consistent with other studies.

Somatization symptoms were found to be lower in participants with a higher education level in the study. Some studies have reported that the symptoms of somatization increase as the education level decreases. Primary and high school graduates showed higher somatization levels than university graduates,⁴⁰ and being black and with

a low educational level⁴¹ was associated with higher somatization scores. The fact that higher rates of somatization are seen in individuals who are defined as disadvantaged groups in the society and have low socioeconomic conditions in terms of life difficulties and working conditions can be interpreted as these individuals choosing to externalize their psychological distress through physical diseases.

In this study, somatization levels were found to be higher among the participants born outside of Turkey and the TRNC (born in England and Australia). Another study that showed that somatization is among the most common psychological symptoms in immigrants, which supports our results.⁴² Immigration status and encountering a new culture can lead to identity confusion. The stress of being a migrant and cultural stress experienced during the adaptation process can affect somatic complaints.⁴³ Somatization is a common problem in immigrants who are transiting cultures and is likely to be associated with psychological distress.

In the study, it was found that as the level of somatization increases, dyadic adjustment also decreases. It was also observed that the factor affecting the level of somatization the most was dyadic adjustment. Adjustment between married couples is one of the important determinants of better marriage outcomes. Marital functionality or high level of adjustment are related with being healthy. Externalizing the conflicts and emotional problems caused by incompatibility in the couple's relationship through physical diseases may have a protective function in the marital relationship. It was reported in a study that somatization symptoms increased in those with low dyadic adjustment.⁴⁴

In this study, it was observed that as gratitude increased, the level of somatization decreased. In a study conducted among university students, a significant negative relationship was found between somatization and gratitude.⁴⁵ Gratitude was considered as a concept protective for mental health and strengthening physical health. The positive emotions created by gratitude improve the way in which individuals cope with the difficulties they face in their lives. It also contributes to individuals' maintaining their social functionality and well-being by re-interpreting negative situations from a positive perspective.

Another important result of the study is that the level of somatization decreases if the thoughts of forgiveness of self and situation increase. Forgiveness is shown as one of the components of psychological well-being. Considering that forgiveness has positive effects on psychological well-being and resilience against negativities, it can be observed that individuals who forgive more easily have less psychological distress and their likelihood of being happy increases. Having a non-forgiving nature can increase the emotional and physiological effects of stress responses that cause health deterioration, leading to the emergence of somatic diseases in the long run. Studies have shown that self-forgiveness has a greater effect on predicting mental health than forgiving others,⁴⁶ and low forgiveness predicts negative mental and physical health.⁴⁷

It has been observed that the level of somatization is associated with maladaptive perfectionism. Maladaptive perfectionism has a predictive effect on somatization score. Studies have reported that perfectionism is a sustaining factor for multiple psychological disorders.⁴⁸ A significant relationship has been found between somatization and perfectionism,⁴⁹ and it has been reported that maladaptive perfectionism is a significant predictor of psychosomatic disorder.⁵⁰ Maladaptive perfectionism, which is an expression of the anxiety of perfectionists related to not achieving high standards or their performance contradicting the standards they have set, may cause the difficulties they experience to be reflected on the body.

Therefore, female sex, low education level, immigration, low dyadic adjustment, high maladaptive perfectionism, low self-forgiveness, and low level of gratitude were determined as possible risk factors for somatization. The collection of data from 1 hospital limits the generalizability of the results. Evaluation of the variables investigated is limited to the measurement tools and is based on self-report. The study is correlational and does not provide information about the cause-effect relationship between the variables. Conducting prospective studies as multi-center studies, including the evaluation of the clinician other than self-report and also different somatization groups other than the skin, will help to better understand the psychological factors that affect somatization.

Ethics Committee Approval: Ethics committee approval was obtained for this study from the Ethics Committee of Near East University (Approval Date: March 29, 2018; Approval Number: YDÜ/SB/2018/133).

Informed Consent: Informed consent was obtained from the individuals who participated in this study.

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