

Gender Effect on Attitudes Towards the Mentally Ill: A Survey of Turkish University Students

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Abstract: This study investigates gender-associated characteristics of attitudes towards the mentally ill in a large sample of Turkish university students. Factors associated with gender variation were also analyzed. *Materials and methods:* Student's t-test and linear regression analyses of the results of a vignette-based opinion survey conducted on a sample of final-year Turkish university students (n=700) were performed. The survey consisted of the following: the "Dangerousness Scale," "Characteristics Scale," "Skill Assessment Scale," "Social Distance Scale," "Affective Reaction Scale" and a socio-demographic questionnaire. *Results:* The results showed a statistically significant difference between female and male respondents with regard to their answers to the questions on the "Dangerousness Scale," "Characteristics Scale" and the "Skill Assessment Scale." In all of these three scales, female respondents showed a less stigmatizing attitude than the male respondents. This gender effect continued after controlling for the subjects' age and family income. In female respondents, parents' level of education and a more positive attitude about treatment of mental illness predicted less stigmatizing attitudes towards mental illness. *Conclusions:* The findings suggest that gender difference in this sample has an impact on the stigmatization phenomenon in an independent fashion. A more positive view of female university students towards the mentally ill might be due to their comparatively optimistic attitudes about the treatability of mental illnesses. The observed gender difference seems to be accentuated by the fact that female students' parents' level of education was higher than that of their male counterparts.

Introduction

Stigma has been identified by professionals as a key issue in mental illness (1, 2). Stigmatizing attitudes may inhibit help seeking among individuals with a mental disorder (3, 4), provide barriers to their successful reintegration into society (5), and increase their psychological distress (6).

Previous research findings on gender and stigma have been mixed. In an early review by Farina, the author summarized results of community surveys conducted before the 1980s in the United States, with a conclusion that males and females tended not to differ in their overall attitudes towards individuals with mental illness (7). Literature on community attitudes towards the mentally ill demonstrated a sudden surge in the following years. Only recently stigma has been depicted as different dimensions of attitudes, not always consistently correlated with each other. Among these stigma-dependent mea-

asures employed with success in previous research are the questionnaires that separately address the subject's social avoidance of contact with the patient; the subject's beliefs about whether persons with mental illness are likely to be dangerous to others; the subject's reported affective reaction to being acquainted with the patient; the subject's view of the patient's degree of blame and responsibility for his/her disease and a measure of the subject's opinion on the patient's social skills (8). Specific study of these dimensions might lead to a better understanding of the nature of stigma, allowing for development of effective community de-stigmatization programs.

In this study, we investigated the influence of gender on characteristics of stigmatizing attitudes by use of stigma-dependent measures in a large survey of Turkish undergraduate university students. We sought to test the hypothesis of whether gender should be considered in the analysis of study results

on stigma, and to identify which factors might be associated with the gender effect.

Materials and Methods

We recruited 700 final-year students from the Management and Economics Faculty of the University of Marmara, Istanbul, Turkey. Their mean ages were 22.2 ± 1.8 (range: 18–32 years). Mean ages for females and males were 21.67 ± 1.7 and 21.48 ± 1.8 , respectively. Females comprised 45% of the population. After being informed of their rights as research participants, all students volunteered to complete the research survey in class.

Stigma was assessed by asking respondents to read one of 14 different hypothetical psychiatric case histories (9). Each subject read only one vignette randomly distributed to 50 students. The stories were collected after five minutes and students were asked to fill out a demographic questionnaire and five different stigma-dependent measures (see below).

Demographic Questionnaire

Each subject was required to fill out a demographic questionnaire, where they were asked if they believe that mental illnesses are treatable, whether they are personally acquainted with someone with a mental illness, and if they have had any psychiatric problems. Their ideas regarding the causes of the mental illnesses were also evaluated. Choices were: stress, social instability, biological, family attitudes, economic. Age and gender were noted. Included in the survey was yearly family income (lower third of the sample was rated as low, middle third as intermediate and upper third as high), parents' level of education (indicated as high if either parent had graduated from high school or higher; and low if not).

Stigma-Dependent Measures

Turkish versions of a number of measures used in previous studies on stigma were used in this study. These measures were the "Dangerousness Scale," the "Characteristics Scale," the "Skill Assessment Scale," the "Social Distance Scale" and the "Affective Reaction Scale" (9–11).

Dangerousness Scale (DS)

The DS comprises eight items that question beliefs about whether persons with mental illness are likely to be a danger to others. The participant rated each item on a 7-point Likert scale (1= strongly agree to 7= strongly disagree). The questions did not relate to the presented vignettes. Relevant items were reverse-scored so that higher ratings indicate greater perceived dangerousness. The composite score consisted of the sum of the eight items (range= 8–56). The Turkish version of the DS was found to have good internal consistency in our previous study ($\alpha=0.72$) (11).

Characteristics Scale (CS)

The characteristics scale contains 20 items that assess impressions of the personality and behavioral attributes of individuals in the vignette on a 7-point semantic differential scale. The items consisted of 20 opposing adjective pairs (e.g., strong-weak, boring-interesting, insensitive-sensitive, sophisticated-naïve, bold-shy, sociable-unsociable, emotional-rational, cruel-kind, poised-awkward, unintelligent-intelligent, sad-happy, unsuccessful-successful, enthusiastic-unenthusiastic, insecure-secure, open-defensive, cold-warm, untrustworthy-trustworthy, effective-ineffective). The Turkish version of the DS was found to have good internal consistency in our previous study ($\alpha=0.83$) (9).

Skill Assessment Scale (SAS)

The "Skill Assessment Scale" (SAS) has eight items describing various abilities that were not overtly stated in the vignette. Thus the subject had to go beyond the information given to make a judgement of the described individual's skill level. The participants rated each item on a 7-point Likert scale (1= strongly agree to 7= strongly disagree). Relevant items were reverse-scored so that higher ratings indicate greater perception of lack of patient's skills. The composite score consisted of the sum of the eight items (range= 8–56). The Turkish the version of DS was found to have good internal consistency in a previous study ($\alpha=0.78$) (9).

Social Distance Scale (SDS)

Self-reported willingness to make contact with the

person in the vignette was measured using a 5-item scale. In particular, respondents rated their willingness to: 1) move next door to the person in the vignette; 2) spend an evening socializing with the person; 3) make friends with the person; 4) work closely on a job with the person; and 5) have the person marry into the family. The Turkish version of the test required the respondent to rate each item on a 4-point scale: definitely willing, probably willing, probably unwilling and definitely unwilling. The Turkish version of the DS was found to have good internal consistency in a previous study ($\alpha=0.79$) (10).

Affective Reaction Scale (ARS)

The affective reaction scale required the subject to rate his/her emotional reactions to the patient depicted in the vignette. It comprises 10 opposing pairs of adjectives relevant to emotions (e.g., “calm-nervous”). The subject rated each adjective pair with respect to how he/she would react to interacting with someone with a mental illness on a 7-point scale, with neutral being the midpoint. Half of the items were reverse-scored so that higher numbers reflect a greater negative affect. The composite score consisted of the sum of the 10 items (range= 7-70). The Turkish version of the DS was found to have good internal consistency in a previous study ($\alpha=0.83$) (10).

Statistical Analysis

Statistical comparisons were made by linear regression analysis and the Student's t-test.

Results

The demographic characteristics of the population were equally distributed. Table 1 lists the means and standard deviations of the total scores of the five stigma-dependent measures, representing the dimensions of stigma researched. These values are presented by the demographic variable of gender.

Independent samples t-test showed that gender had a significant impact on stigmatization in the following measures: Skill Assessment Scale, Characteristics Scale and Dangerousness Scale. In these scales, women were found to stigmatize less than men. In the remaining two scales, Affective Reaction Scale and Social Distance Scale, there was not a significant difference between men and women (see Table 1).

To determine the factors that might have mediated the effects observed for gender, each individual item was put in a single formula of the linear regression analysis using the backwards elimination method: Total scores for Skill Assessment Scale, Characteristic Scale and Dangerousness Scale were dependent variables. Independent variables were the coded demographic data (family income, age, parents' level of education, gender, idea regarding the treatability of mental illness and the etiology of psychiatric disorders, personal acquaintance with mentally ill, personal history of any kind of psychiatric problem). Significant interactions observed between the demographic variables were as follows: a) in “Social Skills Scale” between gender and the opinion that “mental illness can be treated,” b) in “Characteristics Scale” between gender and parents' level of education, c) in “Dangerousness Scale” between gender, parents' level of education and the opinion that “mental illness can be treated” (Table 2).

Table 1. Total scores of the five stigma dependent measures compared for significant difference between gender groups. *p* value was set <0.05 . (nsf=No significance found).

(n)	Female	Male	t-test
Dangerousness Scale	32.79±7.08 (280)	34.38±7.20 (352)	t=-2.78 p=0.01
Characteristics Scale	70.03±14.27 (276)	74.19±13.72 (335)	t=-3.66 p<0.01
Skill Assessment Scale	25.85±8.06 (288)	27.98±8.55 (346)	t=-3.20 p<0.01
Social Distance Scale	17.65±3.80 (290)	18.02±4.00 (351)	t=-1.1 nsf
Affective Reaction Scale	35.72±9.50 (284)	34.90±8.80 (346)	t=1.08 nsf

Table 2. *Linear regression analysis using backwards elimination method: Total scores for Skill Assessment Scale, Characteristic Scale and Dangerousness Scale taken as dependent variables; while independent variables were family income, age, parents' level of education, gender. Significant correlation with "stigma-dependent parameters" was observed only for gender, parents' level of education and the opinion that "mental illness can be treated."*

	alpha error	P	Model	R ²
Social Skills Scale (Tot. Score)				
gender	1.41	0.049		
mental illness can be treated	-1.51	0.083		
			F=4.14 P=0.003	0.023
Characteristics Scale (Tot. Score)				
gender	4.29	P<0.001		
parents' level of education	-2.19	P=0.06		
			F=6.73 P=0.042	0.042
Dangerousness Scale (Tot. Score)				
gender	1.87	0.049		
parents' level of education	-0.79	0.002		
mental illness can be treated	-3.67	0.038		
			F=10.53 P<0.001	0.068

Discussion

This study examined whether the gender of university students in Turkey had an effect on stigmatization of the mentally ill. Additionally, we investigated the possible demographic characteristics that might be relevant to the gender effect. Impressive differences were obtained in stigmatizing attitudes with regard to the gender of the participants.

The study showed that female university students were less likely than males to endorse prejudice against people with psychiatric disorders (Table 1). Of particular concern is that this effect seemed to be fairly independent of participant's age and family income. Parents' level of education and beliefs about the treatability of mental illness were the relevant factors that might explain the observed gender difference (Table 2).

Few studies have investigated differences in attitudes between gender groups, which might be helpful when targeting de-stigmatization efforts. Some studies have found women to be less prejudiced than men (7, 12, 13). Other studies (14, 15) have found no gender differences.

We found that female university students tended

to differ from their male counterparts in terms of the beliefs that mental disorders can be treated successfully. Stronger beliefs among females with reference to treatability of mental disorders might be one of the reasons why females in this study were found to be less prejudiced against the mentally ill. In parallel with this assumption, in one study performed with final-year university students aiming to analyze the impact of knowledge regarding the chances of treating mental illness, we have shown that individuals who believe that it is possible to treat the mentally ill tend to stigmatize them less (11).

Education has been shown to determine familiarity with mental illness; namely, people who have completed more years of education are likely to have more knowledge about and/or experience with psychiatric disorders which, in turn, leads to less endorsement of stigma (16). Presuming that parents' level of education may represent the students' knowledge about and attitude towards people with mental illness, we analyzed the relation between parents' level of education and stigmatizing attitudes. In this study parents' level of education was higher for female respondents than male respondents, al-

though this difference was not statistically significant. The question arises as to whether the higher level of parents' education noted for females could account for the gender-associated difference in stigmatizing attitudes. Consistent with this issue, Farina found education to interact with gender effects on stigma; men with less education were more likely to express prejudice and discrimination towards people with mental illness (7). Since other factors, including the possible tendency of parents with higher education to send their daughters to university in Turkey, might have an impact on the above-mentioned observation, one should be tentative in drawing a causal link between education and gender effect on stigma.

One of the limitations of our study is the lack of a control group whose respondents could be questioned about their views on non-psychiatric illnesses in order to compare for the specificity of our findings with regard to mental illnesses. Additionally, our student population may not be representative of the general population, and the results might be biased by a social desirability response set. Further, people's self-reported attitude may not be safely correlated with actual behavior. Therefore, any conclusion drawn about the population as a whole should be tentative. Despite these limitations, results of this paper might provide fundamental information to guide these hypotheses in future research.

References

1. World Health Organization. *Mental health: New understanding, new hope*. Geneva: World Health Organization, 2001.
2. Department of Health and Human Services. *Mental Health: A report of the Surgeon General*. Rockville, MD: Department of Health and Human Services, 1999.
3. Wells JE, Robins LN, Bushnell JA, Jarosz D, Oakley-Brown MA. Perceived barriers to care in St. Louis (USA) and Christchurch (NZ): Reasons for not seeking professional help for psychological distress. *Soc Psychiatry Psychiatr Epidemiol* 1994;29:155-164.
4. Corrigan P. How stigma interferes with mental health care. *Am Psychol* 2004;59:614-625.
5. Corrigan PW, Edwards AB, Green A, Diwan SL, Penn DL. Prejudice, social distance, and familiarity with mental illness. *Schizophr Bull* 2001;27:219-225.
6. Link BG, Struening EL, Rahav M, Phelan JC, Nuttbrock L. On stigma and its consequences: Evidence from a longitudinal study of men with dual diagnoses of mental illness and substance abuse. *J Health Soc Behav* 1997;38:177-190.
7. Farina A. Are women nicer people than men? Sex and the stigma of mental disorders. *Clin Psychol Rev* 1981; 1:223-243.
8. Penn DL, Chamberlin C, Mueser KT. The effects of a documentary film about schizophrenia in psychiatric stigma. *Schizophr Bull* 2003;29:383-391.
9. Arikian K, Uysal O, Senocak M, Dirican A, Oran O, Erdem I. The influence of information on social and occupational outcome in mental illness on the attitudes of students in Turkey. *Isr J Psychiatry Relat Sci* 2000;37: 320-325.
10. Arikian K, Uysal O. Emotional reactions to the mentally ill are positively influenced by personal acquaintance. *Isr J Psychiatry Relat Sci* 1999;36:100-104.
11. Arikian K, Uysal O, Cetin G. Public awareness of the effectiveness of psychiatric treatment may reduce stigma. *Isr J Psychiatry Relat Sci* 1999;36:95-99.
12. Angermeyer MC, Matschinger H, Holzinger A. Gender and attitudes towards people with schizophrenia: Results of a representative survey in the Federal Republic of Germany. *Int J Soc Psychiatry* 1998;44:107-116.
13. Morrison M, de Man AF, Drumheller A. Correlates of socially restrictive and authoritarian attitudes toward mental patients in university students. *Soc Behav Pers* 1993;21:333-338.
14. Chou K, Mak K. Attitudes to mental patients among Hong Kong Chinese: A trend study over two years. *Int J Soc Psychiatry* 1998;44:215-224.
15. Vuksic-Mihaljevic Z, Mandic N, Barkic J, Laufer D, Filakovic P. Schizophrenic disorder and family attitudes. *Eur Psychiatry* 1998;12:139-152.
16. Holmes EP, Corrigan PW, Williams P, Canar J, Kubiak M. Changing public attitudes about schizophrenia. *Schizophr Bull* 1999;25:447-456.