



## Public attitudes towards depression and schizophrenia in an urban Turkish sample

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### ARTICLE INFO

#### Keywords:

Stigma  
Schizophrenia  
Depression  
Turkey  
Mental health

### ABSTRACT

Stigma towards mental illness influences help-seeking behavior and prevents individuals with a mental illness from seeking the appropriate treatment for their condition. In Turkey, a shift from inpatient psychiatric mental health care towards a community-based, low-threshold system highlights the importance of understanding public attitudes towards the mentally ill. This study aims to underpin developments in mental health care through culturally sensitive research. Public stigma towards schizophrenia and depression is examined for the first time simultaneously in a community sample. Unlabeled case vignettes of either schizophrenia or depression as well as an assessment of mental illness attribution and the desire for social distance (SDS) were presented to an urban Turkish sample (N = 295). Analysis of variance revealed that attribution to mental illness determines significant levels of stigma for schizophrenia, however not for depression. Furthermore, desire for social distance (SDS) was significantly higher for the schizophrenia condition compared to depression. Depression and schizophrenia evoke different reactions within the Turkish population, specifically the attribution to mental illness increases stigma. This finding is discussed in light of the contact hypothesis, and furthermore contextualized within literature on familiarity with depression symptoms on the one hand, and perceived dangerousness and symptom severity of schizophrenia on the other hand. Implementation of timely and culturally sensitive adapted interventions within the ongoing reform of the Turkish mental health care system is recommended.

### 1. Introduction

Insufficient access to mental health provision persistently cause a treatment gap that leaves more than 70% of people with mental illnesses worldwide without treatment from health care practitioners (Bruckner et al., 2011; Kohn et al., 2004; Thornicroft, 2007; WHO, 2011). This treatment gap is interrelated with the economic development of any society (Lund et al., 2012). Also, a significant barrier to appropriate treatment for affected people remains public stigma (Evans-Lacko et al., 2012; Thornicroft, 2008). The stigma attached to mental illness elicits a progressive process of marginalization and discrimination for patients with mental illness (Brohan et al., 2010). The subsequent distress of stigmatization thus impedes people concerned from seeking professional mental health care (Corrigan, 2004). Consequently, symptom severity and hospitalization rates increase

(Livingston and Boyd, 2010; Rüsç et al., 2009, 2005), depriving people with mental illnesses of actively participating in social realms and interpersonal relations. In addition, individual withdrawal aligned with a chronic course of illness are among the determining factors for societal and economic burden associated with mental illness (Sharac et al., 2010). Understanding the reasons of public stigma within particular sociocultural dimensions in the respective national context, is a necessary first step in examining and dissolving the downward spiral of stigma associated discrimination and personal withdrawal.

Stigma towards mental illness varies across cultures (Angermeyer and Dietrich, 2006; Ciftci et al., 2012; Rao et al., 2007). Thus, understanding the pitfalls in applying Western concepts of mental health care to culturally diverse populations is crucial for any valid assumptions (Raney and Çinarbas, 2005). As a geographical gateway between Europe and Asia, Turkey is characterized by mutual interactions

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between European, Asian and Middle-Eastern ethnicities and cultures (Mocan-Aydin, 2000). Mocan-Aydin (2000) depicted that the Turkish population transits through a process from traditional rural to modern urban life, concluding that multiple attitudes coexist and create a sophisticated image within the societal varieties. Institutions, values, attitudes, families, child-rearing practices increasingly reflect so-called individualistic values (according to Hofstede's Culture Dimensions, 1984), but traditionally the society is of a collectivistic nature (Mocan-Aydin, 2000). Mocan-Aydin (2000) summarized the relevant traits for the Turkish populace as traditionally emphasizing sharing, hospitality, friendship, kinship, protective and compassionate attitude towards children and the elderly (collectivistic) but increasingly adopting individualistic values like a fondness for material goods, independence, autonomy and competition. The Turkish society maintained mental health care rather by family and social support (Dogan, 2000; Mocan-Aydin, 2000). Further, the importance of religious practices for mental health care (such as praying, consulting religious leaders, healers and pilgrimages) have been emphasized (Carkoglu and Toprak, 2000). According to the report of the Ministry of Health of Turkey (MHT) from 2006 3.6% of the population consulted spiritual healers, so-called "hocas" and practices such as carrying amulet which protect for witchcraft were widely spread.

In the past mental health care in Turkey was mainly maintained by psychiatric hospitals with pharmacological treatments, lacking to a large degree of preventive and community-based interventions. In 2009 the Turkish Ministry of Mental health decided to create Community Mental Health Centers (CMHCs), offering low-threshold treatments which integrate outpatient care and family doctors (Soygür, 2016). Soygür (2016) pointed out that these new developments in mental health care still need to be internalized and adopted by the population.

For this adoption, an understanding of public attitudes is crucial, but research in this field in Turkey is scarce. In 2006 the Turkish Ministry of Health published a National Mental Health Policy (Ministry of Health of Türkiye [MHT], 2006), acknowledging the necessity to tackle stigmatization. However, since then neither the congruently adopted action plan from 2011 (Ministry of Health of the Republic of Turkey, 2011) has proven efficacious, nor have there been efforts to develop a concise legal framework. Efforts of non-governmental organizations have been sidelined and failed (Soygür, 2016). Nonetheless, Turkish studies proved antistigma programs to reduce stigma efficaciously (Altindag et al., 2006; Ücok, 2007). In order to achieve profound changes, interventions need to be adapted sensitive to the public's sociocultural attitudes and perception (Saxena et al., 2007).

The majority of the few recently published studies targeting stigma of mental illness in Turkey are based on samples of health care professionals, populations experienced with mental health patients or directly with mental health patients (Arkar and Eker, 1992; Ay et al., 2006; Aydin et al., 2003; Eker, 1985; Eker and Arkar, 1991; Sağduyu et al., 2003). Those studies applied unlabeled case vignettes, describing a person who has an episode of mental illness, and operationalized stigma in the form of the desire for social distance (Link et al., 1987). Desire for social distance is the most feasible and common method capturing the exclusive component of the multifaceted concept of stigma (Jorm and Oh, 2009). The Social Distance Scale (SDS) measures the desire to avoid contact with a particular person in different social settings. Surveys conducted with hospital staff (Aydin et al., 2003; Eker and Arkar, 1991; Ücok, 2007; Ücok et al., 2004), as well as students of medicine and psychology (Ay et al., 2006; Eker, 1985), found that higher education levels were not associated with more positive attitudes towards mentally ill, adversely, these populations showed somewhat higher levels of stigma. Furthermore, surveys with family members of patients yielded unambiguously stigmatizing attitudes (Arkar and Eker, 1992; Sağduyu et al., 2003).

Thus, there is a pressing need for additional data to identify factors influencing public stigma of the general population in Turkey. Ozmen et al. (2004) examined an urban Turkish sample and highlighted that a

person suffering from depression was more stigmatized when the problems of this person were attributed to mental illness. Research has shown that the *attribution to mental illness* as the result of diagnostic classification in the medical sense has reversed consequences (Angermeyer and Matschinger, 2003; Arkar and Eker, 1994). The authors point out that the diagnosis of a disorder would relieve affected persons and simplify treatment processes. However, evidence illustrates a stigmatizing effect of psychiatric diagnoses: Labeling a person described in a vignette as suffering from mental illness was associated with more desire for social distance in several studies (Angermeyer and Matschinger, 2003; Arkar and Eker, 1994; Link et al., 1987; Ozmen et al., 2004; Sağduyu et al., 2003).

Regarding research about public attitudes towards different types of mental illness, the most frequently and consciously investigated diagnoses in Turkey are depression and schizophrenia (Ozmen et al., 2004; Taskin et al., 2003). Depression is also highly prevalent in Turkey; the lifetime incidence is 10 to 20% and up to 30% among adolescents (Bilican, 2013; Bostanci et al., 2005). The lifetime incidence for schizophrenia is estimated with 1% in Turkey (Binbay et al., 2011). Earlier studies (Bag et al., 2006; Ozmen et al., 2004) with participants from urban Turkey revealed support for institutional control of persons who have schizophrenia (50%) and depression (25%) rather than allowing free movement in the community. These results are in line with studies from European populations (Angermeyer et al., 2015; Schomerus et al., 2014) where patients with schizophrenia were more stigmatized than patients with depression.

The current study investigates the desire for social distance towards a person with schizophrenia or depression as being described in an unlabeled case vignette among non-expert respondents from urban parts of Turkey. It is hypothesized that symptoms of schizophrenia are associated with a heightened desire for social distance compared to symptoms of depression. Further, the desire for social distance is expected to be higher when symptoms of depression and schizophrenia are attributed to mental illness.

## 2. Method

### 2.1. Participants

The convenience sample of N = 295 participants was recruited between May and September 2016 in Turkey. Participants' age ranged from 15 to 64 years. They either filled out a paper-and-pencil (n = 215) or an online version (n = 83) of the questionnaire. The paper-and-pencil sample was collected by FU (speaking Turkish) in the afternoon in public parks or transportation, while the online version was distributed via social media (facebook) relying on the snowball principle. Online participants were asked to indicate the number of inhabitants of their place of residence. In order to avoid urbanity bias in public attitudes, only residents of Turkish urban areas were included (cities with a population > 100.000, namely Ankara, Aydın, Çanakkale, Edirne, Eskişehir, Denizli, Doğubeyazıt, Düzce, Manisa, Mersin, İstanbul, İzmir, Samsun, Van). The limit of 100.000 was set in accordance to other well-established studies, allowing comparison and ensuring consistency with international research. Sociodemographic information is shown in Table 1.

### 2.2. Procedure

First, all participants received an information sheet about the study and gave written informed consent. Second, participants randomly received one of the two vignette conditions, either schizophrenia or depression. FU was present at all times while the respondents filled out the questionnaires and collected them as soon as they were completed. Participants did not receive any financial compensation.

The study is based on a cross-cultural methodological framework of well-established attitude research (e.g., Angermeyer et al., 2013;

**Table 1**  
Distribution of sociodemographic characteristics (%) of the survey sample in comparison to the general population.

Sociodemographic variables	Urban sample > 100,000 inhabitants n = 295	General population Turkey
Gender (m/f)	45.4/50.5	50.2/49.8
Age (M/SD)	29.5/10	30.1
Religion		
No religion	20	0.72
Islam	69.8	99.2
Christianity	2.4	0.23
Education		
Primary school	1.7	3.02
Middle school	5.4	1.72
High School	26.4	24.82
University degree	48.5	14.32
Ph.D. or higher degree	12.9	not available
Marital status		
Married	22.7	68.42
Single	60.7	23.2
Widowed	1.7	4.52
Divorced	4.4	2.72
Unmarried partnership	5.4	0.82
Employment status		
Employed	54.2	40.72
Student	26.8	6.72
Unemployed	3.4	4.72
Retired	3.7	12.82
Homemaker	3.7	34.62
Subjective satisfying income (yes/no)	57.6/37.3	63.2/35.42
Number of people per household (M/SD)	3.29/1.6	3.61

Note. Data given as percentage.

<sup>1</sup><http://www.turkstat.gov.tr/UstMenu.do?metod=temelist>.

<sup>2</sup><http://www.worldvaluessurvey.org/WVSONline.jsp>.

<sup>3</sup><http://www.nationmaster.com/country-info/profiles/Turkey/Religion>.

Schomerus et al., 2014). For the translation of the questionnaire, a collaborative and iterative method was used (Douglas and Craig, 2007), guaranteeing rather conceptual than the merely linguistic equivalence. A native Turkish speaker translated the questionnaires from English to Turkish. Three independent native speakers verified the Turkish translation for comprehension and compared it to the English version for correctness.

The questionnaires started with the presentation of an unlabeled, ungendered case vignette validated in former studies (Angermeyer et al., 2013; Schomerus et al., 2014). The case vignettes describe a person depicting symptoms of either schizophrenia or depression according to DSM-5 (DSM-5; American Psychiatric Association, 2013) criteria. Unlabeled case vignettes avoid the explicit use of medical or diagnostic terms; hence potentially related prejudices are reduced. In the Turkish language personal pronouns are gender-neutral, though the gender of the person in the case vignettes was kept undefined. The modification of the original using male and female vignettes aims to avert possible gender biases.

### 2.3. Measures

Attribution of symptoms as mental illness was assessed by asking whether the person described in the vignette had a mental illness in a medical sense. Possible answers were 'Yes', 'No' or 'I don't know.'

The desire for social distance was measured by the *Social Distance Scale SDS* (Link et al., 1987). This scale measures the desire for social distance through seven items such as 'Would you introduce the person to your friends?' on a five-point Likert scale (1 = I most definitely would; 5 = I most definitely would not). The SDS has good psychometric properties in literature (internal consistency,  $\alpha = .74$ ) (Interian et al., 2010) and in the current study sample (internal consistency,

**Table 2**  
Distribution of desire for social distance for schizophrenia and depression vignette.

Items for desire for social distance	Schizophrenia n = 147	Depression n = 147
Rent a room***	3.41	3.01
Accept as a colleague*	2.86	2.57
<i>Accept as a neighbor***</i>	2.67	2.15
<b>Take care of my children**</b>	4.37	3.66
Marry into my family***	3.39	2.81
<i>Introduce to friends*</i>	2.65	2.23
Recommend for a job***	3.54	2.81
Mean sum score (SD)***	3.27 (.78)	2.75 (.76)

Note. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ , SD = standard deviation, low scoring items are printed in italics, highest scoring item printed in bold.

$\alpha = .70$ ).

### 2.4. Statistical analysis

Independent sample t-tests were performed, to explore for differences in the desire for social distance between both vignettes. The relationship between the mental illness attribution and the sum score of the Social Distance Scale was measured with an analysis of variance (one-way 2\*3 ANOVA). All analyses were performed using SPSS 24.

### 3. Results

The desire for social distance was higher towards the person described in the schizophrenia vignette as compared to the depression vignette (see Table 2). The mean sum score of SDS for depression was 2.75 and therewith significantly lower ( $t(283) = 5.610$ ,  $p < .000$ ) compared to 3.27 for the schizophrenia vignette. There was no significant difference between female or male or respondents with high or low education level. 1 participant (depression-vignette-condition) did not complete the SDS-Scale.

Regarding the attribution to mental illness 119 participants in the schizophrenia condition (S) versus 94 in the depression condition (D) agreed, 12 (S) versus 36 (D) disagreed and 15 (S) versus 16 (D) answered 'I don't know.' An analysis of variance (ANOVA) showed that the effect of mental illness attribution on the desire for social distance was significant for the schizophrenia condition ( $F(2,135) = 5.678$ ,  $p = .000$ , but not for the depression condition. That means, that participants in the schizophrenia condition who attributed the condition of the person to mental illness displayed a higher desire for social distance. Post hoc analyses using the Scheffé post hoc criterion for significance indicated the average desire of social distance was significantly ( $p < .001$ ) higher among the 'Yes' respondents ( $M = 3.40$ ,  $SD = .75$ ) than among the 'No' respondents ( $M = 2.47$ ,  $SD = .467$ ), (0.93, CI-95% [0.36;1.53]) compared to the 'I don't know' respondents ( $M = 2.80$ ,  $SD = .695$ ) there was no significant difference. In the depression condition, there was no significant difference ( $F(2,141) = .466$ ,  $p = .628$ ) between the 'Yes' respondents ( $M = 2.77$ ,  $SD = .771$ ), the 'No' respondents ( $M = 2.64$ ,  $SD = .730$ ) and the 'I don't know' respondents ( $M = 2.84$ ,  $SD = .810$ ).

### 4. Discussion

#### 4.1. Desire for social distance towards depression and schizophrenia

The current study indicates that desire for social distance was higher towards people with schizophrenia compared to people with a depression. Therewith, the current sample results are in line with prior studies measuring the desire for social and using vignette based design with samples from Switzerland (Nordt et al., 2005), Australia (Jorm and Griffiths, 2008), Canada (Norman et al., 2010), Japan (Yoshioka et al.,

2014) and Germany (Angermeyer et al., 2015). Comparing the extent of desire for social distance with methodologically similar studies, the urban Turkish sample showed higher desire for social distance compared to a sample of general public in Switzerland (Nordt et al., 2005), but lower than undergraduates and members of two community service clubs in a Canadian sample (Norman et al., 2010). Thus, the issue of stigmatization of mental illness in Turkey was shown to be comparable with Western countries.

The presented data does not offer evidence about the reasons for differences in stigmatization between schizophrenia and depression, nonetheless contextualizing the findings within previous research reveals the following assumptions. First, depression is a highly prevalent mental illness (Bostanci et al., 2005); therewith, familiarity with people suffering from depression might be higher (Bilican, 2013). Second, it is supposed that due to this familiarity, people are somewhat able to imagine themselves or a close person in a depressive state, thus engendering more sympathetic relation (Bag et al., 2006). Third, schizophrenia is widely recognized as the more severe mental illness (Bag et al., 2006; Pescosolido et al., 2010), people who have been diagnosed with schizophrenia are perceived as unpredictable and dangerous (Angermeyer and Matschinger, 2004; Levey and Howells, 1995).

In a review, Jorm et al. (2012) conclude, that the belief of dangerousness by the public exceeded the actual evidence and reported only a slight increased risk of dangerous behavior in patients with schizophrenia compared to patients with affective disorders. Moreover, it was shown that most of these beliefs are not based on personal experiences and actual behaviors, but rather on prejudices transmitted by media (Jorm et al., 2012). In light of the contact hypothesis, people who have had personal contact with this vulnerable group are less likely to fear dangerousness and to hold stigmatizing attitudes compared to the general public (Allport, 1954; Couture and Penn, 2003).

Besides increasing familiarity with another approach to counteract the stigma of schizophrenia is to rethink the conceptualization of the illness itself. Psychotic symptoms are far more frequent than the complete symptom complex of the ICD-10 schizophrenia diagnosis (Perälä et al., 2007). In Japan and South Korea the term “schizophrenia” was eliminated because of its stigmatizing character and the mental health body started to refer to “psychotic disorders” or “integration disorder”, stigma was shown to decrease considerably (Guloksuz and Van Os, 2017).

#### 4.2. Relationship of attribution to mental illness in depression and schizophrenia

Previous research (Angermeyer and Matschinger, 2003; Arkar and Eker, 1994; Link et al., 1987) support this study’s finding that respondents in Turkey attribute symptoms of schizophrenia to mental illness likewise showed more desire for social distance, however remarkably not for the depression condition. This manifests that participants who read the schizophrenia vignette and attributed those symptoms to a mental illness expressed the highest level of desire for social distance. This observed pattern explicitly replicates previous findings (Angermeyer and Matschinger, 2003) of a German sample. These findings can only meaningfully be interpreted considering the complex implications for using labels: On the one hand, the attribution to mental illness illustrates increased stigmatization due to the dichotomous categorization of people as mentally ill or healthy, hence, elicits public stereotypes of unpredictability and dangerousness (Link et al., 1987). On the other hand, for the persons concerned a psychiatric diagnosis might induce positive consequences by receiving confirmation on the own psychological dysbalanced state, which enables adequate treatment (Angermeyer and Matschinger, 2003). Concluding, attribution to mental illness does not inevitably increase the desire for social distance. In the case of depression, perceived stigmatization might equalize the potentially positive effects of diagnosis on an individual level, while overall attitudes towards the depression vignette were rather positive

compared to schizophrenia. In contrast, the findings support the modified labeling theory by Link et al. (1989) that for a severe mental illness such as schizophrenia attribution and categorization increase public stigma and stipulate primarily negative associations.

Following studies that focus on associations with familiarity with mental illness (Corrigan, 2007; Corrigan et al., 2001; Pettigrew and Tropp, 2000), the current study’s findings might be explained through a deficiency of familiarity with behaviors associated with mental illnesses, thus hindering a reduction of adverse effects due to labeling. From that perspective, it can be deduced that legislative changes and societal awareness campaigns are appropriate and necessary actions for a noticeable reduction of stigmatization. Angermeyer and Matschinger (2003) have demonstrated that one of the most effective interventions against stigmatization is the encouragement and facilitation of personal social interaction and familiarization with mentally ill. Campaigns have proven successful in reducing stigma and negative stereotypes using organized encounters of patients with schizophrenia and high school students (Schulze et al., 2003). Henceforth, controlled studies examining the effect of labeling mentally ill in more detail are urgently needed to examine cultural dynamics in multiethnic transitioning countries such as Turkey. A further approach might be to compare the public’s desire for social distance towards labeled and unlabeled case vignettes.

#### 4.3. Limitations

A number of limitations of the present study have to be addressed. First, the survey sample represents imbalances of the Turkish population concerning socio-demographic factors such as age, education and family status, which can be primarily attributed to the recruitment strategy, resulting in a convenience sample. Still, an advantage of this procedure is that public samples were recruited, which are not affiliated with mental health (as a patient, a relative of a patient, a mental health worker, etc.). Second, in order to reach more potential participants two methods of data collection were employed, being well aware that differences in paper-and-pencil and an online assessment might confound the results. Taking into account the present sample bias towards a characteristically low-stigmatizing and open-minded population due to higher education levels, voluntary study participation and use of social media even strengthens our findings and underlines the apparent prevalence of mental health stigma. Third, the external validity of reported desire for social distance towards case vignettes remains limited. However, currently the use of unlabeled case vignettes is accepted as an well-established method in public attitude research. Fourth, the measurement of ‘attribution to mental illness’ might be biased by the information sheet. In addition to that, participants were informed about the objective of the study, including the fact that a German and Turkish University Department of Psychology initiated it. Finally, this might have influenced the response patterns towards higher degrees of agreement to mental illness attribution due to social desirability or priming effects. Still, the disadvantages of the information sheet were accepted to establish a reliable basis for the participation by open and transparent communication. Overall, the limitations did not inhibit to gain valuable insights into public attitudes of the urban Turkish population.

#### 4.4. Conclusion

In sum, results in this community sample matched the findings of previous Turkish and international research. Public attitudes were shown to be noticeably stigmatizing, ranging among the levels of desire for social distance in Western countries. Further, respondents displayed more desire for social distance towards persons with schizophrenia symptoms compared to persons with depression symptoms. The attribution to mental illness had different effects depending on the type of mental illness. In contrast to vignettes depicting depression,

schizophrenia symptoms were more stigmatized when respondents attributed them as mental illness. The current study highlights the importance of differentiating between the specific characteristics of various mental illnesses, such as depression and schizophrenia.

The investigation of stigma is a stepping-stone for interventions applying anti-stigma campaigns. These findings encourage measures that increase social interactions and familiarization with mentally ill and initiating personal encounters with affected persons. Furthermore, the need for a broader spectrum of mental health care services including low-threshold treatments is stressed. Lastly, qualitative approaches and careful evaluations of interventions are suggested further actions to account for the continually changing public attitudes in culturally diverse regions such as urban Turkey.

## Declaration of Competing Interest

None.

## Acknowledgments

We thank Özge Sezer, Mehmet Taşkın, Kaan Arduç and Mehtap Okar for translation, practical advice and support!

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