

## ORIGINAL PAPER

Georg Schomerus · Herbert Matschinger · Matthias C. Angermeyer

# The stigma of psychiatric treatment and help-seeking intentions for depression

Received: 4 March 2008 / Accepted: 15 January 2009 / Published online: 17 February 2009

**Abstract** *Aims* The stigma of mental illness has often been considered a potential cause for reluctant willingness to seek help for mental problems, but there is little evidence on this issue. We examine two aspects of stigma related to seeing a psychiatrist and their association with help-seeking intentions for depression: anticipated discrimination by others when seeking help and desire for social distance from those seeking help. *Methods* Representative population survey in Germany 2007 ( $n = 2,303$ ), containing a depression vignette with a question on readiness to seek psychiatric care for this problem, a focus group developed scale anticipated discrimination when seeing a psychiatrist (ADSP), and a scale on desire for social distance from someone seeing a psychiatrist (SDSP). We further elicited previous contact to psychiatric treatment, depressive symptoms, and socio-demographic data. *Results* Both scales had good internal consistency (Cronbach's alpha ADSP 0.87, SDSP 0.81). Exploratory factor analysis of all items revealed a distinct factor representing the social distance scale and three factors "anticipated discrimination", "anticipated job problems" and "anticipated shame" derived from the ADSP scale. In both the general population and in those with current depressive syndrome, personal desire for social distance significantly decreased willingness to seek psychiatric help, but anticipated discrimination by others did not. Other factors related to likely help-seeking

were female gender and previous contact to psychiatric treatment or to psychotherapy. *Conclusion* Contrary to expectations, anticipated discrimination from others was unrelated to help-seeking intentions, while personal discriminatory attitudes seem to hinder help-seeking. Our findings point to self-stigmatization as an important mechanism decreasing the willingness to seek psychiatric help.

**Key words** stigma · discrimination · social distance · help-seeking · mental illness

## Introduction

Although highly prevalent, mental disorders frequently remain untreated [33]. A recent survey conducted in six European countries (Belgium, France, Germany, Italy, Netherlands, Spain) found about half of those needing treatment for mental disorders not getting any medical help for their problem [1]. Treatment rates increase with disease severity, but even for severe mental disorders in western industrialized countries they are low, varying between 37% (United States) and 67% (Germany) [8]. With major depression, only 29–52% of those affected seek help during the first year of illness [42]. Contact to medical services is essential to initiate treatment and reduce the risk of suicide [14]. In Germany, the median duration of delay until treatment is initiated is 2 years [42]. Several socio-demographic and illness-related factors have been related to timely help-seeking for depression: women, young people, singles and those severely affected tend to seek help more readily than others [2, 11, 15, 26]. Personal attitudes towards certain interventions also seem to facilitate or hinder help-seeking: population based studies have examined help-seeking recommendations for people with mental disorders and found a general preference of the public for psycho-social over pharmacological

Dr. G. Schomerus (✉) · H. Matschinger  
Department of Psychiatry  
Leipzig University  
Simmelweiss str. 10  
04103 Leipzig, Germany  
Tel.: +49-341/9724530  
Fax: +49-341/9724539  
E-Mail: georg.schomerus@medizin.uni-leipzig.de

M.C. Angermeyer  
Center for Public Mental Health  
Göding am Wagram, Austria

interventions, although the latter have become more popular over the last decade [4, 22]. Personal help-seeking intentions were found to be associated to both the belief that a GP would be helpful for treating depression [24, 44] and identification of a problem as mental illness [43]. Frequently, the potential exposure to stigma is referred to as a cause of the reluctance of those with mental disorders to seek help [34, 38]. It seems to be a truism that stigma inhibits optimal treatment for mental disorders, and there is evidence that perceived stigma in fact interferes with treatment adherence in outpatients with depression [37]. However, the few studies examining the impact of stigma on help-seeking come to inconclusive results [13, 17, 35].

There is evidence for a particular stigma associated with help-seeking for mental disorders: in an experimental study with college students, a depressed person seeking help was judged as more emotionally unstable than an identical person that did not seek help for the disease [7]. Admitting a psychological problem was anticipated as much more stigmatising than admitting a physical health problem among soldiers returning from Bosnia [10].

Stigmatization of those with mental illness has been conceptualized as a cognitive and emotional process [28, 31]. According to Link, this process comprises several interrelated steps—labelling, stereotyping, separating, emotional reactions—that ultimately result in status loss and discrimination of those stigmatized [28]. Throughout this paper, we will thus use the term “discrimination” to refer to the consequences of stigma for those affected. When a person considers seeking help for a mental problem for the first time, anticipated rather than factual discrimination is of relevance. Previous studies have shown that expected discrimination by professional helpers like GPs or psychiatrists decreases the willingness to seek mental health care [6], and, in more general terms, that perceived discrimination and devaluation of mentally ill patients by others is related to negative attitudes towards seeking help [44]. Besides anticipated discrimination, the help-seeking person may hold discriminatory attitudes towards mentally ill patients himself or herself. There is some evidence that these also hinder help-seeking: Cooper and her colleagues [12] found a reduced readiness to seek help for psychological problems in persons who attributed high responsibility to those affected and had feelings of anger towards them. These attitudes may interfere with help-seeking in terms of self-stigmatization: the negative attitudes someone entertains towards those with mental illness turn against him when he is forced to consider himself as a member of the stigmatised group. In order to avoid identification with this group, this could translate into reluctance to seek help. Personal discriminatory attitudes are frequently assessed by measuring a person’s desire for social distance from mentally ill persons [27].

Thus, we will examine two consequences of stigma and their interference with help-seeking intentions: anticipated discrimination by others when seeking help, and the desire for social distance from those seeking help for a mental problem. Related measures (“perceived stigma” and “personal stigma” of depression) have been used in an Australian study on depression literacy and were found to represent distinct, only weakly correlated concepts [18]. The aim of this study is (1) to describe anticipated discrimination and the desire for social distance related to calling on a psychiatrist in the general population, and (2) to examine the relation between both anticipated discrimination and desire for social distance and the willingness to seek psychiatric help for depression. For this purpose we conducted a telephone survey representative of the general population in Germany, presenting respondents with a case-vignette depicting major depression and a related question on the willingness to see a psychiatrist for this problem, as well as with two scales on anticipated discrimination and desire for social distance.

## Methods

### Subjects

From January to March 2007, a population-based survey was conducted by telephone, involving persons of German nationality aged 18 years and older, living in private households with conventional telephone connection. The sample was randomly drawn from all registered private telephone numbers and additionally generated numbers, allowing for ex-directory households as well. Numbers were assigned to regions and anonymized. Repeat calls were made at six occasions on different days of the week until a connection dropped out. Target persons within households were selected using the last birthday procedure, seeking an interview with the person who most recently had their anniversary. Thus, 3,738 potential interviewees were contacted, of whom 2,303 agreed to do the interview, reflecting a response rate of 61.6%. Informed consent was considered to have been given when a person agreed to the interview. The fieldwork was done by USUMA, Berlin; a company specializing in market and social research. Socio-demographic characteristics of the sample are shown in Table 1. While the age and sex composition was similar to that of the general population, better-educated people were over-represented in our sample.

### Instruments

#### Vignette and help-seeking intention

As initial stimulus, we presented respondents with a labelled case-vignette of someone suffering from major depression according to DSM-IV. Prior to its use in the study, the unlabelled vignette had been presented to five experts in the field of psychopathology who had all been able to provide the correct diagnosis. We chose depression because of the significant public burden of this disease [19] and because persons otherwise unfamiliar with the disease supposedly can relate to many of its symptoms. Participants were asked to imagine that they had the problems described in the vignette, and that they had seen their GP for these problems. At the

**Table 1** Characteristics of the sample

	Survey 2007 (%)	Population >18 years 12/2005 <sup>a</sup> (%)
Women	52.5	51.6
Age group		
18–24	10.2	10.0
25–39	25.8	24.4
40–59	37.3	35.4
>60	26.7	30.3
Education		
8/9 years of schooling	25.6 <sup>b</sup>	42.9 <sup>c</sup>
10 years of schooling	34.3 <sup>b</sup>	26.4 <sup>c</sup>
12/13 years of schooling	40.1 <sup>b</sup>	22.9 <sup>c</sup>
Pupil/unknown	0.2 <sup>b</sup>	4.6 <sup>c</sup>

Representative population survey (Germany 2007,  $n = 2,303$ )

<sup>a</sup>Federal Statistical Office (December 2007)

<sup>b</sup>For comparison: respondents >19 years

<sup>c</sup>Persons >19 years. No data for younger persons available

end of the vignette, participants were told that their GP could not find any physical abnormalities and wanted to refer them to a psychiatrist, because he was considering the diagnosis of major depression. They were then asked to rate how likely they were to comply with his recommendation and see a psychiatrist. Answers were recorded on a seven point Likert-scale with anchors 1 = “not likely at all” and 7 = “very likely”. We thus presented respondents with a precisely defined situation focusing on the intention to seek psychiatric help. For maximum standardization of the stimulus, the case vignette was pre-recorded with a male and female voice, and for each interview one of the two recordings was chosen at random to be played to the respondent.

### Anticipated discrimination when seeing a psychiatrist

To assess anticipated discrimination associated with help seeking for a mental problem, we sought to develop an instrument as close as possible to patients’ and healthy persons’ fears and expectations connected to psychiatric treatment. For that purpose we conducted a focus group study with two focus groups comprising 17 patients treated either in a day-clinic or as in-patients, and addressing beliefs about attitudes and reactions of others towards those seeking

psychiatric help. In these groups, we discussed their real life experiences of stigmatization for seeing a psychiatrist and also their fears and reservations prior to seeing a psychiatrist for the first time. Additionally, a convenience sample of 29 healthy adults answered a written questionnaire that started with the depression vignette and contained open-ended questions on possible negative consequences when seeing a psychiatrist for this problem. Sessions were tape-recorded and transcribed, and both transcripts and the written questionnaires were content analysed [20]. Based on this analysis, we compiled a list of 16 items aiming at a comprehensive representation of the ideas voiced in all groups. Table 2 shows the item wording of the scale generated in this manner. Answers were recorded on a five-point Likert scale anchored with 1 = “do not agree at all” and 5 = “agree completely”. Low values thus represent low anticipated discrimination.

### Social distance from someone seeing a psychiatrist

Measuring the desire for social distance in situations of every day life is an established method to depict discriminatory attitudes against members of a minority group [9]. We adopted a scale used in previous research to measure social distance from people with various mental disorders [3, 27]. This asks whether respondents are willing to engage in various forms of every day contact with “someone seeing a psychiatrist for treatment”. The wording of the seven items is shown in Table 3. Answers were again given on a five-point Likert scale anchored with 1 = “definitely” and 5 = “definitely not”, low values thus indicate low desire for social distance.

### Depressive symptoms, contact to psychiatric treatment, socio-demographic data

We further elicited depressive symptoms during the last 2 weeks using the mood subscale of the patient health questionnaire (PHQ-9, German version) validated for a representative sample of the German population [29]. Respondents indicate for each of nine depressive symptoms (corresponding to the criteria of DSM-IV) whether, during the previous 2 weeks, the symptom has bothered them: 0 = “not at all”, 1 = “several days”, 2 = “more than half of the days”, or 3 = “nearly every day”. We used the sum score of all items (range 0–27) as a continuous variable indicating severity

**Table 2** Item-level statistics for the anticipated discrimination when seeing a psychiatrist (ADSP) scale ( $n = 2,168$ – $2,295$ )

ADSP-item	Mean	SD
If you are seeing a psychiatrist for treatment, ...		
... people talk badly about you	2.89	1.26
... you have to listen to disrespectful comments from other people	3.15	1.40
... most people do not want to have anything to do with you	2.25	1.21
... most employers would rather dismiss you than dismiss other employees	3.24	1.36
... other people deal with you in a patronizing way	2.72	1.26
... other people no longer consider you sane	2.51	1.30
... most people believe you must be crazy or manic	2.77	1.45
... most people think you are not normal	2.99	1.39
... most people think this is a sign of personal failure	2.67	1.38
... most people consider you unreliable	2.56	1.32
... most people consider you unpredictable and dangerous	2.27	1.28
... you have to feel ashamed about it in front of other people	1.62	1.06
... this is a stain on your life history that nobody should know about	2.30	1.41
... chances are smaller that you will find a partner	2.27	1.31
If you have mental problems, most people believe you should pull yourself together instead of calling on a psychiatrist	3.02	1.42
Most employers will pass over the application of someone seeing a psychiatrist for treatment and hire another applicant	3.92	1.25
Total scale	2.69	0.78

Answers are given on a five-point Likert scale from 1 = “do not agree at all” to 5 = “agree completely”

**Table 3** Item level statistics for the social distance from someone seeing a psychiatrist (SDSP) scale ( $n = 2,196\text{--}2,289$ )

SDSP item	Mean	SD
If you had a room to rent in your home, would you rent it to someone seeing a psychiatrist for treatment?	2.37	1.29
Would you accept someone seeing a psychiatrist for treatment as a colleague at work?	1.36	0.77
Would someone seeing a psychiatrist for treatment suit you as a neighbour?	1.59	0.95
Would you let someone seeing a psychiatrist for treatment take care of your children for a couple of hours?	2.93	1.34
Would you accept someone seeing a psychiatrist for treatment as a friend?	1.37	0.80
Would you acquaint someone seeing a psychiatrist for treatment with a friend of yours?	1.74	1.09
Would you recommend someone seeing a psychiatrist for treatment for a job working for a friend of yours?	2.31	1.25
Total scale	1.94	0.74

Answers are given on a five-point Likert scale from 1 = “definitely” to 5 = “definitely not”

of depressive symptoms. Furthermore, a diagnosis of “major depressive syndrome” or “other depressive syndrome” was established according to the PHQ Office Coding Algorithm [39]. A major depressive syndrome is diagnosed if five or more of the nine depressive symptoms are reported to be present at least at “more than half the days” ( $\geq 2$ ), and one of the symptoms is depressed mood or anhedonia. One of the nine symptom criteria (item “*p*”: “thoughts that you would be better off dead...”) counts if present at all ( $\geq 1$ ). Other depressive syndrome is diagnosed if only two, three or four symptoms are indicated at least at “more than half the days” (with item “*p*” counted if present at all), and one of the symptoms is depressed mood or anhedonia. We found a prevalence of 6.0% for any depressive syndrome during the last two weeks in our sample ( $n = 136$ ), which is very close to the previously reported 4-week prevalence of depression in Germany [21].

We further asked respondents whether they knew someone who had seen a psychiatrist or psychotherapist, or whether they had ever seen a psychiatrist or psychotherapist themselves. We asked about contact to both professions (psychiatrist and psychotherapist) to cover a broad range of specialized mental health services. Drawing on the closest contact reported, we generated a score with 0 indicating “no previous contact to psychiatric treatment/psychotherapy”, 1 = “knows somebody treated” ( $n = 1,108$ , 48.1%), and 2 = “personal contact to psychiatric treatment/psychotherapy” ( $n = 482$ , 21.0%). Although a direct comparison of differently framed questions in different surveys is not possible, these numbers correspond broadly to the proportion of respondents found in another representative German survey reporting life-time use of any service because of emotions or mental health problems (22.3%) [25]. In the depressive sub-sample, 67 respondents (49.3%) reported personal treatment experience. Finally, age, gender, and academic achievement were recorded. Before starting the fieldwork, we pilot tested the interview on 30 randomly chosen lay people.

## Statistical analysis

All items of both instruments on stigma were entered in a principal component factor analysis with quartimax rotation. By using quartimax rotation we generated unrelated (orthogonal) factors, since our interest was to see whether our instruments measure independent constructs that would be represented by independent factors. Quartimax rotation maximizes the variance of the squared factor loadings in each variable, i.e. each variable will only load on a few factors. We computed factor scores for all factors with an eigenvalue  $>1$ . We then conducted a linear regression analysis with intention to seek help as dependent variable, regressed on factor scores, depressive symptoms, previous contact to treatment, and socio-demographic variables. A second regression analysis was conducted for the sub-sample of those with depressive syndrome, regressing help-seeking intention on factor scores, previous contact, and socio-demographic variables. We further report test statistics for the two instruments on anticipated discrimination and desire for social distance. All statistical procedures were computed using STATA (version 9.2).

## Results

Of all respondents, 23.9% were opposed to consulting a psychiatrist for depression (combining the negative answer categories 1–3 of the seven-point Likert scale), 7.2% were undecided, and 68.9% indicated being rather likely to seek psychiatric help (answer categories 5–7).

Tables 2 and 3 show item wording and item-level statistics of the two stigma-instruments. Both scales had good internal consistency [Cronbach’s alpha anticipated discrimination when seeing a psychiatrist (ADSP) 0.87, social distance from someone seeing a psychiatrist (SDSP) 0.81].

To exemplify the extent of anticipated discrimination and desire for social distance among the public, it is helpful to look at answer percentages of some items, thereby combining the two affirmative answer categories closer to “agree completely” in the ADSP scale: for example, 68% expected discrimination when applying for a job, and 42% anticipated disrespectful comments from other people. Combining the two answer categories closer to “definitely not” in the social distance scale, 34% were opposed to having someone who sees a psychiatrist take care of their children, 18.8% were unwilling to sublet a room, and 17.3% would not recommend someone for a job.

A post hoc, exploratory factor analysis of all items used revealed four factors with an eigenvalue  $>1$  (Table 4). All items of the SDSP scale loaded on factor 2, which we thus termed “desire for social distance”. The items of the ADSP scale loaded on three factors, which we termed “anticipated discrimination” (factor 1), “anticipated job problems” (factor 3), and “anticipated shame” (factor 4). Factor 4 is the least consistent, since ‘smaller chances to find partner’ in terms of its content (social rejection) seems closer to factor 1 than to factor 4. The four factors accounted for a cumulative variance of 48.9%. Social distance items had very low loadings on “anticipated discrimination”, and ADSP items did barely load on “social distance”.

We computed factor scores for each factor [mean 0, standard deviation (SD) 1] and entered them into a linear regression model with help-seeking intention as



**Table 4** Anticipated discrimination of and desire for social distance from someone seeing a psychiatrist

Item (paraphrased)	Factor 1 "anticipated discrimination"	Factor 2 "desire for social distance"	Factor 3 "anticipated job problems"	Factor 4 "anticipated shame"
People talk badly	<b>0.68</b>	0.07	0.08	0.00
People give disrespectful comments	<b>0.60</b>	0.04	0.04	−0.08
People do not want to have anything to do with you	<b>0.61</b>	0.11	−0.03	0.30
People deal with you in a patronizing way	<b>0.67</b>	0.07	0.02	0.11
People no longer consider you sane	<b>0.68</b>	0.08	0.09	0.13
People believe you must be crazy or manic	<b>0.73</b>	0.02	0.04	−0.11
People think you are not normal	<b>0.72</b>	0.05	0.03	−0.11
People think it is sign of personal failure	<b>0.62</b>	0.02	0.14	−0.07
People believe you should pull yourself together	<b>0.44</b>	0.03	0.16	−0.24
People consider you unreliable	<b>0.60</b>	0.10	0.11	0.20
People consider you unpredictable and dangerous	<b>0.64</b>	0.10	0.00	0.26
Employers dismiss you first	0.33	0.06	<b>0.64</b>	0.11
Employers pass over your application	0.24	0.02	<b>0.76</b>	0.02
Have to feel ashamed in front of other people	0.34	0.19	−0.18	<b>0.50</b>
Stain in your life history	0.42	0.12	0.16	<b>0.52</b>
Smaller chances to find a partner	0.28	0.12	0.17	<b>0.63</b>
Sublet a room	0.06	<b>0.73</b>	0.20	0.07
Accept as colleague at work	0.10	<b>0.69</b>	−0.15	−0.04
Suit you as neighbour	0.13	<b>0.70</b>	−0.13	−0.01
Let take care for your children	0.12	<b>0.63</b>	0.27	0.06
Accept as friend	0.08	<b>0.69</b>	−0.21	0.04
Acquaint with friend	0.10	<b>0.72</b>	−0.02	0.04
Recommend for job	0.03	<b>0.67</b>	0.23	0.05
Eigenvalues	6.00	2.98	1.22	1.04
Percentage of variance accounted for	22.17	15.11	6.11	5.49

Rotated factor loadings on four identified factors with an eigenvalue >1. Highest factor loadings are in bold

a dependent variable in order to evaluate the relation of different forms of discrimination to the willingness to seek help (Table 5). In this linear model, coefficients represent the predicted differences in answer scores, adjusting for all other variables. The constant represents the predicted score if all independent variables equal zero. Thus personal treatment experience predicted an increase of 1.10 points on the seven-point Likert scale of the dependent variable, while knowing someone treated still predicted a difference of 0.56 points. Greater desire for social distance, stronger anticipated shame, and higher age were associated with weaker intentions to see a psychiatrist, while female respondents tended to be more willing to see a psychiatrist. An increase of the desire for social distance of 1 SD predicted a decrease of 0.35 points of help-seeking intention. Anticipated discrimination by others was unrelated to these intentions. Depressive symptoms, academic achievement, and anticipated job problems also had no statistical influence on help-seeking intentions. The regression model was significant ( $F_{11,1867} = 19.52$ ;  $\text{prob} > F = 0.000$ ) and accounted for 9.8% of the variance. We exploratively calculated an extended regression model including interaction effects of depressive symptoms and the four factor scores, exploring whether any of the factor scores became more relevant to help-seeking intentions in those with more depressive symptoms. Interaction terms did not significantly relate to help-seeking intentions, and the explained variance of the model did not improve by including them ( $F_{15,1863} = 14.48$ ;  $\text{prob} > F = 0.000$ ; adjusted  $R^2 =$

**Table 5** Intention to seek psychiatric help for depression regressed on factor scores, age, gender, academic achievement, contact to psychiatric treatment or psychotherapy, and depressive symptoms

	<i>B</i>	<i>P</i>
"Anticipated discrimination"	−0.036	0.439
"Desire for social distance"	−0.353	0.000
"Anticipated job problems"	0.084	0.072
"Anticipated shame"	−0.136	0.004
Age (cont.)	−0.008	0.004
Women	0.207	0.027
8/9 years of schooling (ref.)		
10/11 years of schooling	0.123	0.308
12/13 years of schooling	0.176	0.139
No contact (ref.)		
Knows someone treated	0.556	0.000
Treatment experience	1.100	0.000
Depressive symptoms (cont.)	0.001	0.962
Constant	4.829	0.000
Adjusted $R^2$ (%)	9.8	

Linear regression analysis ( $n = 1,879$ ), non-standardized regression coefficients ( $B$ )

9.7%, data not shown). The same held true for a regression model with interaction effects of contact and the four factor scores, following the assumption that in those with treatment experience, fear of future discrimination could have been of less relevance for help-seeking intentions, because labelling and the resulting discrimination had already occurred at an earlier occasion. No interaction term was significant in this model, and model fit did not improve ( $F_{14,1864} = 15.52$ ;  $\text{prob} > F = 0.000$ ; adjusted  $R^2 = 9.7\%$ , data not shown).

**Table 6** Intention to seek psychiatric help for depression regressed on factor scores, age, gender, academic achievement, and contact to psychiatric treatment or psychotherapy

	<i>B</i>	<i>P</i>
"Anticipated discrimination"	−0.007	0.969
"Desire for social distance"	−0.443	0.024
"Anticipated job problems"	−0.149	0.488
"Anticipated shame"	−0.143	0.382
Age (cont.)	−0.009	0.407
Women	0.857	0.027
8/9 years of schooling (ref.)		
10/11 years of schooling	0.137	0.767
12/13 years of schooling	0.208	0.681
No contact (ref.)		
Knows someone treated	0.304	0.578
Treatment experience	0.983	0.045
Constant	4.548	0.000
Adjusted <i>R</i> <sup>2</sup> (%)	8.6	

Linear regression analysis of a sub-sample with current depressive syndrome (*n* = 113), non-standardized regression coefficients (*B*)

A second model was calculated for the sub-sample with current depressive syndrome (Table 6). Overall, coefficients were similar to those in the first model, but due to the considerably smaller sample-size, less reached statistical significance: only desire for social distance, personal treatment experience and female gender were significantly related to help-seeking intention. Similar to the first model, anticipated discrimination was unrelated to help-seeking intentions in those with current depressive syndrome. This model, too, was significant ( $F_{10,102} = 2.06$ ; prob  $> F = 0.035$ ) and accounted for 8.6% of the variance.

## Discussion

Examining ADSP and the desire for social distance from those who do so, we found evidence for both forms of psychiatric treatment stigma in the general population. Concerning the social distance scale, attitudes towards those seeking help seem overall more accepting than towards those with severe mental illness: 39% of respondents were reluctant to sublet a room to someone suffering from major depression in a 2001 German survey [5], compared to 19% in our study. However, the ranking of situations where contact is avoided is similar to that found in severe mental illness [3]: people were most frequently opposed to letting someone take care of their children, while they rarely rejected friend or neighbour relations with someone seeing a psychiatrist.

Since we conducted an exploratory factor analysis, the factor structure of our instruments remains a preliminary finding that needs replication in other samples. Both constructs—anticipated discrimination by others and social distance from those seeking help—were represented by distinct, unrelated factors. The main finding of our study is that anticipated discrimination by others is of far less influence for the

intention to seek psychiatric help than the personal desire for social distance. In our regression models, anticipated discrimination had no independent statistical influence on help-seeking preferences at all, neither among the general population nor in the sub-sample of those with current depressive syndrome. This is remarkable, since our measure on anticipated discrimination was carefully developed in a focus group study with patients and healthy persons and thus may claim to represent relevant fears and expectations adequately. Since our study is based on a large sample it would have shown even small statistical associations.

One can speculate about the reasons for this unexpected finding. First of all, it could be rooted in the fact that we examined the general population, most of whom had never experienced depression themselves; hence the anticipation of discrimination was purely fictional for most participants. In contrast, the desire for social distance as a personal attitude could have been of intuitive relevance to healthy respondents. However, analysis of interaction effects showed that an increase in depressive symptoms did not accompany an increased influence of anticipated discrimination (or any other of the four factors inherent in our instruments) on help-seeking. Furthermore, in the sub-sample of depressed respondents, anticipated discrimination had no significant effect on help-seeking either. Thus real life experience of depressive symptoms does not seem to make anticipated discrimination more relevant to help-seeking intentions.

Our study seemingly contrasts with another study that found perceived discrimination significantly related to help-seeking attitudes in a small Australian rural sample. Wrigley and her colleagues [44] found perceived discrimination and devaluation of mentally ill persons ("perceived stigma") related to Fischer's "Attitudes Towards Seeking Psychological Help"-Scale [16]. However, this scale measures attitudes (and not help-seeking intentions) and contains within it items on anticipated stigmatization—and may thus be confounded with their perceived stigma measure. Similar to our results, they found perceived stigma unrelated to the readiness to discuss mental health problems with a general practitioner [44]. Along this line, a recent study of a student sample in the United States found perceived public stigma unrelated to help-seeking intentions and past help-seeking in those with current anxiety or depressive symptoms [17].

A possible explanation for the relative unimportance of anticipated negative reactions of others could be that people hope to avoid discrimination by keeping their psychiatric help-seeking secret. In fact, in a study among depressed patients, secrecy was by far the most popular coping strategy to avoid stigmatization [40]. When considering seeing a psychiatrist, intended secrecy would thus neutralize the

influence of anticipated discrimination by others. The potential role of secrecy would also explain why, different from our study, higher perceived stigma was associated with reduced readiness to consult professional helpers for depression in a population-based study in Australia [6]. In their measure of perceived stigma, two out of three items asked about potential discrimination by professional helpers themselves—here, secrecy would equal treatment avoidance. However, since we did not measure secrecy in our study, these considerations remain speculative and require verification in future studies.

A factor inherent in the ADSP-scale that significantly decreased the readiness to seek psychiatric help in the general population was anticipated shame. Shame is an emotional reaction of the stigmatized person and thus presumably more difficult to avoid by secrecy. It may not only represent fear of other peoples' negative reactions, but may also be regarded as a result of self-stigmatization, as negative personal beliefs about seeing a psychiatrist which turn against the person himself [32]. Barney and her colleagues have shown that anticipated embarrassment was more important for the willingness to consult professional help for a mental problem than perceived stigma [6]. A study with college students found higher self-stigma associated with impaired use of psychological services [41]. Overall, personal negative attitudes towards those seeking psychiatric help seem a much stronger hindrance to help seeking than worries about how other people might react.

The particular importance of personal discriminatory attitudes (and the relative unimportance of anticipated discrimination) may help to explain why previous studies could not find any influence of beliefs about discrimination by others on help-seeking behaviour [17, 23, 24, 44]. So far, this has been attributed to a weak relationship between behavioural intention and actual behaviour [35]. Our study, however, shows that it matters which form of discrimination is examined. The distinction between beliefs about discrimination by others and personal discriminatory attitudes reflects different sets of attitudes that have a differential effect on help seeking intentions—and probably also on help seeking behaviour. Hence future research on predictors of help seeking should also address personal stigmatizing attitudes of the respondents, as well as potential strategies to cope with anticipated discrimination.

### ■ Implications for anti-stigma initiatives

Our main finding suggests that personal negative attitudes towards seeking professional psychiatric help seem a much stronger hindrance to help-seeking than worries about how other people might react, hence these personal attitudes constitute a promising target for anti-stigma interventions. This is even more

so since these attitudes seem to have similar effect in those currently depressed and in those without depression, which indicates that changing attitudes in healthy people could improve help-seeking in the case of depressive illness. Our study further shows that endorsing negative views on mental health care actually constitutes a risk factor for negative outcomes should the holder of the belief himself or herself ever develop depression. Consequently, destigmatising psychiatric care itself seems a promising way to removing treatment barriers for depression.

We found both personal and indirect contact to psychiatric treatment associated with greater willingness to seek psychiatric help. Contact could be the result of positive attitudes towards treatment, but it could also shape attitudes and facilitate future help seeking. Personal treatment or knowing someone being treated may enhance knowledge and reduce negative stereotypes about psychiatric care. The question arises whether this potentially positive influence could be utilized in programs aiming to improve the readiness to seek psychiatric care. Since personal experience may not easily be replaced by public information programs, similar to anti-stigma interventions that use contact to mentally ill patients as a means to reduce the stigma of mental illness [30, 36], real contact to people having sought psychiatric help could offer a way to improve help seeking behaviour for mental illness. However, contact to someone being treated is hindered by secrecy. Secrecy could thus play an ambivalent role in psychiatric help-seeking: while it is possibly an appropriate means against anticipated discrimination by others, it impedes the potentially de-stigmatizing experience of contact to someone treated. It has to be noted, however, that in our model with depressed respondents only personal treatment contact was significantly related to help-seeking. The role of contact for help-seeking thus needs further definition in studies using larger samples of depressed respondents.

### ■ Limitations

Some limitations of our study need discussion. First, we examined a sample of the general population and did not focus on persons with untreated depression. Although we adjusted our analysis for depressive symptoms and studied a sub-sample of currently depressed respondents, sample-size and available information on personal history did not allow to further differentiate and examine attitudes of those with currently untreated depression. A study of persons experiencing depression for the first time and their real life choices remains a desideratum of future research and would also overcome a second limitation of our study: namely, that we did examine help-seeking intentions in a virtual situation and not help-seeking behaviour.

Another concern is the role of personal treatment contact for our analyses. Many respondents particularly in the depressed sub-sample had treatment experience, and, since labelling and the resulting discrimination may have occurred at an earlier occasion, fear of future discrimination could have been less relevant to them. However, since we included treatment experience as an independent variable in our regression analyses, the present results are controlled for its influence. Moreover, by including interaction effects of contact and stigma factors in an explorative regression model, we excluded any differential effect of, e.g. anticipated discrimination on help-seeking intentions in those with and without previous contact to psychiatric treatment.

A further limitation is the small amount of variance our models accounted for. Other attitudes not examined in this study could be of major influence on help-seeking intentions. Also, we have broken down stigma on anticipated discrimination by others and personal social distance, because we considered these most relevant to the help-seeking person. However, other aspects of stigma could also be examined and complement our results: for instance, effects of labelling on the acceptance of psychiatric care, influence of certain stereotypes on the willingness to seek psychiatric care, or the impact of structural realities (i.e. structural discrimination) on the readiness to seek psychiatric care. Furthermore, we examined help-seeking for depression, and help seeking for other mental diseases could follow different rules. Finally, our results are representative only for the German public and may differ in other national or cultural contexts, and since they are based on a cross-sectional examination, conclusions on causal attributions are not possible.

Summarizing our study, there is a particular stigma attached to seeking psychiatric help. Desire for social distance from those seeking help and, to a lesser degree, the anticipation of shame decrease the willingness to see a psychiatrist. Our findings thus underline the importance of discrimination qua self-stigmatization for psychiatric help seeking. Anticipated discrimination by others, in contrast, had no influence on help seeking intentions, which allows speculation about secrecy as a coping strategy that facilitates help-seeking. For anti-stigma interventions, personal attitudes towards help-seeking seem a more promising target than potential negative reactions of others. Willingness to seek psychiatric help in the general population was associated with previous personal and indirect contact to psychiatric treatment, hence contact to people having sought psychiatric help could offer a way to improve help seeking behaviour should a mental illness develop.

## References

- Alonso J, Codony M, Kovess V, Angermeyer MC, Katz SJ, Haro JM et al (2007) Population level of unmet need for mental healthcare in Europe. *Br J Psychiatry* 190:299–306
- Andrews G, Issakidis C, Carter G (2001) Shortfall in mental health service utilisation. *Br J Psychiatry* 179:417–425
- Angermeyer MC, Matschinger H (1997) Social distance towards the mentally ill: results of representative surveys in the Federal Republic of Germany. *Psychol Med* 27:131–141
- Angermeyer MC, Matschinger H (2004) Public attitudes towards psychotropic drugs: have there been any changes in recent years? *Pharmacopsychiatry* 37:152–156
- Angermeyer MC, Matschinger H (2005) The stigma of mental illness in Germany: a trend analysis. *Int J Soc Psychiatry* 51:276–284
- Barney LJ, Griffiths KM, Jorm AF, Christensen H (2006) Stigma about depression and its impact on help-seeking intentions. *Aust N Z J Psychiatry* 40:51–54
- Ben-Porath DD (2002) Stigmatization of individuals who receive psychotherapy: an interaction between help-seeking behavior and the presence of depression. *J Soc Clin Psychol* 21:400–413
- Bijl RV, de Graaf R, Hiripi E, Kessler RC, Kohn R, Offord et al (2003) The prevalence of treated and untreated mental disorders in five countries. *Health Aff (Millwood)* 22:122
- Bogardus ES (1925) Measuring social distance. *J Appl Sociol* 1–2:216–226
- Britt TW (2000) The stigma of psychological problems in a work environment: evidence from the screening of service members returning from Bosnia. *J Appl Soc Psychol* 30:1599–1618
- Burns T, Eichenberger A, Eich D, Ajdacic-Gross V, Angst J, Rössler W (2003) Which individuals with affective symptoms seek help? Results from the Zurich epidemiological study. *Acta Psychiatr Scand* 108:419–426
- Cooper AE, Corrigan PW, Watson AC (2003) Mental illness stigma and care seeking. *J Nerv Ment Dis* 191:339–341
- Corrigan PW, Rüsch N (2003) Mental illness stereotypes and clinical care: do people avoid treatment because of stigma? *Psychiatr Rehabil Skills* 6:312–334
- Deisenhammer EA, Huber M, Kemmler G, Weiss EM, Hinterhuber H (2007) Suicide victims' contacts with physicians during the year before death. *Eur Arch Psychiatry Clin Neurosci* 257:480–485
- Dew MA, Dunn LO, Bromet EJ, Schulberg HC (1988) Factors affecting help-seeking during depression in a community sample. *J Affect Disord* 14:223–234
- Fischer EH, Turner JLB (1970) Orientations to seeking professional help—development and research utility of an attitude scale. *J Consult Clin Psychol* 35:79–90
- Golberstein E, Eisenberg D, Gollust SE (2008) Perceived stigma and mental health care seeking. *Psychiatr Serv* 59:392
- Griffiths KM, Christensen H, Jorm AF, Evans K, Groves C (2004) Effect of web-based depression literacy and cognitive-behavioural therapy interventions on stigmatising attitudes to depression—randomised controlled trial. *Br J Psychiatry* 185:342–349
- Günther OH, Friemel S, Bernert S, Matschinger H, Angermeyer MC, König HH (2007) Die Krankheitslast von depressiven Erkrankungen in Deutschland (the burden of depressive disorders in Germany). *Psychiatr Prax* 34:292–301
- Huberman AM, Miles MB (1994) Data management and analysis methods. In: Denzin NK, Lincoln YS (eds) *Handbook of qualitative research*. Sage Publications, London, pp 428–444
- Jacobi F, Wittchen HU, Hiltling C, Hifler M, Pfister H, Müller N et al (2004) Prevalence, co-morbidity and correlates of mental disorders in the general population: results from the German Health Interview and Examination Survey (GHS). *Psychol Med* 34:597–611
- Jorm AF, Christensen H, Griffiths KM (2006) The public's ability to recognize mental disorders and their beliefs about treatment: changes in Australia over 8 years. *Aust N Z J Psychiatry* 40:36–41
- Jorm AF, Medway J, Christensen H, Korten AE, Jacomb PA, Rodgers B (2000) Attitudes towards people with depression: effects on the public's help-seeking and outcome when experiencing common psychiatric symptoms. *Aust N Z J Psychiatry* 34:612–618



24. Komiti A, Judd F, Jackson H (2006) The influence of stigma and attitudes on seeking help from a GP for mental health problems. *Soc Psychiatry Psychiatr Epidemiol* 41:738–745
25. Kovess-Masfety V, Alonso J, Brugha TS, Angermeyer MC, Haro JM, Sevilla-Dedieu C (2007) Differences in lifetime use of services for mental health problems in six European countries. *Psychiatr Serv* 58:213
26. Leaf PJ, Livingston MM, Tischler GL, Weissman MM, Holzer CE, Myers JK (1985) Contact with health-professionals for the treatment of psychiatric and emotional problems. *Med Care* 23:1322–1337
27. Link BG, Cullen FT, Frank J, Wozniak JF (1987) The social rejection of former mental patients—understanding why labels matter. *Am J Sociol* 92:1461–1500
28. Link BG, Phelan JC (2001) Conceptualizing stigma. *Annu Rev Sociol* 27:363–385
29. Martin A, Rief W, Klaiberg A, Braehler E (2006) Validity of the Brief patient health questionnaire mood scale (PHQ-9) in the general population. *Gen Hosp Psychiatry* 28:71–77
30. Rickwood D, Cavanagh S, Curtis L, Sakrouge R (2004) Educating young people about mental health and mental illness: evaluating a school-based programme. *Int J Ment Health Promot* 6:23–32
31. Rüsch N, Angermeyer MC, Corrigan PW (2005) Mental illness stigma: concepts, consequences, and initiatives to reduce stigma. *Eur Psychiatry* 20:529–539
32. Rüsch N, Hölzer A, Hermann C, Schramm E, Jacob GA, Bohus M et al (2006) Self-stigma in women with borderline personality disorder and women with social phobia. *J Nerv Ment Dis* 194:766–773
33. Salize HJ, Rössler W, Becker T (2007) Mental health care in Germany. *Eur Arch Psychiatry Clin Neurosci* 257:92–103
34. Sartorius N (2007) Stigma and mental health. *Lancet* 370:810–811
35. Schomerus G, Angermeyer MC (2008) Stigma and its impact on help-seeking for mental disorders—what do we know? *Epidemiol Psychiatr Soc* 17:31–37
36. Schulze B, Richter-Werling M, Matschinger H, Angermeyer MC (2003) Crazy? So what! Effects of a school project on students' attitudes towards people with schizophrenia. *Acta Psychiatr Scand* 107:142–150
37. Sirey JA, Bruce ML, Alexopoulos GS, Perlick DA, Raue P, Friedmann SJ et al (2001) Perceived stigma as a predictor of treatment discontinuation in young and older outpatients with depression. *Am J Psychiatry* 158:479–481
38. Spießl H, Hübner-Liebermann B, Hajak G (2007) Depression—und viele schauen (noch) weg! [Depression—but many are (still) looking away!]. *Psychiatr Prax* 34:53–54
39. Spitzer RL, Kroenke K, Williams JBW (1999) Validation and utility of a self-report version of PRIME-MD—the PHQ primary care study. *JAMA* 282:1737–1744
40. Stengler-Wenzke K, Angermeyer MC, Matschinger H (2000) Depression und stigma [depression and stigma]. *Psychiatr Prax* 27:330–335
41. Vogel DL, Wade NG, Haake S (2006) Measuring the self-stigma associated with seeking psychological help. *J Couns Psychol* 53:325–337
42. Wang PS, Angermeyer M, Borges G, Bruffaerts R, Chiu WT, de Girolamo G et al (2007) Delay and failure in treatment seeking after first onset of mental disorders in the World Health Organization's World Mental Health Survey Initiative. *World Psychiatry* 6:177
43. Wright A, Harris MG, Wiggers JH, Jorm AF, Cotton SM, Harrigan SM et al (2005) Recognition of depression and psychosis by young Australians and their beliefs about treatment. *Med J Aust* 183:18–23
44. Wrigley S, Jackson H, Judd F, Komiti A (2005) Role of stigma and attitudes toward help-seeking from a general practitioner for mental health problems in a rural town. *Aust N Z J Psychiatry* 39:514–521