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RESEARCH ARTICLE

# How mental health literacy and experience of mental illness relate to stigmatizing attitudes and social distance towards people with depression or psychosis: A cross-sectional study

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## ABSTRACT

**Background** Evidence suggests that mental health literacy among the public is low, and stigmatizing attitudes are widespread. So far the effects of anti-stigma campaigns are small, and studies demonstrate that negative attitudes have been quite stable through recent decades. **Aims** To investigate the relationships between mental health literacy, experience of mental illness and stigmatizing attitudes/social distance towards people with depression or psychosis. **Methods** A cross-sectional study in which staff members from public services in Sweden ( $n=1027$ ) completed questionnaires covering demographic data, self-reported experience of mental illness, identification of a vignette for depression or psychosis, beliefs about helpful interventions for the illness presented in the vignette, and attitudes and social distance towards people with the illness. **Results** About 50% of participants could identify depression and less than 40% psychosis. A higher degree of mental health literacy was related to less stigma and social distance but mainly towards people with depression. A similar relationship was shown for having personal or family experience of mental illness and attitudes/social distance. Negative attitudes and social distance were significantly higher in all aspects measured towards a person with psychosis than a person with depression. **Conclusions** A higher degree of mental health literacy relates to more positive attitudes and less desire for social distance towards people with depression. The differences between depression and psychosis should be taken into account in anti-stigma interventions.

## ARTICLE HISTORY

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## KEYWORDS

Depression Mental health literacy; Psychosis; Social distance; Stigmatization.

## Background

Mental disorders are common in the population and inflict a large amount of morbidity and impairment. Estimations of mental disorders in Europe indicate that around 27% of the adult population suffer from some kind of mental disorder every year (1,2). Highest prevalence is reported for anxiety disorders, mood disorders dominated by major depression, somatoform disorders and substance abuse (1). This leads to a disability burden corresponding to 25–30% of the total disability-adjusted life years (DALYs) lost in Europe (1). Studies also show that only a minority of all cases gets adequate consultation with professional health care services, and there is a long delay between the recognition of the disorder and the help given (3–5). The under-treatment of mental disorders can partly be explained by self-limiting factors such as fear of stigmatization and discrimination together with a public lack of mental health literacy (5). Stigma is generally referred to as a social construct comprising four interrelated components: 1) people distinguish and label human differences, 2) labelled people are caused damage by cultural beliefs and negative stereotypes, 3) labelled people are placed in distinct categories to separate “us” from “them”, and 4) labelled people experience status loss and discrimination (6,7).

Stigmatizing attitudes appear to be widespread in society and hinder recognition and appropriate help-seeking. In order to improve mental health literacy and reduce negative attitudes among the public, different campaigns have been launched in Western countries. So far the strategies in anti-stigma programmes have followed three approaches: personal contact, education, and protest (8). Contact with people with mental disorders appears to be the most effective approach, followed by education, while protest has not shown any significant change in fighting stigma (9). However, the effects of anti-stigma programmes are small and longitudinal population studies demonstrate that negative attitudes are quite stable. There is a trend indicating a more positive attitude towards psychiatric treatment and an improvement in abilities to identify mental illness. Attitudes towards people with mental disorders seem, however, to be unchanged. In fact, over the last two decades attitudes towards people with mental disorders have not improved and regarding people with schizophrenia they have become even worse (10–12).

Despite a lot of anti-stigma programmes and extensive research it appears to be difficult to find effective ways to fight stigma against mental illness in the population (9–12). Hopefully further research might clarify the most crucial aims for interventions on a public level. This study investigates some

of the factors that in earlier studies have shown a relationship with attitudes towards mental illness such as mental health literacy and personal contact with individuals affected (8).

## Aim

The aim of the study was to investigate

- whether better knowledge about mental illness influences attitudes towards the people affected,
- whether attitudes differ between people with personal or family experience of mental illness and people without such experience,
- whether attitudes towards people with depression or psychosis differ,
- whether there are differences between men and women.

## Participants and methods

The design is a cross-sectional study. Data represents the baseline measurements from one randomized controlled trial and one quasi experimental trial with pre- and post-testing performed to evaluate a project about implementation of mental health first aid (MHFA) (13) in Sweden.

Participants in the study were staff members from the Swedish social insurance agency, employment agencies, social services, schools, police departments, correctional treatment centres, rescue services and recreation centres who applied for the MHFA course. The study took place in two different counties, one in the south west of Sweden and one in the north. The county in the south west is a densely populated area with about 1.6 million inhabitants and includes the second largest city in the country, Gothenburg, and two medium sized cities, Falköping and Vänersborg. The county in the north is a rural area with a population of about 215 000 inhabitants, including the city of Umeå, with around 80 000 inhabitants.

Assessment was administered by mailed questionnaires with reply envelopes sent to participants. The questionnaires covered sociodemographic characteristics of the participant, why he/she was interested in doing the course, self-reported history of mental health problems in the participant or their family, confidence in providing help, contact with people who have had mental health problems in the previous 6 months and help offered, recognition of a disorder in vignettes describing a person with depression or schizophrenia/psychosis and beliefs about the helpfulness of various interventions for the person described.

The instrument for rating helpfulness was created by Kitchener and Jorm and been used in earlier studies (14). Participants rated a list of people, treatments and actions that the person in the vignette might use. The question was formulated as "If [the person in the vignette] was to seek help from any of the following people, is it likely to be 'helpful', 'harmful', 'neither' or 'don't know' for her/his problem?: a typical GP; a pharmacist; a counsellor; a social worker; telephone counselling; a psychiatrist; a clinical psychologist; help from her/his family; help from some close friends; a neuropath or herbalist; the clergy; a minister or priest; the person tries to deal with her problems on her own." This was followed by a list of medications: vitamins and minerals, St

John's wort, pain relievers, antidepressants, antibiotics, sleeping pills, antipsychotics, tranquillizers. Finally the participants scored a list of other strategies: becoming more physically active such as playing more sport, or doing a lot more walking or gardening, reading about people with similar problems and how they have dealt with them, getting out and about more, courses on relaxation, stress management, meditation or yoga, cutting out alcohol altogether, counselling, cognitive behaviour therapy, psychotherapy, hypnosis, admission to the psychiatric ward or hospital, electroconvulsive therapy (ECT), having an occasional alcoholic drink to relax, a special diet or avoiding certain foods. Correct answers about the helpfulness of the different people, treatments and actions are based on consensus from a survey of professionals (15). The maximum score for the depression vignette is six including GPs, psychiatrists, clinical psychologists, antidepressants, counselling and cognitive-behaviour therapy. For the schizophrenia vignette the maximum score is five including GPs, psychiatrists, clinical psychologists, antipsychotics and admission to a ward. A social distance scale to assess stigmatizing attitudes is also included (16). The questions in this scale ask how willing (1 = definitely, 2 = rather not, 3 = definitely not) respondents would be to 1) move next door to the person described in the vignette, 2) make friends with the person, 3) work closely with the person, and 4) have the person marry into the family. To investigate attitudes the personal and perceived Stigma Scale was used (17). The scale was originally developed to investigate stigma towards people with depression and comprises 18 items. Nine of the items ask the participant to rate how strongly they personally agree with statements about the person presented in the vignette (depression or schizophrenia) and the other nine questions ask about what they think other people believe about the same issue. In this study only the personal part of the scale is used. Ratings are made on a five-point Likert scale and higher scores indicate less stigmatizing attitudes. The items include whether the described disorder is a real medical illness, to what extent it is under personal control, whether the disorder is a sign of weakness, whether a person with the disorder is dangerous or/and unpredictable, whether to feel shame or/and conceal the illness if stricken by it, avoidance of a person with the disorder and discrimination in terms of "not voting for a politician with the disorder" and "not employing someone with the disorder". Psychometric testing of the scale has demonstrated acceptable properties concerning internal consistency (17) and test-retest reliability (18). The internal consistency of the scale for the present sample was 0.76 (Cronbach's alpha).

A final question covered whether the participant or a family member had ever had a problem such as the one described in the vignette. The vignettes describing depression and schizophrenia were given alternately to the participants.

## Statistical analyses

Differences in demographic variables were investigated by  $\chi^2$  analysis for dichotomous variables and with independent samples t-test for continuous variables. Differences between groups were investigated with the independent samples t-test. Alpha was set to 0.05. In all analyses SPSS statistics version 20

was used (IBM, New York, NY). Effect sizes (ES) were calculated using Cohen's *d* (19).

## Results

The number of eligible participants was 1647; of these 620 declined to participate in the study which gave a final sample of 1027 individuals. No differences concerning background characteristics or familiarity with mental health problems were found between those who completed the questionnaire with the depression vignette ( $n = 506$ ) and those who completed the vignette for psychosis ( $n = 521$ ). Characteristics of the participants are presented in Table 1.

The participant ratings of possible interventions to help someone with depression or psychosis and adequate staff category to give help are presented in Table 2. For both depression and psychosis psychologists and psychiatrists were identified as important individuals to seek help from and for depression antidepressants were believed to be helpful as well as antipsychotics for psychosis. In general the respondents had high confidence in the helpfulness of counselling, physical activity, cognitive behavioural therapy and psychotherapy in general.

Highly significant differences between reported social distance towards depression and psychosis were found. In all aspects measured the social distance was higher towards psychosis than towards depression (Table 3).

Among the participants who completed the questionnaire with the depression vignette, 50.1% made a correct identification of the condition and among those with the psychosis vignette, 38.1%. Women were significantly better on identifying the vignettes than men. The gender differences for depression were  $\chi^2 p < 0.01$ , and for psychosis  $\chi^2 p < 0.05$ . Men also showed more negative attitudes than women according to the personal Stigma Scale (depression,  $p < 0.05$ , ES 0.26, psychosis  $p < 0.001$ , ES 0.45) and were more negative about having a person with depression married into the family ( $p < 0.05$ , ES 0.29).

A correct identification of the vignette might be seen as an indicator of a higher level of mental health literacy resulting in less social distance. This appears to be true for depression where those who made a correct identification reported more positive attitudes ( $p < 0.001$ , ES 0.53) and a lower level of social distance in all respects: become a neighbour ( $p < 0.001$ , ES 0.20), become a friend ( $p < 0.001$ , ES 0.33), become a colleague ( $p < 0.001$ , ES 0.46) and finally to have someone married into the family ( $p < 0.001$ , ES 0.29). For the psychosis vignette the only finding was more positive attitudes according to the personal stigma scale among those who made a correct identification ( $p < 0.01$ , ES 0.22).

Table 1. Demographic characteristics of the participants in the study ( $n = 1027$ ).

Variables	% (n)
Age, mean (SD)	46.2 (11.0)
Women	78.6 (807)
University/college education	68.2 (700)
Born in Sweden	93.7 (962)
Personal experience of mental illness	23.0 (236)
Experience of mental illness in the family	44.6 (480)
Met someone with mental illness during the last six months	81.5 (837)

The percentage of participants who showed 100% agreement with health professionals concerning adequate help-giving and recommended treatment were 49.8% for depression and 37.2% for psychosis. The group with 100% agreement concerning help-giving and treatment for depression also reported less social distance according to personal stigma and to have a person with depression married into the family. Only one difference among those who answered the psychosis vignette was found. Participants who had a 100% agreement showed a more positive attitude to become a neighbour with a person with psychosis (Table 4).

Among the participants, 23% reported personal experience of mental illness and 44.6% personal experience of mental illness in the family. Analyses to investigate whether these

Table 2. Percentage of respondents rating each intervention as helpful for depression/psychosis.

	Intervention	
	Depression ( $n = 506$ )	Psychosis ( $n = 521$ )
Person		
General practitioner	77.0	64.2
Pharmacist	13.3	7.7
Counsellor	91.8	74.3
Social worker	27.1	32.7
Telephone counsellor	62.6	40.0
Psychiatrist	89.1	98.0
Psychologist	95.6	93.6
Close family	72.5	52.9
Close friends	80.4	57.9
Naturopath	18.0	5.5
Clergy	58.1	33.1
Deal with alone	9.0	2.1
Medication		
Vitamins/minerals	21.7	7.3
Pain relievers	0.8	1.0
Antidepressants	88.4	69.3
Antibiotics	1.6	0.6
Sleeping pills	60.0	46.3
Antipsychotics	26.8	89.8
Tranquillizers	12.2	28.7
Other interventions		
Physical activity	90.4	70.5
Read about problem	53.4	42.7
Get out more	25.9	17.5
Learn relaxation	87.3	50.7
Cut out alcohol	64.0	66.3
Counselling	93.1	75.0
Cognitive behavioural therapy	84.7	74.5
Psychotherapy	79.9	88.2
Hypnosis	16.7	12.3
Psychiatric ward	33.8	80.0
Electroconvulsive therapy	22.9	25.7
Occasional drink	1.2	1.0
Special diet	9.0	9.1

Table 3. Differences in stigma and social distance between the depression vignette and the psychosis vignette.

	Depression ( $n = 506$ )	Psychosis ( $n = 521$ )	F value	<i>p</i> value*	ES
	Mean (SD)	Mean (SD)			
Personal stigma scale	36.2 (5.0)	33.7 (4.9)	0.3	<0.001	0.50
Become a neighbour with X	1.2 (0.5)	1.7 (0.6)	44.2	<0.001	0.91
Become a friend with X	1.3 (0.6)	1.7 (0.6)	8.0	<0.001	0.67
Become a colleague with X	1.6 (0.7)	1.9 (0.6)	37.5	<0.001	0.46
X married into family	1.7 (0.7)	2.2 (0.6)	48.0	<0.001	0.77

\*Independent sample *t*-test.  
ES, effect size (Cohen's *d*).

Table 4. Differences between having a complete or incomplete agreement with health professionals concerning help-giving and treatment.

	Complete agreement (n = 252) Mean (SD)	Incomplete agreement (n = 254) Mean (SD)	F value	p value*	ES
Depression					
Personal Stigma Scale	36.9 (4.4)	35.3 (5.3)	6.8	<0.001	0.33
Become a neighbour with X	1.2 (0.5)	1.3 (0.5)	3.2	ns	0.20
Become a friend with X	1.3 (0.6)	1.4 (0.6)	3.7	ns	0.17
Become a colleague with X	1.6 (0.7)	1.7 (0.6)	6.0	ns	0.15
X married into family	1.6 (0.7)	1.8 (0.7)	2.5	0.001	0.29
Psychosis (n = 194) (n = 327)					
Personal stigma scale	33.8 (4.7)	33.6 (5.0)	3.0	ns	0.04
Become a neighbour with X	1.8 (0.6)	1.7 (0.6)	7.2	0.01	0.33
Become a friend with X	1.7 (0.6)	1.7 (0.6)	3.7	ns	–
Become a colleague with X	2.0 (0.6)	1.9 (0.7)	7.2	ns	0.15
X married into family	2.2 (0.6)	2.1 (0.6)	0.0	ns	0.17

\*Independent sample t-test.

ES, effect size (Cohen's d), ns = not significant.

experiences had any impact on stigmatizing attitudes were made. For psychosis, personal experience of mental illness resulted in a lower level of personal stigma. However, the differences between those with and without experience were small ( $p < 0.05$ , ES 0.22). Experience of mental illness in the family showed a tendency to reduce personal stigma but did not reach significance ( $p < 0.055$ , ES 0.17). There were no differences in willingness to become a neighbour, friend, colleague or having a person with psychosis married into the family.

For depression, personal experience showed a lower level of personal stigma ( $p < 0.05$ , ES 0.27), more willingness to become a colleague ( $p < 0.05$ , ES 0.25) and to have a person with depression married into the family ( $p < 0.001$ , ES 0.40). The experience of mental illness (depression) in the family also influenced towards more positive attitudes. The level of personal stigma was lower ( $p < 0.001$ , ES 0.34) they showed more willingness to become a neighbour ( $p < 0.05$ , ES 0.20) and to have a person with depression married into the family ( $p < 0.05$ , ES 0.22).

## Discussion

This study is not representative of the population in Sweden. Rather, it is representative of well-educated women working in professions where they often meet clients in need of some kind of psychological or psychiatric service. Furthermore, many of the participants have received basic education in mental health in their vocational training, e.g. social workers, employment officers. Consequently it can be expected that their level of mental health literacy in general is quite high. Among the participants, 98% agree that a psychiatrist is the best helper for a person with psychotic symptoms and 90% believe that anti-psychotic medication is helpful for these symptoms. The vast majority recommend a psychologist for people with depression and state that psychotherapy and anti-depressants are effective treatments. The results indeed indicate a high level of mental health literacy. Concerning stigmatizing attitudes and social distance, a significant difference was found between depression and psychosis. People are clearly more negative and more inclined to dissociate themselves socially from a

person with psychosis than from a person with depression. This finding corresponds with earlier research. The only condition facing a stronger rejection than psychosis appears to be alcohol dependence (11,20).

Women identified the conditions in the vignettes more often than men. They also had more positive attitudes towards both individuals with depression and psychosis. The reason might be a gender difference but so far research has shown inconsistent results in this matter. In an extensive review by Angermeyer & Dietrich a majority of the studies examined did not show any association between gender and attitudes (20). Two Scandinavian studies have found that women compared to men have more positive attitudes, but these studies did not take the level of mental health literacy into account (21,22). If greater success in identifying the vignettes is seen as a proxy of mental health literacy this might be the factor that leads to more positive attitudes (23). Unfortunately, the gender distribution in the sample of this study does not make it relevant to analyse the interaction between gender and mental health literacy. Otherwise the results show that correct identification of the vignettes and having 100% agreement with health professionals about treatment are associated with more positive attitudes and less desire for social distance. This appears to be true for depression but only to a small extent for psychosis, however. Regarding the aspects of having a person with psychosis married into the family and to become a neighbour with a person with psychosis, a higher level of mental health literacy tends to be related to more desire for social distance. This finding is not that surprising. Similar results have been described both in population studies (24) and in studies of targeted interventions aimed at reducing stigma by improving knowledge about mental health issues. Improved knowledge may not necessarily decrease the desire for social distance (25–27).

Personal experience of mental illness or experience of mental illness in the family shows a similar picture as the other results from the study. Attitudes as well as the assessments of social distance are more positive among participants who have experienced mental health problems themselves or in the family, but mainly towards people with depression. Concerning psychosis, personal or family experience does not seem to have much impact on either attitudes or social distance. Meta-analyses have demonstrated that contact with individuals with mental health problems within anti-stigma programmes (9) seems to be the most efficient intervention to bring about a positive change. However, having a family member affected by mental illness or being personally affected probably produces different experiences than formal and temporary contacts with individuals in a programme. Perhaps it is more interesting to compare results from studies of mental health staff and mentally ill patients. In one study it was reported that staff members treating patients with psychosis in particular had negative attitudes and that the patients themselves to a great extent shared the same attitudes (28).

## Conclusions

A higher degree of mental health literacy is related to more positive attitudes and less desire for social distance towards

individuals with depression. The difference between people with psychosis and depression should be taken into account when delivering anti-stigma interventions.

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