Changes in attitudes, intended behaviour, and mental health literacy in the Swedish population 2009–2014: an evaluation of a national antistigma programme

Hansson L, Stjernwärd S, Svensson B. Changes in attitudes, intended behaviour, and mental health literacy in the Swedish population 2009–2014: an evaluation of a national antistigma programme.

Objective: Public stigma of mental illness is still a major problem where numerous population studies during the last decade have mainly shown no improvements. A Swedish national antistigma campaign has been running 2010–2014. The aim of this study was to investigate changes in public stigma during this period as compared to baseline in 2009.

Methods: Yearly population surveys were made between 2009 and 2014 including assessments of mental health literacy, attitudes, and intended future behaviour. Two surveys were made, one including a nationally representative sample and one including a representative sample from three original campaign regions. Multiple regression analyses, also including age, gender, education, and familiarity with mental illness were made to investigate yearly changes in public stigma compared to baseline.

Results: Mental health literacy improved significantly in the campaign regions between 2009 and 2014, as did intended future behaviour. Attitudes toward mental illness also improved significantly. Improvements were also shown in the national population surveys, but the time pattern of these compared to that of the original campaign regions indicated that these changes took place mainly after the campaign had been extended to a further five Swedish regions.

Conclusion: The results of our surveys suggest that a campaign primarily based on social contact theory and involving people with lived experience of mental illness may, even in a rather short-term perspective, have a significant positive impact on mental health literacy, attitudes, and intentions of social contact with people with mental illness.

Significant outcomes

- Attitudes, mental health literacy, and intended behaviour showed positive changes during the campaign period.
- Social contact was a main source for interventions and campaign events.
- Duration of campaign was related to changes in attitudes, knowledge, and behaviour.

Limitations

- The design did not include any strict control regions with no campaign activities.
- No firm conclusion can be drawn that the use of social contact theory may be attributed to the positive changes shown.
Introduction

Stigma and discrimination are still prominent features of the life situation of persons with mental illness, adding to the burden of living with a mental illness. The deinstitutionalization of mental health services and the development of community-based services have not fundamentally changed this situation. Negative attitudes, stereotypes, and discrimination are still prevalent. In fact, there is evidence that public attitudes have not changed during the last two decades, or even turned worse in the case of people with schizophrenia (1). Stigma and discrimination in many ways affect people with a mental illness causing a lowered self-esteem and quality of life (2), and affecting possibilities of adequate housing, work, and financial situation in a negative way (3, 4). It is also a major barrier to help seeking (5) causing delays, drop-out, and non-adherence to treatment (6, 7).

During the last decades, a number of national and international campaigns and antistigma programmes have been launched to ameliorate this situation. Rather few of these have been the subject of systematic evaluations to investigate outcomes of these programmes. An attempt to evaluate Beyondblue: the national depression initiative in Australia showed that high-exposure regions had greater positive changes in beliefs about treatment and benefits of help seeking in general (8). Recent evaluations of the ongoing Time to Change anti-stigma campaign in England (9, 10) showed moderate positive changes in attitudes related to prejudice and exclusion but not for attitudes related to tolerance and community support. A dose–effect relation was also found between campaign awareness and regional improvement in mental health literacy and attitudes, but not for intended future behaviour. A recent meta-analysis of studies on the effectiveness of antistigma strategies pointed out that interventions including social and personal face-to-face contacts with people with lived experience have shown to be the most effective strategy in changing attitudes of the general public (11).

The Swedish antistigma campaign ‘Hjärnkoll’

The Swedish national antistigma campaign was initiated by the government in 2009 and has been running 2010–2014, financed by the government. Initially, during the period 2010–2011, the main activities of the campaign were rolled out in three Swedish regions with a population of 2 243 000, accounting for 23% of the total Swedish population of 9 774 000 inhabitants. In 2012, a further five regions with a population of 2 229 000 were included, accounting for 22.8% of the population. Thus, the campaign during the final years covered around half of the population. Some activities like media campaigns were national and not restricted to these 8 regions.

There were four main areas for the campaign work (12). A core feature has been the creation of activities and events focusing social contacts with people with lived experience of mental illness. Around 350 ‘ambassadors’ with own mental illness experience were trained to take part in such activities. A second area has been media campaigns through television, the internet, and newspapers. A third area has been mobilization on a local level to promote sustainable activities based on local circumstances. A fourth area has been working life with a special focus on mental illness in the workplace and the role of middle managers with staff responsibility.

Aims of the study

The aims of this study were to evaluate changes in mental health literacy, attitudes toward people with mental illness, and intentional behaviour in the population of the campaign regions as well as in the general population of Sweden during the period 2009–2014.

Methods and participants

The population surveys

Data collection was made by yearly population surveys 2009–2014. Two separate general population surveys were made in October each year, one including a sample from the three primary campaign regions and one on a national level. A well-established private company, NOVUS, running marketing and opinion surveys was contracted for the data collection. The surveys were administered as web-based questionnaires using general population random samples from a panel consisting of 40 000 members, stratified to be representative for the general population with respect to age, sex, and geographical location. Two reminders were sent, 1 and 2 weeks after the initial invitation respectively. It was secured that no respondent had participated in any of the earlier surveys included in the study. Weights were calculated and used to secure the final samples’ representativity with regard to age, sex, and results from parliament elections 2006 and 2010. The final samples for the national surveys ranged from 2053 to 2317 participants (52–55% participation rate) and for the
campaign regions surveys from 657 to 1153 participants (50–57% participation rate), see Table 1. The reason for using a larger sample from 2012 and on in the original campaign regions was to enable comparisons between the three campaign regions in yearly feedback reports to the antistigma campaign. Background characteristics of participants 2009–2014 are shown in Table 2.

**Measures**

**Community Attitudes toward Mental Illness (CAMI).** CAMI is a questionnaire originally developed by Taylor and Dear (13) which originally consisted of 40 items covering attitudes toward mental illness and people with mental illness. In this study, a Swedish version was used including 20 items categorized into three factors: ‘open minded and pro-integration’, ‘fear and avoidance’, and ‘community mental health ideology’. Certain items were recoded so that higher subscale scores indicate more positive attitudes. The Swedish version has been tested regarding psychometric properties, showing high internal consistency in the final three factor solution (latent structure factor analysis) (14). The response format of the questionnaire is a 6-point Likert scale ranging from 1 = do not agree to 6 = fully agree. In this study, the internal consistency of the subscales was found to be good. Cronbach’s alpha for open minded and pro-integration varied between 0.89 and 0.91, for fear and avoidance between 0.76 and 0.81, and for community mental health ideology between 0.70 and 0.72.

**Mental Health Knowledge Scale (MAKS).** MAKS comprises 12 items. Six items are related to stigma-related mental health literacy areas such as help seeking, ability to give advice, support, employment, treatment, and recovery, and 6 items inquire about knowledge of mental illness diagnoses. Items are responded to on a 5-point scale ranging from 1 = totally disagree to 5 = strongly agree, with an additional possibility to score ‘don’t know’. The questionnaire has shown good psychometric properties with regard to reliability and validity (15). MAKS was translated into Swedish and back-translated into English according to standard procedures. The overall internal consistency in this study was acceptable and varied between 0.67 and 0.71 (Cronbach’s alpha).

**Reported and Intended Behaviour Scale (RIBS).** The RIBS is about reported and intended behaviour in four different contexts: living with, working with, living nearby someone

| Year | National survey | Campaign region survey |
|------|----------------|-----------------------|
| 2008 | 1240 657 | 1561 859 |
| 2009 | 1460 803 | 1932 1024 |
| 2010 | 1904 952 | 1994 1014 |
| 2011 | 2023 1153 | 2129 1149 |
| 2012 | 2113 1137 | 2173 1153 |
| 2013 | 2317 1237 | 2173 1153 |
| 2014 | 2317 1237 | 2317 1237 |

| Year | National survey | Campaign region survey |
|------|----------------|-----------------------|
| 2008 | 3912 2113 | 4286 2382 |
| 2009 | 3561 1932 | 3856 2023 |
| 2010 | 3856 2023 | 4212 2317 |
| 2011 | 4212 2317 | 4212 2317 |
| 2012 | 4212 2317 | 4212 2317 |
| 2013 | 4212 2317 | 4212 2317 |
| 2014 | 4212 2317 | 4212 2317 |
Table 2. Background characteristics of participants in the national and campaign region population surveys 2009–2014. Weighted percentages given in the table

|                | Campaign region survey |                | Year of survey | National survey |                |
|----------------|------------------------|----------------|----------------|----------------|----------------|
|                | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  |
| \( n \)        | 657   | 859   | 803   | 1024  | 1153  | 952   | 2053  | 2113  | 2317  | 2182  | 2173  | 2129  |       |       |       |       |       |       |
| Age M (SD)     | 46.2 (16.4) | 47.5 (15.8) | 44.6 (16.8) | 47.8 (17.7) | 48.6 (16.1) | 50.4 (17.1) | 47.6 (16.2) | 47.2 (16.1) | 46.2 (16.6) | 49.6 (16.1) | 48.0 (16.0) | 48.1 (16.4) |       |       |       |       |       |       |
| Gender         |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Male           | 48.6   | 50.4   | 47.1   | 47.2   | 49.9   | 45.4   | 46.3   | 45.0   | 45.4   | 47.1   | 48.7   | 46.5   |        |        |        |        |        |        |
| Female         | 51.4   | 49.6   | 52.9   | 52.8   | 50.1   | 54.6   | 53.7   | 55.0   | 54.6   | 52.9   | 51.3   | 53.5   |        |        |        |        |        |        |
| Education      |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| No finished    | 0.8    | 0.5    | 0.4    | 0.3    | 0.1    | 0.0    | 0.4    | 0.3    | 0.3    | 0.4    | 0.1    | 0.0    |        |        |        |        |        |        |
| Primary school | 12.0   | 11.9   | 9.3    | 10.2   | 7.4    | 8.1    | 12.1   | 11.5   | 9.9    | 9.7    | 7.6    | 7.1    |        |        |        |        |        |        |
| Secondary school | 45.2 | 46.3   | 47.9   | 44.2   | 42.2   | 40.7   | 45.1   | 42.3   | 46.2   | 43.6   | 42.4   | 42.1   |        |        |        |        |        |        |
| University     | 42.0   | 42.4   | 42.4   | 45.3   | 50.4   | 51.2   | 42.3   | 46.0   | 43.5   | 46.4   | 49.8   | 50.8   |        |        |        |        |        |        |
| Familiarity    |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| None           | 27.2   | 27.4   | 25.7   | 28.9   | 25.3   | 28.6   | 26.2   | 25.9   | 25.6   | 28.1   | 28.9   | 26.5   |        |        |        |        |        |        |
| Own illness    | 11.1   | 12.5   | 16.0   | 13.5   | 14.1   | 13.6   | 11.6   | 14.9   | 14.8   | 13.0   | 13.0   | 16.3   |        |        |        |        |        |        |
| Relative's illness | 32.6 | 34.3   | 38.0   | 32.6   | 36.3   | 35.1   | 35.8   | 35.2   | 36.0   | 35.8   | 34.8   | 38.0   |        |        |        |        |        |        |
| Close friend's illness | 43.1 | 41.8   | 43.5   | 38.7   | 41.4   | 40.0   | 42.2   | 41.3   | 41.1   | 40.4   | 38.8   | 40.2   |        |        |        |        |        |        |
| Education in mental health area | 17.2 | 17.9   | 16.3   | 16.1   | 15.4   | 14.4   | 17.1   | 16.9   | 15.4   | 15.7   | 15.2   | 15.7   |        |        |        |        |        |        |
| Work in mental health area | 19.6 | 21.2   | 21.1   | 19.3   | 19.3   | 19.4   | 20.3   | 20.8   | 18.2   | 19.0   | 18.0   | 19.9   |        |        |        |        |        |        |
with a mental health problem, and continuing a relationship with a friend who gets mental health problems. There are eight items, and the first four items assess the reported behaviour in the four contexts, while the next four items ask about intended future behaviour within the same contexts. The response format of the first four items is Yes/No, and for the last four items, a 5-point response scale is used ranging from strongly disagree = 1 to strongly agree = 5. The RIBS has been tested and found to be a feasible and psychometrically robust measure for assessing mental health-related reported and intended behaviour (16). RIBS was translated into Swedish and back-translated into English according to standard procedures. Only the four items referring to future intended behaviour were used in this study. Internal consistency according to Cronbach’s alpha was high and varied between 0.85 and 0.87.

Background characteristics and familiarity with mental illness. Information about the participants’ background characteristics was collected. Familiarity with mental illness was assessed by gathering information on the following items: no experience, experience by own illness, experience by contact with friends, by relatives with mental illness, or by working or having an education in the mental health area. The response format of these items was yes = 1 and no = 0. Scores were summed up to indicate degree of familiarity (0–5), a higher score indicating a higher degree of familiarity.

Descriptive analyses

Descriptive statistics were used to present background characteristics. Z-scores of dependent variables were computed and used in multiple regression analyses to analyze annual changes 2009–2014, both on a national level and in the three campaign regions. Analyses were performed regarding mental health literacy (standardized MAKs score), attitudes (standardized CAMI subscales scores), and intended behaviour (standardized RIBS, intended behaviour score), using 2009 as the reference category. In all regression analyses, sum scores of familiarity (ordinal), gender (male gender reference category), age (continuous), and educational level (primary school used as reference category) were used as covariates. Standardized B, confidence interval, and P-values are presented in the tables. Weights were calculated and used in the analyses to secure the final samples’ representativity with regard to age, sex, and results from parliament elections 2006 and 2010. The statistical package used was IBM SPSS version 21.0.

Results

Campaign regions

Mental health literacy improved significantly in the campaign regions between 2009 and 2014 (0.28 SD units, CI 0.18–0.38, P = 0.001). A significant improvement was shown already by the end of the first campaign year 2010 and all the following years as well, Table 3.

In the attitude subscale ‘open minded and pro-integration’, there was a significant improvement between 2009 and 2014 (0.49 SD units, CI 0.39–0.58, P = 0.001). There were also significant improvements shown for the years 2011–2013 in comparison with 2009, Table 4. The same was shown for the subscale ‘fear and avoidance’ in comparisons between 2009 and 2014 (0.41 SD units, CI 0.31–0.50, P = 0.001) as well as for all years in between. In the subscale ‘community mental health ideology’, there was a significant improvement between 2009 and 2014 (0.35 SD units, CI 0.25–0.44, P = 0.001) and in comparisons between 2009 and 2013.

Intended behaviour improved significantly between 2009 and 2014 (0.18 SD units, CI 0.08–0.28, P = 0.001). Significant improvements in comparison with 2009 were also shown for the years 2011–2013, Table 5.

In all analyses, female gender, higher education, and more familiarity with mental illness were significantly related to better mental health literacy, more positive attitudes, and being more prone to interact with people with mental illness in the future. The results regarding age were mixed. Younger age was related to better mental health literacy and being more prone to interact with people with mental illness in the future, but older age was in all three attitude subscales significantly related to more positive attitudes.

The national level

Mental health literacy improved significantly in Sweden as a whole between 2009 and 2014 (0.14 SD units, CI 0.07–0.21, P = 0.001). A significant improvement compared to 2009 was also shown in 2013 but not for the preceding years, Table 3.

Attitudes showed significant improvements on a national level as well, Table 4. In the attitude subscale ‘open minded and pro-integration’, there was a significant improvement between 2009 and 2014.
(0.09 SD units, CI 0.02–0.16, \( P = 0.01 \)), as well as in comparisons between 2009 and the preceding year 2013, Table 4. In the subscale ‘fear and avoidance’, there were also significant improvements in comparisons between 2009 and 2014 (0.10 SD units, CI 0.03–0.16, \( P = 0.007 \)) as well as between 2012 and 2014 but not for the other comparison years. In the subscale ‘community mental health
ideology’, there was a significant improvement between 2009 and 2014 (0.15 SD units, CI 0.08–0.21, P = 0.001) and in comparisons between 2009 and 2013.

Intended behaviour improved significantly between 2009 and 2014 (0.15 SD units, CI 0.08–0.22, P = 0.001). A significant improvement was also shown in 2012, but not for 2010–2011 and 2013, Table 5.

In general, the associations to background characteristics were the same as in the campaign regions. More positive intentions to interact with people with mental illness in the future were related to younger age, female gender, higher educational level, and more familiarity with mental illness. The same relationships were shown for a better mental health literacy, except for the fact that educational level in this case was not related to mental health literacy. Female gender, older age, higher educational level, and more familiarity were all related to more positive attitudes in all three subscales.

Discussion

The main findings of the present study were significant and positive changes in attitudes, mental health literacy, and intended future behaviour. However, although our datasets did not allow analyses of differences in changes in these aspects, it is obvious that for a number of areas investigated there are differences in changes in the original campaign regions and the national level which speaks in favor of the campaign being the major agent responsible for this development. For two of the three attitude subscales, ‘open minded and pro-integration’ and ‘fear and avoidance’, and for intended future behaviour, there is a time pattern in the significant changes which are synchronized with the launching of the campaign in different regions. In the original three campaign regions, where the campaign started in 2010, significant changes were visible in these aspects already in 2010–2011, while they on a national level were unchanged during these years. Not until the initiation of the campaign in a further five regions in 2012 were significant changes shown on a national level. This time pattern is consistent with an impression that the campaign is part of this development. Furthermore, recent reviews of population studies have shown that attitudes toward mental illness have generally been unchanged or worsened during the last two decades, which supports the fact that unless intense and focused efforts are made to end stigma and discrimination, no changes will appear (1, 11).

However, this pattern was not uniform. In the attitude subscale ‘community mental health ideology’, containing items concerning integration of people with mental illness in the community and the development of community-based mental health services, no significant changes in comparison with 2009 were shown until 2013, coinciding with a significant change on the national level. The reasons for this are unclear. It might be that the campaign did not focus on these matters as much as those topics included in the other subscales or

Table 5. Multiple regression analysis of changes in intended future behaviour (RIBS) in campaign regions and on a national level through the campaign years, controlling for gender, age, education, and familiarity with mental illness.

| Predictors                        | Campaign region survey | National survey |
|-----------------------------------|------------------------|----------------|
|                                   | Stand. B 95% CI        | Stand. B 95% CI|
|                                   | P-value                | P-value        |
| 2010†                             | 0.04                   | 0.04           |
| 2011                              | 0.14                   | 0.03           |
| 2012                              | 0.10                   | 0.03           |
| 2013                              | 0.17                   | 0.04           |
| 2014                              | 0.18                   | 0.07           |
| Gender†                           | 0.11                   | 0.07           |
| Age                               | −0.003                 | −0.01          |
| Educational level§                | 0.10                   | 0.10           |
| Familiarity with mental illness   | 0.15                   | 0.17           |

†Reference category year 2009.
‡Reference category male gender.
§Reference category primary school.
that changes in these aspects do require a more long-term perspective to change. On the other hand, changes regarding community mental health ideology were visible on a national level during the first year of the extension of the campaign to the five added regions.

In general, the same pattern emerged regarding mental health literacy. Positive changes were shown in the original three campaign regions during the first year of the campaign 2010 but not until 2013 in the national surveys. Regarding intentional behaviour, the pattern was somewhat more inconsistent. There were significant changes shown in the campaign regions in 2011 and the following years. On a national level, a significant change was shown a year later, in 2012, an improvement which disappeared during 2013, but was significant again in the overall comparison 2009–2014.

In concordance with earlier studies, we also showed that both concerning attitudes, mental health literacy and intended future behaviour, female gender, and more familiarity with mental illness were related to more positive responses (9, 17, 18). In addition, a higher level of education was related to a more positive response in all instances. The influence of age was more mixed. Younger age was both in the campaign region surveys and in the national surveys linked to better mental health literacy, and this was also the case for intended future behaviour. Older age was in both survey series related to more positive attitudes in all three subscales.

In conclusions, the results from the population surveys showed changes in mental health literacy, attitudes, and intended future behaviour during the antistigma campaign period 2009–2014. The time pattern of these improvements makes it plausible that these improvements are related to ‘Hjärnkoll’. Changes of this consistency and size are not plausible as part of a spontaneous decrease in stigma and discrimination in Sweden, taken the lack of such changes during recent decades noted in recent meta-analyses of population studies. However, the lack of a formal control population makes it necessary to draw this conclusion with caution. We have tried to identify concurrent societal changes and processes that might be alternative explanations for these changes. One important factor in shaping and reflecting attitudes toward mental illness, as well as acquiring knowledge about mental illness for many people, is the media coverage of this area (19, 20). It is possible that changes in the focus of media coverage might interact with the activities of the antistigma campaign. Actually, part of the campaign was focusing media and there were efforts to impact on media to report on mental illness in a more balanced way. We could not identify any major events highlighted by media, such as crimes of violence performed by people with mental illness, during the years preceding the stigma campaign, which would have negatively impacted attitudes making way for a rebound during the campaign years. In a Swedish dissertation (20) analyzing media coverage of mental illness in television news media during the three decades preceding the stigma campaign, it was concluded that the psychiatry field had become more newsworthy, occurred more often and got more space in the broadcasting. There were no indications that this coverage had become more negative during the last years of the study period. On the contrary, news about health care and legislation occupied more space and news about violence less space. This indicates that media coverage was not in this respect an important factor in understanding the changes observed in the present study. Further surveys are in preparation to investigate future development in cases of termination of the campaign or changes in strategies used to decrease stigma and discrimination.

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Declaration of interest

All authors declare no competing interests.

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References

1. SCHOMERUS G, SCHWAB C, HOLZINGER A et al. Evolution of public attitudes about mental illness: a systematic review and meta-analysis. Acta Psychiatr Scand 1996;125:440–452.
2. LIVINGSTON JD, BOYD JE. Correlates and consequences of internalized stigma for people living with mental illness: a systematic review and meta-analysis. Soc Sci Med 2010;71:2150–2161.
3. RÜSCH N, ANGERMEYER MC, CORRIGAN P. Mental illness stigma. Concepts, consequences and initiatives to reduce stigma. Eur Psychiatr 2005;20:529–539.
4. SHARAC J, MCCORNE P, CLEMENT S, THORNicroft G. The economic impact of mental health stigma and discrimination: a systematic review. Epidemiol Psychiatr Soc 2010;19:223–232.
5. Guli ter A, Griffiths KM, Christensen H. Perceived barriers and facilitators to mental health help-seeking in young people: a systematic review. BMC Psychiatry 2010;10:113.
6. Andrews G, Henderson S, Hall W. Prevalence, co-morbidity, disability and service utilisation. Overview of the Australian National Mental Health Survey. Br J Psychiatry 2001;178:145–153.
7. Srey JA, Bruce ML, Alexopoulos GS et al. Perceived stigma as a predictor of treatment discontinuation in young and older outpatients with depression. Am J Psychiatry 2001;158:479–481.
8. Jorm AF, Christensen H, Griffiths KM. The impact of Beyondblue: the national depression initiative on the Australian public’s recognition of depression and beliefs about treatments. Aust N Z J Psychiatry 2005;39:248–254.
9. Evans-Lacko S, Corker E, Williams P, Henderson C, Thornicroft G. Effect of the Time to Change anti-stigma campaign on trends in mental-illness-related public stigma among the English population in 2003–13: an analysis of survey data. Lancet Psychiatry 2014;1:121–128.
10. Corrigan PW, Morris SB, Michaels PJ, Rafacz JD, Rüsch N. Challenging the public stigma of mental illness: a meta-analysis of outcome studies. Psychiatr Serv 2012;63:963–973.
11. Five years with “Hjärnkoll” (in Swedish). Stockholm: National Collaboration for Mental Health, 2014.
12. Taylor SM, Dear MJ. Scaling community attitudes toward the mentally ill. Schizophr Bull 1981;7:225–240.

Evaluation of a Swedish antistigma programme

13. Högb erg T, Magnusson A, Ewertzon M, Lützén K. Attitudes towards mental illness in Sweden: adaptation and development of the Community Attitudes towards Mental Illness questionnaire. Int J Ment Health Nurs 2008;17:302–310.
14. Evans-Lacko S, Little K, Meltzer H et al. Development and psychometric properties of the mental health knowledge schedule. Can J Psychiatry 2010;55:440–448.
15. Evans-Lacko S, Rose D, Little K et al. Development and psychometric properties of the Reported and Intended Behaviour Scale (RIBS): a stigma-related behaviour measure. Epidemiol Psychiatr Sci 2011;20:263–271.
16. Evans-Lacko S, Henderson C, Thornicroft G. Public knowledge, attitudes and behaviour regarding people with mental illness in England 2009–2012. Br J Psychiatry 2013;202:51–57.
17. Mottar a R. Mental illness and willingness to seek mental health care in the European Union. Soc Psychiatry Psychiatr Epidemiol 2010;45:705–712.
18. Philo G. The media and public belief. In: Philo G, ed. Media and mental distress. Harrow: Longman; 1996.
19. Dietrich S, Heider D, Matschinger H, Angermeyer M. Influence of newspaper reporting on adolescents’ attitudes toward people with mental illness. Soc Psychiatry Psychiatr Epidemiol 2006;41:318–322.
20. Magnusson A-S. Media images of the psychiatry field in television news during three decades (In Swedish). Dissertation, Department of Journalism, Media and Communication, Gothenburg University, 2010.