

Development and Psychometric Properties of the Mental Health Knowledge Schedule

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Objective: Stigma has been conceptualized as comprised of 3 constructs: knowledge (ignorance), attitudes (prejudice), and behaviour (discrimination). We are not aware of a psychometrically tested instrument to assess knowledge about mental health problems among the general public. Our paper presents the results of the development stage and the psychometric properties of the Mental Health Knowledge Schedule (MAKS), an instrument to assess stigma-related mental health knowledge among the general public.

Methods: We describe the development of the MAKS in addition to 3 studies that were carried out to evaluate the psychometric properties of the MAKS. Adults aged 25 to 45 years in socioeconomic groups: B, C1, and C2 completed the instrument via face-to-face interview ($n = 92$) and online ($n = 403$).

Results: Internal reliability and test-retest reliability is moderate to substantial. Validity is supported by extensive review by experts (including service users and international experts in stigma research).

Conclusion: The lack of a valid outcome measure to assess knowledge is a shortcoming of evaluations of stigma interventions and programs. The MAKS was found to be a brief and feasible instrument for assessing and tracking stigma-related mental health knowledge. This instrument should be used in conjunction with other attitude- and behaviour-related measures.

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Clinical Implications

- Improving public knowledge about mental health can produce a positive impact on stigma, facilitate help seeking, and contribute to a greater proportion of people with mental illness receiving treatment in future.
- To our knowledge, the MAKS is the first psychometrically tested instrument to assess mental health-related knowledge at the population level and can be used for longitudinal studies of changing population levels of mental health-related knowledge.
- The MAKS is a brief and feasible method for assessing and tracking stigma-related mental health knowledge and can facilitate evaluation of large-scale antistigma interventions, and will allow for better understanding in the future of how knowledge, attitudes, and behaviour interrelate.

Limitations

- Although online assessment should reduce social desirability, we cannot be certain to what extent social desirability affects participant response.
- The MAKS alone is not sufficient for assessing reductions in discrimination or success of an antistigma intervention and should be used in conjunction with attitude- and behaviour-related measures.
- Future research is still needed to examine how improvements in these areas of mental health knowledge translate into changes in stigmatizing behaviours.

Key Words: *stigma, mental illness, health literacy, measurement*

Stigma has been conceptualized as comprised of 3 constructs: knowledge (ignorance), attitudes (prejudice), and behaviour (discrimination).¹ The scientific literature on mental health-related stigma, including the evaluation of antistigma campaigns and other interventions aimed at reducing stigma, however, is limited mainly to the assessment of public attitudes and on internalized stigma as experienced by people with mental illness.^{1,2}

The National Institute for Health and Clinical Excellence emphasizes the importance of including knowledge, attitude, and behavioural components when developing interventions aimed at behaviour change among people or populations. In addition, assessment of knowledge before and after the intervention may help to determine initial gaps in knowledge and to track changes in outcome expectations.³ There is evidence that knowledge may be a significant outcome in itself, and may play an important role in mediating attitudinal and behavioural change in relation to stigma. Wolff et al⁴ showed an association between mental health-related knowledge and attitudes of social control and that knowledge explained more of the association than any demographic characteristic. Better mental health-related knowledge has also been shown to be associated with less personal stigma and less fear and discomfort when in contact with people with a mental illness.^{5,6}

The literature also suggests that certain types of knowledge such as that related to treatment efficacy, recognition, help seeking, and employment are more significant in decreasing stigma and making improvements in mental health-related attitudes and behaviours. Kelly et al⁷ found that knowledge specifically around recognition of symptoms and illnesses may facilitate help seeking and also understanding when communicating with clinicians.⁷ It may also be important to know about sources of help or ways of helping others with mental health problems. Several studies of the Mental Health First Aid program, which teaches members of the public skills in how to assist people developing mental disorders, have shown improvements in several stigma-related outcomes such as social distance, beliefs about treatment, decreased social distance from people with mental disorders, increased confidence in providing help to someone with a mental disorder, and increased help provided to others.⁷⁻¹¹

Although knowledge may be an important component of stigma and may influence mental health-related attitudes and behaviours, few studies assess knowledge specifically. This may be explained by a lack of adequate measures designed

exclusively to assess knowledge among the general public. Some measures have been developed to test knowledge among specific populations¹² or which are diagnosis-specific.^{13,14} Other studies include measures which include informative knowledge-related item(s). For example, a Canadian study¹⁵ looked at the association between knowledge of prevalence and causes of schizophrenia and attitudes toward social distance. The United Kingdom Department of Health Attitudes to Mental Illness Survey showed that most people underestimated the prevalence of mental illness. Forty-one percent thought that the proportion of people in the United Kingdom who might have a mental health problem at some point in their lives was less than 1 in 10.¹⁶ The evaluation of the Scottish See Me campaign¹⁷ includes an important assessment of knowledge, which suggests that, among youth, campaign awareness was associated with better knowledge about how to help a friend with a mental health problem. Additional studies describe knowledge related to treatment efficacy^{18,19} and recognition of symptoms.^{18,20} However, to our knowledge, there is no such tool that has been developed and psychometrically tested to be used with the general public, and which could be used to evaluate interventions among the general public and allow for comparability among results. Without measuring the specific components of stigma, it is difficult to assess the mechanisms of change of antistigma interventions. Given the growth in interest in population-level antistigma and antidiscrimination campaigns, such as the national campaign, Opening Minds, recently launched by the Mental Health Commission of Canada, which are aimed at reducing mental health-related stigma,²¹⁻²⁷ reliable and valid outcome measures that can assess active ingredients²⁸ of their effectiveness are essential. The lack of a valid outcome measure to assess knowledge is a shortcoming of evaluations of stigma interventions and programs. The aim of this project is to develop a mental health knowledge-related measure that comprises domains of relevant evidence-based knowledge in relation to stigma reduction that can be used in conjunction with attitude- and behaviour-related measures with the general public.

Methods

Instrument Development

An extensive review of the literature informed the initial item-generation process. All items were supported by evidence from previous studies suggesting types of knowledge that might potentially influence subsequent mental health-related attitudes and behaviours. The initial pool of items and framework were reviewed by an expert panel (including service users and international experts in questionnaire design and stigma research). The panel was asked to ensure that the framework was comprehensive in addition to evaluating content and face validity of the items.

A survey format was selected for the MAKS to reflect expert opinion that, although value-based judgments may be assessed by vignettes, closed questions within a

Abbreviations used in this article

MAKS	Mental Health Knowledge Schedule
SES	socioeconomic status

structured questionnaire format may be better at assessing factual information. Although the MAKS does not contextualize each item the way a vignette would, items 7 to 12 allow us to interpret each participant's conceptualization of mental illness. Specifically, we can examine whether shifts in knowledge might be attributed to changes in conceptualization of mental illness (for example, endorsing only schizophrenia as a mental illness, compared with endorsing all items, including grief, as mental illnesses).

Pre-Pilot

Following instrument refinement based on expert review, we performed a cognitive test on a purposively selected sample of 30 lay people in South London. This test was used specifically to clarify wording, comprehensibility, and response format.²⁹ Because we were developing a knowledge survey, we performed cognitive testing to test lay people understanding and acceptability of the questions rather than to generate items as is sometimes done for attitude surveys.

Empirical Testing of MAKS

Study 1. Following cognitive testing of the instrument, the MAKS was piloted using face-to-face interviews during September 2008 in Cambridge, England, prior to a brief, locally based antistigma campaign carried out as part of the Time to Change campaign²³ and preceding the national campaign that began in 2009. Although the instrument is designed to be a general measure of stigma-related mental health knowledge that can be applied to evaluate a range of antistigma interventions, the evaluation of Time to Change provided a unique opportunity for us to test these measures. Participants were recruited via a market research panel, through Consumer Insight who were contracted to assist with data collection and campaign tracking. Sixty interviews were performed door-to-door (that is, interviewers knock on doors and then revisit people at their home the week after for follow-up interviews) and the additional 32 interviews were performed with people on the street. We do not have the exact number of contacts made for the street survey, but we estimate that a 1 in 3 response rate was achieved. Quotas were set to ensure equal distributions of men and women, and target SES and age groups. Interviews performed on the street were conducted between 10 AM and 4 PM. All interviews were done within a 10-mile radius of the city and all respondents were residents of Cambridge. The campaign was designed to target people of a specific age and SES, respondents were therefore restricted to adults aged 25 to 45 years and in SES groups B, C1, and C2. These categories relate to a system of demographic classification used in the United Kingdom that comes from the National Readership Survey. Category B represents people designated as middle class, in which the chief income earner's occupation is intermediate managerial, administrative, or professional. Category C1 is considered lower middle class (for example, supervisory or clerical and junior managerial, administrative, or professional). Category C2 represents people designated as skilled working class (for example, skilled manual

workers). Participants were chosen to be representative of the population living in Cambridge. Quotas were set to include equal distributions of men and women, and target SES and age groups. Internal consistency and item stability were evaluated in 92 people.

Study 2. All 60 participants who completed the door-to-door survey from Study 1 were asked whether they would complete the survey at a later time. Thirty-seven people agreed to complete the MAKS twice, one week apart for test-retest reliability purposes. All of the recall interviews were performed door-to-door.

Finalizing the Main Instrument

Study 3. Final changes were made to the MAKS following the pilot test in Cambridge and psychometric properties of the instrument were determined in 403 adults across England. Quotas were set again to include equal distributions of age, sex, and SES, and the sample was designed to be representative of the population in England on those characteristics in addition to region of residence and ethnicity. Participants were recruited via an online fieldwork provider, Research Now.³⁰ Research Now has access to 89 000 panel members meeting eligibility criteria. Members of the panel who met eligibility criteria were randomly selected and invited to take part in the survey via email. Owing to concerns about social desirability resulting from the face-to-face format and sensitive content of the scale, participants in this sample completed the MAKS online as part of the campaign evaluation survey. A meta-analysis concluded that online assessment enhances participants' perceptions of anonymity, compared with interviews, which is linked to decreased social desirability distortion and increased self-disclosure.³¹

Instrument Design

Based on literature review and expert consultation, the MAKS comprises 6 stigma-related mental health knowledge areas: help seeking, recognition, support, employment, treatment, and recovery, and 6 items that inquire about knowledge of mental illness conditions. Response options reflect the conclusion of the consultation with experts and lay people. Although true or false answer categories may be the most appropriate when assessing knowledge, they might make the respondent feel unintelligent or highlight their lack of knowledge. Additionally, the validity of the responses may be affected by guessing when participants are presented with true or false responses. Consequently, it was felt that asking about agreement to statements would be preferable. Work with the pre-pilot sample supported these response options as clear and comprehensible, and most respondents preferred having multiple response options. It was suggested that "don't know" be added as an additional response option, and this option was endorsed in Studies 1 and 3 by 27.6% and 24.1%, respectively.

Characteristic	Study 1 ^a n = 37 (%)	Study 2 n = 92 (%)	Study 3 n = 403 (%)
Age, years			
25–29	11 (29.7)	26 (28.3)	89 (22.1)
30–34	8 (21.6)	25 (27.2)	104 (25.8)
35–39	5 (13.5)	17 (18.5)	106 (26.3)
40–45	13 (35.1)	24 (26.1)	104 (25.8)
Sex			
Male	18 (48.7)	43 (46.7)	199 (49.4)
Female	19 (51.4)	49 (53.3)	204 (50.6)
Marital status			
Married or living with partner	21 (56.8)	58 (63.0)	330 (81.9)
Single	16 (43.2)	34 (37.0)	73 (18.1)
Ethnicity			
White	37 (100.0)	88 (95.7)	314 (77.9)
Mixed	0 (0.0)	1 (1.1)	14 (3.5)
Asian or Asian British	0 (0.0)	2 (2.2)	39 (9.7)
Black or Black British	0 (0.0)	1 (1.1)	20 (5.0)
Chinese	0 (0.0)	0 (0)	9 (2.2)
Other	0 (0.0)	0 (0)	3 (0.7)
Working status			
Full-time	25 (67.6)	57 (62.0)	282 (70.0)
Part-time	9 (24.3)	20 (21.7)	71 (17.6)
Student	2 (5.4)	10 (10.9)	4 (1.0)
Not working	1 (2.7)	5 (5.4)	46 (11.4)
Region			
East Midlands			21 (5.2)
East of England			99 (24.5)
London			68 (16.9)
North East			14 (3.5)
North West			44 (10.9)
Scotland			23 (5.7)
South East			48 (11.9)
South West			22 (5.5)
Wales			9 (2.2)
West Midlands			26 (6.5)
Yorkshire and Humberside			29 (7.2)
Known, or have known, someone with a mental health problem			
Yes	17 (46.0)	55 (59.8)	271 (67.2)
No	20 (54.0)	37 (40.2)	132 (32.8)

^a This sample is a subset of sample 2 re-tested at a later point

Data Analysis

Scoring

MAKS items were scored on an ordinal scale (1 to 5). Items in which the respondent strongly agreed with a correct statement had a value of 5 points, while 1 point reflected a response in which the respondent strongly disagreed with a correct statement. The total score for each participant was calculated by adding together the response values of each item. “Don’t know” was coded as neutral (that is, 3) for the purposes of determining a total score. Items 6, 8, and 12 were reverse coded to reflect the direction of the correct response. Items 7 to 12 are designed to establish levels of recognition and familiarity with various conditions and also to help contextualize the responses to other items. For example, it is important to know if broadening one’s conceptualization of mental illness influences participants’ subsequent responses to questions.

Statistical Analysis

Each item’s psychometric performance was assessed by response frequencies, internal consistency using Cronbach’s alpha, and (in Study 2) retest reliability. Overall test–retest reliability of the MAKS was also evaluated in Study 2. For test–retest, a weighted kappa was performed for each item (assuming responses are ordinal). Lin’s concordance statistic was used to calculate the overall test–retest statistic for the entire MAKS scale using the concord command in Stata (Stata Corporation, College Station, TX). The overall internal consistency was also assessed among items 1 to 6 using Cronbach’s alpha. However, as the MAKS was not developed to function as a scale, the internal consistency is not as important, and people’s knowledge may be domain specific; therefore we chose not to exclude items based on low alpha score. Instead it is an indicator of trends in responses. This is because the MAKS intentionally includes items of a multidimensional structure aimed at testing various types of mental health-related knowledge. Because the MAKS is designed to measure a heterogeneous group of items it subsequently would not be expected to have a high internal consistency, as people may have knowledge in certain domains but lack knowledge in other domains. Thus items that did not have high alpha scores indicating high internal consistency were not removed from the MAKS. This structure of the MAKS allows for using individual items to track knowledge in specific areas.

Analyses were carried out using Stata version 10 and SAS version 9.1 (SAS Institute Inc, Cary, NC). This study was classified as exempt by the King’s College London, Psychiatry, Nursing, and Midwifery Research Ethics Subcommittee. All participants were given information on the study and could refuse or accept to take part in the study.

Sample Characteristics

The total sample of all studies included 495 distinct people (Study 1, $n = 92$; Study 2, $n = 37$; Study 3, $n = 403$). Participant characteristics (that is, biographic characteristics,

sociodemographic characteristics, geographical characteristics, and social contact) are shown in Table 1. About one-half of respondents in each study said they know or have known someone with a mental illness.

Feasibility

The average time for online, self-completion of the MAKS was 1 minute and 23 seconds (range: 10.9 seconds to 5 minutes and 26 seconds). The range of time for interviewer administration of the MAKS was 1 minute and 22 seconds (range: 31 seconds to 3 minutes and 58 seconds).

Study 1

In Study 1, 7 people (8%) scored below 24, indicating an average of 2 or less for each item. No individual items indicated significant floor effects. Data from Study 1 did indicate potential ceiling effects. Twenty-four percent had a score of 36 or higher, indicating an average score of 4 or more for each item. This effect may be due in part to items covered a range of difficulty. For example, although a substantial majority of the population strongly agreed that schizophrenia is a mental illness, respondents were less confident about endorsing depression and drug addiction.

Study 3

Overall, participants tended to use the full range of response options (Table 3). Study 3 aimed to ameliorate the ceiling by using an anonymous self-complete online survey. In Study 3, 16% scored below 24, suggesting potential improvements, while the proportion scoring 36 or higher remained stable at 8%.

Reliability

Study 2. Overall test–retest reliability was 0.71 using Lin’s concordance statistic. Item retest reliability, based on a weighted kappa, ranged from 0.57 to 0.87 (Table 2), suggesting moderate to substantial agreement between the 2 time points. Additionally, we tested the hypothesis that responses may be more likely to shift in the positive (that is, become more accurate) or negative direction during retest; however, the data from Study 2 did not support this (On average, the shift from pre- to post-response was +0.37, but this was not significantly different from 0 [$df = 36$, $P = 0.8$]).

Study 3. The item stability ranged from 0.54 to 0.69 in Study 3. We report, for each item, the scale’s Cronbach’s alpha reliability coefficient for internal consistency if the individual item is removed from the scale. The overall internal consistency among items 1 to 6 was moderate (0.65). However, as mentioned previously, as the MAKS was not developed to function as a scale, the value of this number is less important and, in this case, the alpha should only be used to interpret trends in responses (Table 2).

Discussion

The aim of our study was to develop and psychometrically evaluate a questionnaire to assess stigma-related mental

Table 2 Reliability of the MAKs

MAKS item	Internal consistency	
	(Cronbach's α) <i>n</i> = 403	κ <i>n</i> = 37
1. Most people with mental health problems want to have paid employment	0.60	0.68
2. If a friend had a mental health problem, I know what advice to give them to get professional help	0.57	0.76
3. Medication can be an effective treatment for people with mental health problems	0.54	0.81
4. Psychotherapy (for example, talking therapy or counselling) can be an effective treatment for people with mental health problems	0.59	0.76
5. People with severe mental health problems can fully recover	0.61	0.76
6. Most people with mental health problems go to a health care professional to get help	0.69	0.73
7. Depression	n/a	0.81
8. Stress	n/a	0.62
9. Schizophrenia	n/a	0.83
10. Bipolar disorder (manic depression)	n/a	0.87
11. Drug addiction	n/a	0.57
12. Grief	n/a	0.76
Total	0.65 ^a	0.71

^a Only items 1 to 6 were evaluated.
n/a = not applicable

health knowledge. The MAKs was found to be a brief and feasible instrument for assessing and tracking stigma-related mental health knowledge. The MAKs demonstrated overall moderate to substantial test-retest reliability. The results of the study suggest that stigma-related mental health knowledge is multidimensional in that the correct endorsement of some items did not ensure good correct knowledge of other items. This was reflected in the statistics assessing internal consistency and in the distribution of responses shown in Table 3.

There were several challenges in the development and evaluation of the MAKs. For example, only items in which experts agreed that there was sufficient evidence to be considered factual could be included. It is possible that social desirability influenced participants' responses. Although we noticed that the ceiling effect may have been lessened in Study 3, compared with Study 2, we cannot be sure to what extent social desirability still plays a role in response patterns.

This instrument may be helpful in further determining the relation between knowledge, attitudes, and behaviours. Further testing of this relation and examining the usefulness of various types of knowledge in influencing stigmatizing attitudes or behaviours could help us to better understand the most effective way to influence behavioural change. The

relation and influence of mental health-related knowledge on attitudes and discrimination is not well established and is difficult to explore in many studies, which often conflate knowledge and attitudes.^{1,7} The MAKs is a knowledge-specific instrument that can be used in conjunction with attitude and behaviour measures to better understand how improvements in knowledge might translate into changes in attitudes or behaviour.

There are several barriers to successful knowledge transfer and translation as described by Prochaska and DiClemente³² and Weinstein.³³ Our paper does not suggest that improvements in knowledge ensure changes in behaviour, but rather that a better understanding of this relation is needed. A recent review by Angermeyer et al³⁴ describes an increase in mental health literacy alongside a stable or increasing trend for social distance from people with major depression or schizophrenia in Eastern Germany. Importantly, the review questions the assumption that educational interventions and improvements in literacy necessarily lead to improvements in attitudes or behaviours. Although historical bias or lack of adequate assessment of knowledge may have influenced the relation demonstrated in this study, it is crucial to elaborate on this area of uncertainty and inform future campaigns and interventions. Additional studies of educational interventions suggest improvements in knowledge and some attitudes

Table 3 Response frequencies for Study 3, n = 403

MAKS item	Strongly agree n (%)	Slightly agree n (%)	Neither agree nor disagree n (%)	Disagree slightly n (%)	Strongly disagree n (%)	Don't know n (%)
1. Most people with mental health problems want to have paid employment	84 (20.8)	173 (42.9)	93 (23.1)	9 (2.2)	5 (1.2)	39 (9.7)
2. If a friend had a mental health problem, I know what advice to give them to get professional help	57 (14.1)	116 (28.8)	97 (24.1)	80 (19.9)	32 (7.9)	21 (5.2)
3. Medication can be an effective treatment for people with mental health problems	88 (21.8)	204 (50.6)	79 (19.6)	10 (2.5)	5 (1.2)	17 (4.2)
4. Psychotherapy (for example, talking therapy or counselling) can be an effective treatment for people with mental health problems	107 (26.6)	209 (51.9)	59 (14.6)	7 (1.7)	4 (1.0)	17 (4.2)
5. People with severe mental health problems can fully recover	48 (11.9)	129 (32.0)	111 (27.5)	46 (11.4)	12 (3.0)	57 (14.1)
6. Most people with mental health problems go to a health care professional to get help	26 (6.5)	73 (18.1)	123 (30.5)	109 (27.1)	72 (17.9)	0 (0.0)
7. Depression	188 (46.7)	142 (35.2)	43 (10.7)	17 (4.2)	9 (2.2)	4 (1.0)
8. Stress	90 (22.3)	128 (31.8)	79 (19.6)	65 (16.1)	33 (8.2)	8 (2.0)
9. Schizophrenia	315 (78.2)	52 (12.9)	26 (6.5)	1 (0.3)	1 (0.3)	8 (2.0)
10. Bipolar disorder (manic depression)	268 (66.5)	91 (22.6)	27 (6.7)	4 (1.0)	3 (0.7)	10 (2.5)
11. Drug addiction	61 (15.1)	104 (25.8)	84 (20.8)	67 (16.6)	72 (17.9)	15 (3.7)
12. Grief	64 (15.9)	137 (34.0)	85 (21.1)	60 (14.9)	47 (11.7)	10 (2.5)

among target populations following an intervention; however, it is not clear if and how this translates to behaviour change or which types of knowledge are most effective.^{12,35-37} Additionally, Corrigan et al³⁸ have also shown that the type of educational program and information disseminated is significant and that some programs that mean well may in fact negatively influence attitudes.

Jorm et al^{10,11,18}, and Jorm³⁹, who have played a major role in the developments around mental health literacy, have also shown that information may be especially useful for improving access and help seeking of evidence-based care for people with mental health problems and that this evidence should be reflected in policy.

Conclusions

The development of this tool is a long-term process and it may require further revisions in the future. Still, the assessment of knowledge as one component of evaluating antistigma interventions is significant. Based on the literature, it is hypothesized that mental health-related knowledge will influence negative attitudes and discriminatory behaviour. Several studies have shown improvements in stigma-related outcomes such as social distance, beliefs about treatment, decreased social distance from people with mental disorders, increased confidence in providing help to someone with a

mental disorder, and increased help provided to others following education-based knowledge interventions.⁷⁻¹¹ Future work should examine how improvements in mental health-related knowledge influence stigmatizing attitudes or behaviours so that we can better understand the relation between these constructs and further inform interventions that aim to modify behaviours, in addition to exploring differences in response by age, educational qualifications, or ethnicity. This tool can be used to evaluate antistigma interventions and using it in combination with other attitudinal and behavioural assessment may help us to understand how to better organize interventions to best reduce stigma.

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Résumé : Élaboration et propriétés psychométriques du questionnaire des connaissances de santé mentale

Objectif : La stigmatisation a été conceptualisée pour comprendre 3 construit : les connaissances (ignorance), les attitudes (préjugé), et le comportement (discrimination). Nous ne connaissons pas d'instrument éprouvé sur le plan psychométrique qui évalue les connaissances de santé mentale dans le grand public. Notre étude présente les résultats de la phase d'élaboration et des propriétés psychométriques du questionnaire des connaissances de santé mentale [Mental Health Knowledge Schedule (MAKS)], un instrument pour évaluer les connaissances de santé mentale liées à la stigmatisation dans le grand public.

Méthodes : Nous décrivons l'élaboration du MAKS en plus de 3 études qui ont été menées pour évaluer les propriétés psychométriques du MAKS. Des adultes de 25 à 45 ans de certains groupes socioéconomiques : B, C1, and C2 ont répondu à l'instrument par des entrevues face à face ($n = 92$) et en ligne ($n = 403$).

Résultats : La fiabilité interne et la fiabilité test–retest vont de modérées à substantielles. La validité est soutenue par un examen exhaustif des experts (dont des utilisateurs des services et des spécialistes internationaux de la recherche sur la stigmatisation).

Conclusion : L'absence de mesure valide pour évaluer les connaissances créait un vide pour l'évaluations des programmes et interventions en matière de stigmatisation en santé mentale. Le MAKS s'est révélé être un instrument bref et faisable pour évaluer et dépister les connaissances de santé mentale liées à la stigmatisation. Cet instrument devrait être utilisé conjointement avec d'autres mesures des attitudes et du comportement.