Mental Health Commission of Canada

Commission de la santé mentale du Canada

Structural Stigma Measures Case Study

Consultation/ Liaison Service

Spotlight on Early Adopters

Piloting Scales to Measure Structural Stigma Related to Mental Health and Substance Use (MHSU) in Health-care Settings

Case Study: Consultation–liaison psychiatry service

Background

In 2019, the Mental Health Commission of Canada (MHCC) launched a multi-year project to better understand the problem of mental health- and substance use-related structural stigma in health-care contexts. Its objective was to identify gaps and reduce stigma, both at policy, practice, and system levels and within the organizational culture of health care.

Since then, MHCC developed two measurement scales to help health-care organizations identify areas for improvement, monitor progress, and demonstrate their commitment to a stigma-free health system.

As part of the development, field testing was conducted to validate the scale's reliability. The MHCC worked with health-care organizations who were engaged in quality improvement projects focused on stigma reduction. The scales were embedded within a research study specific to each site.

The following case study describes the approach, results, and lessons learned used to implement the measurement scales.

The measurement scales

The **Stigma Cultures in Health Care Scale (SCHCS) and the Structural Stigma in Mental Health Care Scale (SSMHCS)** have been psychometrically tested and are now available for public use after pilot efforts to demonstrate their effectiveness in real-world health-care settings.

These measurement scales were designed to assess the degree and prevalence of stigma experienced by people with mental health and/or substance use (MHSU) problems and illnesses and are helpful tools to address structural stigma within health-care environments.

Why measure structural stigma?

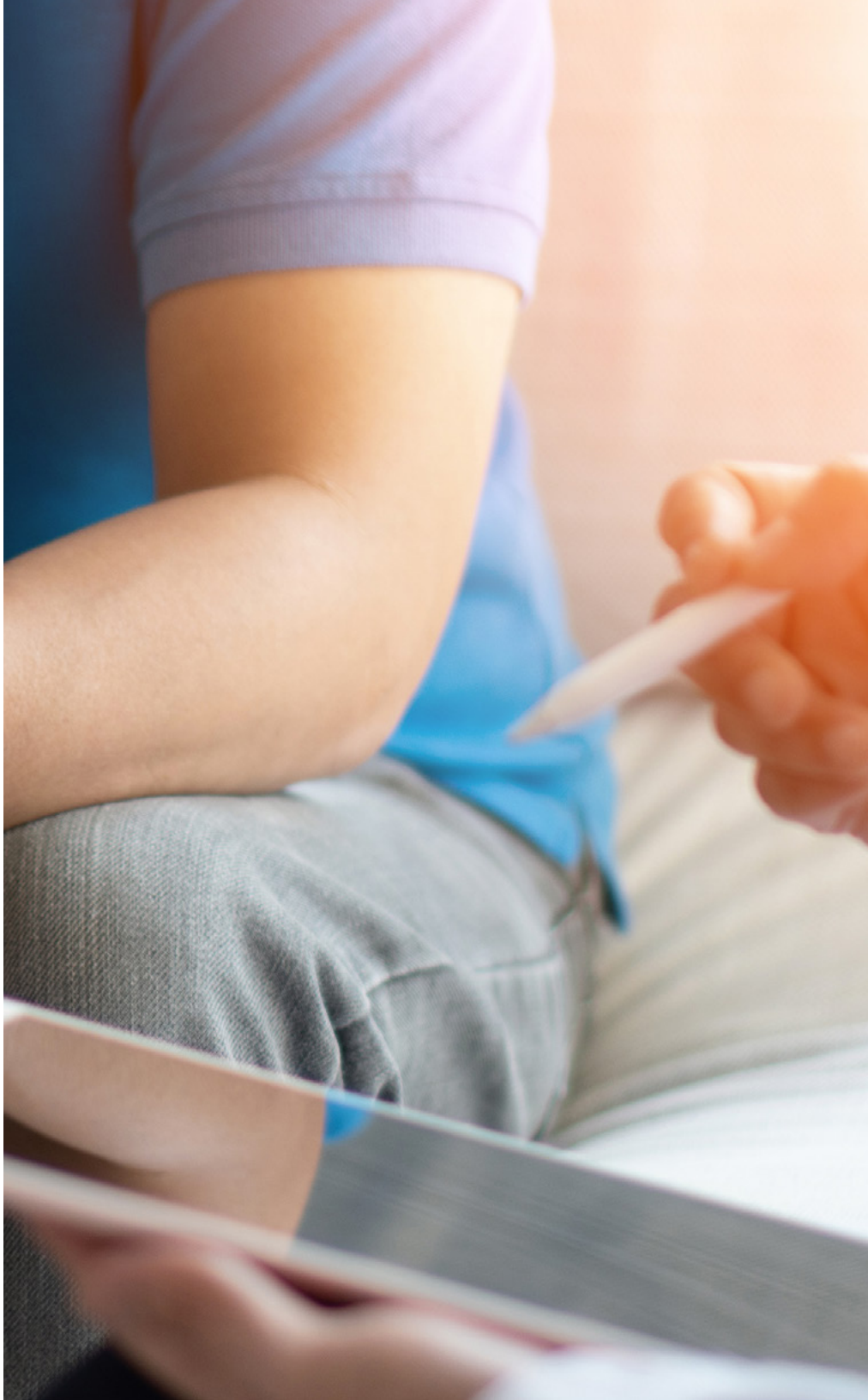
Addressing stigma is top of mind for many organizations in the health-care sector. An important first step to addressing structural stigma within health-care environments is to assess its scope and severity.

The measurement scales will help organizations to assess the existence of stigma cultures by understanding the experiences that patients with MHSU problems and illnesses have with care.

Health-care organizations can use these scales to identify gaps in their processes, practices, or policies and evaluate the progress and effectiveness of interventions to reduce MHSU-related structural stigma in health-care settings.

Health-care organizations are encouraged to use these measurement scales as part of a quality improvement plan and/or stigma reduction initiative.

Want to learn more about the measurement scales?



Exploring the Influence of Prior Psychiatric History study

Background

This research was conducted over the course of six months in a hospital setting. To ensure the privacy and respect of all patients involved, the name of the hospital will remain anonymous. All findings and discussions arising from this research aim to contribute to the reduction of structural stigma in health care.

The Exploring the Influence of Prior Psychiatric History study was conducted within a Consultation-Liaison (C/L) Psychiatry Service of an acute care teaching hospital. This service provides advanced psychiatric care to medically ill patients throughout the hospital. This setting was selected to be able to reach an ideal population to explore the impact of structural stigma on psychological and physical outcomes.

The study used all of the items in the SCHCS[1], eight items from the SSMHCS, and the Internalized Stigma of Mental Illness[2] (ISMI-12) scale. This research sought to understand the impact of certain predictor variables (i.e., demographics, psychiatry history, consult reason) on scale scores. The hypothesis was that structural and internalized stigma scores would be higher for participants who were already experiencing mental health problems or illnesses.

A secondary objective of the project was to test the SCHCS and SSMHCS items in a real-world health-care setting, as part of the MHCC's pilot study, to determine if the scales were reliable.

Recruitment and participants

The study coordinator was embedded within the C/L psychiatry service. The coordinator and provider team reviewed weekly consult lists for eligible participants through the hospital's electronic health record (EHR). Eligible participants were then approached, and informed consent was obtained. To be eligible to participate, individuals had to be aged 18–80 years, to have received a consultation by the C/L Psychiatry Service, and to have had no reported confusion, delirium, or encephalopathy.

The study employed an exploratory, longitudinal survey design with surveys at two time points and retrospective EHR data analysis. At the first time point, surveys were administered when the study coordinator approached the patients in the medical setting of the hospital. Surveys at the second time point were administered only to those who transferred to the inpatient psychiatric unit, 72 hours after transfer. Retrospective chart reviews were completed for all participants upon discharge. Data collected in these reviews included psychiatric history, consult reason, Columbia-Suicide Severity Rating Scale (C-SSRS) score, Brøset Violence Checklist (BVC) score, length of stay, and restraint/seclusion orders.

In addition to the scale items from the three subscales, demographic data were collected from the EHR. This information included gender identity, sex assigned at birth, sexual orientation, race, ethnicity, and language(s) spoken.

The study was conducted over six months. There were several limitations that resulted in a small sample size.

Findings

Multiple analyses were completed to meet the MHCC's requirements to demonstrate the validity of the scales. Even though the study was underpowered in many areas, there were significant results, and it was possible to test the efficacy of the SCHCS and SSMHCS in measuring structural stigma in the hospital. Cronbach's alpha, the most widely used objective measure of reliability,[3] is a reliability coefficient and a measure of internal consistency. It is used most frequently when there are multiple Likert questions in a survey/questionnaire that form a scale and when the goal is to determine if the scale is reliable. The following chart provides more information about Cronbach's alpha values and the range of reliability.

Table 1 Range of reliability and its coefficient of Cronbach's alpha

Coefficient of Cronbach's alpha	Reliability level
More than 0.90	Excellent
0.80–0.89	Good
0.70–0.79	Acceptable
0.60–0.69	Questionable
0.50–0.59	Poor
Less than 0.59	Unacceptable

Source: Adapted from Arof, K. Z. M., Ismail, S., & Saleh, A. L. (2018). Contractor's performance appraisal system in the Malaysian construction industry: Current practice, perception and understanding. *International Journal of Engineering & Technology*.

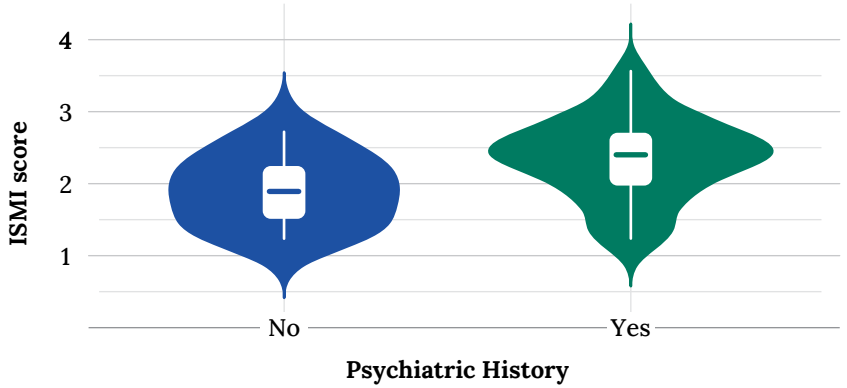
Table 2 Cronbach's alpha

Scale	N	Items	M	SD	Cronbach's α
1. SCHCS	80	23	2.06	.63	.91
2. SSMHCS (partial)	80	8	5.54	.89	.78
3. Combined total	80	31	2.33	.43	.82

The study results showed **excellent reliability** for the Stigma Cultures in Health Care Scale (SCHCS) and **acceptable reliability** for the Structural Stigma in Health Care Scale (SSMHCS)*

Another relevant finding was that people with a history of psychiatric illnesses had higher levels of internalized stigma (as demonstrated by ISMI-12 scores; Figure 1).

Figure 1 Distribution of ISMI scores by psychiatric history



Distribution of ISMI-12 scores among participants with a psychiatric history ("yes") versus those with no prior psychiatric history ("no").

* Only eight of the 20 questions from the SSMHCS were used in this study, so the results are not a comprehensive demonstration of the scale's reliability.

Lessons learned

Engaging hospital leadership and the consultation-liaison (C/L) team early in the process ensured proper buy-in and fostered collaboration across departments.

Embedding a study coordinator:

- Having a dedicated study coordinator within the C/L team proved invaluable for seamless recruitment and data collection. This individual reviewed patient lists, clarified questions with providers (e.g., medical abbreviations and clinical language), and directly approached eligible participants.
- Providers often facilitated patient introductions, making participants feel more comfortable and helping to establish trust.

Bilingual recruitment support:

- Recruitment was strengthened through bilingual (English/Spanish) materials and translators, which expanded participation among Spanish-speaking individuals.

Recruitment from inpatient psychiatric settings was more difficult, with only ~12 out of 80 participants transferring to inpatient psychiatry during the study period.

- Many psychiatric inpatients were admitted directly from the hospital's psychiatric emergency department (ED) unit, which was not included in the study. Future studies should incorporate such units to better capture this population and increase sample sizes.

Many statistical tests were underpowered because of the relatively small sample size (n = 80).

- Expanding recruitment channels (e.g., including other psychiatric units and psychiatric ED units), offering incentives, and leveraging digital platforms or follow-up methods may improve participation rates.

Initial reliability and validity calculations for the SCHCS were encouraging.

- However, the scale showed room for improvement, particularly in refining weaker items (e.g., items with low item-total correlations) and enhancing its ability to capture variance in outcomes. Future iterations should focus on ensuring clarity in item wording and optimizing the factor structure.

Use of the ISMI-12 scale and the SCHCS provided valuable information.

- Use of the SCHCS alongside the ISMI-12 demonstrated convergent validity, suggesting that these tools can work together effectively to measure structural and self-stigma.

Cultural sensitivity enhanced trust and participation.

- Tailored recruitment strategies, including bilingual materials, translator support, and trauma-informed approaches, improved the study's inclusivity and participant comfort.

Conclusion

Despite limitations in sample diversity and statistical power, this study successfully demonstrated the SCHCS's potential as a valuable tool for measuring structural stigma in hospital settings related to mental health and substance use.

Initial validity analyses indicate that the SCHCS is a promising measurement tool, with strong agreement between the SCHCS and ISMI-12, supporting its convergent validity and confirming its alignment with established measures of internalized stigma.

While findings highlight the need for further refinement, SCHCS and ISMI-12 underscore the scale's capacity to capture MHSU-related structural stigma in health-care environments.

For future studies, increasing sample size and participant diversity will be essential to strengthening statistical power and further utilizing the SCHCS, ensuring its effectiveness and applicability across diverse health-care contexts.

References

1 Stuart, H., & Knaak, S. (2024). Measuring aspects of stigma cultures in healthcare settings. *Social Psychiatry and Psychiatric Epidemiology*. https://doi.org/10.1007/s00127-024-02780-5

2 Boyd, J. E., Adler, E. P., Otilingam, P. G., & Peters, T. (2014). Internalized Stigma of Mental Illness (ISMI) scale: a multinational review. *Comprehensive psychiatry*, 55(1), 221–231. https://doi.org/10.1016/j.comppsych.2013.06.005

3 Tavakol, M., & Dennick, R. Making sense of Cronbach's alpha. (2011). *International Journal of Medical Education*, 2, 53–55. https://doi.org/10.5116/ijme.4dfb.8dfd

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