

Exploring Changes in Recognition and Stigmatization toward Individuals with Schizophrenia in Singapore from 2015 to 2023

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Introduction

- Schizophrenia affects approximately 1% of the population and shortens life expectancy by 15 years.
- Length of untreated psychosis relates to poor treatment response and long-term outcome.
- Mental health literacy helps reduce stigma and promote help-seeking.
- In Singapore, schizophrenia is the least recognized and most stigmatized mental illness.

Objective

- Examine changes in schizophrenia recognition, personal stigma, and social distancing.
- Explore shifts in sociodemographic factors influencing recognition and stigma toward individuals with schizophrenia.

Methods



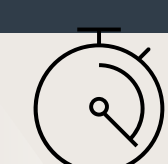
Preparation

- IRB (IMH IRRC, NHG DSRB)
- Schizophrenia vignette developed by trained psychiatrists
- Translate the English surveys to Chinese, Malay, and Tamil
- Training Interviewers from a survey company

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Recruitment

- Singapore citizen or PR
- Reside in Singapore during study recruitment
- 18-65 years old
- Literate in English, Chinese, Malay, or Tamil
- Able to provide informed consent



Data Collection

2

Sociodemographic Information

Vignette and Related Questions

Personal Stigma Scale

Social stigma Scale

Mind Matters 2015 (n=595)

Mind Matters 2023 (n=602)



Analytical Plan

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- Weighted mean and standard error calculated for the continuous variable
- Frequencies and percentages calculated for categorical variables
- Exploratory structural equation modelling and confirmatory factor analysis to establish stigma dimension.
- Multiple logistic regression for recognition and sociodemographic correlates. Multivariable linear regression for factors associated with stigma scale.

Results

FIGURE 1: CORRECT AND INCORRECT RECOGNITION OF THE SCHIZOPHRENIA VIGNETTE

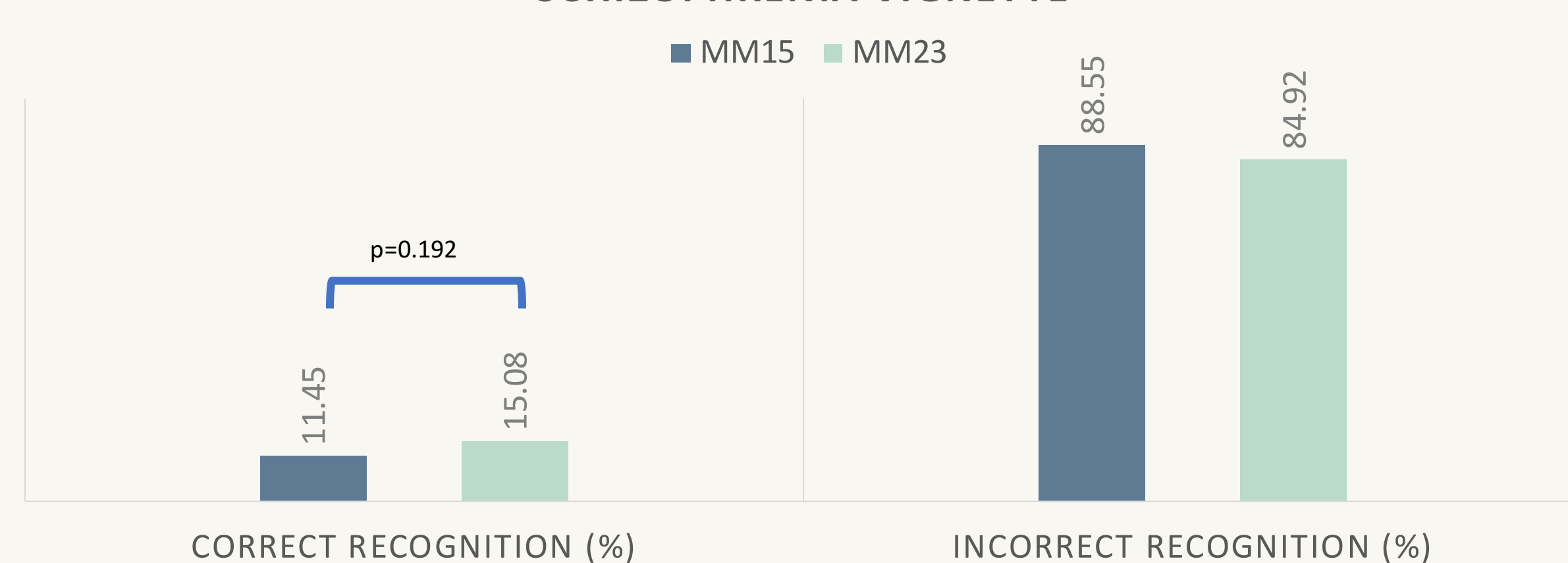


FIGURE 2: DISTRIBUTIONS OF CATEGORIES DESCRIBING THE PROBLEM IN THE SCHIZOPHRENIA VIGNETTE

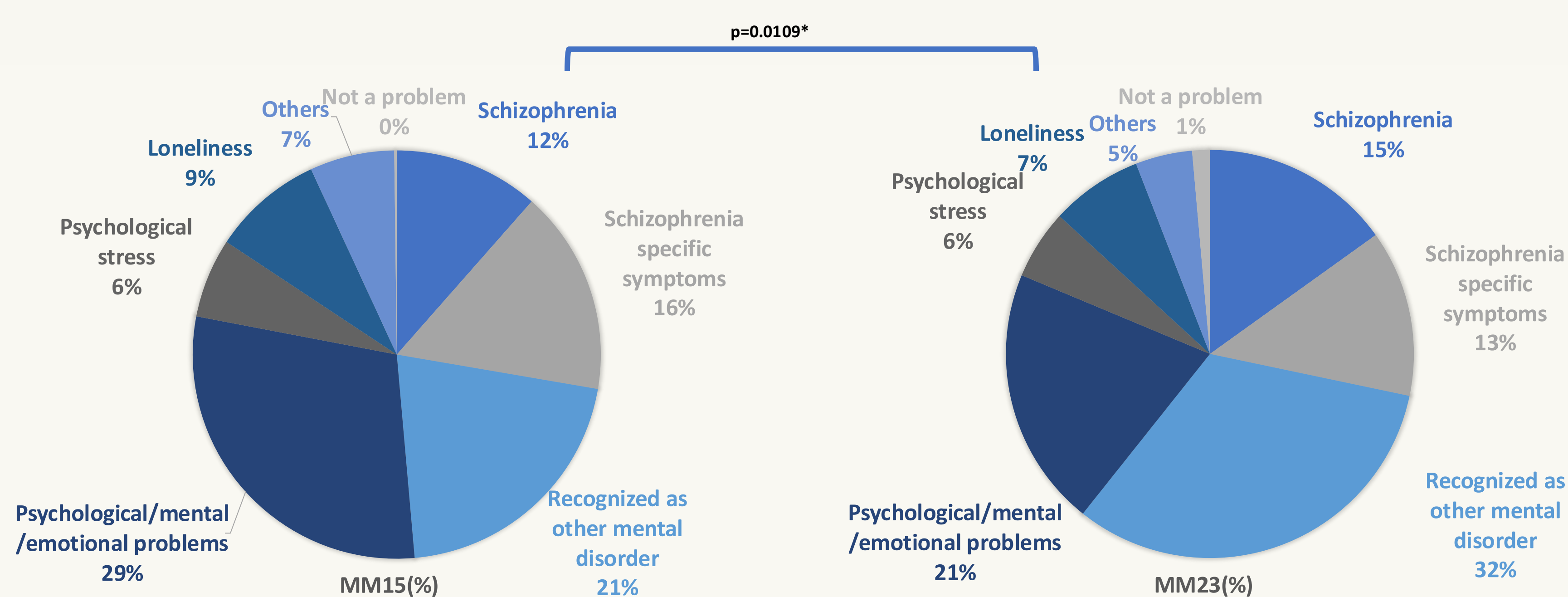


FIGURE 3: DESCRIPTIVE STATISTICS OF STIGMA DIMENSION SCORE

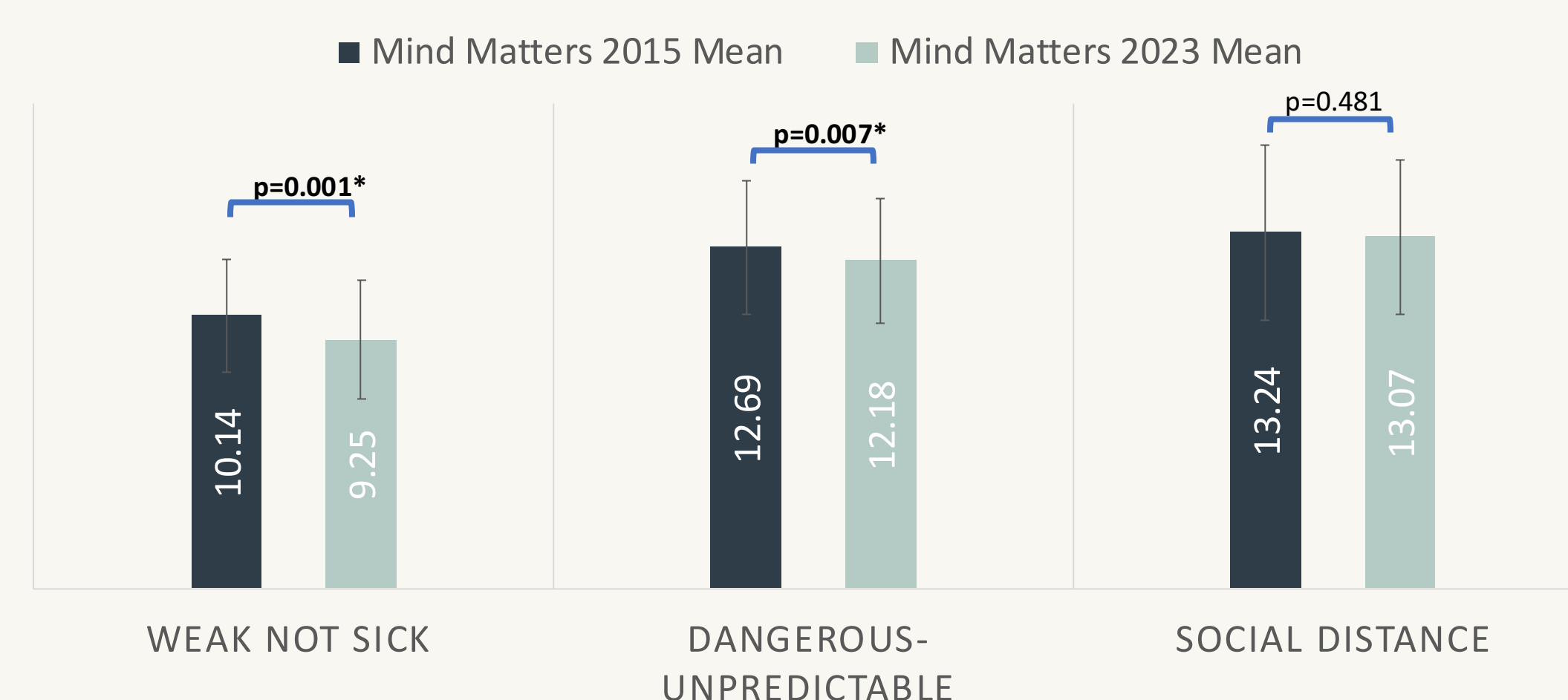
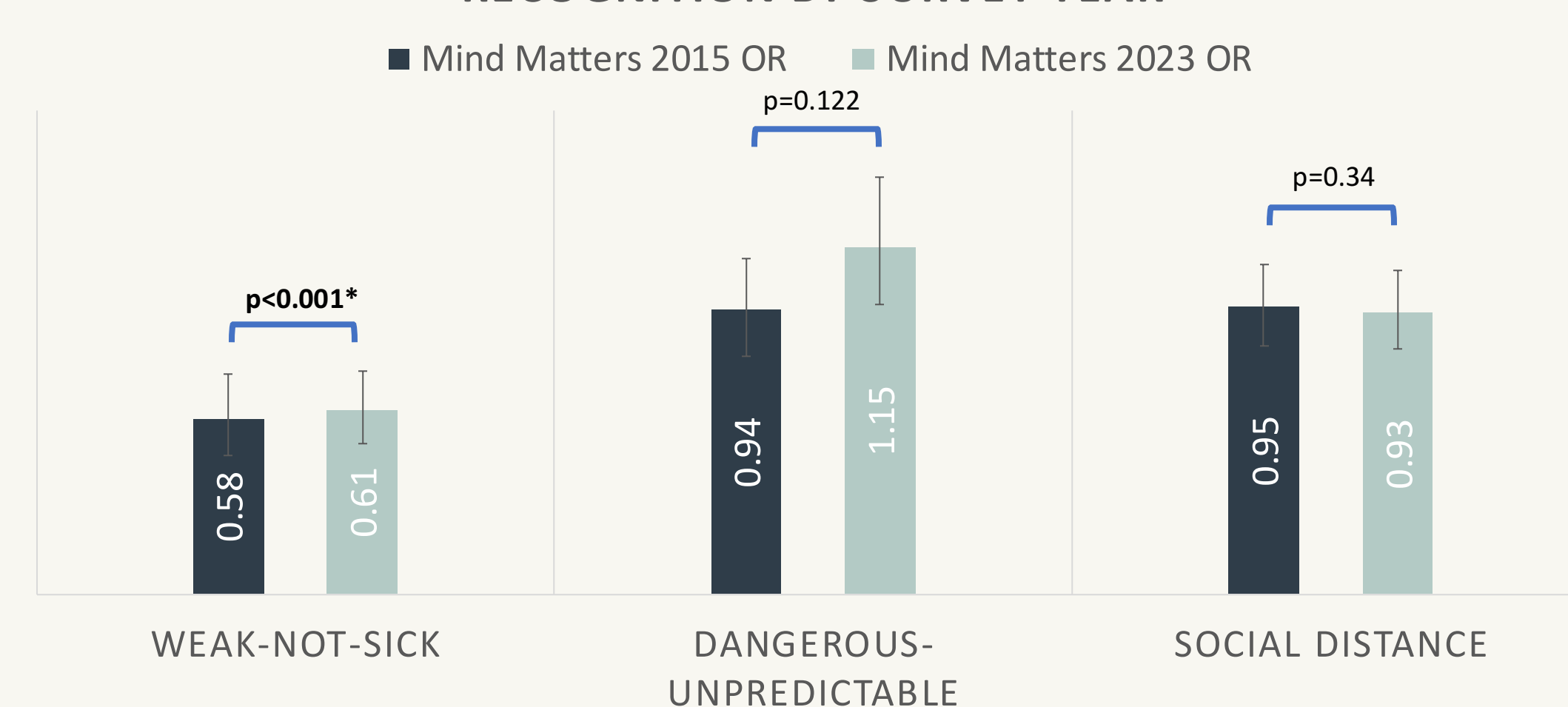
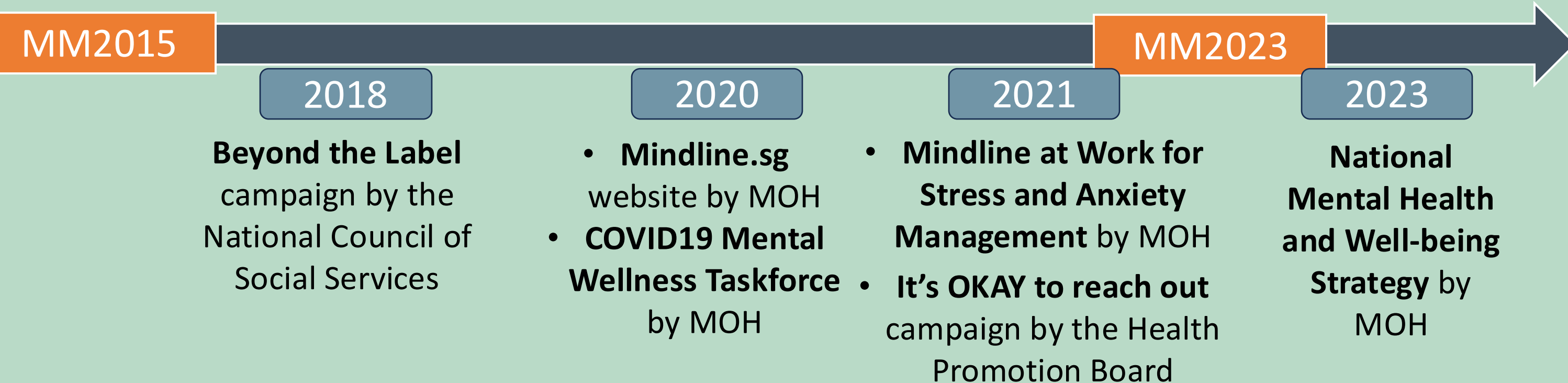


FIGURE 4: RELATIONSHIP BETWEEN STIGMA AND RECOGNITION BY SURVEY YEAR



Discussion



- The schizophrenia recognition rate increased slightly from 11.5% to 15.1% but this was not statistically significant. The recognition rate in Singapore is consistent with other Asian countries (China: 11.2%; Taiwan: 9.8%). In contrast, Western countries report higher recognition (UK: 25.7%; Australia: 42.5%).
- A lack of significant improvement is likely due to the lack of targeted intervention and the complexity of the symptoms.
- Significant improvement in the stigma dimension ("weak, not sick" and "dangerous, unpredictable") was observed, which is likely contributed by the national anti-stigma campaigns.
- Older individuals are less likely to recognize schizophrenia. Distinct stigma patterns were observed in the Malay, Indian, and Chinese ethnic groups.
- Contact with family and friends with mental illness improved recognition and reduced stigma.

Strengths and Limitations

- Strengths: two nationwide surveys, stratified sampling, validated vignettes/questionnaires, translations for cultural relevance.
- Limitations: Singapore-based (limits generalizability), cross-sectional (no causality), and potential social desirability bias in responses.

Future Directions

- Engage community leaders (workplace supervisors, teachers) to enhance early recognition and intervention.
- Develop targeted, culturally relevant anti-stigma interventions focusing on schizophrenia.
- Incorporate social contact and storytelling approaches to reduce stigma (e.g., through lived experience sharing).
- Tailor strategies for older adults and the low digital literacy group.



Acknowledgement and References

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