



## Original Article

# Psychometric properties of the Burmese version of Self-Stigma Scale: A study among older Myanmar migrants in Thailand

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## Abstract

Self-stigma is a major barrier to mental health help-seeking among marginalized populations, including older Myanmar migrants in Thailand. Despite its importance, this issue has been understudied in this population, and no validated Burmese-language instrument has been available to date. This study evaluated the psychometric properties of the Burmese version of the Self-Stigma Scale–Short Form (SSS-SF), with particular emphasis on its factor structure, reliability, and validity among older Myanmar migrants in Thailand. Participants (n=211) aged ≥60 years were recruited through online platforms and community outreach initiatives. The SSS-SF was translated and culturally adapted in accordance with international guidelines. Confirmatory factor analysis was used to test multiple structural models, and reliability was assessed using Cronbach's alpha. Convergent and discriminant validity were examined through correlations with the depression and anxiety subscales of the Outcome Inventory-21 (OI-21), the Mental Help-Seeking Intention Scale (MHSIS), and the Extraversion domain of the Zuckerman-Kuhlman-Aluja Personality Questionnaire-20 (ZKA-20). Initial analyses indicated that the 9-item bifactor model provided the best representation of the data, although overall fit remained only modest. After removal of four misfitting items, a shortened 5-item version demonstrated improved fit as a unidimensional model. Reliability was good for the 9-item scale ( $\alpha=0.855$ ) and acceptable for the 5-item scale ( $\alpha=0.828$ ). Convergent validity was supported by significant positive correlations between self-stigma and OI-21 depression ( $r=0.55$ ,  $p<0.01$ ), OI-21 anxiety ( $r=0.54$ ,  $p<0.01$ ), and MHSIS ( $r=0.15$ ,  $p<0.05$ ). Discriminant validity was supported by a weak, non-significant association with ZKA-20 Extraversion ( $r=0.11$ , ns). These findings suggest that, although the original 9-item Burmese SSS-SF showed limitations in model fit, the refined 5-item version offers a more concise measure with initial evidence of promising psychometric properties for assessing self-stigma among older Myanmar migrants. This shorter version may be useful for rapid screening in community and clinical settings, although further validation in other Burmese populations is warranted.

**Keywords:** Self-stigma, older people, Burmese, validity, SSS-5

## Introduction

Self-stigma is a major barrier to mental health help-seeking, with meta-analytic evidence showing it significantly reduces willingness to seek psychological services and negatively impacts mental health outcomes [1,2]. Self-stigma, which includes internalizing negative stereotypes and



beliefs [3-5], acts as a substantial barrier to accessing mental health services [1,6]. This process undermines both self-esteem and perceived self-efficacy, frequently resulting in what has been termed the “why-try syndrome”, wherein individuals disengage from opportunities due to anticipated failure [7,8]. This barrier is especially evident among marginalized populations such as Burmese migrants in Thailand. Migrant identity stigma may also intersect with mental health stigma, as traditional Burmese views often associate mental illness with weakness or karma, compounding barriers to care [9].

For older Myanmar migrants, the barriers to seeking mental health support are even more pronounced. Many have experienced forced migration, political instability, and economic hardship, leading to significant psychological distress [10]. Although some research has shown that self-stigma can significantly reduce engagement with mental health services [11-13], understanding of self-stigma tied to migrant identity among older Myanmar migrants is still limited. This study therefore focuses on migrant identity stigma as a specific manifestation of self-stigma among older Myanmar migrants, who often face compounded challenges of migration stress, cultural marginalization, and limited access to healthcare [14].

Identifying self-stigma among migrants is important. Although several scales exist, only one specifically addresses immigrants: Mak and Cheung’s 9-item Self-Stigma Scale–Short Form (SSS-SF). This scale measures cognitive, affective, and behavioral aspects of self-stigma and was developed among individuals with mental illness, immigrants, and people with non-heterosexual orientations—groups often subject to societal bias [15]. Grounded in the theory of internalized stigma, it shows how self-stigma can hinder help-seeking and personal achievement [16]. The SSS-SF has demonstrated strong validity across diverse cultural contexts [15,17,18], but no Burmese version has yet been developed or validated.

The aim of the study was to translate and validate the Burmese version of the SSS-SF. The translation and cultural adaptation process was conducted to ensure content validity, making the instrument linguistically and culturally appropriate for older Myanmar migrants. To establish the psychometric properties of the Burmese version of the SSS-SF, several analyses were conducted. Factorial validity was examined using confirmatory factor analysis (CFA). Convergent validity was evaluated by examining correlations between the SSS-SF and related constructs, such as help-seeking intention, anxiety, and depression, while discriminant validity was tested against extraversion of personality traits to confirm distinctiveness. Reliability was assessed through internal consistency measures (Cronbach’s alpha).

## Methods

### Study design and setting

A cross-sectional study was conducted to evaluate the psychometric properties of the Burmese version of SSS-SF among older Myanmar migrants in Thailand. The study was carried out from September to December 2025 and involved both online and in-person recruitment. Participants were recruited from Myanmar migrant communities in Thailand, particularly in northern and border areas such as Chiang Mai and Tak provinces, where sizeable Myanmar migrant populations are located. These settings provided access to community-based and digitally connected older migrants, allowing assessment of the scale in a relevant sociocultural context. The study was designed to assess the factorial validity, reliability, and construct validity of the Burmese SSS-SF in this population.

### Participants

Participants were older Myanmar migrants residing in Thailand. Eligibility criteria included being aged  $\geq 60$  years, being of Myanmar origin, having lived in Thailand for at least six months, and being able to read and understand Burmese. Individuals who were currently receiving treatment for a diagnosed mental disorder were excluded from participation. These criteria were defined to ensure the appropriateness of the target population for evaluating the psychometric properties of the Burmese version of SSS-SF.

## Procedure

Participants were recruited through both online and in-person approaches, including community social media groups, digital outreach platforms, temples, community centers, and volunteer programs in Thailand. Individuals who met the eligibility criteria provided informed consent prior to participation, either in written form for in-person recruitment or through an online consent form for digital recruitment. Data were collected using self-administered questionnaires completed independently by the participants. All responses were kept confidential, and no identifying information was collected or disclosed. Ethical approval for the study was obtained from the Research Ethics Committee, Faculty of Medicine, Chiang Mai University. Participation was voluntary, and each participant received 100 Thai Baht as compensation upon survey completion, either in cash or by bank transfer, according to their preference.

## Instrument

### *Self-Stigma Scale–Short Form (SSS-SF)*

SSS-SF is a 9-item tool designed to measure an individual's internalized stigma related to their minority status [15]. Participants rate their level of agreement on a Likert-type scale, ranging from 1 (e.g., strongly disagree) to 4 (e.g., strongly agree), with higher scores reflecting a stronger internalized stigma. SSS includes three items for the affective subscale (items 1, 4, and 7), three items for behavioral subscale (items 3, 6, and 9), and three items reflecting the cognitive subscale (items 2, 5, and 8)

The Burmese version of the SSS-SF was translated from the English version by the first author and a professional translator from the Language Institute, Chiang Mai University, with expertise in the Burmese language. A back-translation was performed by an independent bilingual translator from the Language Institute, Chiang Mai University, Chiang Mai, Thailand. The first author and the authors (TW and NW) reviewed the original and the back-translated versions and produced the final Burmese version. The final version that preserved the conceptual meaning of the original scale while aligning with the linguistic and cultural context of Burmese community in Thailand.

### *Mental Help Seeking Intention Scale (MHSIS)*

The Mental Help-Seeking Intention Scale (MHSIS) is a 3-item tool designed to measure an individual's intention to seek professional help for mental health concerns [19]. The MHSIS focuses on capturing the likelihood that respondents would consider consulting a mental health professional if they were experiencing psychological distress. Participants rate their level of intention on a Likert-type scale, ranging from 1 (e.g., extremely unlikely) to 7 (e.g., extremely likely), with higher scores reflecting a stronger intention to seek help. The MHSIS is grounded in the theory of planned behavior, which emphasizes the role of intentions as key predictors of actual behaviors [20].

### *Outcome Inventory (OI)*

The OI is a brief self-report instrument designed to evaluate the effectiveness of mental health services by tracking changes in patients' psychological functioning over time [21]. The inventory consists of 21 items, each rated on a Likert scale from 0 (never) to 4 (almost always). The items are grouped into four subscales: anxiety, depression, somatization, and interpersonal difficulty. For the purposes of this study, only the depression and anxiety subscales were utilized, as these domains were most relevant to the research objectives. Higher scores on each subscale indicate greater severity of the respective symptoms.

### *Extraversion-subscale of the Zuckerman-Kuhlman-Aluja Personality Questionnaire–20 (ZKA-20)*

The ZKA-20 is a short version of the Zuckerman-Kuhlman-Aluja Personality Questionnaire (ZKA-PQ), consisting of 20 items designed to provide a concise yet reliable evaluation of personality dimensions within the Alternative Five-Factor Model (AFFM) of personality [22–24]. For the purposes of this study, only the Extraversion dimension—conceptualized in the AFFM as Sociability—was utilized. This trait reflects tendencies toward social interaction, positive affect,

and preference for engaging with others. Items are rated on a 4-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree), with higher scores indicating greater levels of extraversion.

### Statistical analysis

To assess the factorial validity of the Self-Stigma Scale (SSS) dimensions, we conducted confirmatory factor analyses (CFA) using AMOS (Version 27.0, IBM Corp.) by comparing alternative models to determine the most suitable fit for the data. Several CFA models were tested to establish the optimal factor structure for the sample of older Myanmar migrants, including (a) a unidimensional model in which all nine items loaded onto a single factor; (b) the theoretically hypothesized three factor model, with items 1, 4, and 7 loading on the affective factor, items 3, 6, and 9 on the behavioral factor, and items 2, 5, and 8 on the cognitive factor; and (c) a higher order factor model in which the three first order factors were specified as indicators of a broader self-stigma construct. Model fit was assessed using chi-square statistics, the root mean square error of approximation (RMSEA), the Tucker-Lewis index (TLI), and the Comparative Fit Index (CFI). Following conventional guidelines, RMSEA values  $\leq 0.08$  were considered indicative of acceptable model fit, with values  $\leq 0.05$  reflecting good fit, while CFI and TLI values  $\geq 0.90$  were interpreted as evidence of adequate model fit [25].

Reliability was assessed through internal consistency, evaluated using Cronbach's alpha in SPSS (Version 27.0, IBM Corp.), with coefficients above 0.70 considered acceptable [26,27]. Convergent validity was evaluated by examining Pearson's correlation coefficients between the Burmese SSS-SF and related constructs, including help-seeking intention, anxiety, and depression, to assess the strength of association. Discriminant validity was tested against the extraversion from the ZKA personality inventory, with the expectation of a weak or non-significant relationship, thereby confirming the distinctiveness of the self-stigma construct.

## Results

### Demographic information, self-stigma, help-seeking intentions, depression, anxiety, and extraversion

A total of 211 older Myanmar migrants residing in Thailand were included in the study. Demographic and psychosocial characteristics are summarized in **Table 1**. Participants spanned the young-old to old-old age range. Most participants were female, lived with someone, had attained elementary-level education, and had been living in Thailand for more than five years. The sample was recruited primarily from northern and border provinces, including Chiang Mai and Tak.

**Table 1.** Demographic information, self-stigma, help-seeking intentions, depression, anxiety, and extraversion (n=211)

| Variables                             | Frequency (%) | Min-max, mean (SD)  |
|---------------------------------------|---------------|---------------------|
| Age                                   |               | 60–88, 66.11 (5.88) |
| Sex                                   |               |                     |
| Female                                | 125 (59.2)    |                     |
| Male                                  | 86 (40.8)     |                     |
| Education                             |               |                     |
| Elementary                            | 106 (50.2)    |                     |
| Junior high                           | 55 (26.1)     |                     |
| Senior high/vocational                | 29 (13.7)     |                     |
| Diploma/high vocational               | 2 (0.9)       |                     |
| Bachelor and above                    | 19 (9.0)      |                     |
| Living status                         |               |                     |
| Living alone                          | 20 (9.5)      |                     |
| Living with someone                   | 191 (90.5)    |                     |
| Duration of stay in Thailand          |               |                     |
| 6 months to 1 year                    | 8 (3.8)       |                     |
| Above 1 year to 3 years               | 44 (20.9)     |                     |
| Above 3 years to 5 years              | 24 (11.4)     |                     |
| 5 years and above                     | 135 (64.0)    |                     |
| Self-Stigma Scale–Short Form (SSS-SF) |               | 1.22–4, 2.62 (0.47) |

| Variables                                    | Frequency (%) | Min-max, mean (SD) |
|----------------------------------------------|---------------|--------------------|
| Mental Help Seeking Intentions Scale (MHSIS) |               | 1-7, 3.41 (1.43)   |
| Outcome Inventory (OI)-Depression            |               | 0-20, 8.65 (5.03)  |
| Outcome Inventory (OI)-Anxiety               |               | 0-23, 11.46 (5.14) |
| ZKA-Extraversion                             |               | 9-16, 14.39 (1.78) |

SD: standard deviation; ZKA: Zuckerman-Kuhlman-Aluja Personality Questionnaire

### Detailed information on Self-Stigma Scale–Short Form (SSS-SF)

The descriptive statistics of the self-stigma items are presented in **Table 2**, showing that all item characteristics fall within acceptable ranges. Skewness and kurtosis values suggest approximate normality for most items, though some behavioral indicators (e.g., “not make friends,” “avoid interacting”) showed slight positive skewness, reflecting clustering of responses at the lower end of the scale. Descriptive statistics for the 9-item SSS-SF are presented in **Table 2**. Overall, the items demonstrated acceptable distributional characteristics. Mean item scores ranged from 2.20 to 3.17, reflecting variation in the extent to which different expressions of self-stigma were endorsed by the participants. The highest mean score was observed for item 2, followed by items 4 and 6, indicating that inconvenience in daily life, discomfort, and social withdrawal related to migrant identity were among the more strongly endorsed experiences. In contrast, items 9 and 3 showed the lowest mean scores, suggesting lower endorsement of more explicit interpersonal avoidance.

All items showed skewness and kurtosis values within acceptable thresholds, supporting the assumption of approximate normality. Nevertheless, items 3 and 9 displayed relatively higher positive skewness and kurtosis compared with the remaining items, indicating that these behaviors were less commonly reported and that responses were clustered toward lower scores. Taken together, the item-level findings suggest that the Burmese SSS-SF performed adequately at the descriptive level and was appropriate for further psychometric analysis.

**Table 2. Descriptive statistics, skewness, and kurtosis of the Self-Stigma Scale–Short Form (SSS-SF) (n=211)**

| Items                                                                  | Min | Max | Mean | SD   | Skewness statistic | Skewness SD | Kurtosis statistic | Kurtosis SD |
|------------------------------------------------------------------------|-----|-----|------|------|--------------------|-------------|--------------------|-------------|
| 1. I fear that others would know that I am a migrant                   | 1   | 4   | 2.43 | 0.74 | 0.60               | 0.16        | -0.08              | 0.33        |
| 2. My identity as a migrant incurs inconvenience in my daily life.     | 1   | 4   | 3.17 | 0.69 | -0.33              | 0.16        | -0.60              | 0.33        |
| 3. I dare not make new friends lest they find out that I am a migrant. | 1   | 4   | 2.26 | 0.61 | 1.33               | 0.16        | 1.87               | 0.33        |
| 4. I feel uncomfortable because I am a migrant.                        | 1   | 4   | 3.05 | 0.74 | -0.29              | 0.16        | -0.55              | 0.33        |
| 5. My identity as a migrant is a burden to me.                         | 1   | 4   | 2.72 | 0.70 | 0.36               | 0.16        | -0.80              | 0.33        |
| 6. I estrange myself from others because I am a migrant.               | 1   | 4   | 2.88 | 0.77 | -0.47              | 0.16        | 0.06               | 0.33        |
| 7. I feel like I cannot do anything about my identity as a migrant.    | 1   | 4   | 2.64 | 0.79 | 0.38               | 0.16        | -0.77              | 0.33        |
| 8. The identity of being a migrant taint my life.                      | 1   | 4   | 2.24 | 0.76 | 0.51               | 0.16        | 0.13               | 0.33        |
| 9. I avoid interacting with others because I am a migrant.             | 1   | 4   | 2.20 | 0.70 | 1.25               | 0.16        | 1.73               | 0.33        |

Max: maximum; Min: minimum; SD: standard deviation

Affective: items 1, 4, 7; Behavioral: items 3, 6, 9; Cognitive: items 2, 5, 8

Acceptable ranges: skewness = -2 to +2; kurtosis = -2 to +2

### Confirmatory factor analysis (CFA) models

The bifactor model provided the best fit among all tested models, as presented in **Table 3** ( $\chi^2=77.78$ ,  $df=16$ ,  $\chi^2/df=4.80$ , CFI=0.962, TLI=0.914, and SRMR=0.053). However, the RMSEA remained above the conventional threshold (0.135), indicating residual model misfit. This may

suggest that some items performed differently or that certain relationships among the items were not fully captured by the model. The initial 9-item model showed poor fit ( $\chi^2/df=8.22$  and  $RMSEA=0.185$ ). Diagnostic outputs from AMOS further identified four items (items 1, 2, 8, and 9) with weak standardized loadings ( $<0.50$ ), which likely contributed to poor model fit. In addition, 11 participants were identified as multivariate outliers.

Table 3. Comparison of fit indices among the confirmatory factor analysis (CFA) models

| Model          | $\chi^2$ | df | $\chi^2/df$ | RMSEA | SRMR  | TLI   | CFI   |
|----------------|----------|----|-------------|-------|-------|-------|-------|
| Unidimensional | 222.03   | 27 | 8.223       | 0.185 | 0.082 | 0.840 | 0.880 |
| First order    | 171.77   | 24 | 7.157       | 0.171 | 0.077 | 0.909 | 0.863 |
| Higher order   |          |    |             |       |       |       |       |
| Factor         | 171.77   | 24 | 7.157       | 0.171 | 0.077 | 0.909 | 0.863 |
| Bifactor       | 77.78    | 16 | 4.8         | 0.135 | 0.053 | 0.914 | 0.962 |

CFI: Comparative Fit Index; df: degree of freedom; RMSEA: root-mean-square error of approximation; SRMR: standardized root mean square residual; TLI: Tucker Lewis Index;  $\chi^2$ : Chi-squared

### Refinement of Self-Stigma Scale–Short Form (SSS-SF)

Because the original 9-item model did not demonstrate acceptable overall fit, additional refinement was undertaken. After removal of the identified outliers and misfitting items, the shortened model showed improved fit, with  $\chi^2/df=2.51$ ,  $CFI=0.975$ ,  $TLI=0.949$ , and  $SRMR=0.053$ . Although the  $RMSEA$  remained slightly above the conventional threshold ( $0.085$ ,  $90\%CI: 0.026-0.145$ ), the overall pattern of fit indices suggested a more adequate model. Following this refinement, the scale was reduced to 5 items and designated as the “Burmese SSS-5”.

The confirmatory factor analysis model for the Burmese SSS-5 is presented in **Figure 1**. The model specifies a single latent factor, SSS-5, represented by five observed items reflecting experiences of migrant self-stigma. Standardized regression weights (item loadings) are shown on each path, ranging from 0.48 to 0.84, indicating the strength of association between items and the latent factor [28]. Error terms ( $e_3-e_7$ ) are included for each observed item and represent residual variance not explained by the latent factor.

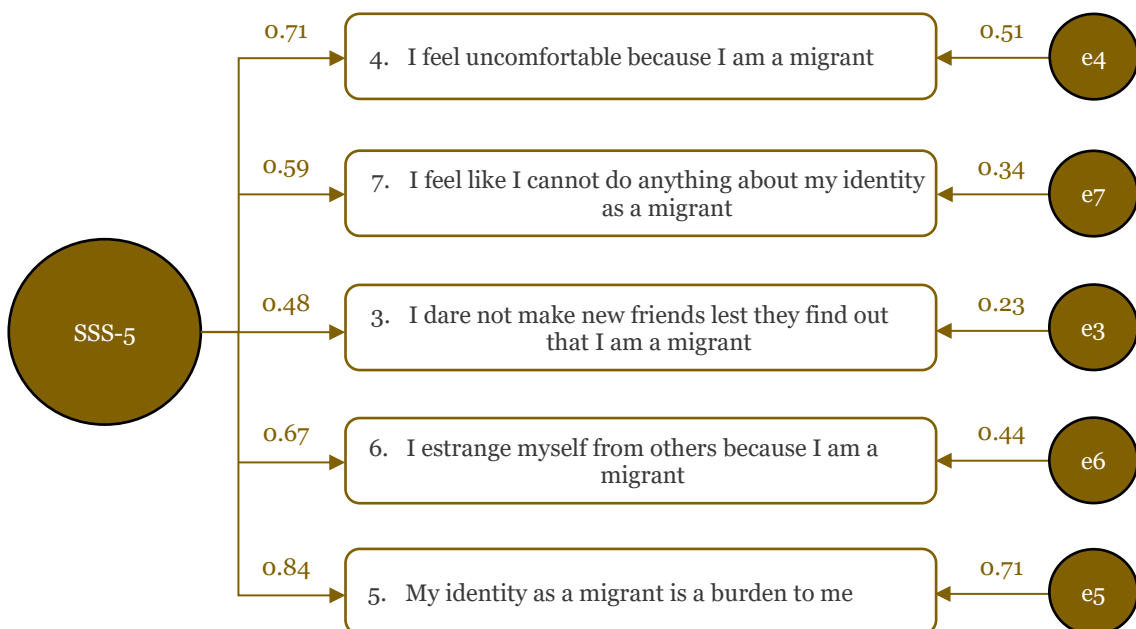


Figure 1. Five items Self-Stigma Scale (Burmese SSS-5) version after removing items 1, 2, 8, and 9. Chi-square: 12.572; degree of freedom ( $df$ )=5; Chi-square/ $df=2.514$ ;  $p=0.028$ ; Comparative Fit Index ( $CFI$ )=0.975; Tucker Lewis Index ( $TLI$ )=0.949; root-mean-square error of approximation ( $RMSEA$ )=0.085; ( $90\%CI: 0.026-0.145$ ).

Among the retained items, “My identity as a migrant is a burden to me” showed the highest loading (0.84), indicating that it was the strongest indicator of self-stigma, whereas “I dare not

make new friends lest they find out that I am a migrant” showed the lowest loading (0.48), suggesting a comparatively weaker contribution. Overall, the pattern of loadings supports the interpretation that the retained items reflect a common underlying self-stigma construct.

### Convergent, discriminant validity, and reliability

In terms of convergent validity, the original 9-item SSS showed significant positive correlations with depression ( $r=0.60, p<0.01$ ), anxiety ( $r=0.59, p<0.01$ ), and help-seeking intentions ( $r=0.13, p<0.05$ ) (Table 4). In contrast, discriminant validity was supported by the weak, non-significant correlation between self-stigma and ZKA Extraversion, indicating that the scale captures self-stigma rather than unrelated personality traits. The shortened 5-item version showed a similar pattern of associations, as presented in Table 4.

Table 4. Comparison of 9-item Self-Stigma Scale (SSS) and 5-item SSS for convergent, discriminant validity, and reliability

| Psychometric properties | 9-item SSS         | 5-item SSS (Burmese SSS-5) |
|-------------------------|--------------------|----------------------------|
| Convergent validity     |                    |                            |
| Depression              | 0.60**             | 0.55**                     |
| Anxiety                 | 0.59**             | 0.54**                     |
| Help-seeking intentions | 0.13*              | 0.15*                      |
| Discriminant validity   |                    |                            |
| Extraversion            | 0.08 <sup>ns</sup> | 0.11 <sup>ns</sup>         |
| Reliability             |                    |                            |
| Cronbach's alpha        | 0.85               | 0.82                       |

ns: non-significant

\*Statistically significant at  $p<0.05$

\*\*Statistically significant at  $p<0.01$

## Discussion

The present study evaluated the psychometric properties of the Burmese version of the SSS-SF in a sample of older migrants. Overall, the findings provide initial evidence that the Burmese SSS-5 may be useful in this population. Among the tested models, the bifactor model showed the best, albeit still modest, fit, suggesting that self-stigma may comprise both a general stigma component and specific dimensions. This structure is consistent with the conceptualization of self-stigma as a broad internalized evaluation that may be expressed across cognitive, affective, and behavioral domains [15,29]. As the original 9-item version did not demonstrate acceptable model fit, the refined Burmese SSS-5 appears to be a more promising alternative. Other aspects of validity were also supported. Self-stigma was meaningfully associated with indicators of psychological distress, including depression and anxiety, and showed a smaller association with help-seeking intentions. This finding is consistent with the view that stigma contributes to emotional burden and may discourage help-seeking [30,31], although help-seeking behavior is also influenced by other barriers, such as accessibility, cost, language, and perceived usefulness of services [32,33]. In contrast, the negligible association with extraversion supports discriminant validity and suggests that the scale does not simply capture broad personality tendencies.

This study contributes novel evidence by providing the first validation of the SSS-SF in Burmese and the first examination of its performance specifically among older Myanmar migrants. Interpretation of the findings should, however, take into account the sociocultural context of the sample. Migration experiences in Thailand may differ from those in other host countries, and most participants were recruited from northern Thailand and border areas, such as Chiang Mai and Mae Sot, where Burmese communities are relatively well established. Accordingly, the levels and meanings of stigma, as well as opportunities for help-seeking, may differ in other settings with distinct social dynamics and patterns of integration. In addition, most participants had limited formal education, which may have influenced how some items were understood, even when the translation was appropriate. Participants also varied in their duration of residence in Thailand; however, in the absence of detailed migration histories, it was not possible to determine how migration pathways and settlement experiences may shape trajectories of self-stigma. Future studies should therefore incorporate migration-related variables, such as

legal status, language proficiency, work conditions, social support, and access to health services, to better contextualize stigma and its consequences.

Finally, although all participants held Burmese identification and were able to read Burmese, the sample comprised individuals from diverse ethnic backgrounds. Subtle linguistic and cultural differences may have influenced item interpretation and response styles. Further validation work, particularly measurement invariance testing across subgroups and qualitative cognitive interviewing to explore item comprehension, would strengthen confidence that the Burmese SSS-SF functions equivalently across different segments of the Burmese migrant population.

Based on the present findings, the Burmese SSS-5 may be considered a potentially useful tool for older Burmese migrants, as it showed acceptable model fit and appeared to capture the overall construct of self-stigma in this population. As a shorter version of the SSS-SF, the Burmese SSS-5 may be particularly valuable for rapid screening and outreach in community and primary care settings serving older migrants, where time constraints, fatigue, and limited literacy may hinder completion of longer instruments. Community health workers, non-governmental organization staff, and clinic personnel may use this brief scale as a low-burden indicator of elevated self-stigma to help identify individuals who may be less willing to disclose distress or engage with mental health services. When elevated scores are identified, the tool may support stepped follow-up, such as brief psychoeducation on stigma and mental health, motivational conversations to address concerns about help-seeking, and referral to culturally and linguistically appropriate services. At the program level, the Burmese SSS-5 may also be useful for monitoring and evaluating stigma-reduction or mental health promotion initiatives by providing a feasible outcome measure that can be administered repeatedly in community groups or outreach activities.

Several limitations should be considered when interpreting these findings. First, as this study represents the first validation of the Burmese SSS-SF in a sample of older migrants, the findings may not be generalizable to other Burmese populations, such as younger adults, non-migrant groups, or Burmese communities in other host countries. Second, participants were recruited primarily from northern Thailand and border areas, including Chiang Mai and Mae Sot, where Burmese communities are relatively well established; experiences of stigma and opportunities for help-seeking may therefore differ in other regions of Thailand with different social dynamics and levels of integration. Third, most participants had limited formal education, which may have influenced item comprehension and response patterns despite careful translation. Fourth, although participants varied in their duration of residence in Thailand, the study lacked sufficient migration-history detail to examine how migration pathways, legal status, or settlement experiences may shape self-stigma. Finally, although all participants were able to read Burmese and held Burmese identification, the sample included individuals from diverse ethnic backgrounds, and subtle linguistic or cultural differences may have influenced the interpretation of certain items. Future research should replicate these findings in broader samples, incorporate more detailed migration-related variables, and further examine whether the scale functions equivalently across subgroups, for example through measurement invariance testing and cognitive interviewing.

## Conclusions

This study provides the first psychometric evaluation of the SSS-SF among older Myanmar migrants living in Thailand. The Burmese version of the SSS-SF showed initial evidence of adequate reliability and moderate validity, with the bifactor structure providing the best representation of the original 9-item scale. Importantly, the shortened version (Burmese SSS-5) demonstrated acceptable reliability and stronger psychometric performance, suggesting that this briefer form may be more suitable when assessment time is limited or respondent burden is a concern.

## Ethics approval

This study received approval from the research ethics committee of the Faculty of Medicine, Chiang Mai University (protocol code: PSY-2568-0336) on 22 July 2025.

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## Competing interests

All authors declare that there are no conflicts of interest.

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## Underlying data

Derived data supporting the findings of this study are available from the corresponding author on request. Link to download the Burmese version of Self-Stigma scale: <https://www.wongpakaran.com/index.php?lay=show&ac=article&Id=2147690354>.

## Declaration of artificial intelligence use

We hereby confirm that no artificial intelligence (AI) tools or methods were used at any stage of this study, including during data collection, analysis, visualization, or manuscript preparation. All work presented in this study was conducted manually by the authors without the assistance of AI-based tools or systems.

## How to cite

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