

Translation and validation of the Taiwanese version of the mental health literacy scale (MHLS-TW)

Sz-Ching Lin, Assistant Professor

Background

Mental health literacy (MHL) is a critical determinant for the early recognition, management, and prevention of mental health issues. Despite the increasing prevalence of mental distress in the public, particularly within campus settings, there is a lack of a standardized and psychometrically validated MHL instrument suitable for the general Taiwanese population.

Objective

This study aimed to translate, culturally adapt, and evaluate the reliability and construct validity of the Mental Health Literacy Scale (MHLS) developed by O'Connor and Casey (2015) for use in a Chinese-speaking Taiwanese context.

Methods

The study was conducted in two phases: (1) standardized translation using the TRAPD approach and expert content validation; and (2) cross-sectional data collection from 205 participants aged 18 and over to assess psychometric properties. Data analysis included item analysis, Exploratory Factor Analysis (EFA), and Confirmatory Factor Analysis (CFA) using the robust Weighted Least Squares Mean and Variance Adjusted (WLSMV) estimator.

Results

Item-to-total correlation analysis led to the deletion of 12 poorly discriminating items. The remaining items were subjected to CFA, which compared a one-factor, a four-factor (adapted), and the original six-factor model. The six-factor structure demonstrated the optimal fit to the data ($\chi^2 = 1.55$, CFI = .96, TLI = .95, RMSEA = 0.06, SRMR = 0.08). The overall scale exhibited good internal consistency (alpha = .74), with subscale Cronbach's alpha values ranging from .50 to .81. Convergent validity, as measured by Average Variance Extracted (AVE), was acceptable for four of the six latent constructs.

Table 1. Standardized Factor Loadings, Reliability, and Convergent Validity Indicators for the Measurement Model^a

Factor ^b	Item ^c	Standardized			z ^d	p value ^e	Cronbach's α ^f	CR ^g	AVE ^h
		Loading ⁱ	SE ^j	Factor					
Diagnostic knowledge ^b	P8 ^c	.77 ^d	0.05 ^e	16.36 ^f	<.001 ^g	.79 ^h	.84 ⁱ	.57 ^j	
	P7 ^c	.80 ^d	0.06 ^e	14.35 ^f	<.001 ^g	^h	ⁱ	^j	
	P4 ^c	.67 ^d	0.06 ^e	11.68 ^f	<.001 ^g	^h	ⁱ	^j	
	P5 ^c	.77 ^d	0.05 ^e	14.78 ^f	<.001 ^g	^h	ⁱ	^j	
Symptom recognition ^b	P1 ^c	.68 ^d	0.06 ^e	12.23 ^f	<.001 ^g	.72 ^h	.80 ⁱ	.50 ^j	
	P2 ^c	.81 ^d	0.05 ^e	18.10 ^f	<.001 ^g	^h	ⁱ	^j	
	P3 ^c	.63 ^d	0.05 ^e	11.54 ^f	<.001 ^g	^h	ⁱ	^j	
	P6 ^c	.70 ^d	0.05 ^e	14.48 ^f	<.001 ^g	^h	ⁱ	^j	
Information seeking ^b	P19 ^c	.95 ^d	0.07 ^e	13.31 ^f	<.001 ^g	.77 ^h	.84 ⁱ	.73 ^j	
	P18 ^c	.76 ^d	0.06 ^e	12.88 ^f	<.001 ^g	^h	ⁱ	^j	
Help-seeking attitudes ^b	P27 ^c	.69 ^d	0.05 ^e	15.24 ^f	<.001 ^g	.64 ^h	.69 ⁱ	.37 ^j	
	P26 ^c	.72 ^d	0.06 ^e	13.11 ^f	<.001 ^g	^h	ⁱ	^j	
	P28 ^c	.57 ^d	0.06 ^e	9.01 ^f	<.001 ^g	^h	ⁱ	^j	
	P25 ^c	.42 ^d	0.07 ^e	6.21 ^f	<.001 ^g	^h	ⁱ	^j	
Stigmatizing beliefs ^b	P21 ^c	.69 ^d	0.09 ^e	7.42 ^f	<.001 ^g	.50 ^h	.58 ⁱ	.41 ^j	
	P22 ^c	.58 ^d	0.07 ^e	8.52 ^f	<.001 ^g	^h	ⁱ	^j	
Social acceptance ^b	P30 ^c	.90 ^d	0.03 ^e	30.14 ^f	<.001 ^g	.81 ^h	.86 ⁱ	.62 ^j	
	P29 ^c	.55 ^d	0.06 ^e	9.74 ^f	<.001 ^g	^h	ⁱ	^j	
	P31 ^c	.96 ^d	0.03 ^e	32.19 ^f	<.001 ^g	^h	ⁱ	^j	
	P35 ^c	.68 ^d	0.05 ^e	14.20 ^f	<.001 ^g	^h	ⁱ	^j	

Conclusion

The Taiwanese version of the mental health literacy scale (MHLS-TW) is a psychometrically sound, six-factor instrument validated for use among the general Taiwanese population. This scale offers a valuable, reliable tool for researchers and public health practitioners to accurately assess MHL levels, informing the development of targeted mental health promotion and intervention programs in Taiwan.