

Title: Measurement properties of the Mental Health Literacy Scale (MHLS) validation studies: a systematic review protocol

Supplementary file

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Supplementary 1A Search Filters

This search filter was adopted from: Terwee CB, Jansma EP, Riphagen II, de Vet HC. Development of a methodological PubMed search filter for finding studies on measurement properties of measurement instruments. *Qual Life Res.* 2009 Oct;18(8):1115-23. doi: 10.1007/s11136-009-9528-5. Epub 2009 Aug 27. PMID: 19711195; PMCID: PMC2744791.

Supplementary 1AI -Sensitive Filter for Measurement Properties

("instrumentation" [Subheading]) OR "methods" [Subheading] OR "Validation Stud*" [Publication Type] OR Comparative Study [Publication Type] OR "psychometrics" [MeSH] OR psychometr* [Title/Abstract] OR clinimetr* [Text Word] OR clinometr* [Text Word] OR "Outcome Assessment, Health Care" [Mesh] OR outcome assessment [Title/Abstract] OR outcome measure* [Text Word] OR "observer variation" [MeSH] OR observer variation [Title/Abstract] OR "Health Status Indicators" [Mesh] OR "reproducibility of results" [MeSH] OR reproducib* [Title/Abstract] OR "discriminant analysis" [MeSH] OR reliab* [Title/Abstract] OR unreliab* [Title/Abstract] OR valid* [Title/Abstract] OR coefficient [Title/Abstract] OR homogeneity [Title/Abstract] OR homogeneous [Title/Abstract] OR "internal consistency" [Title/Abstract] OR (cronbach* [Title/Abstract] AND (alpha [Title/Abstract] OR alphas [Title/Abstract])) OR (item [Title/Abstract] AND (correlation* [Title/Abstract] OR selection* [Title/Abstract] OR reduction* [Title/Abstract])) OR agreement [Title/Abstract] OR precision [Title/Abstract] OR imprecision [Title/Abstract] OR "precise values" [Title/Abstract] OR test- retest [Title/Abstract] OR (test [Title/Abstract] AND retest [Title/Abstract]) OR (reliab* [Title/Abstract] AND (test [Title/Abstract] OR retest [Title/Abstract])) OR stability [Title/Abstract] OR interrater [Title/Abstract] OR inter-rater [Title/Abstract] OR intrarater [Title/Abstract] OR intra-rater [Title/Abstract] OR intertester [Title/Abstract] OR inter-tester [Title/Abstract] OR intratester [Title/Abstract] OR intra-tester [Title/Abstract] OR interobserver [Title/Abstract] OR inter-observer [Title/Abstract] OR intraobserver [Title/Abstract] OR intraobserver [Title/Abstract] OR intertechnician [Title/Abstract] OR inter-technician [Title/Abstract] OR intratechnician [Title/Abstract] OR intra-technician [Title/Abstract] OR interexaminer [Title/Abstract] OR inter-examiner [Title/Abstract] OR intraexaminer [Title/Abstract] OR intra-examiner [Title/Abstract] OR interassay [Title/Abstract] OR inter-assay [Title/Abstract] OR intraassay [Title/Abstract] OR intra-assay [Title/Abstract] OR interindividual [Title/Abstract] OR inter-individual [Title/Abstract] OR intraindividual [Title/Abstract] OR intra-individual [Title/Abstract] OR interparticipant [Title/Abstract] OR inter-participant [Title/Abstract] OR intraparticipant [Title/Abstract] OR intra-participant [Title/Abstract] OR kappa [Title/Abstract] OR kappa's [Title/Abstract] OR kappas [Title/Abstract] OR repeatab* [Title/Abstract] OR ((replicab* [Title/Abstract] OR repeated [Title/Abstract]) AND (measure [Title/Abstract] OR measures [Title/Abstract] OR findings [Title/Abstract] OR result [Title/Abstract] OR results [Title/Abstract] OR test [Title/Abstract] OR tests [Title/Abstract])) OR generaliza* [Title/Abstract] OR generalisa* [Title/Abstract] OR concordance [Title/Abstract] OR (intraclass [Title/Abstract] AND correlation* [Title/Abstract]) OR discriminative [Title/Abstract] OR "known group" [Title/Abstract] OR factor analysis [Title/Abstract] OR factor analyses [Title/Abstract] OR dimension* [Title/Abstract] OR subscale* [Title/Abstract] OR (multitrait [Title/Abstract] AND scaling [Title/Abstract] AND (analysis [Title/Abstract] OR analyses [Title/Abstract])) OR item discriminant [Title/Abstract] OR interscale correlation* [Title/Abstract] OR error [Title/Abstract] OR errors [Title/Abstract] OR "individual variability" [Title/Abstract] OR

(variability[Title/Abstract] AND (analysis[Title/Abstract] OR values[Title/Abstract])) OR (uncertainty[Title/Abstract] AND (measurement[Title/Abstract] OR measuring[Title/Abstract])) OR “standard error of measurement”[Title/Abstract] OR sensitiv*[Title/Abstract] OR responsive*[Title/Abstract] OR ((minimal[Title/Abstract] OR minimally[Title/Abstract] OR clinical[Title/Abstract] OR clinically[Title/Abstract]) AND (important[Title/Abstract] OR significant[Title/Abstract] OR detectable[Title/Abstract]) AND(change[Title/Abstract] OR difference[Title/Abstract])) OR (small*[Title/Abstract] AND (real[Title/Abstract] OR detectable[Title/Abstract]) AND (change[Title/Abstract] OR difference[Title/Abstract]) OR meaningful change [Title/Abstract] OR “ceiling effect”[Title/Abstract] OR “floor effect”[Title/Abstract] OR “Item response model”[Title/Abstract] OR IRT[Title/Abstract] OR Rasch[Title/Abstract] OR “Differential item functioning”[Title/Abstract] OR DIF[Title/Abstract] OR “computer adaptive testing”[Title/Abstract] OR “item bank”[Title/Abstract] OR “cross-cultural equivalence”[Title/Abstract])

Supplementary 1AII -Exclusion Search Filter

(“address*”[Publication Type] OR “biography”[Publication Type] OR “case reports”[Publication Type] OR “comment”[Publication Type] OR “directory”[Publication Type] OR “editorial”[Publication Type] OR “festschrift”[Publication Type] OR “interview”[Publication Type] OR “lectur*”[Publication Type] OR “legal case*”[Publication Type] OR “legislation”[Publication Type] OR “letter”[Publication Type] OR “news”[Publication Type] OR “newspaper article”[Publication Type] OR “patient education handout”[Publication Type] OR “popular work*”[Publication Type] OR “congress*” [Publication Type] OR “consensus development conference”[Publication Type] OR “consensus development conference, nih”[Publication Type] OR “practice guideline”[Publication Type]) NOT (“animals”[MeSH Terms] NOT “humans”[MeSH Terms])

Supplementary 1B Search Strategies

1.1. Search for PubMed		
	<i>Population Search</i>	This search did not include a population search since there is no restriction on population type, age and settings
#1	<i>Instrument Search MHLS O'Conner and Casey (2015)</i>	("mental health literacy scale*") OR (MHLS)
#2	<i>Construct search mental health literacy</i>	("mental health"[Title/Abstract] OR "mental health"[Title/Abstract] OR "mental health"[MeSH Terms] OR "mental stabilit*" [Title/Abstract] OR "mental balanc*" [Title/Abstract] OR "mental hygien*" [Title/Abstract] OR "sanit*" [Title/Abstract] OR "psychiatr*" [Title/Abstract] OR "life disrupt*" [Title/Abstract] OR "mental ill*" [Title/Abstract] OR "mental ill*" [Title/Abstract] OR "mental disord*" [Title/Abstract] OR "mental wellbeing*" [Title/Abstract] OR "mental well being*" [Title/Abstract] OR "mental condition*" [Title/Abstract] OR "Mental Disorders"[MeSH Terms]) AND ("Health Literacy"[MeSH Terms] OR "health literac*" [Title/Abstract] OR "health education*" [Title/Abstract] OR "health train*" [Title/Abstract] OR "health aware*" [Title/Abstract])
#3	<i>Filter for measurement properties</i>	("instrumentation" [Subheading]) OR "methods" [Subheading] OR "Validation Stud*" [Publication Type] OR Comparative Study [Publication Type] OR "psychometrics" [MeSH] OR psychometr* [Title/Abstract] OR clinimetr* [Text Word] OR clinometr* [Text Word] OR "Outcome Assessment, Health Care" [Mesh] OR outcome assessment [Title/Abstract] OR outcome measure* [Text Word] OR "observer variation" [MeSH] OR observer variation [Title/Abstract] OR "Health Status Indicators" [Mesh] OR "reproducibility of results" [MeSH] OR reproducib* [Title/Abstract] OR "discriminant analysis" [MeSH] OR reliab* [Title/Abstract] OR unreliab* [Title/Abstract] OR valid* [Title/Abstract] OR coefficient [Title/Abstract] OR homogeneity [Title/Abstract] OR homogeneous [Title/Abstract] OR "internal consistency" [Title/Abstract] OR (cronbach* [Title/Abstract] AND (alpha [Title/Abstract] OR alphas [Title/Abstract])) OR (item [Title/Abstract] AND (correlation* [Title/Abstract] OR selection* [Title/Abstract] OR reduction* [Title/Abstract])) OR agreement [Title/Abstract] OR precision [Title/Abstract] OR imprecision [Title/Abstract] OR "precise values" [Title/Abstract] OR test- retest [Title/Abstract] OR (test [Title/Abstract] AND retest [Title/Abstract]) OR (reliab* [Title/Abstract] AND (test [Title/Abstract] OR retest [Title/Abstract])) OR stability [Title/Abstract] OR

	<p> inter-rater[Title/Abstract] OR inter-rater[Title/Abstract] OR intra-rater[Title/Abstract] OR intra-rater[Title/Abstract] OR inter-tester[Title/Abstract] OR inter-tester[Title/Abstract] OR intra-tester[Title/Abstract] OR intra-tester[Title/Abstract] OR inter-observer[Title/Abstract] OR inter-observer[Title/Abstract] OR intra-observer[Title/Abstract] OR intra-observer[Title/Abstract] OR inter-technician[Title/Abstract] OR inter-technician[Title/Abstract] OR intra-technician[Title/Abstract] OR intra-technician[Title/Abstract] OR inter-examiner[Title/Abstract] OR inter-examiner[Title/Abstract] OR intra-examiner[Title/Abstract] OR intra-examiner[Title/Abstract] OR inter-assay[Title/Abstract] OR inter-assay[Title/Abstract] OR intra-assay[Title/Abstract] OR intra-assay[Title/Abstract] OR inter-individual[Title/Abstract] OR inter-individual[Title/Abstract] OR intra-individual[Title/Abstract] OR intra-individual[Title/Abstract] OR inter-participant[Title/Abstract] OR inter-participant[Title/Abstract] OR intra-participant[Title/Abstract] OR intra-participant[Title/Abstract] OR kappa[Title/Abstract] OR kappa's[Title/Abstract] OR kappas[Title/Abstract] OR repeatability[Title/Abstract] OR ((repeatability[Title/Abstract] OR repeated[Title/Abstract]) AND (measure[Title/Abstract] OR measures[Title/Abstract] OR findings[Title/Abstract] OR result[Title/Abstract] OR results[Title/Abstract] OR test[Title/Abstract] OR tests[Title/Abstract])) OR generalizability[Title/Abstract] OR generalizability[Title/Abstract] OR concordance[Title/Abstract] OR (intraclass[Title/Abstract] AND correlation*[Title/Abstract]) OR discriminative[Title/Abstract] OR "known group"[Title/Abstract] OR factor analysis[Title/Abstract] OR factor analyses[Title/Abstract] OR dimensionality[Title/Abstract] OR subscale*[Title/Abstract] OR (multitrait[Title/Abstract] AND scaling[Title/Abstract] AND (analysis[Title/Abstract] OR analyses[Title/Abstract])) OR item discriminant[Title/Abstract] OR interscale correlation*[Title/Abstract] OR error[Title/Abstract] OR errors[Title/Abstract] OR "individual variability"[Title/Abstract] OR (variability[Title/Abstract] AND (analysis[Title/Abstract] OR values[Title/Abstract])) OR (uncertainty[Title/Abstract] AND (measurement[Title/Abstract] OR measuring[Title/Abstract])) OR "standard error of measurement"[Title/Abstract] OR sensitiveness*[Title/Abstract] OR responsive*[Title/Abstract] OR ((minimal[Title/Abstract] OR minimally[Title/Abstract] OR clinically[Title/Abstract] OR clinically[Title/Abstract]) AND (important[Title/Abstract] OR significant[Title/Abstract] OR detectable[Title/Abstract]) AND(change[Title/Abstract] OR difference[Title/Abstract])) OR (small*[Title/Abstract] AND (real[Title/Abstract] OR detectable[Title/Abstract]) AND (change[Title/Abstract] OR </p>
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		difference[Title/Abstract]) OR meaningful change [Title/Abstract] OR “ceiling effect”[Title/Abstract] OR “floor effect”[Title/Abstract] OR “Item response model”[Title/Abstract] OR IRT[Title/Abstract] OR Rasch[Title/Abstract] OR “Differential item functioning”[Title/Abstract] OR DIF[Title/Abstract] OR “computer adaptive testing”[Title/Abstract] OR “item bank”[Title/Abstract] OR “cross-cultural equivalence”[Title/Abstract])
#4	<i>Exclusion filter</i>	(“address*”[Publication Type] OR “biography”[Publication Type] OR “case reports”[Publication Type] OR “comment”[Publication Type] OR “directory”[Publication Type] OR “editorial”[Publication Type] OR “festschrift”[Publication Type] OR “interview”[Publication Type] OR “lectur*”[Publication Type] OR “legal case*”[Publication Type] OR “legislation”[Publication Type] OR “letter”[Publication Type] OR “news”[Publication Type] OR “newspaper article”[Publication Type] OR “patient education handout”[Publication Type] OR “popular work*”[Publication Type] OR “congress*” [Publication Type] OR “consensus development conference”[Publication Type] OR “consensus development conference, nih”[Publication Type] OR “practice guideline”[Publication Type]) NOT (“animals”[MeSH Terms] NOT “humans”[MeSH Terms])
#5	<i>#1 AND #2 AND #3 NOT#4</i>	((("mental health"[Title/Abstract] OR "mental health"[Title/Abstract] OR "mental health"[MeSH Terms] OR "mental stabilit*" [Title/Abstract] OR "mental balanc*" [Title/Abstract] OR "mental hygien*" [Title/Abstract] OR "sanit*" [Title/Abstract] OR "psychiatr*" [Title/Abstract] OR "life disrupt*" [Title/Abstract] OR "mental ill*" [Title/Abstract] OR "mental ill*" [Title/Abstract] OR "mental disord*" [Title/Abstract] OR "mental wellbeing*" [Title/Abstract] OR "mental well being*" [Title/Abstract] OR "mental condition*" [Title/Abstract] OR "Mental Disorders"[MeSH Terms]) AND ("Health Literacy"[MeSH Terms] OR "health literac*" [Title/Abstract] OR "health education*" [Title/Abstract] OR "health train*" [Title/Abstract] OR "health aware*" [Title/Abstract])) AND (("instrumentation" [Subheading]) OR "methods" [Subheading] OR "Validation Stud*" [Publication Type] OR Comparative Study[Publication Type] OR “psychometrics” [MeSH] OR psychometr* [Title/Abstract] OR clinimetr* [Text Word] OR clinometr* [Text Word] OR "Outcome Assessment, Health Care"[Mesh] OR outcome assessment[Title/Abstract] OR outcome measure* [Text Word] OR “observer variation” [MeSH] OR observer variation[Title/Abstract] OR “Health Status Indicators” [Mesh] OR “reproducibility of results” [MeSH] OR reproducib* [Title/Abstract] OR “discriminant analysis” [MeSH]

		<p>OR reliab*[Title/Abstract] OR unreliab*[Title/Abstract] OR valid*[Title/Abstract] OR coefficient[Title/Abstract] OR homogeneity[Title/Abstract] OR homogeneous[Title/Abstract] OR “internal consistency”[Title/Abstract] OR (cronbach*[Title/Abstract] AND (alpha[Title/Abstract] OR alphas[Title/Abstract])) OR (item[Title/Abstract] AND (correlation*[Title/Abstract] OR selection*[Title/Abstract] OR reduction*[Title/Abstract])) OR agreement[Title/Abstract] OR precision[Title/Abstract] OR imprecision[Title/Abstract] OR “precise values”[Title/Abstract] OR test– retest[Title/Abstract] OR (test[Title/Abstract] AND retest[Title/Abstract]) OR (reliab*[Title/Abstract] AND (test[Title/Abstract] OR retest[Title/Abstract])) OR stability[Title/Abstract] OR interrater[Title/Abstract] OR inter-rater[Title/Abstract] OR intrarater[Title/Abstract] OR intra-rater[Title/Abstract] OR intertester[Title/Abstract] OR inter-tester[Title/Abstract] OR intratester[Title/Abstract] OR intra-tester[Title/Abstract] OR interobserver[Title/Abstract] OR inter-observer[Title/Abstract] OR intraobserver[Title/Abstract] OR intraobserver[Title/Abstract] OR intertechnician[Title/Abstract] OR inter-technician[Title/Abstract] OR intratechnician[Title/Abstract] OR intra-technician[Title/Abstract] OR interexaminer[Title/Abstract] OR inter-examiner[Title/Abstract] OR intraexaminer[Title/Abstract] OR intra-examiner[Title/Abstract] OR interassay[Title/Abstract] OR inter-assay[Title/Abstract] OR intraassay[Title/Abstract] OR intra-assay[Title/Abstract] OR interindividual[Title/Abstract] OR inter-individual[Title/Abstract] OR intraindividual[Title/Abstract] OR intra-individual[Title/Abstract] OR interparticipant[Title/Abstract] OR inter-participant[Title/Abstract] OR intraparticipant[Title/Abstract] OR intra-participant[Title/Abstract] OR kappa[Title/Abstract] OR kappa’s[Title/Abstract] OR kappas[Title/Abstract] OR repeatab*[Title/Abstract] OR ((replicab*[Title/Abstract] OR repeated[Title/Abstract]) AND (measure[Title/Abstract] OR measures[Title/Abstract] OR findings[Title/Abstract] OR result[Title/Abstract] OR results[Title/Abstract] OR test[Title/Abstract] OR tests[Title/Abstract])) OR generaliza*[Title/Abstract] OR generalisa*[Title/Abstract] OR concordance[Title/Abstract] OR (intraclass[Title/Abstract] AND correlation*[Title/Abstract]) OR discriminative[Title/Abstract] OR “known group”[Title/Abstract] OR factor analysis[Title/Abstract] OR factor analyses[Title/Abstract] OR dimension*[Title/Abstract] OR subscale*[Title/Abstract] OR (multitrait[Title/Abstract] AND scaling[Title/Abstract] AND (analysis[Title/Abstract] OR analyses[Title/Abstract])) OR item discriminant[Title/Abstract] OR interscale correlation*[Title/Abstract] OR error[Title/Abstract] OR</p>
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		<p>errors[Title/Abstract] OR “individual variability”[Title/Abstract] OR (variability[Title/Abstract] AND (analysis[Title/Abstract] OR values[Title/Abstract])) OR (uncertainty[Title/Abstract] AND (measurement[Title/Abstract] OR measuring[Title/Abstract])) OR “standard error of measurement”[Title/Abstract] OR sensitiv*[Title/Abstract] OR responsive*[Title/Abstract] OR ((minimal[Title/Abstract] OR minimally[Title/Abstract] OR clinical[Title/Abstract] OR clinically[Title/Abstract]) AND (important[Title/Abstract] OR significant[Title/Abstract] OR detectable[Title/Abstract])) AND(change[Title/Abstract] OR difference[Title/Abstract])) OR (small*[Title/Abstract] AND (real[Title/Abstract] OR detectable[Title/Abstract]) AND (change[Title/Abstract] OR difference[Title/Abstract]) OR meaningful change [Title/Abstract] OR “ceiling effect”[Title/Abstract] OR “floor effect”[Title/Abstract] OR “Item response model”[Title/Abstract] OR IRT[Title/Abstract] OR Rasch[Title/Abstract] OR “Differential item functioning”[Title/Abstract] OR DIF[Title/Abstract] OR “computer adaptive testing”[Title/Abstract] OR “item bank”[Title/Abstract] OR “cross-cultural equivalence”[Title/Abstract])) NOT ((“address*”[Publication Type] OR “biography”[Publication Type] OR “case reports”[Publication Type] OR “comment”[Publication Type] OR “directory”[Publication Type] OR “editorial”[Publication Type] OR “festschrift”[Publication Type] OR “interview”[Publication Type] OR “lectur*”[Publication Type] OR “legal case*”[Publication Type] OR “legislation”[Publication Type] OR “letter”[Publication Type] OR “news”[Publication Type] OR “newspaper article”[Publication Type] OR “patient education handout”[Publication Type] OR “popular work*”[Publication Type] OR “congress*” [Publication Type] OR “consensus development conference”[Publication Type] OR “consensus development conference, nih”[Publication Type] OR “practice guideline”[Publication Type]) NOT (“animals”[MeSH Terms] NOT “humans”[MeSH Terms])) AND (“mental health literacy scale*”) OR (MHLS))</p>
		<p>Result in documents Final= 6 Exclusion =14 (Different tool 13-RCT 1)</p>

**Note. The initial PubMed search was conducted on June 3, 2023, and was limited to English.

Table A2. Final Search Strategy

1.2. Search for Embase

1.3. Search for PsychINFO
1.4. Search for CINAHL
1.5. Search for ERIC
1.6. Search for Medline

Supplementary 1C Data Charting Instruments

1C I. Descriptive Characteristics of The Included Studies

#	Study (Authors/year)	Study Design	Instrument Administration			Population				Methodological Process		MHLS score	Reported MHLS modifications
			Country	Language	Setting	N	Age Mean (SD) yr	Gender (% female)	Selection process	Summary of adaptation process steps	Adaptation process / validation process reported guideline		
1.													
2.													

**Sample size calculation reference provided*

1C II. Results of Studies on Measurement Properties

Study (authors/date)	Country (language) in which the MHLS was evaluated	Structural validity			Internal Consistency			Cross-cultural validity/ measurement invariance			Reliability		
		n	Meth quality	Result (rating)	n	Meth quality	Result (rating)	n	Meth quality	Result (rating)	n	Meth quality	Result (rating)
<i>Pooled or summary results (overall rating)</i>													

<i>Study (authors/date)</i>	<i>Country (language) in which the MHLS was evaluated</i>	<i>Measurement Error</i>			<i>Criterion validity</i>			<i>Hypothesis testing</i>			<i>Responsiveness</i>		
		<i>n</i>	<i>Meth quality</i>	<i>Result (rating)</i>	<i>n</i>	<i>Meth quality</i>	<i>Result (rating)</i>	<i>n</i>	<i>Meth quality</i>	<i>Result (rating)</i>	<i>n</i>	<i>Meth quality</i>	<i>Result (rating)</i>
<i>Pooled or summary results (overall rating)</i>													

1C III. Summary of Findings Tables

<i>Structural Validity</i>	<i>Summary or pooled results</i>	<i>Overall rating</i>	<i>Quality of evidence</i>
PROM A			
PROM B			
PROM C			

<i>Internal consistency</i>	<i>Summary or pooled results</i>	<i>Overall rating</i>	<i>Quality of evidence</i>
PROM A			
PROM B			
PROM C			

<i>Cross-cultural validity\measurement invariance</i>	<i>Summary or pooled results</i>	<i>Overall rating</i>	<i>Quality of evidence</i>
PROM A			
PROM B			
PROM C			

<i>Reliability</i>	<i>Summary or pooled results</i>	<i>Overall rating</i>	<i>Quality of evidence</i>
PROM A			
PROM B			
PROM C			

<i>Measurement Error</i>	<i>Summary or pooled results</i>	<i>Overall rating</i>	<i>Quality of evidence</i>
PROM A			
PROM B			
PROM C			

<i>Hypothesis testing</i>	<i>Summary or pooled results</i>	<i>Overall rating</i>	<i>Quality of evidence</i>
PROM A			
PROM B			
PROM C			

<i>Responsiveness</i>	<i>Summary or pooled results</i>	<i>Overall rating</i>	<i>Quality of evidence</i>
PROM A			
PROM B			
PROM C			

Supplementary 1D Hypotheses for construct validity and responsiveness

Specific MHLS hypotheses for ‘Hypothesis Testing for Construct Validity’ and ‘Responsiveness’

Hypothesis Testing for Construct Validity	<p>Hypothesised <i>a priori</i> that we would observe:</p> <p><i>Comparison with other outcome measurement instruments (convergent validity)</i></p> <ol style="list-style-type: none"> 1. In all populations, strong correlations ≥ 0.5 will be observed between MHLS and comparator instruments (see Table 2) measuring similar constructs [e.g. Mental health literacy questionnaire-short version for adults (MHLq-SVa)] 2. In all populations, medium correlations (≥ 0.30 and < 0.50) will be observed between MHLS and instruments (see Table 2) measuring <i>related but dissimilar</i> constructs [e.g. Attitudes Towards Depression (ATD), The Stigmatizing Attitudes-Believability (SAB)] 3. In all populations, ,weak correlations (< 0.3) will be observed between MHLS and instruments (see Table 2) measuring <i>a separate</i> construct (instruments that do not measure MHL) [e.g. The 12-item General Health Questionnaire (GHQ-12), My lifestyle questionnaire (MLQ)]. <p><i>Comparison between subgroups (Divergent validity)</i></p> <p>MHLS scores should be able to distinguish between the following groups, with statistically significant differences between the groups:</p> <ul style="list-style-type: none"> • Alternative Hypothesis 1: younger vs. older age groups, with older groups having higher MHL. • Alternative Hypothesis 2: males vs. females, with females having higher MHL. • Alternative Hypothesis 3: those who have direct experience with mental disorders vs. those who do not, with those having direct experience with mental disorders having higher MHL. • Alternative Hypothesis 4: those who have indirect experience with mental disorders (family or friends)
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	<p>vs. those who do not, with those having indirect experience with mental disorders having higher MHL.</p> <ul style="list-style-type: none"> • Alternative Hypothesis 5: Those with low SES vs. high SES. With those with high SES having higher MHL. • Alternative Hypothesis 6: Those with low education levels vs. high education levels, with those with higher education having higher MHL.
Responsiveness	<p>Hypothesized <i>a priori</i> that we would observe:</p> <p>Before and After Intervention:</p> <p>A. Null hypothesis: In response to an educational intervention, we expect no difference in MHLS scores in the intervention and control groups.</p> <p>B. Alternative hypothesis: In response to an educational intervention, we expect a statistically significant difference in MHLS scores in the intervention and control groups.</p>

1. O'Connor M, Casey L. The Mental Health Literacy Scale (MHLS): A new scale-based measure of mental health literacy. *Psychiatry Res.* 2015 Sep 30;229(1–2):511–6.
2. Terwee CB, Jansma EP, Riphagen II, de Vet HCW. Development of a methodological PubMed search filter for finding studies on measurement properties of measurement instruments. *Qual Life Res.* 2009 Oct 1;18(8):1115–23.
3. Stephenson M, Riitano D, Wilson S, Leonardi-Bee J, Mabire C, Cooper K, et al. Chapter 12: Systematic reviews of measurement properties. In: *JBIManual for Evidence Synthesis* [Internet]. JBI; 2020 [cited 2023 Sep 10]. Available from: <https://jbi-global-wiki.refined.site/space/MANUAL/4686202/Chapter+12%3A+Systematic+reviews+of+measurement+properties>

