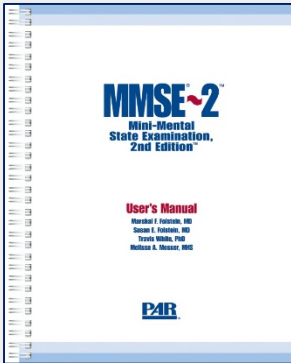


Mini-Mental State Examination, 2nd Edition™ (MMSE-2®)

Marshal F. Folstein, MD, and Susan E. Folstein, MD; User's Manual by
Marshal F. Folstein, MD, Susan E. Folstein, MD, Travis White, PhD, and
Melissa A. Messer, MHS



Applications

Screen for cognitive impairment and track patient progress

Predict general functional independence in elderly individuals

Use in clinical or research settings

For use by physicians, medical students, psychologists, psychology technicians, nurses, student nurses, social workers, and trained research workers

Overview & What's New

- Revision includes a brief version (MMSE-2: BV) to conduct rapid clinical assessments and screen individuals for large population studies.
- Revision also includes an expanded version (MMSE-2: EV) with two added tasks (Story Memory and Processing Speed) that is more sensitive to changes associated with aging.
- Structure and difficulty of the original MMSE have been retained while problematic items have been replaced.
- Equivalent, alternate forms enable you to retest with reduced practice efforts.

Administration & Scoring

- The MMSE-2: BV: 5 minutes to administer.
- The MMSE-2: SV: 15 minutes to administer.
- The MMSE-2: EV: 20 minutes to administer.
- All forms take just 5 minutes to score.
- Qualification level B or S.
- Published translations are available in 10 languages, including Spanish, Chinese, German, French, Simplified Chinese, and Russian.

Test Materials

- MMSE-2 User's Manual.
- MMSE-2 Pocket Norms Guide (includes raw means and standard deviations by age and education level, age- and education-based T scores, and a reliable change score table).
- Administration form for MMSE-2: BV, Blue and Red Forms.
- Administration form for MMSE-2: SV, Blue and Red Forms.
- Administration form for MMSE-2: EV, Blue and Red Forms.
- Scoring templates for the MMSE-2: EV Processing Speed task, Blue and Red Forms.

Reliability, Validity, & Normative Data

- A normative sample ($N = 1,531$) from 26 states was used to establish reliability and the normal range of scores; a clinical sample ($N = 232$) of patients with Alzheimer’s disease and patients with subcortical dementia was tested to establish validity.
- Internal consistency coefficients ranged from .66 to .79 for the clinical sample. Equivalency of the Blue and Red forms was examined using G coefficients, which were $\geq .96$ for all three versions.
- Interrater reliability coefficients ranged from .94 to .99.
- Convergent validity of the MMSE-2 was examined in terms of its correlations with several tests that purport to measure specific aspects of cognitive functions, including the WMS®-III Digit Span Forward and Digit Span Backward subtests, the Category Naming Test, the Boston Naming Test, and the Trail Making Test.
- To help determine the clinical significance of specific raw scores, the sensitivity, specificity, percent correctly classified, positive predictive power, and negative predictive power of a wide range of raw score cutoffs are presented for each version of the MMSE-2 by clinical group.

Task	Description	Identical task on MMSE	Revision on MMSE-2: SV
Registration & Recall	Ability to repeat and retain three unrelated words, and then recall after a short task		Words have been made slightly more difficult and easier to translate
Orientation to Time	Identify year, season, month, day of the week, and date	X	
Orientation to Place	Identify state, country, city/town, building, and floor	X	
Attention & Calculation (Serial 7s)	Count backward by 7s	X	No longer can use WORLD spelled backward as an alternate task
Naming	Identify body parts when pointed to by examiner		Change from “watch” and “pencil” allows for translation and no use of external materials
Repetition	Repeat a sentence that contains words not often said together		Revised to include a sentence that is easier to translate; difficulty is slightly increased
Comprehension	Understand and carry out a three-stage verbal command		Removed the reliance on motor responses
Reading	Read and follow instructions	X	
Writing	Write a sentence	X	
Drawing	Copy intersecting pentagons	X	