

Outcome Measure	Mini-Mental State Examination (MMSE)
Sensitivity to Change	Yes
Population	Adult
Domain	Neuropsychological Impairment
Type of Measure	Objective test
ICF-Code/s	b1
Description	<p>The MMSE (Folstein et al., 1975) is an objective, clinician administered test, intentionally designed to provide a brief, bedside assessment that is suitable for older people with delirium or dementia who may only be able to cooperate for short periods of time. It is the most commonly and widely used of all cognitive screening tests, both in clinical settings as well as in research studies. The MMSW is traditionally regarded as the standard reference against which all newly developed cognitive screening tests are measured.</p> <p>The MMSE contains 11 questions measuring basic cognitive processes in a range of domains: orientation for time, orientation for place, registration and later recall of three unrelated words, attention, five aspects of language (confrontation naming, repetition, following a 3-stage command, reading a phrase, writing a sentence), and construction.</p> <p>Each correct point is awarded 1 point. The total score ranges from 0 to 30, with higher scores indicating better performance. Traditionally, a cut-off score of 23/24 is used to classify cognitive impairment. Additional cut-off scores have been recommended for a more fine-grained classification of degree of cognitive impairment: normal (27-30), mild (21-26), moderate (11-20), severe (0-10).</p>
Properties	<p>See Tate (2010)</p> <p>Normative data are available in the clinical guide (Folstein et al., 1975).</p> <p><u>Inter-rater reliability</u>: $r = .83-.95$ in 4 studies (Folstein et al., 2000)</p> <p><u>Test-retest reliability</u>: 24 hour: $r = .89$ and $.83$ with 2 different examiners, 28 days: $r = .99$.</p> <p><u>Internal consistency</u>: $\alpha = .68-.96$ in 3 studies (Tombaugh & McIntyre, 1992); $\alpha = .31-.96$ in 9 studies (Folstein et al., 2000) but generally higher in clinical groups ($.56-.96$ in 4 studies; $<.8$ for 2/4 studies).</p> <p><u>Concurrent validity</u>: MMSE can discriminate dementia vs depression with cognitive impairment and affective disorder without cognitive impairment and normal controls.</p>
Advantages	<ul style="list-style-type: none"> • Is an easy test to administer

	<ul style="list-style-type: none"> • Quick to administer • Has good psychometric properties • Is well used, particularly with medical practitioners.
Disadvantages	<ul style="list-style-type: none"> • Is a screening tool, not a diagnostic tool. • Is a crude measure of cognitive functioning and domains of cognitive functioning, thus subtle changes in cognitive functioning may not be detectable using this tool. • Internal consistency for various cognitive domains not calculated due to brevity of test and low number of items. • Measure is best used to screen for cognitive impairment in older, community dwelling, hospitalised and institutionalized adults. May not be suitable for community TBI individuals.
Additional Information	
Reviewers	Skye McDonald

References

(M. F. Folstein, Folstein, & Fanjiang, 2000)(M. F. Folstein, Folstein, & Fanjiang, 2000)(M. F. Folstein, et al., 2000)

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