

### Appendix 3: Summary of Findings table

On-road test	Psychometric properties	Summary or pooled result	Overall rating	Quality of evidence
<b>Performance-Based Driving Evaluation (PBDE)</b>				
	<b>Internal consistency</b>	$\alpha$ : 0.78-0.89, no factor analysis Total sample size: n=30	Indeterminate	Risk of bias: -2 Inconsistency: 0 Imprecision: -2 Indirectness: -1 <b>GRADE: very low</b>
	<b>Reliability</b>	Inter-rater, ICC: 0.74-0.84 Total sample size: n=30	Sufficient	Risk of bias: -2 Inconsistency: 0 Imprecision: -2 Indirectness: -1 <b>GRADE: very low</b>
	<b>Criterion validity</b>	r=0.74 Total sample size: n=30	Sufficient	Risk of bias: 0 Inconsistency: 0 Imprecision: -2 Indirectness: -1 <b>GRADE: very low</b>
	<b>Hypotheses testing</b>	7 hypotheses confirmed Total sample size: n=30	Sufficient	Risk of bias: 0 Inconsistency: 0 Imprecision: -2 Indirectness: -1 <b>GRADE: very low</b>

Note:  $\alpha$ : Cronbach alpha; r: Pearson correlation coefficient; ICC: intraclass correlation coefficient

<b>On-road test</b>			
<b>Psychometric properties</b>	<b>Summary or pooled result</b>	<b>Overall rating</b>	<b>Quality of evidence</b>
<b>Washington University Road Test (WURT)</b>			
<b>Realibility</b>	Test-retest, $\tau$ -b=0.76 Total sample size: n=63	Indeterminate	Risk of bias: -2 Inconsistency: 0 Imprecision: -1 Indirectness: -1 <b>GRADE: very low</b>
<b>Criterion validity</b>	$\tau$ -b=0.60 Total sample size: n=123	Insufficient	Risk of bias: 0 Inconsistency: 0 Imprecision: 0 Indirectness: -1 <b>GRADE: moderate</b>
<b>Hypotheses testing</b>	1 hypothese confirmed Total sample size: n=123	Sufficient	Risk of bias: 0 Inconsistency: 0 Imprecision: 0 Indirectness: -1 <b>GRADE: moderate</b>
<b>New Haven</b>			
<b>Internal consistency</b>	$\alpha$ =0.88, no factor analysis Total sample size: n=35	Indeterminate	Risk of bias: -2 Inconsistency: 0 Imprecision: -2 Indirectness: -1 <b>GRADE: very low</b>
<b>Reliability</b>	Inter-rater, ICC >0.80 Total sample size: n=357	Sufficient	Risk of bias: -1 Inconsistency: 0 Imprecision: 0 Indirectness: -1 <b>GRADE: low</b>
<b>Hypotheses testing</b>	3 hypotheses confirmed Total sample size: n=35	Sufficient	Risk of bias: -1 Inconsistency: 0 Imprecision: -2 Indirectness: -1 <b>GRADE: very low</b>

Note:  $\alpha$ : Cronbach alpha;  $\tau$ -b: Kendall rank correlation coefficient; ICC: intraclass correlation coefficient

On-road test	Psychometric properties	Summary or pooled result	Overall rating	Quality of evidence
<b>Test Ride for Investigating Practical Fitness to Drive: Belgian Version (TRIP)</b>				
	<b>Reliability</b>	Inter-rater, ICC: 0.62-0.84 Total sample size: n=65	Sufficient	Risk of bias: 0 Inconsistency: 0 Imprecision: -1 Indirectness: -1 <b>GRADE: very low</b>
	<b>Criterion validity</b>	r=0.8 Total sample size: n=38	Sufficient	Risk of bias: 0 Inconsistency: 0 Imprecision: -2 Indirectness: -1 <b>GRADE: very low</b>
<b>Rhode Island Road Test (RIRT)</b>				
	<b>Structural validity</b>	1 primary dimension explaining 31% of the variance 1 secondary dimension explaining 8% of the variance Total sample size: n=80	Indeterminate	Risk of bias: -3 Inconsistency: 0 Imprecision: -1 Indirectness: -1 <b>GRADE: very low</b>
	<b>Internal consistency</b>	Primary dimension: $\alpha=0.93$ Secondary dimension: $\alpha=0.80$ Total sample size: n=80	Sufficient	Risk of bias: 0 Inconsistency: 0 Imprecision: -1 Indirectness: -1 <b>GRADE: low</b>
	<b>Reliability</b>	Inter-rater, r=0.87 Total sample size: n=20	Sufficient	Risk of bias: -2 Inconsistency: 0 Imprecision: -2 Indirectness: -1 <b>GRADE: very low</b>

Note:  $\alpha$ : Cronbach alpha; r: Pearson correlation coefficient; ICC: intraclass correlation coefficient

<b>On-road test</b>			
<b>Psychometric properties</b>	<b>Summary or pooled result</b>	<b>Overall rating</b>	<b>Quality of evidence</b>
<b>Sum of Maneuvers (SMS)</b>			
<b>Internal consistency</b>	$\alpha=0.94$ , no factor analysis Total sample size: n=95	Indeterminate	Risk of bias: -2 Inconsistency: 0 Imprecision: -1 Indirectness: -1 <b>GRADE: very low</b>
<b>Reliability</b>	Inter-rater and test-retest, ICC: 0.88-0.95 Total sample size: n=43	Sufficient	Risk of bias: -1 Inconsistency: 0 Imprecision: -2 Indirectness: -1 <b>GRADE: very low</b>
<b>Criterion validity</b>	$r=0.94$ and AUC=0.906 Total sample size: n=222	Sufficient	Risk of bias: 0 Inconsistency: 0 Imprecision: 0 Indirectness: -1 <b>GRADE: moderate</b>

Note:  $\alpha$ : Cronbach alpha; r: Pearson correlation coefficient; AUC: area under the curve; ICC: intraclass correlation coefficient

On-road test Psychometric properties	Summary or pooled result	Overall rating	Quality of evidence
<b>Performance Analysis of Driving Ability (P-Drive)</b>			
<b>Structural validity</b>	3 items outside the criteria for goodness-of-fit PCA supports unidimensionality Total sample size: n=304	Insufficient	Risk of bias: -1 Inconsistency: 0 Imprecision: 0 Indirectness: 0 <b>GRADE: moderate</b>
<b>Cross-cultural validity/measurement invariance</b>	Differential Item Functioning suggests differences in item functioning between diagnoses of MCI and CVA Total sample size: n=205	Insufficient	Risk of bias: -3 Inconsistency: 0 Imprecision: 0 Indirectness: 0 <b>GRADE: very low</b>
<b>Reliability</b>	Inter-rater, ICC: 0.875-0.978 Total sample size: n=24	Sufficient	Risk of bias: 0 Inconsistency: 0 Imprecision: -2 Indirectness: 0 <b>GRADE: low</b>
<b>Criterion validity</b>	Inconsistent results that may be explained by differences between studies in terms of raters, participants and criteria used Total sample size: n=208	Inconsistent	Risk of bias: -1 Inconsistency: -1 Imprecision: 0 Indirectness: 0 <b>GRADE: low</b>
<b>Composite Driving Assessment Scale (CDAS)</b>			
<b>Structural validity</b>	2 dimensions of equal importance explaining 14% et 12% of the variance Total sample size: n=47	Indeterminate	Risk of bias: -3 Inconsistency: 0 Imprecision: -2 Indirectness: -1 <b>GRADE: very low</b>
<b>Internal consistency</b>	$\alpha=0.89$ $\alpha=0.73$ Total sample size: n=47	Sufficient	Risk of bias: 0 Inconsistency: 0 Imprecision: -2 Indirectness: -1 <b>GRADE: very low</b>

Note:  $\alpha$ : Cronbach alpha; PCA: principal component analysis; ICC: intraclass correlation coefficient; MCI: mild cognitive impairment; CVA: cerebrovascular accident

On-road test Psychometric properties	Summary or pooled result	Overall rating	Quality of evidence
<b>Nottingham Neurological Driving Assessment (NNDa)</b>			
<b>Reliability</b>	Inter-rater: use of the level of agreement (may happen solely based on chance) Total sample size: n=6	Insufficient	Risk of bias: -3 Inconsistency: 0 Imprecision: -2 Indirectness: -1 <b>GRADE: very low</b>
<b>Driving Observation Schedule (DOS)</b>			
<b>Reliability</b>	Inter-rater, ICC=0.91 Total sample size: n=33	Sufficient	Risk of bias: -1 Inconsistency: 0 Imprecision: -2 Indirectness: -1 <b>GRADE: very low</b>
<b>Measurement error</b>	SEM=3% Total sample size: n=33	Indeterminate	Risk of bias: -1 Inconsistency: 0 Imprecision: -2 Indirectness: -1 <b>GRADE: very low</b>
<b>Record of Driving Errors (RODE)</b>			
<b>Reliability</b>	Inter-rater, ICC: 0.84-0.97 Total sample size: n=24	Sufficient	Risk of bias: -1 Inconsistency: 0 Imprecision: -2 Indirectness: -1 <b>GRADE: very low</b>

Note: ICC: intraclass correlation coefficient; SEM: standard error of the measurement

On-road test	Psychometric properties	Summary of pooled result	Overall rating	Quality of evidence
<b>Western University's on-road assessment (UWO)</b>				
	<b>Reliability</b>	Inter-rater, $\kappa$ : 0.847-0.952 Total sample size: n=34	Sufficient	Risk of bias: -2 Inconsistency: 0 Imprecision: -2 Indirectness: -1 <b>GRADE: very low</b>
	<b>Hypotheses testing</b>	2 hypotheses confirmed Total sample size: n=35	Sufficient	Risk of bias: 0 Inconsistency: 0 Imprecision: -2 Indirectness: -1 <b>GRADE: very low</b>

Note:  $\kappa$ : kappa de Cohen