Appendix 2: risk of bias assessment

Citation(s)		Ме	asurement error			Criterion validity		Hypothe	ses testing	Responsiveness			
	n	Meth. Qual.	Results (rating)	n	Meth. Qual.	Results (rating)	n	Meth. Qual.	Results (rating)	n	Meth. Qual.	Results (rating)	
PBDE (1994)				30	Very good	Open road r=0.74; p<0.001 Closed road r=0.44; p<0.05 (+), result closed road ignored, because low correlation between results open road and closed road	30	Very good	7 hypotheses confirmed (7+)				
Pooled or summary result (overall rating)				30		0.44-0.74 (+)	30		7+ (+)				
WURT (1997)				123	Very good	τ-b=0.60 τ-b/category: 0.26-0.69 (-)	123	Very good	τ-b=-0.27, hypothese confirmed (1+)				
Pooled or summary result (overall rating)				123		τ-b<0.70 (-)	123		1+ (+)				
New Haven (2003)							35	Adequate	3 hypotheses confirmed (3+)				
Pooled or summary result (overall rating)							35		3+ (+)				
TRIP (2003)													
TRIP (2005)				38	Very good	r=0.8 (+)							
Pooled or summary result (overall rating)				38		r=0.8 (+)							

Note: n: number; r: Pearson correlation coefficient; p: p-value;  $\tau$ -b: Kendall rank correlation coefficient

Citation(s)		Mea	asurement error			Criterion validity		Hypoth	eses testing	Responsiveness			
	n	Meth. Qual.	Results (rating)	n	Meth. Qual.	Results (rating)	n	Meth. Qual.	Results (rating)	n	Meth. Qual.	Results (rating)	
RIRT (2005)													
RIRT (2012)													
Pooled or summary result (overall rating)	80		A major dimension and a minor dimension (?)	80		0.80 and 0.93 (+)				20		0.87 (+)	
SMS (2006)				95	Very good	r=0.94 (+)							
SMS (2010)				127	Very good	ROC analysis: AUC=0.906 (sensi.=0.91 and speci.=0.87) (+)							
Pooled or summary result (overall rating)				222		r=0.94; AUC=0.906 (+)							
P-Drive (2010)													
P-Drive (2011)				85	Adequate	ROC analysis: optimal cut-off at 85 (?)							
P-Drive (2015)				24	Very good	R <sup>2</sup> =0.445 (-)							
P-Drive (2015)				99	Very good	ROC analysis: area under the curve=0.98 (sensi.=0.93 and speci.=0.92) (+)							
Pooled or summary result (overall rating)				208		(±)							

Note: n: number;  $\alpha$ : Cronbach alpha; r: Pearson correlation coefficient; IR: inter-rater; ROC: receiver operating characteristic; AUC: area under the curve; R<sup>2</sup>: coefficient of determination (square of Pearson's coefficient

Citation(s)	Measurement error				Criterion validity				eses testing	Responsiveness		
	n	Meth. Qual.	Results (rating)	n	Meth. Qual.	Results (rating)	n	Meth. Qual.	Results (rating)	n	Meth. Qual.	Results (rating)
CDAS (2012)												
Pooled or summary result (overall rating)												
NNDA (2012)												
Pooled or summary result (overall rating)												
DOS (2013)	33	Adequate	SEM=3% (?)									
Pooled or summary result (overall rating)	33		SEM=3% ( ?)									
RODE (2015)												
Pooled or summary result (overall rating)												
UWO (2016a)							35	Very good	2 hypotheses confirmed (2+)			
UWO (2016b)												
Pooled or summary result (overall rating)							35		2+ (+)			

Note: n: number; SEM: standard error of the measurement

Citation(s)		Struct	ural validity		Internal consistency			Cross-cultural validity invariand			Reliability			
	n	Meth. Qual.	Results (rating)	n	Meth. Qual.	Results (rating)	n	Meth. Qual.	Results (rating)	n	Meth. Qual.	Results (rating)		
PBDE (1994)				30	Doubtful	Closed road $\alpha$ =0.78 Open road $\alpha$ =0.89 (?)				30	Doubtful	IR: closed road r=0.84; open road r=0.74 (+)		
Pooled or summary result (overall rating)				30		0.78-0.89 (?)				30		0.74-0.84 (+)		
WURT (1997)										TR: 63	Doubtful	TR: τ-b=0.76 (?)		
Pooled or summary result (overall rating)										63		τ-b=0.76 (?)		
New Haven (2003)				35	Doubtful	α=0.88 (?)				357	Adequate	IR: ICC (scale)=0.99 ICC/items: for 26, ICC: 0.911-0.998 and for 10, ICC>0.80 (+)		
Pooled or summary result (overall rating)				35		0.88 ( ?)				357		ICC>0.80 (+)		

Note: n: number; α: Cronbach alpha; r: Pearson correlation coefficient; τ-b: Kendall rank correlation coefficient ; ICC: intraclass correlation coefficient; IR: inter-rater; TR: test-retest

Citation(s)	Structural validity			Internal consistency			C	ross-cultural validit invarian			Reliability			
	n	Meth. Qual.	Results (rating)	n	Meth. Qual.	Results (rating)	n	Meth. Qual.	Results (rating)	n	Meth. Qual.	Results (rating)		
TRIP (2003)										27	Adequate	IR: total score ICC: 0.62- 0.84 (+), video VS video ICC: 0.80-0.84 and real- life VS video ICC: 0.62- 0.64 with large CI considered in the risk of bias		
TRIP (2005)										38	Adequate	IR: total score ICC=0.83 (+)		
Pooled or summary result (overall rating)										65		0.62-0.84 (+)		
RIRT (2005)										20	Doubtful	IR: r=0.87 (+)		
RIRT (2012)	80	Inadequate	2 subscales (one explains 31% and the other 8% of the variance) (?)	80	Very good	$\alpha/\mathrm{subscales}{=}0.93$ and 0.80 (+)								
Pooled or summary result (overall rating)	80		A major dimension and a minor dimension (?)	80		0.80 and 0.93 (+)				20		0.87 (+)		

Note: n: number;  $\alpha$ : Cronbach alpha; r: Pearson correlation coefficient; ICC: intraclass correlation coefficient; CI: confidence interval; IR: inter-rater

Citation(s)		Structui	ral validity	Internal consistency			Cross-c	cultural validity/N invariance		Reliability			
	n	Meth. Qual.	Results (rating)	n	Meth. Qual.	Results (rating)	n	Meth. Qual.	Results (rating)	n	Meth. Qual.	Results (rating)	
SMS (2006)				95	Doubtful	α=0.94 (?)				IR: 33 TR: 10	Adequate	IR: ICC: 0.88 (dich. scores) 0.94 (scale with 4 pts/item) (+) TR: ICC: 0.91 (dich. scores) 0.95 (scale with 4 pts/item) (+)	
SMS (2010)													
Pooled or summary result (overall rating)				95		0.94 ( ?)				43		0.88-0.95 (+)	
P-Drive (2010)	205	Very good	3 items outside the criteria for goodness-of-fit Unidim. scale (PCA: 59.1% for the principal component and 4.9% for the second one, with a rule of thumb set at resp. 50% and 5%) (-)			205	Inadequate	Differences in item functioning for 4 items between CVA and MCI (-)					
P-Drive (2011)													

Note: n: number; α: Cronbach alpha; PCA: principal component analysis; ICC: intraclass correlation coefficient; IR: inter-rater; TR: test-retest; CVA: cerebrovascular accident; MCI: mild cognitive impairment

Citation(s)		Structural validity			Interna	l consistency	Cross-cultural validity/Measurement invariance				Reliability			
	n	Meth. Qual.	Results (rating)	n	Meth. Qual.	Results (rating)	n	Meth. Qual.	Results (rating)	n	Meth. Qual.	Results (rating)		
P-Drive (2015)										24	Very good	IE: ICC random effect=0.950 (CI 95%: 0.889-0.978); ICC/category: 0.875- 0.963 (+)		
P-Drive (2015)	99	Doubtful	3 items outside the criteria of goodness-of-fit Unidim. scale PCA: 80.3% for the principal component and 2.4% for the second one, with a rule of thumb set at resp. 60% and 5%) (-)											
Pooled or summary result (overall rating)	304		3 items outside the criteria of goodness-of-fit but PCA suggests unidim. (-)				205		Differences in item functioning according to the diagnosis MCI, CVA (-)	24		0.875-0.978 (+)		
CDAS (2012)	47	Inadequate	2 subscales (one explains 14% and the other 12% of the variance) (?)	47	Very good	α=0.89 α=0.73 (+)								
Pooled or summary result (overall rating)	47		2 dimensions of equal importance (?)	47		0.73 and 0.89 (+)								

Note: n: number;  $\alpha$ : Cronbach alpha; PCA: principal component analysis; ICC: intraclass correlation coefficient; CI: confidence interval; IR: inter-rater; CVA: cerebrovascular accident; MCI: mild cognitive impairment

Citation(s)		Structural validity			Interna	l consistency	Cross-cultural validity/Measurement invariance				Reliability			
	n	Meth. Qual.	Results (rating)	n	Meth. Qual.	Results (rating)	n	Meth. Qual.	Results (rating)	n	Meth. Qual.	Results (rating)		
NNDA (2012)										6	Inadequate	IR: Level of agreement: 100% for 7/25 items and discrepancies between minor errors and no error 13/25 and discrepancies between minor errors/no error and major errors 5/25 and significative discrepancies for 6/150 observations (4%) (-)		
Pooled or summary result (overall rating)										6		Use of level of agreement's, doesn't take into account chance(-)		
DOS (2013)										33	Adequate	IR: ICC=0.91 (+)		
Pooled or summary result (overall rating)										33		0.91 (+)		
RODE (2015)										24	Adequate	IR: ICC: 0.84-0.97 (+)		
Pooled or summary result (overall rating)										24		0.84-0.97 (+)		

Note: n: number; IR: inter-rater; ICC: intraclass correlation coefficient

Citation(s)	on(s) Structural validity				Interna	l consistency	Cro	ss-cultural validi invaria	ty/Measurement nce		Reliability			
	n	Meth. Qual.	Results (rating)	n	Meth. Qual.	Results (rating)	n	Meth. Qual.	Results (rating)	n	Meth. Qual.	Results (rating)		
UWO (2016a)														
UWO (2016b)										34	Doubtful	IR: GRS (dich.), $\kappa$ =0.892; GSR (4 levels), $\kappa$ =0.952 PERS, error 1: $\kappa$ =0.888; error 2: $\kappa$ =0.847; error 3: $\kappa$ =0.902 (+)		
Pooled or summary result (overall rating)										34		0.847-0.952 (+)		

Note: n: number;  $\kappa$ : Cohen's kappa; IR: inter-rater; GRS: global rating scale; PERS: priority error rating score