

Table 2. WMS-IV Subtest Input and Output Requirements and Equivalence Evidence

WMS-IV subtest	Input^a	Output^b	Direct evidence^c	Evidence for similar tasks^c
Brief Cognitive Status Exam (BCSE)- Orientation	BSD	OE, BSR	T: D: 3	T: 6, 7, 8, 11-VC; 14-Oral Vocabulary (OV), General Information (GI); 15-Guess What (GW), Verbal Reasoning (VR)
BCSE-Time Estimation	BSD, SS	OE, BSR	T:	T: 4-Picture Naming; 14-OV, GI; 15-GW, VR
BCSE-Mental Control	BSD, SS	OE, SPR	T: D: 3	T: 6, 7, 8, 11-VC; 7, 11-SI; 14-OV, GI; 15-GW, VR
BCSE-Clock Drawing	BSD, RB	WFR	T: 3 D: 3	T: 6, 7, 8, 11-VC; 7, 11-SI; 14-OV, GI
BCSE-Incidental Recall	BSD, SS	OE, SPR	T: D: 3	
BCSE-Inhibition	BSD, GD, PS, SP	SPR	T: D: 3	T: 7-FW; 7, 11-MR; 14-Visualization (VZ); 15-Odd Item Out (OI) D: 1, 2, 3, 4, 5, 6-MR, FW
BCSE-Verbal Production	BSD	SPR, OE, TT,	T: D: 3	T: 7-VP; 14-Concept Formation (CF); 15-OI D: 1, 2, 3, 4, 5, 6: VP, FW
Visual Reproduction I & II (VR I & II)	BSD, PS, RB, SP, TS	IT, WFR	T: D: 3	T: 6, 11-MR; 7-VP; 14-CF; 15-OI; D: 1, 2, 3, 4, 5, 6- VP, MR

WMS-IV subtest	Input^a	Output^b	Direct evidence^c	Evidence for similar tasks^c
Logical Memory I & II (LM I & II)	BSD, SS	SPR, OE	T: 3 D: 3	T: 6, 11-MR; 7-VP; 14-CF; 15-OI D: 1, 2, 3, 4, 5, 6- VP, MR, FW
Spatial Addition (SA)	BSD, CC, MD, PM, PS, TP	IT, GMR	T: 3	T: 8-VC; 14-Applied Problems D: 1, 2, 3, 4, 5, 6
Verbal Paired Associates (VPA I & II)	BSD, SS	BSR, OE, IT	T: 3 D: 3	T: 10-Recalling Sentences (RS); 14-Verbal Attention (VA), Numbers Reversed (NR); 15-Verbal Memory (VM)
Designs I & II	BSD, MD, PM, PS, TP	IT, GMR	T: 3 D: 3	T: 15-Nonverbal Memory (NM)
Symbol Span	BSD, GD, SP, TP	PR, IT	T: 3 D: 3	T: 1, 2, 3, 4, 5, 7, 8, 9, 13-DS; 10-RS; 14-VA, NR; 15-VM D: 1, 2, 3, 4, 5, 6-DS

Note. ^aInput abbreviations are: BSD = Brief spoken directions, CC = Color critical items, GD = Gestured directions, MD = Motor demonstration, PM = Physical manipulatives, PS = Pictorial stimuli, RB = Paper response booklet, SP = Letters, digits, or symbols in print, SS = Spoken stimuli, TP = Timed presentation

^bOutput abbreviations are: BSR = Brief spoken response, GMR = Gross motor response, IT = Item-level time limit, MC = Multiple choice, OE = Open ended, PR = Pointing response, SPR = Spoken response, SWR = Simple written response, TT = Task-level time limit, WFR = Written or fine motor response.

^cCitations appear numbered in the references list. T = telepractice-face-to-face mode equivalence; D = digital-traditional format equivalence. While equivalence data on similar measures are relevant, practitioners should be mindful that more research is needed to establish equivalence in all ages and for all tasks on the WMS-IV.