

Exercise & Recreation for Individuals with a Disability: Assessment and Intervention

Appendix B
Calibration of Instruments

Instrument/ Calibration	Average person measure	Person separation (reliability)	Item separation (reliability)	Step structure	Item fit	Comments
CES-D #1 (10 items)	-.74; well targeted across steps	1.31 (.63)	6.43 (.98)	Inversion in categories 2/3 in rescored items	#5 (REV feel hopeless) misfits (1.49)	Delete #5 and recalibrate
CES-D #2 (9 items)	-.84; targeting unchanged	1.29 (.62)	6.15 (.97)	Inversion in categories 2/3 in rescored item	#8 (REV unhappy) now misfits (1.53)	Delete #8 and recalibrate
CES-D #3 (8 items)	-.86; targeting unchanged	1.33 (.64)	6.63 (.98)	No inversions	No misfit	Best solution but still unacceptable
Katz-P #1 (22 items)	.16; well targeted across steps	1.68 (.74)	11.63 (.99)	No inversions	#22 (go to school) and #2 (gardening) misfit (1.54 and 1.35)	Delete #22 and recalibrate
Katz-P #2 (22 items)	.15; targeting unchanged	1.64 (.73)	12.15 (.99)	No inversions	#2 (gardening) still misfits (1.37)	Separation not improved; retain items
Katz-S #1 (22 items)	-1.10; ceiling effect	2.07 (.81)	4.96 (.96)	No inversions	#4 (radio), #5 (TV), #20 (sit and think) misfit (1.33, 2.07, 1.57)	Recode rating scale (231) to reflect amount desired
Katz-S #2 (22 items)	1.05; targeting unchanged	1.69 (.74)	5.84 (.97)	No inversions	#2 (gardening) misfits (1.53)	Recode scale (321) to reflect increasing satisfaction
Katz-S #3 (22 items)	1.10; targeting unchanged	2.07 (.81)	4.96 (.96)	No inversions	#4 (radio), #5 (TV), #20 (sit and think) still misfit	Recode scale (211) to reflect satisfaction or dissatisfaction
Katz-S #4 (22 items)	-.16; targeting improved	1.87 (.78)	6.50 (.98)	No inversions	No misfit	Best solution; scale makes more sense
LSQ #1 (9 items)	.28; well targeted	1.96 (.79)	8.82 (.99)	No inversions	#2 (able to manage self- care) misfits (1.55)	Delete #2 and recalibrate
LSQ #2 (8 items)	.25; targeting unchanged	1.94 (.79)	9.27 (.99)	No inversions	No misfit	Separation not improved; retain item

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Instrument/ Calibration	Average person measure	Person separation (reliability)	Item separation (reliability)	Step structure	Item fit	Comments
SSEE #1 (12 items)	1.01; ceiling effect	1.89 (.78)	5.95 (.97)	Rescored 11223; no inversions	#1 (get up early to exercise) misfits (1.52)	Delete #1 and recalibrate
SSEE #2 (11 items)	.92; targeting unchanged	1.90 (.78)	3.79 (.93)	No inversions	No misfit	Separation not improved; retain item
SF-36 MWB #1 (14 items)	.71; well targeted across steps	1.97 (.80)	7.25 (.98)	Slight inversion in one item (#4)	#6 (very nervous) misfits (1.60)	Delete #6 and recalibrate
SF-36 MWB #2 (13 items)	.72; targeting unchanged	1.97 (.79)	7.47 (.98)	No inversions	#7 (down in dumps) misfits slightly (1.35)	Separation not improved; retain item
SF-36 PWB #1 (23 items)	.05; well targeted	2.06 (.81)	10.36 (.99)	No inversions	#20 (get sick easily) misfits slightly (1.32)	Delete #16 and #19 and recalibrate
SF-36 PWB #2 (21 items)	-.03; targeting unchanged	2.01 (.80)	10.00 (.99)	No inversions	#20 (get sick easily) and #17 (bodily pain) misfit (1.40 and 1.37)	Separation not improved; retain items