

Supplementary material to article by Å. Lundgren Nilsson and A. Tennant "Past and present issues in Rasch analysis: The Functional Independence Measure (FIM™) revisited"

Table S1. Rasch-based papers for the FIM™

Author, year (reference)	Sample	Number of cases	Measures	Model	Thres-holds	Re-scored	Local depend-ency	DIF	Person fit	Item fit	Unidimens- ionality	Items deleted
Granger et al., 1993 (14)	Mi, O	27,669	T, M, C	NS	NS	NS	NS	Yes	NS	NS	NS	NS
Heinemann et al., 1993 (15)	Mi, O	27,669	T, M, C	NS	NS	NS	NS	Yes	NS	Yes	Yes	NS
Heinemann et al., 1994 (16)	Mi, O	27,669	M, C	RS	NS	NS	NS	Yes	NS	Yes	Yes	NS
Linacre et al., 1994 (8)	Mi	14,799	T, M, C	NS	NS	NS	NS	NS	NS	Yes	NS	NS
Cowen et al., 1995 (17)	Mi, O	45+2,324	M, C	RS	NS	NS	NS	NS	NS	NS	NS	NS
Fisher et al., 1995 (18)	Mi	54	M	RS	NS	NS	NS	NS	NS	NS	NS	NS
Chang & Chang, 1995 (19)	S	99	M	MF	NS	NS	NS	NS	NS	Yes	NS	NS
Tsuji et al., 1995 (20)	S	190	M, C	NS	NS	NS	NS	NS	NS	Yes	NS	NS
Grimby et al., 1996 (21)	Mi	312	M, C	RS	NS	NS	NS	NS	NS	NS	NS	NS
Stineman et al., 1996 (22)	Mi	93,829	T	NS	NS	Yes	NS	NS	NS	NS	NS	NS
Grimby et al., 1996 (23)	O	73	M+7 new items	RS	Yes	Yes	NS	Yes	Yes	Yes	Yes	Yes
Pollak et al., 1996 (24)	O	49	M, C	RS	NS	NS	NS	NS	Yes	Yes	Yes	NS
Stineman et al., 1996 (25)	Mi	32,494	M	NS	NS	NS	NS	NS	NS	NS	NS	NS
Werner & Kessler, 1996 (26)	S	49	M	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chang et al., 1997 (27)	O	132	M, C	RS	NS	Yes	Yes	NS	Yes	NS	Yes	Yes
Chang & Chan, 1997 (28)	O	132	M	MF	NS	NS	NS	NS	NS	NS	NS	NS
Meythaler, 1997 (29)	Mi	39	M, C	NS	NS	NS	NS	NS	NS	NS	NS	NS
Grimby et al., 1998 (30)	S	68	M, C+7 new items	RS	NS	NS	NS	Yes	Yes	Yes	Yes	Yes
Meythaler et al., 1998 (31)	Mi	56	M, C	NS	NS	NS	NS	NS	NS	NS	NS	NS
Leonard et al., 1998 (32)	S	68	M, C	NS	NS	NS	NS	NS	NS	NS	NS	NS
Harvey et al., 1998, (33)	S	945	M	NS	NS	NS	NS	NS	NS	NS	NS	NS
Roth et al., 1998 (34)	S	402	M, C	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tesio & Cantagallo, 1998 (35)	TBI	60	T	RS	Yes	Yes	NS	NS	Yes	Yes	NS	Yes
Linacre, 1998 (36)	Mi	6,144	T	NS	NS	NS	NS	NS	NS	NS	NS	NS
Granger et al., 1998 (37)	O	6,645	T	RS	NS	NS	NS	NS	NS	NS	NS	NS
Tsuji et al., 1999 (38)	O	225	T, M, C	NS	NS	NS	NS	NS	NS	Yes	Yes	NS
Hawley et al., 1999 (39)	TBI	652	FIM+FAM	PC	Yes	NS	NS	NS	Yes	Yes	Yes	NS
Linn et al., 1999 (40)	S	376	M, C	RS	NS	NS	NS	NS	NS	Yes	NS	NS
Dijkers et al., 1999 (41)	SCI	4,128	M	RS	NS	NS	NS	NS	NS	NS	NS	NS
Granger & Linn, 2000 (42)	Mi, O	1,000	M, C	NS	NS	NS	NS	NS	NS	NS	NS	NS
Linacre, 2000 (43)	SCI	407	M	NS	Yes	NS	NS	NS	NS	NS	NS	NS
Küçükdeveci et al., 2001 (44)	S, SCI	103	M, C	PC	NS	NS	NS	NS	NS	Yes	NS	NS
Chira-Adisai et al., 2001 (45)	S	30	M	U	U	U	U	U	U	U	U	U
Chen et al., 2002 (46)	Mi	1,976	T, M, C+ Subdo- mains	RS	Yes	NS	NS	NS	NS	Yes	Yes	NS
Brock et al., 2002 (47)	S	106	M	NS	NS	NS	NS	NS	Yes	NS	Yes	NS
Dijkers, 2003 (48)	SCI	17,108	M	RS	NS	NS	NS	NS	NS	NS	NS	NS
Coster et al., 2004 (49)	Mi	477	FIM+	PC	Yes	NS	NS	Yes	Yes	Yes	Yes	Yes
Coster et al., 2004 (50)	Mi	477	M, C	PC	Yes	NS	NS	Yes	Yes	Yes	Yes	Yes
Tennant et al., 2004 (51)	S	989	M	PC	Yes	Yes	NS	Yes	NS	Yes	Yes	Yes
Andren & Grimby, 2004 (52)	Mi	69	M, C	RS	Yes	Yes	NS	NS	No	Yes	NS	NS
Andren & Grimby, 2004 (53)	O	31	M	RS	NS	Yes	NS	NS	No	Yes	NS	Yes
Gauggel et al., 2004 (54)	O	166	M, C	U	U	U	U	U	U	U	U	U
Siebens et al., 2005 (55)	Mi	158	T	PC	NS	NS	NS	NS	NS	NS	NS	NS
Dallmeijer et al., 2005 (65)	S, MS, TBI	533	M, C	RS	Yes	Yes	NS	Yes	Yes	NS	Yes	Yes
Lundgren-Nilsson et al., 2005 (57)	S	895	M, C	PC	Yes	Yes	NS	Yes	Yes	NS	Yes	Yes
Nilsson et al., 2005 (58)	S, SCI	1,660	M, C	RS	Yes	Yes	NS	Yes	Yes	NS	Yes	Yes
News, 2005 (59)	SCI	70	M, C	NS	NS	NS	NS	NS	NS	NS	NS	NS
Sliwa, 2005, (60)	O	129	M, C	RS	NS	NS	NS	NS	NS	NS	NS	NS
Chen et al., 2005 (61)	O	814	T, M	RS	NS	NS	NS	Yes	NS	Yes	Yes	Yes
Odell et al., 2005 (62)	O	101	T, M, C	PC	Yes	Yes	NS	NS	NS	NS	NS	NS
Yamada et al., 2006 (63)	Mi	398, 169, 187, 187	M	NS	NS	NS	NS	NS	Yes	NS	NS	Yes
Koyama et al., 2006 (64)	S	50	M	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lawton et al., 2006 (65)	SCI	647	M, C	PC	Yes	Yes	NS	Yes	NS	Yes	Yes	Yes

Table SI. Rasch-based papers for the FIMTM

Author, year (reference)	Sample	Number of cases	Measures	Model	Thres-holds	Re-scored	Local depend-ency	DIF	Person fit	Item fit	Unidimens- ionality	Items deleted
Lundgren-Nilsson et al., 2006 (66)	S, SCI TBI	417	M, C	PC	Yes	Yes	NS	Yes	NS	Yes	Yes	Yes
Johnston et al., 2006 (67)	TBI	231	FIM+ Other	RS	Yes	NS	NS	NS	Yes	Yes	Yes	Yes
Cantagallo et al., 2006 (68)	TBI	160	M, C	RS	Yes	Yes	NS	Yes	NS	Yes	Yes	Yes
New et al., 2007 (69)	SCI	70	M, C	NS	NS	NS	NS	NS	NS	NS	NS	NS
Veloza et al., 2007 (70)	Mi	236	M	NS	NS	NS	NS	NS	Yes	NS	NS	NS
Tur et al., 2009 (71)	O	134	M, C	PC	Yes	Yes	Yes	Yes	NS	Yes	Yes	No

DIF: differential item functioning; Mi: mixed/other neurological disorders; O: other; S: stroke; TBI: traumatic brain injury; SCI: spinal cord injury; MS: multiple sclerosis; T: total; M: motor; C: cognitive; NS: not stated; RS: Rating Scale; MF: multi-facet; U: unknown; PC: Partial Credit.