Supplementary material

Search PubMed systematic review distal radius#

(#1 AND #2 AND #3 NOT #4) AND (English[Language] OR German[Language] OR Dutch[Language]) AND ("1990"[Publication Date] : "3000"[Publication Date])

#1

activities of daily living[MeSH Terms] OR "activities of daily living"[Text Word] OR "activities of daily life"[Text Word] OR "physical activity"[Text Word] OR "physical function "[Text Word] OR "functional ability"[Text Word] OR "everyday functioning"[Text Word] OR "functional status"[Text Word] OR "function"[Text Word] OR "physical impairment"[Text Word] OR "after hand therapy"[Text Word] OR "Boston questionnaire" [Text Word] OR "Brigham and Women's carpal tunnel questionnaire"[Text Word] OR "DASH"[Text Word] OR "disabilities of arm, shoulder and hand"[Text Word] OR "quick DASH"[Text Word] OR "forearm symptom severity scale"[Text Word] OR "functional index"[Text Word] OR "Gartland and Werley scoring system"[Text Word] OR "Green and O'Brien"[Text Word] OR "Michigan Hand outcomes Questionnaire"[Text Word] OR "MHQ"[Text Word] OR "New York Orthopedic Hospital wrist rating system"[Text Word] OR "patient focused wrist outcome"[Text Word] OR "patient outcomes of surgery-hand/arm"[Text Word] OR "POS-hand/arm"[Text Word] OR "patient rated wrist evaluation"[Text Word] OR " PRWE"[Text Word] OR "sequential occupational dexterity assessment"[Text Word] OR "SODA"[Text Word]

#2

radius fractures[MeSH Terms] OR colles' fracture[MeSH Terms] OR "radius fractures"[Text Word] OR "colles's fracture"[Text Word] OR "colles' fracture"[Text Word] OR "colles fracture"[Text Word] OR "distal radius fracture"[Text Word] OR "wrist fracture"[Text Word] OR "antebrachial fracture"[Text Word] OR "distal radial fracture"[Text Word] OR "radial fracture"[Text Word] OR "forearm fracture"[Text Word] OR "fore-arm fracture"[Text Word] OR "distal fore-arm fracture"[Text Word] OR "smith fracture"[Text Word] OR "smith's fracture"[Text Word] OR "smiths fracture"[Text Word] OR "barton's fracture"[Text Word] OR "barton fracture"[Text Word] OR "bartons fracture"[Text Word] OR "chauffeur fracture"[Text Word] OR "chauffeurs fracture"[Text Word] OR "chauffeur's fracture"[Text Word]

#3

(instrumentation[sh] OR methods[sh] OR "Validation Studies"[pt] OR "Comparative Study"[pt] OR "psychometrics" [MeSH] OR psychometr*[tiab] OR clinimetr*[tw] OR clinometr*[tw] OR "outcome assessment (health care)"[MeSH] OR "outcome assessment"[tiab] OR "outcome measure*"[tw] OR "observer variation"[MeSH] OR "observer variation"[tiab] OR "Health Status Indicators"[Mesh] OR "reproducibility of results"[MeSH] OR reproducib* [tiab] OR "discriminant analysis"[MeSH] OR reliab*[tiab] OR unreliab*[tiab] OR valid*[tiab]OR"coefficientofvariation"[tiab]ORcoefficient[tiab] OR homogeneity[tiab] OR homogeneous[tiab] OR "internal consistency"[tiab] OR (cronbach*[tiab] AND (alpha[tiab] OR alphas[tiab])) OR (item[tiab] AND (correlation*[tiab] OR selection*[tiab] OR reduction*[tiab])) OR agreement[tw] OR precision[tw] OR imprecision[tw] OR "precise values"[tw] OR test-retest[tiab] OR (test[tiab] AND retest[tiab]) OR (reliab*[tiab] AND (test[tiab] OR retest[tiab])) OR stability[tiab] OR interrater[tiab] OR inter-rater[tiab] OR intrarater[tiab] OR intra-rater[tiab] OR intertester[tiab] OR inter-tester[tiab] OR intratester[tiab] OR intra-tester[tiab] OR interobserver[tiab] OR inter-observer[tiab] OR intraobserver[tiab] OR intra-observer[tiab] OR intertechnician[tiab] OR inter-technician [tiab] OR intratechnician[tiab] OR intra-technician[tiab] OR interexaminer[tiab] OR inter-examiner[tiab] OR intraexamine r[tiab] OR intra-examiner[tiab] OR interassay [tiab] OR inter-assay[tiab] OR intraassay[tiab] OR intra-assay[tiab] OR interindividual[tiab] OR inter-individual [tiab] OR intraindividual[tiab] OR intra-individual[tiab] OR interparticipant[tiab] OR inter-participant[tiab] OR intraparticipant[tiab] OR intra-participant[tiab] OR kappa [tiab] OR kappa's[tiab] OR kappas[tiab] OR repeatab*[tw] OR ((replicab*[tw] OR repeated[tw]) AND (measure[tw] OR measures[tw] OR findings[tw] OR result[tw] OR results[tw] OR test[tw] OR tests[tw])) OR generaliza*[tiab] OR generalisa*[tiab] OR concordance[tiab] OR (intraclass[tiab] AND correlation*[tiab]) OR discriminative[tiab] OR "known group"[tiab] OR "factor analysis"[tiab] OR "factor analyses"[tiab] OR "factor structure"[tiab] OR "factor structures"[tiab] OR dimension*[tiab] OR subscale*[tiab] OR (multitrait[tiab] AND scaling[tiab] AND (analysis[tiab] OR analyses[tiab])) OR "item discriminant"[tiab] OR "interscale correlation*"[tiab] OR error[tiab] OR errors[tiab] OR "individual variability"[tiab] OR "interval variability"[tiab] OR "rate variability"[tiab] OR (variability[tiab] AND (analysis[tiab] OR values[tiab])) OR (uncertainty[tiab] AND (measurement [tiab] OR measuring[tiab])) OR "standard error of measurement" [tiab] OR sensitiv*[tiab] OR responsive*[tiab] OR (limit[tiab] AND detection[tiab]) OR "minimal detectable concentration"[tiab] OR interpretab*[tiab] OR ((minimal[tiab] OR minimally[tiab] OR clinical[tiab] OR clinically[tiab]) AND (important[tiab] OR significant[tiab] OR detectable[tiab]) AND (change[tiab] OR difference[tiab])) OR (small*[tiab] AND (real[tiab] OR detectable[tiab]) AND (change[tiab] OR difference[tiab])) OR "meaningful change"[tiab] OR "ceiling effect"[tiab] OR "floor effect"[tiab] OR "Item response model"[tiab] OR IRT[tiab] OR Rasch[tiab] OR "Differential item functioning"[tiab] OR DIF[tiab] OR "computer adaptive testing"[tiab] OR "item bank"[tiab] OR "cross-cultural equivalence"[tiab])

#4 (NOT)

("addresses"[Publication Type] OR "biography" [Publication Type] OR "case reports"[Publication Type] OR

"comment"[Publication Type] OR "directory"[Publication Type] OR "editorial"[Publication Type] OR "festschrift"[Publication Type] OR "interview"[Publication Type] OR "lectures"[Publication Type] OR "legal cases"[Publication Type] OR "legislation"[Publication Type] OR "letter"[Publication Type] OR "news"[Publication Type] OR "newspaper article"[Publication Type] OR "patient education handout"[Publication Type] OR "popular works"[Publication Type] OR "congresses"[Publication Type] OR "consensus development conference"[Publication Type] OR "consensus development conference, nih"[Publication Type] OR "practice guideline"[Publication Type]) NOT ("animals"[MeSH Terms] NOT "humans"[MeSH Terms])

Search EMbase systematic review distal radius# (597 hits)

Limits:
Publication Date (1990-present)
Language: (English, Dutch, German)

#1
exp recreation/ OR exp daily life activity/ OR exp physical capacity/ OR activities of daily living OR activities of daily life OR physical activity OR physical function OR functional ability OR everyday functioning OR functional status OR function OR physical impairment OR after hand therapy OR Boston questionnaire OR Brigham Womens carpal tunnel questionnaire OR DASH OR quick DASH OR forearm symptom severity scale OR functional index OR Gartland Werley scoring system OR Green Brien OR Michigan Hand outcomes Questionnaire OR MHQ OR New York Orthopedic Hospital wrist rating system OR patient focused wrist outcome OR patient outcomes of surgery-hand/arm OR POS-hand/arm OR patient rated wrist evaluation OR PRWE OR sequential occupational dexterity assessment OR SODA

#2
exp radius fracture/ OR exp colles fracture/ OR exp forearm fracture/ OR exp wrist fracture/ OR radius fracture* OR colles fracture* OR distal radius fracture OR wrist fracture* OR antebrachial fracture* OR radial fracture* OR forearm fracture* OR smith fracture* OR smiths fracture* OR barton fracture* OR bartons fracture* OR chauffeur fracture* OR chauffeurs fracture*

#3
(instrumentation OR methods OR Validation Studies OR Comparative Study OR psychometrics OR psychometr* OR clinimetr* OR clinometr* OR outcome assessment OR "outcome assessment" OR outcome measure* OR "observer variation" OR observer variation OR "Health Status Indicators" OR "reproducibility of results" OR reproducib* OR "discriminant analysis" OR reliab* OR unreliab* OR valid* OR coefficient OR homogeneity OR homogeneous OR "internal consistency" OR (cronbach* AND (alpha OR alphas)) OR (item AND (correlation* OR selection* OR reduction*)) OR agreement OR precision OR imprecision OR "precise values" OR test-retest OR (test AND retest) OR (reliab* AND (test OR retest)) OR stability OR interrater OR inter-rater OR intrarater OR intra-rater OR intertester OR inter-tester OR intratester OR intra-tester OR interobserver OR inter-observer OR intraobserver OR intraobserver OR intertechnician OR inter-technician OR intratechnician OR intra-technician OR interexaminer OR inter-examiner OR intraexaminer OR intra-examiner OR interassay OR inter-assay OR intraassay OR intra-assay OR interindividual OR inter-individual OR intraindividual OR intra-individual OR interparticipant OR inter-participant OR intraparticipant OR intra-participant OR kappa OR repeatab* OR ((replicab* OR repeated) AND (measure OR measures OR findings OR result OR results OR test OR tests)) OR generaliza* OR generalisa* OR concordance OR (intraclass AND correlation*) OR discriminative OR "known group" OR factor analysis OR factor analyses OR dimension* OR subscale* OR (multitrait AND scaling AND (analysis OR analyses)) OR item discriminant OR interscale correlation* OR error OR errors OR "individual variability" OR (variability AND (analysis OR values)) OR (uncertainty AND (measurement OR measuring)) OR "standard error of measurement" OR sensitiv* OR responsive* OR ((minimal OR minimally OR clinical OR clinically) AND (important OR significant OR detectable) AND (changeOR difference)) OR (small* AND (real OR detectable) AND (change OR difference)) OR meaningful change OR "ceiling effect" OR "floor effect" OR "Item response model" OR IRT OR Rasch OR "Differential item functioning" OR DIF OR "computer adaptive testing" OR "item bank" OR "cross-cultural equivalence")

#4 (NOT)
"Not applicable"

Search CINAHL + PsycINFO systematic review distal radius#

Limits: 1990-present
English/Dutch/German

#1
("activities of daily living*" OR "activities of daily life*" OR "physical activity*" OR "physical function*" OR "functional ability*" OR "everyday functioning*" OR "functional status*" OR "function*" OR "physical impairment*" OR "after hand therapy*" OR "Boston questionnaire*" OR "Brigham and Womens* carpal tunnel questionnaire*" OR "DASH" OR "disabilities of arm, shoulder and hand" OR "quick DASH" OR "forearm symptom severity scale*" OR "functional index*" OR "Gartland and Werley scoring system" OR "Green and Brien" OR "Michigan Hand outcomes Questionnaire" OR "MHQ" OR "New York Orthopedic Hospital wrist rating system" OR "patient focused wrist outcome" OR "patient outcomes of surgery-hand/arm" OR "POS-hand/arm" OR "patient rated wrist evaluation" OR " PRWE" OR "sequential occupational dexterity assessment" OR "SODA")

#2
("radius fracture*" OR "colles fracture*" OR "distal radius fracture" OR "wrist fracture*" OR "antebrachial fracture*" OR "distal radial fracture" OR "radial fracture" OR "forearm fracture*" OR "smith fracture*" OR "smiths fracture*" OR "barton fracture*" OR "bartons fracture*" OR "chauffeur fracture*" OR "chauffeurs fracture*")

#3
((instrumentation OR methods OR Validation Studies OR Comparative Study OR psychometrics OR psychometr* OR clinimetr* OR clinometr* OR outcome assessment OR "outcome assessment" OR outcome measure* OR "observer variation" OR observer variation OR "Health Status Indicators" OR "reproducibility of results" OR reproducib* OR "discriminant analysis" OR reliab* OR unreliab* OR valid* OR coefficient OR homogeneity OR homogeneous OR "internal consistency" OR (cronbach* AND (alpha OR alphas)) OR (item AND (correlation* OR selection* OR reduction*)) OR agreement OR precision OR imprecision OR "precise values" OR test-retest OR (test AND retest) OR (reliab* AND (test OR retest)) OR stability OR interrater OR inter-rater OR intrarater OR intra-rater OR intertester OR inter-tester OR intratester OR intra-tester OR interobserver OR inter-observer OR intraobserver OR intraobserver OR intertechnician OR inter-technician OR intratechnician OR intra-technician OR interexaminer OR inter-examiner OR intraexaminer OR intra-examiner OR interassay OR inter-assay OR intraassay OR intra-assay OR interindividual OR inter-individual OR intraindividual OR intra-individual OR interparticipant OR inter-participant OR intraparticipant OR intra-participant OR kappa OR repeatab* OR ((replicab* OR repeated) AND (measure OR measures OR findings OR result OR results OR test OR tests)) OR generaliza* OR generalisa* OR concordance OR (intraclass AND correlation*) OR discriminative OR "known group" OR factor analysis OR factor analyses OR dimension* OR subscale* OR (multitrait AND scaling AND (analysis OR analyses)) OR item discriminant OR interscale correlation* OR error OR errors OR "individual variability" OR (variability AND (analysis OR values)) OR (uncertainty AND (measurement OR measuring)) OR "standard error of measurement" OR sensitiv* OR responsive* OR ((minimal OR minimally OR clinical OR clinically) AND (important OR significant OR detectable) AND (changeOR difference)) OR (small* AND (real OR detectable) AND (change OR difference)) OR meaningful change OR "ceiling effect" OR "floor effect" OR "Item response model" OR IRT OR Rasch OR "Differential item functioning" OR DIF OR "computer adaptive testing" OR "item bank" OR "cross-cultural equivalence"))

#4 (NOT)
((addresses OR biography OR "case reports" OR comment OR directory OR editorial OR festschrift OR interview OR lectures OR "legal cases" OR legislation OR letter OR news OR "newspaper article" OR "patient education handout" OR "popular works" OR congresses OR "consensus development conference" OR "consensus development conference", nih OR practice guideline) NOT (animals NOT humans))

Table i.[1-12].

	PRWE[1]	PRWE[2]	PRWE[3]	PRWE[4]	PRWE[5]	PRWE[6]	PRWE[7]	PRWE[8]	PRWE[9]	PRWE[10]	DASH[4]	DASH[11]	DASH[12]	DASH[6]
Generalisability	Fair	Fair	Fair	Poor	Fair	Excel	Poor	Fair	Fair	Fair	Poor	Fair	Good	Excel
Median or mean age	4	4	3	4	4	4	4	4	4	4	4	4	4	4
Distribution of gender	4	4	2	4	4	4	4	4	4	4	4	4	4	4
Disease character	2	2	2	4	4	4	2	2	4	4	4	4	4	4
Setting described	2	4	4	4	4	4	4	4	4	4	4	2	4	4
Countries performed	4	4	4	3	4	4	4	4	4	4	3	3	3	4
Language	3	4	3	3	4	4	4	4	4	4	3	4	4	4
Selecting patients	2	2	4	1	2	4	1	4	4	4	1	4	4	4
Response rate	2	2	3	2	2	4	2	2	2	2	2	4	4	4
InternalConsistency	Poor	Poor			Fair	Poor	Poor	Poor	Poor	Poor		Poor	Poor	Poor
% missing items	4	3			4	3	3	3	3	4		4	3	3
Handling items	2	2			4	2	2	4	2	4		3	2	2
Sample size	4	2			3	1	3	3	3	4		4	3	1
Factor analysis	1	1			2	1	1	1	1	1		1	1	1
Sample factor analysis	n/a	n/a			n/a	n/a	n/a	n/a	n/a	3		n/a	n/a	n/a
Statistic subscales	n/a	n/a			n/a	n/a	n/a	n/a	n/a	3		n/a	n/a	n/a
Flaws in design	4	4			4	4	4	4	4	4		4	4	4
Cronbach's alpha	1	4			4	4	4	4	4	4		4	4	4
Dichotomous scores	n/a	n/a			n/a	n/a	n/a	n/a	n/a	n/a		n/a	n/a	n/a
Chi-squared reliability coefficient	n/a	n/a			n/a	n/a	n/a	n/a	n/a	n/a		n/a	n/a	n/a
Reliability		Fair	Poor		Fair	Poor	Fair	Poor	Fair				Fair	Poor
% missing items		3	3		4	3	3	3	3	4			3	3
Handling items		2	2		4	2	2	4	2	4			2	2
Sample size		2	1		2	1	3	1	3	4			3	1
Two measurements		4	4		4	4	4	4	4	4			4	4
Independent admin		3	4		2	4	3	4	4	4			4	4
Time interval stated		4	4		4	4	4	4	4	4			4	4

(continued)

Table i. (continued)

	PRWE[1]	PRWE[2]	PRWE[3]	PRWE[4]	PRWE[5]	PRWE[6]	PRWE[7]	PRWE[8]	PRWE[9]	PRWE[10]	DASH[4]	DASH[11]	DASH[12]	DASH[6]
Patients stable		2	4		2	3	3	3	3	1			3	3
Time interval		4	4		2	4	4	4	4	1			4	4
Conditions similar		3	2		3	4	4	1	2	3			3	4
Flaws in design		4	4		4	4	4	4	4	4			4	4
Intraclass correlation coefficient		4	4		3	4	4	4	4	n/a			4	4
Kappa*		n/a	n/a		n/a	n/a	n/a	n/a	n/a	n/a			n/a	n/a
MeasurementError#									Fair	Poor				
Standard error of the mean/smallest detectable change									4	1				
Content validity (box D)			Fair					Good						
Relevance construct			4					4						
Relevance population			2					3						
Relevance purpose			4					4						
comprehensive			4					4						
Flaws in design			4					4						
Hypotheses testing		Fair			Good		Fair	Fair	Poor			Fair		
% missing items		3			4		3	3	3			4		
Handling items		2			4		2	4	2			2		
Sample size		2			3		3	3	3			4		
Hypotheses *a priori*		4			4		4	4	1			4		
Direction correlation		4			4		4	4	3			4		
Magnitude correlation		3			3		4	3	3			4		
Comparator instrument		4			4		4	4	4			4		

PRWE, patient-related wrist evaluation; DASH, Disabilities of the Arm, Shoulder and Hand

Table ii. Methodological quality of the studies on measurement properties. 4=excellent, 3=good, 2=fair, 1=poor, n/a=not applicable, Excel = excellent[1-10].

	PRWE[1]	PRWE[2]	PRWE[3]	PRWE[4]	PRWE[5]	PRWE[6]	PRWE[7]	PRWE[8]	PRWE[9]	PRWE[10]	DASH[4]	DASH[36]	DASH[48]	DASH[34]
Properties comparator		3			4		4	2	2			2		
Flaws in design		4			4		4	4	4			4		
Statistical methods		3			3		4	3	3			4		
Cross-cultural					Fair		Poor	Poor	Poor					
% missing items					4		3	3	3					
Handling items					4		2	4	2					
Sample size					3		1	1	1					
Both languages					4		4	4	4					
Expertise adequate					3		4	4	4					
Translators indepent					3		4	1	4					
Forward/backward					4		4	1	4					
Difference resolving					4		4	4	3					
Review committee					4		4	3	4					
Instrument pre-tested					4		2	4	4					
Sample pre-test					2		4	4	4					
Samples similar					3		4	4	3					
Flaws in design					4		4	4	4					
Confirm analysis					n/a		1	1	1					
Differential function					n/a		n/a	n/a	n/a					
Responsiveness			Fair	Fair	Fair		Fair	Fair	Poor		Fair		Fair	
% missing items			3	3	4		3	3	3		3		3	
Handling items			2	2	4		2	4	2		2		2	
Sample size			4	3	3		3	3	3		3		3	
Two measurements			4	4	4		4	4	4		4		4	
Time interval stated			4	4	4		4	4	4		4		4	
Anything occurred			3	3	2		2	3	2		3		2	
Patient changed			3	3	2		3	3	3		3		3	
Hypotheses *a priori*			4	n/a	n/a		4	4	1		n/a		n/a	
Direction correlation			4	n/a	n/a		4	4	3		n/a		n/a	
Magnitude correlation			3	n/a	n/a		4	3	3		n/a		n/a	
Comparator instrument			2	n/a	n/a		4	4	4		n/a		n/a	
Properties comparator			4	n/a	n/a		4	2	4		n/a		n/a	
Flaws in design			4	n/a	n/a		4	4	4		n/a		n/a	
Statistical methods			4	n/a	n/a		2	2	1		n/a		n/a	
Benchmark			n/a	n/a	n/a		n/a	n/a	n/a		n/a		n/a	
Flaws in design			n/a	n/a	n/a		n/a	n/a	n/a		n/a		n/a	
Area under the curve calculated			n/a	n/a	n/a		n/a	n/a	n/a		n/a		n/a	

(continued)

Table ii. (continued)

	PRWE[1]	PRWE[2]	PRWE[3]	PRWE[4]	PRWE[5]	PRWE[6]	PRWE[7]	PRWE[8]	PRWE[9]	PRWE[10]	DASH[4]	DASH[36]	DASH[48]	DASH[34]
Sensitivity/specificity			n/a	n/a	n/a		n/a	n/a	n/a		n/a		n/a	
Interpretability					Poor				Poor		Poor	Poor		
% missing items					4				3		3	4		
Handling items					4				2		4	4		
Sample size					3				3		3	4		
Distribution total score					4				4		2	4		
Floor effect					4				4		4	1		
Ceiling effect					4				4		4	1		
Change scores					4				4		2	4		
MIC					1				1		1	4		
Flaws in design					4				4		4	4		

PRWE, patient-related wrist evaluation; DASH, Disabilities of the Arm, Shoulder and Hand.

Table iii. Methodological quality of the studies on measurement properties. 4=excellent, 3=good, 2=fair, 1=poor, n/a=not applicable, Excel = excellent.*Could not be determined due to high ceiling effect; # The first ten questions of the measurement property reliability and measurement error are the same[4,6,13-19].

	MHQ[13]	MHQ[14]	MHQ[15]	SF36[4]	SF36[16]	PEM[17]	IOF[18]	PFW[19]	AIMS2[16]	BWH[16]	TSK[6]	CAT[6]	SES[6]
Generalisability	Fair	Fair	Poor	Poor	Fair	Poor	Fair	Fair	Fair	Fair	Excel	Excel	Excel
Median or mean age	4	4	1	4	4	4	4	4	4	4	4	4	4
Distribution of gender	4	4	1	4	4	4	4	4	4	4	4	4	4
Disease character	4	2	1	4	2	2	4	2	2	2	4	4	4
Setting described	4	4	4	4	4	1	4	4	4	4	4	4	4
Countries performed	3	4	4	3	3	3	4	4	3	3	4	4	4
Language	4	4	3	3	3	3	3	4	3	3	4	4	4
Selecting patients	4	2	1	1	4	2	2	4	4	4	4	4	4
Response rate	2	2	2	2	2	2	2	3	2	2	4	4	4
Internal Consistency						Poor	Poor				Poor	Poor	Poor
% missing items						3	3				3	3	3
Handling items						2	4				2	2	2
Sample size						4	4				1	1	1
Factor analysis						1	1				1	1	1
Sample factor analysis						n/a	n/a				n/a	n/a	n/a
Statistic subscales						n/a	n/a				4	4	4
Flaws in design						4	4				4	4	4
Cronbach's alpha						4	4				4	4	4
Dichotomous scores						n/a	n/a				n/a	n/a	n/a
chi-squared reliability coefficient						n/a	n/a				n/a	n/a	n/a
Reliability							Poor				Poor	Poor	Poor
% missing items							3				3	3	3
Handling items							4				2	2	2
Sample size							1				1	1	1
Two measurements							4				4	4	4
Independent admin							4				4	4	4
Time interval stated							4				4	4	4
Patients stable							3				3	3	3
Time interval							4				4	4	4
Conditions similar							3				4	4	4
Flaws in design							4				4	4	4
Intraclass correlation coefficient							n/a				4	4	4
Kappa							n/a				n/a	n/a	n/a
Weighted K							n/a				n/a	n/a	n/a
Weighting scheme							n/a				n/a	n/a	n/a
Content validity													
Relevance construct													
Relevance population													
Relevance purpose comprehensive													
Flaws in design													
Hypotheses testing						Poor		Poor					
% missing items						3		3					
Handling items						2		2					

(continued)

Table iii. (continued)

	MHQ[13]	MHQ[14]	MHQ[15]	SF36[4]	SF36[16]	PEM[17]	IOF[18]	PFW[19]	AIMS2[16]	BWH[16]	TSK[6]	CAT[6]	SES[6]
Sample size						4		1					
Hypotheses *a priori*						1		4					
Direction correlation						3		4					
Magnitude correlation						3		4					
Comparator instrument						1		4					

PRWE, Patient-Rated Wrist Evaluation; DASH, Disabilities of Arm, Shoulder and Hand; MHQ, Michigan Hand Questionnaire; SF-36, Short Form-36; PEM, Patient Evaluation Measure; AIMS2, Arthritis Impact Measurement Scale; BWH-CTQ, Brigham and Women's Hospital Carpal Tunnel Questionnaire; IOF-WFQ International Osteoporosis Foundation Wrist Fracture Questionnaire; PFW, Patient Focused Wrist Outcome Instrument; TSK, Tampa Scale of Kinesophobia; CAT, Catastrophizing Subscale of the Coping Strategies Questionnaire; SES Self-Efficacy Scale

Table iv. Methodological quality of the studies on measurement properties. 4=excellent, 3=good, 2=fair, 1=poor, n/a=not applicable, Excel = excellent[4,6,16,18-23]

	MHQ[19]	MHQ[20]	MHQ[21]	SF36[4]	SF36[16]	PEM[22]	IOF[18]	PFW[23]	AIMS2[16]	BWH[16]	TSK[6]	CAT[6]	SES[6]
Properties comparator						1		3					
Flaws in design						4		4					
Statistical methods						3		3					
Cross cultural													
% missing items													
Handling items													
Sample size													
Both languages													
Expertise adequate													
Translators independent													
Forward/backward													
Difference resolving													
Review committee													
Instrument re-tested													
Sample pre-test													
Samples similar													
Flaws in design													
Confirm analysis													
Differential function													
Responsiveness	Fair	Fair	Fair	Fair	Poor		Fair	Poor	Poor	Poor			
% missing items	3	3	3	3	3		3	3	3	3			
Handling items	2	2	2	2	2		4	2	2	2			
Sample size	2	3	3	3	1		3	1	1	1			
Two measurements	4	4	4	4	4		4	4	4	4			
Time interval stated	4	4	4	4	4		4	4	4	4			
Anything occurred	3	2	2	3	2		2	3	2	2			
Patient changed	3	3	4	3	3		3	3	3	3			
Hypotheses *a priori*	n/a	n/a	4	n/a	n/a		n/a	4	n/a	n/a			
Direction correlation	n/a	n/a	4	n/a	n/a		n/a	4	n/a	n/a			
Magnitude correlation	n/a	n/a	3	n/a	n/a		n/a	4	n/a	n/a			
Comparator instrument	n/a	n/a	4	n/a	n/a		n/a	4	n/a	n/a			
Properties comparator	n/a	n/a	4	n/a	n/a		n/a	4	n/a	n/a			
Flaws in design	n/a	n/a	4	n/a	n/a		n/a	4	n/a	n/a			
Statistical methods	n/a	n/a	3	n/a	n/a		n/a	4	n/a	n/a			
Gold standard	n/a	n/a	n/a	n/a	n/a		n/a	n/a	n/a	n/a			
Flaws in design	n/a	n/a	n/a	n/a	n/a		n/a	n/a	n/a	n/a			
Area under the cruve calculated	n/a	n/a	n/a	n/a	n/a		n/a	n/a	n/a	n/a			
Sensitivity/Specificity	n/a	n/a	n/a	n/a	n/a		n/a	n/a	n/a	n/a			
Interpretability													
% missing items		3											
Handling items		2											
Sample size		3											
Distribution total score		4											
Floor effect		3											
Ceiling effect		4											
Change scores		4											
Minimal important change		4*											
Flaws in design		2											

PRWE, Patient-Rated Wrist Evaluation; DASH, Disabilities of Arm, Shoulder and Hand; MHQ, Michigan Hand Questionnaire; SF-36, Short Form-36; PEM, Patient Evaluation Measure; AIMS2, Arthritis Impact Measurement Scale; BWH-CTQ, Brigham and Women's Hospital Carpal Tunnel Questionnaire; IOF-WFQ International Osteoporosis Foundation Wrist Fracture Questionnaire; PFW, Patient Focused Wrist Outcome Instrument; TSK, Tampa Scale of Kinesophobia; CAT, Catastrophizing Subscale of the Coping Strategies Questionnaire; SES Self-Efficacy Scale

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