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Appendix 1 – Tables A1 and A2

Table A1. Analysis of Linking Assumptions for KOOS₅, IKDC

	KOOS ₅ , IKDC-SKF <i>r</i>	REMSD		Unidimensionality Indices					
		Age	Sex	KOOS ₅			IKDC-SKF		
				EV Ratio	ECV	ω _h	EV Ratio	ECV	ω _h
Pre-Op	.85	.020	.004	6.9	.63	.80	3.6	.57	.63
1 Year	.89	.034	.012						
2 Years	.91	.030	.017	6.8	.64	.79	5.4	.69	.74
5 Years	.94	.054	.001						
6 Years	.91	.017	.027	7.3	.67	.81	6.1	.71	.75

KOOS₅=average of 5 subscales of the Knee Injury Osteoarthritis Outcomes Survey, IKDC-

SKF=International Knee Documentation Committee-Subjective Knee Form, REMSD = Root

Expected Mean Squared Difference, *r*= correlation coefficient, EV= eigenvalue, ECV=

explained common variance, ω_h= omega hierarchical. Correlations and REMSD values were

examining in the training dataset. Unidimensional indices were examined in a subset of the

MOON cohort for which item data were available.

Table A2. Analysis of Linking Assumptions for KOOS₄

	KOOS ₄ , IKDC-SKF <i>r</i>	REMSD		Unidimensionality Indices		
		Age	Sex	EV Ratio	ECV	ω_h
Pre-Op	.84	.014	.001	4.5	.55	.74
1 Year	.89	.040	.008			
2				7.0	.70	.81
Years	.91	.034	.015			
5						
Years	.94	.063	.003			
6				8.1	.73	.84
Years	.91	.023	.024			

KOOS₄=average of 4 subscales of the Knee Injury Osteoarthritis Outcomes Survey (KOOS-

Activities of Daily Living not included), IKDC-SKF=International Knee Documentation

Committee-Subjective Knee Form, REMSD = Root Expected Mean Squared Difference, *r*=

correlation coefficient, EV= eigenvalue, ECV= explained common variance, ω_h = omega

hierarchical. Correlations and REMSD values were examining in the training dataset.

Unidimensional indices were examined in a subset of the MOON cohort for which item data were available.