

Designing Knee Braces Instrument

Reliability Report

Scales for the Designing Knee Braces (KB) instrument were constructed from a sample of 148 students completing post-assessments (version 7/27/2010). Correct answers to the 19 questions were summed to create an “All” scale. This was tested for internal reliability and found to have a Cronbach’s α of .729 (n=135). Subscales of the KB instrument are presented in the table below.

Scale	N of Students	# Items	Items	Reliability: Cronbach’s α
All	135	19	1-19	.728
Science (Joints, muscles, and bones and their functions)	145	7	2, 4, 6, 8, 10, 15, 17	.552
Biomedical Engineering	144	6	1, 5, 7, 12, 14, 18	.685
Design and Models	138	6	3, 9, 11, 13, 16, 19	.528