

**Multimedia Appendix 3.** Comparison of internal consistencies and the Mokken Scale Analysis between Mobile App Rating Scale in English and other available translations of the scale.

			MARS English	MARS German	MARS Italian	MARS Spanish	MARS Arabic	MARS French	
	Intraclass Correlation (95%CI)		0.79 (0.75-0.83)	0.83 (0.82-0.85)	0.96 (0.93-0.98)	0.96 (0.92-0.98)	0.84 (0.82-0.85)	0.89 (0.80-0.93)	
Internal consistency	Engagement	Cronbach's alpha (95%CI)	0.89		Rater1=0.85 (0.76-0.91) Rater2=0.84 (0.75-0.90)	Rater1=0.88 Rater2=0.87	0.96		
		Omega coefficient (95%CI)		0.84 (0.77-0.88)				0.79 (0.72-0.83)	
	Functionality	Cronbach's alpha (95%CI)	0.80		Rater1=0.77 (0.63-0.87) Rater2=0.87 (0.79-0.92)	Rater1=0.87 Rater2=0.86	0.71		
		Omega coefficient (95%CI)		0.90 (0.85-0.94)				0.79 (0.73-0.85)	
	Esthetics	Cronbach's alpha (95%CI)	0.86		Rater1=0.92 (0.86-0.95) Rater2=0.88 (0.81-0.93)	Rater1=0.86 Rater2=0.77	0.94		
		Omega coefficient (95%CI)		0.91 (0.92-0.96)				0.78 (0.71-0.82)	
	Information quality	Cronbach's alpha (95%CI)	0.81		Rater1=0.73 (0.57-0.84) Rater2=0.71 (0.54-0.83)	Rater1=0.84 Rater2=0.78	0.81		
		Omega coefficient (95%CI)		0.74 (0.14-0.99)				0.61 (0.53-0.65)	
	Total score	Cronbach's alpha (95%CI)	0.85 (0.80-0.89)		Rater1=0.90 (0.85-0.94) Rater2=0.91 (0.87-0.94)	Rater1=0.94 Rater2=0.94			
		Omega coefficient (95%CI)		0.81 (0.74-0.86)				0.86 (0.85-0.90)	
	Subjective quality	Cronbach's alpha (95%CI)	0.93		Rater1=0.95 (0.92-0.97) Rater2=0.93 (0.89-0.96)	Rater1=0.86 Rater2=0.88	0.97		
	Mokken Scale Analysis				H=0.48				H=0.35;
					SE 0.06				SE 0.03
					MS=0.74				MS=0.88
				lambda 2=0.72				lambda 2=0.89	
				LCRC=0.74				LCRC=0.90	