Supplementary 1: Data Collection Sheet Fall

Student Presentation # _____   Evaluator # _____

Instructions: Please circle a number to score for the following 11 objectives, and overall rating of the entire presentation.

Descriptors for the 6-point Scale are: 1=Failing Performance, 2=Substantial Improvement Needed, 2.5=Moderate Improvement Needed, 3=Minor Improvement Needed, 3.5=Meets Expectations, 4=Exceeds Expectations
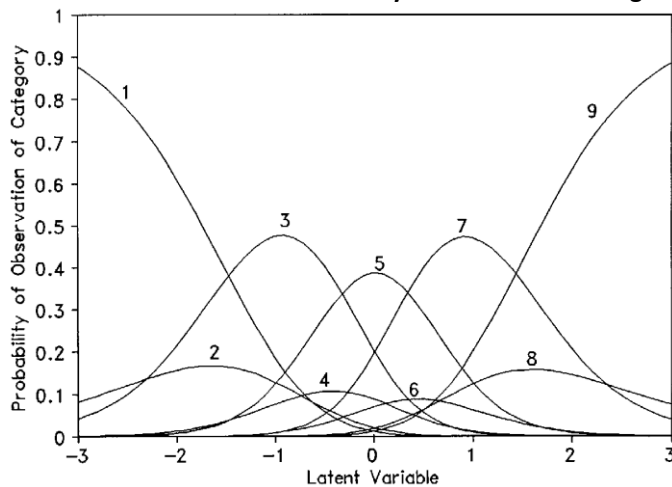Descriptors for the 2-point scale are: 1=unacceptable, 3.5=acceptable
Descriptors for the 4-point scale are: 1= failing/substantial need for improvement, 2=some improvement needed, 3=acceptable, 4=superior

Category	Objective	Score	Comments
Drug Knowledge	Drug Knowledge	1 2 2.5 3 3.5 4	
Disease State Knowledge	Disease State Knowledge	1 2 2.5 3 3.5 4	
Critical Thinking and Problem Solving	Patient Assessment	1 2 2.5 3 3.5 4	
	Therapeutic Plan Development	1 2 2.5 3 3.5 4	
	Evidence-Based	1 2 2.5 3 3.5 4	
Patient Safety	Patient Safety	1 2 2.5 3 3.5 4	
Written Plan and Presentation	Written Communication (SOAP)	1 2 2.5 3 3.5 4	
	Presentation Style	1 2 2.5 3 3.5 4	
Professionalism	Professional Attire/appearance*	1 3.5	
	Respectful Interactions*	1 3.5	
	Confidentiality and HIPPA*	1 3.5	
Global Rating	Overall Rating Score	1 2 3 4	

*Removed from G-Theory analysis (all 3.5 for all students & all cases, so no variance in scoring)
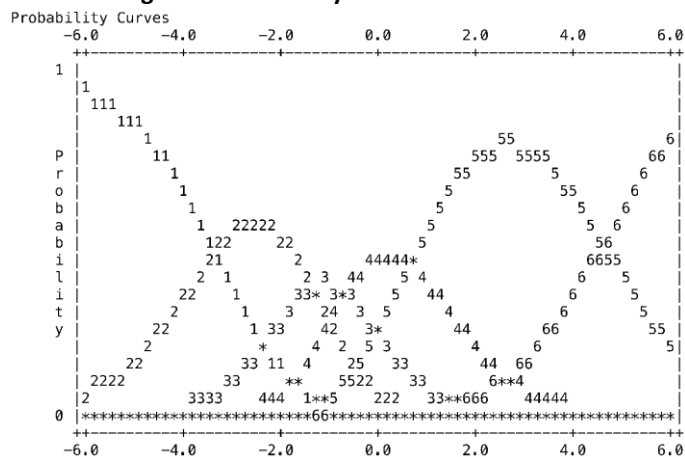
Supplementary 2. Rating-scale Probability Curves within the Rasch Measurement Model

Panel A. Better and Worse Rasch Probability Curves for the Rating-scale
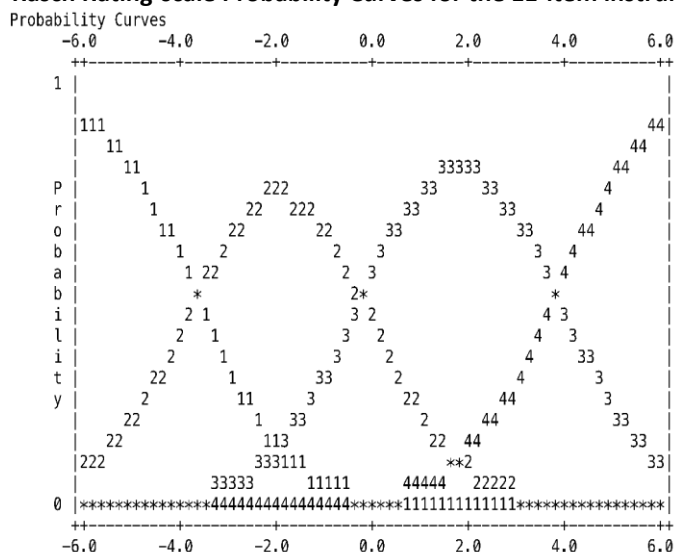

Note: Better = 1, 3, 5, 7, and 9; Worse = 2, 4, 6, and 8
(reprinted with permission from Reference 5)

Panel B. Rasch Rating-scale Probability Curves for the 11-item instrument, with 6-point rating-scale)

Panel C. Rasch Rating-scale Probability Curves for the 11-item instrument, with collapsed 4-point rating-scale)

Supplementary 3. Variance components (with percentage of total variance) from a multivariate G-Theory analysis of PharmD case-presentations.

Facets	Item1	Item2	Item3	Item4	Item5	Item6	Item7	Item8	Global
student	0.17 (31%)	0.21 (36%)	0.08 (15%)	0.1 (20%)	0.09 (17%)	0.15 (26%)	0.12 (22%)	0.15 (30%)	0.1 (30%)
case	0.01 (1%)	0.02 (3%)	0.03 (6%)	0.04 (8%)	0.04 (6%)	0.05 (9%)	0.05 (10%)	0.02 (3%)	0.05 (15%)
rater : case	0.01 (2%)	0 (0%)†	0 (0%)	0 (0%)	0.01 (1%)	0.01 (1%)	0 (0%)	0.01 (2%)	0 (0%)†
student x case	0.17 (32%)	0.16 (27%)	0.2 (38%)	0.14 (28%)	0.16 (28%)	0.16 (27%)	0.15 (27%)	0.13 (25%)	0.09 (28%)
student x rater : case*	0.18 (34%)	0.2 (34%)	0.23 (42%)	0.22 (44%)	0.27 (48%)	0.21 (36%)	0.23 (41%)	0.2 (39%)	0.09 (27%)

x=crossed, :=nested, Global=global-item; *this facet contains residual error; †This variance component was negative, and so reported as zero