



D.C. Certification Network Group

New and Small Certification Programs: Psychometrics and Analyses

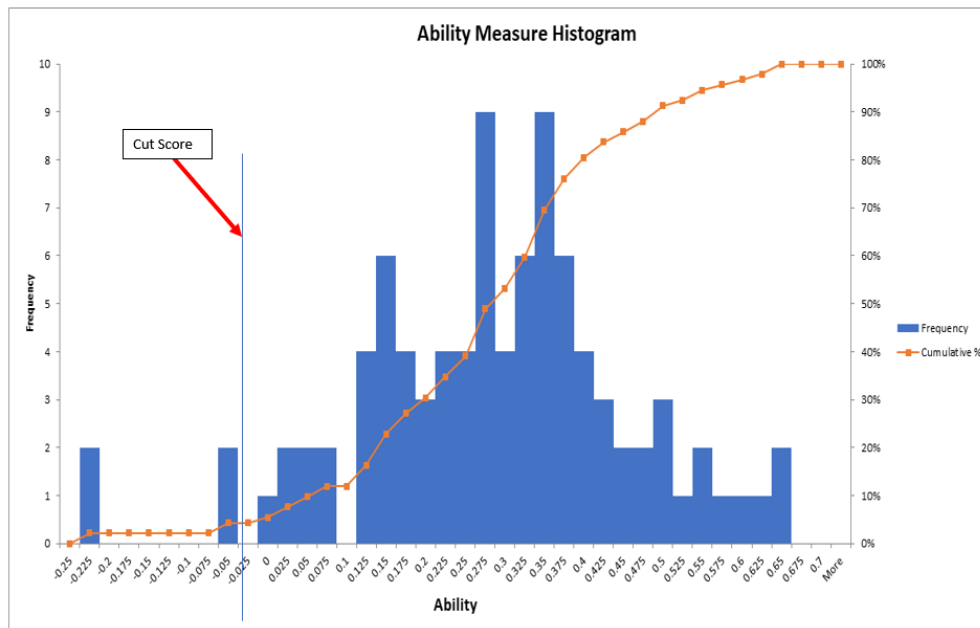
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These basic statistics should be provided annually to your Board, your accreditors, and, perhaps, even to your stakeholders.

[Dates Covered]	Statistic		
Counts	Number of (Total Candidates / First-timers)	/	
	Number of (items administered/scored)	/	
Scores	Scores (Percent Correct / Scaled Score)	Avg	Min
		Max	
Items	P-Value of (All / Scored) Items	/	/
	Point-Biserial of (All / Scored) Items	/	/
Test	Cut Score ¹ (Percent Correct / Scaled Score)	/	
	Percent of (Total / First-timers) Passing	/	
	Reliability		
	Decision Consistency		

¹ Include a description of how the cut score was determined. Conduct a standard setting for new exams; equate subsequent forms.

Graphs are eloquent:



An easy item analysis:

People	Items										# Correct	
	Easiest					Hardest						
	A	B	C	D	E	F	G	H	I	J		
James	1	1	0	1	1	1	1	1	1	1	9	Highest
Maria	1	1	1	1	1	1	0	1	1	0	8	
John	1	1	1	1	0	1	1	1	0	0	7	
David	0	1	1	1	1	1	1	0	0	0	6	
Jane	1	1	1	1	1	1	0	0	0	0	6	
Dwayne	1	1	0	1	1	0	1	0	1	0	6	
Abram	1	1	1	1	1	0	0	0	0	0	5	
Doris	1	1	1	0	0	0	0	0	0	0	3	
Jed	1	0	0	0	0	0	1	0	0	1	3	
Bud	0	0	1	0	0	0	0	0	0	0	1	Lowest
# Correct	8	8	7	7	6	5	5	3	3	2		

Recommended Reading:

Institute for Credentialing Excellence's R&D Research Report: RSRCH19 [Small Program Issues, Parts 1 & 2](#)

Dwyer, Andrew (Summer 2016), [Options for Establishing the Passing Score on a New Test Form for Small Volume Programs](#), CLEAR Exam Review, p. 28-31

Depascale, Christine and Matthews-Lopez, Joy (March 2017), [Managing Low-Volume Examination Programs: Where Theory Meets Reality](#), Blog post, The Professional Testing Blog (www.proftesting.com/blog/2017/03/15/768/)

Common Themes:

Delaying score reporting after the first test administration allows the item and person data to be thoughtfully analyzed by psychometricians and SMEs working together, and for an informed passing standard to be set. Small-volume programs may need to continue delaying score reports.

Acquiring and training SMEs is hard. The 'representativeness' requirement holds from the beginning and regardless of size.

New forms of the test should be introduced regularly, removing bad items and trying out new ones. Staleness may be more of a threat than exposure for small exams.

New forms' passing standards should be equated to the previous ones'. There are options for small exams. Standard setting is not an equating method.