

## Maintaining Accuracy during Poster Quality Scoring

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### BACKGROUND

- Research poster presentations are a mainstay at academic conferences; though quality of posters varies<sup>1</sup>
- A literature search uncovered 12 rubrics<sup>2</sup>

### OBJECTIVE

- We compared two notable analytic rubrics (AR1<sup>3</sup>, AR2<sup>4</sup>) to a newer mixed-approach rubric<sup>1</sup> (MAR).

### METHODS

60 randomly-selected research posters downloaded from 2023 AACP Annual Meeting repository

Two experienced pharmacy educators independently scored all posters using the MAR, AR1, & AR2 rubrics  
(Raters were not trained on any rubrics nor discussed rubric scoring prior to use)

For each rubric, inter-rater reliability determined via:  
1. Intraclass correlation  
2. Rasch Measurement  
3. Time to score

### RESULTS

- Quality of posters varied with every rubric
- From *classical intraclass correlations*, seemed equivocal
- ABSOLUTE AGREEMENT similar for all rubrics; though CONSISTENCY higher for AR1 & AR2
- From *Rasch*, AR1 & AR2 has malfunctioning items, while MAR functioned well
- Comparison favored MAR & AR2 over AR1
- MAR was MUCH quicker to score than AR1 or AR2

This mixed-approach rubric had **GOOD** accuracy & reliability to separate posters into better/worse quality *and* took **MUCH LESS** time to complete



Scan for poster copy  
& other Result visuals



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CLASSICAL IntraClass Correlation	AR1	AR2	MAR
Agreement	.35	.37	.35
Consistency	.57	.57	.36

MODERN Rasch Measurement	AR1	AR2	MAR
Reliability	.56	.72	.71
Separation	1.8	2.5	2.4

See QR-code for Rating Scales & Wright Maps

TIME to score	AR1	AR2	MAR
	4-5min		1-2min

### REFERENCES

1. Khadka S, Holt K, Peeters MJ. Academic conference posters: Describing visual impression in pharmacy education. *Explor Res Clin Soc Pharm.* 2024;13:100423.
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3. Hess GR, Tosney KW, Liegel LH. Creating effective poster presentations: AMEE Guide no. 40. *Med Teach.* 2009;31(4):319-321.
4. Belilos E, Kamande S, Morrison M, Malmut L. Teaching poster design to enhance research presentation quality at academic conferences: a guide for educators. *Postgrad Med J.* 2023;99(1173):777-781.