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Setting the Standard for a High-Stakes End of Third Year Assessment

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Purpose:

- conduct modified Angoff standard setting procedure due to planned move to “high-stakes” End of Third Year Assessment (EOTYA)
- assess the result of applying cutoffs to EOTYA student performance data
- analyze judges’ perceptions and confidence in setting cutoffs for three skill areas across seven Objective Structured Clinical Examinations (OSCEs)

Methods:

- 7 “internally created” OSCE case summaries were reviewed by 6 content experts:

Third year clerkship directors

- Family Medicine
- Internal Medicine
- Ob-Gyn
- Pediatrics
- Psychiatry
- Surgery

Methods:

Each OSCE case summary included:

- **Case Summary** patient symptoms, social history, family history, past medical history
- **SP Behavior Notes** affect, mannerisms, required questions/statements
- **Opening Scenario** patient information, chief complaint, presenting symptoms, setting, vitals, test results
- **Examiner's Tasks** timeline to complete interview/exam, related paperwork, and feedback session
- **Checklists** history, physical exam, interviewing/communication, problem list, differential diagnosis

Methods:

- 10-step standard setting procedure was explained and terms were defined
 - Essential vs non-essential items
 - Minimally competent 3rd year student
 - Probability
 - Cutoffs for 3 skill areas: Hx, PE, & Interviewing
- Group agreed to meet frequently during academic year rather than conduct 1-2 day standard setting workshop

Results:

Final Performance Standards

	Standard	Number of Items
History	73.49 %	84
Physical Exam	70.43 %	31
Interview	3.65 (scale ranges from 1 to 5 with 5 being the highest)	33

Results:

Student Performance Results

Student Name	History Standard = 73.49 (Cohort Avg = 80.1; SD = 5.7) Did not successfully complete=11%
Student 1	63.38
Student 2	65.63
Student 3	67.91
Student 4	68.33
Student 5	69.49
Student 6	69.60
Student 7	72.06
Student 8	72.61
Student 9	72.80
Student 10	73.12

Results:

Student Performance Results

Student Name	Physical Exam Standard = 70.43 (Cohort Avg = 76.09; SD = 8.9) Did not successfully complete=21%
Student 1	51.77
Student 2	56.31
Student 3	58.46
Student 4	58.46
Student 5	58.71
Student 6	61.24
:	:
Student 18	68.69
Student 19	69.19

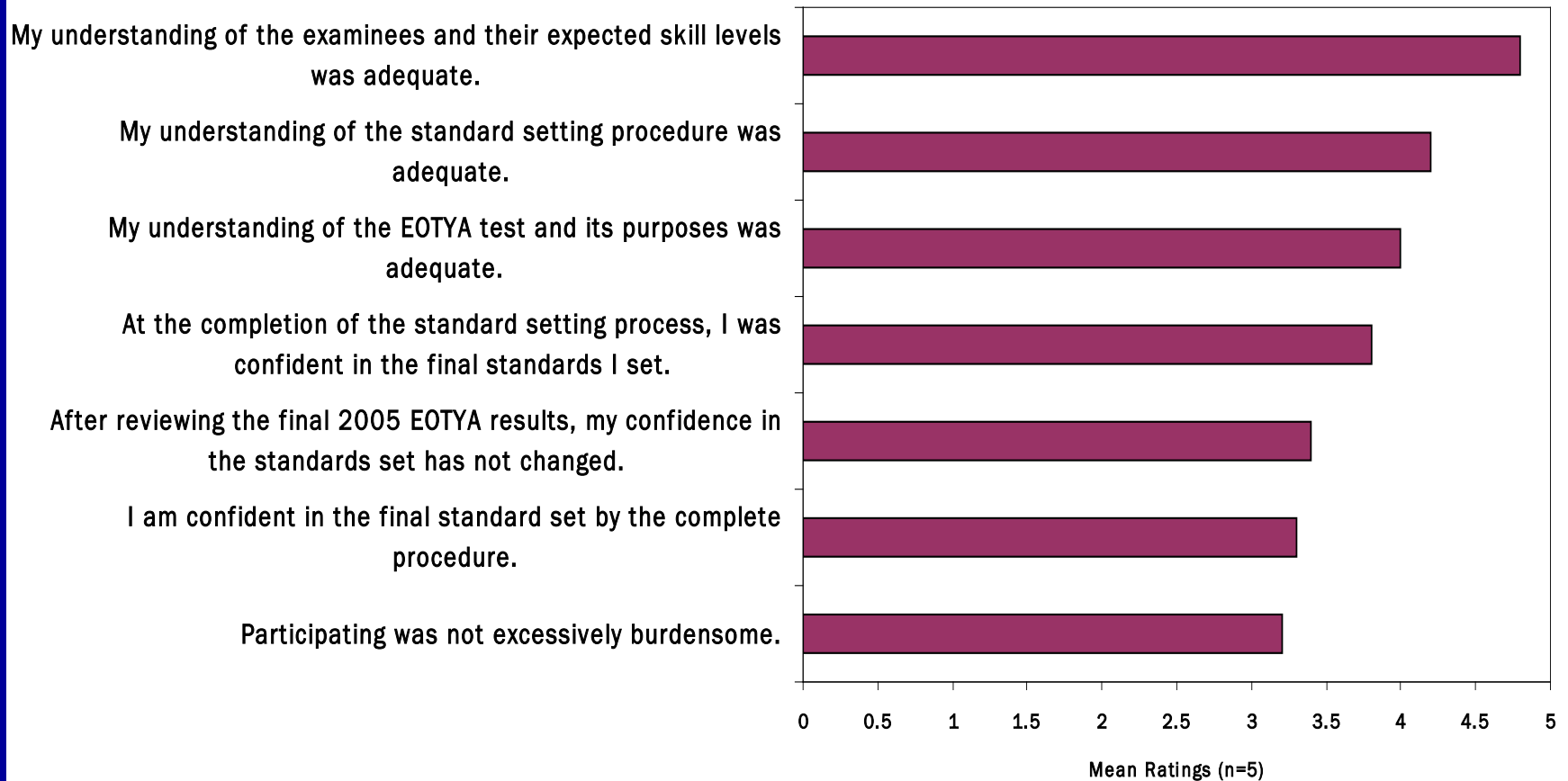
Results:

Student Performance Results

Student Name	Interview Standard = 3.65 (Cohort Avg = 4.15; SD = .25) Did not successfully complete=3%
Student 1	3.41
Student 2	3.52
Student 3	3.63

Results:

Expert Rater Survey Results



Discussion:

- Increased communication among clerkship directors
- OSCEs were revised to be more inter-disciplinary & PE added to all cases
- Non-essential items were deleted
- Pilot cases rotated into EOTYA
- Norm-referenced standard setting procedure was selected

Limitations of Study:

- Need at least 8 content experts
- Should have 8-10 OSCEs to further enhance stability of cutoffs
- Standard setting procedure should occur during a 1-2 day workshop
- Consensus on content of cases must be unanimous at onset of project

Conclusion:

- Standard setting procedure vital to “high-stakes” assessment
- Early planning is key to success
- Consensus building required
- Transparent process necessary

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