Effect of live versus video grading on student objective structured clinical examination (OSCE) assessment scores

Jasmine Williams, PharmD candidate, Katie Ronald, PharmD, BCPS

SOUTHERN ILLINOIS UNIVERSITY EDWARDSVILLE SCHOOL OF PHARMACY

BACKGROUND

- Simulation-based assessments are a tool utilized in many pharmacy school curriculums
- The use of these assessments allows students to develop clinical skills necessary to excel in the profession of pharmacy in a realistic and constructive setting
- The use of video recording during OSCE assessments and the impact it has on student grades has not been established

OBJECTIVE

- To investigate if there is a significant difference in student grades when the OSCE public health assessment was graded live versus graded from a video

METHODS

- Approved by the Investigational Review Board
- Six pharmacy practice faculty members volunteered to re-grade the 2018 public health assessment portion of the OSCE from videos originally recorded using SimulationIQ
- Students were assessed on global communication skills and ability to answer all parts of the proposed questions
- The skills checklist consists of seventeen items, each worth one point. The global communication rubric consists of five sections– each worth a maximum of three points
- The total number of points on each rubric were calculated and validated to determine a final weighted score
- The weighted score was calculated by averaging the total skills checklist and total global communication rubric scores
- Students were then assigned a final grade of pass (greater than 69%), 1 standard deviation of no pass (58-69%), or no pass (less than 58%)
- A final grade of NO PASS required remediation
- Original and regrade scores were compared, and a two-tailed student t-test was performed for total skill checklist score, total global communication rubric, and total weighted score

METHODS

OSCE Skills Checklist

Getting Started
- Ability to introduce themselves and explain the purpose of the encounter

Gathering Information
- Students assessed on patient/health care provider education
- Education must be accurate and patient-specific
- All parts of question must be answered

Monitoring/Follow-up
- Students assessed on ability to provide appropriate closure statement to end encounter

Global Communication Rubric

Verbal expression (content and mechanics)
- Speaks with proper fluency and grammar at appropriate rate and volume
- Use of open-ended questions and ability to communicate effectively

Non-verbal Expression
- Maintains appropriate eye contact and professionalism
- Does not engage in distracting behavior

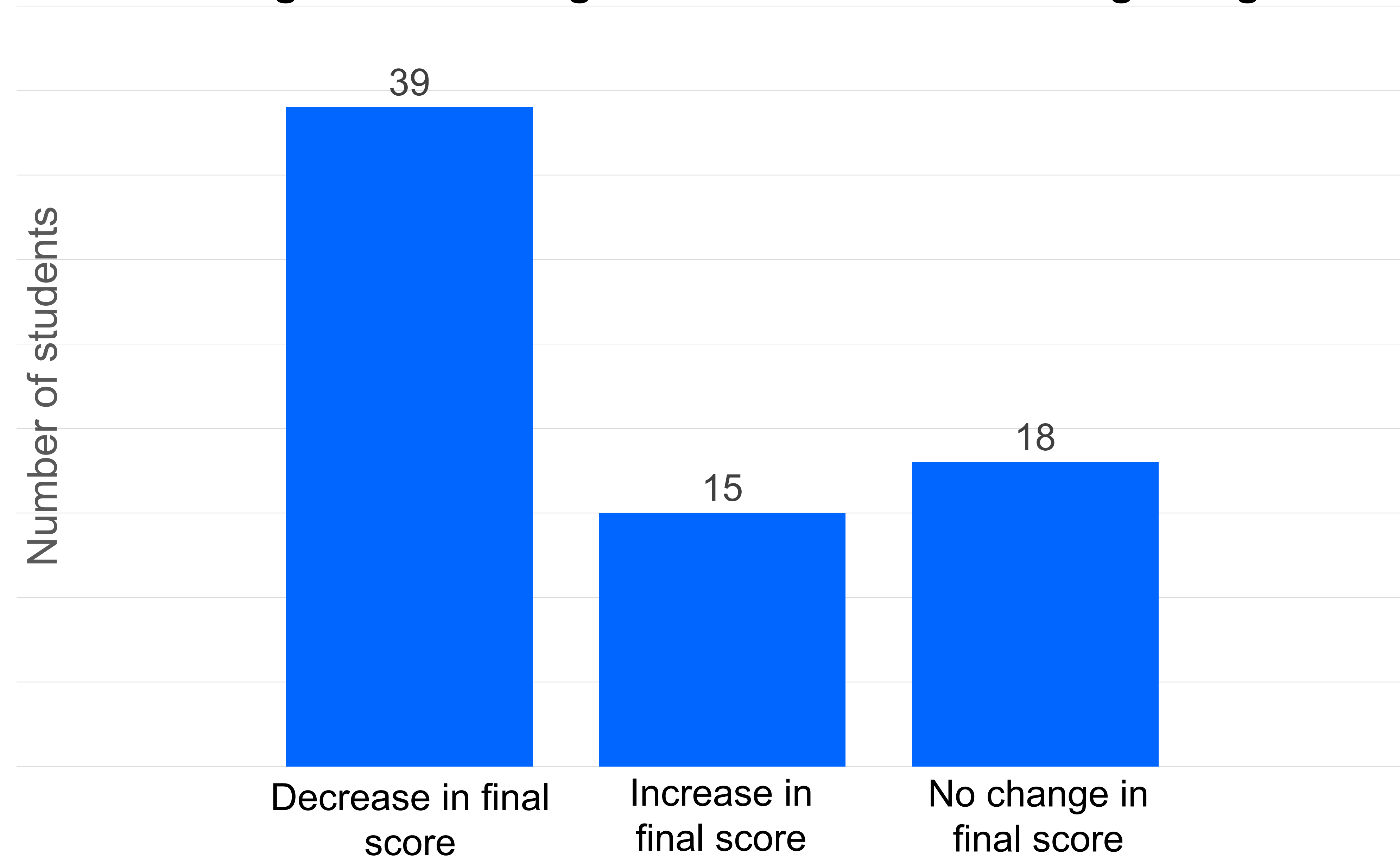**Interaction with healthcare professional**
- Displays active listening, empathy, and responsive to uncovering new information

Organization and logic
- Information presented in logical order
- Maintains control of the encounter

RESULTS

Changes in final weighted scores after video re-grading

RESULTS

Average original total checklist score	Average re-grade total checklist score	Student t-test
14.375	14.236	0.667

Average original total global score	Average re-grade total global score	Student t-test
11.208	10.347	0.002

Average original overall score	Average re-grade overall score	Student t-test
25.58	24.58	0.049

Average original total weighted score	Average re-grade total weighted score
79.64% (PASS)	76.82% (PASS)

DISCUSSION

- Results greatly limited by small sample size (72)
- Re-grading was not preformed by the original grading faculty member for all videos, leading to possible inconsistences in scoring
- Fifteen students had a significant enough change in score that their final score categorization also changed

CONCLUSION

- Video grading rather than live grading only made a significant difference in score for global communication
- The use of technology and video grading has potential benefits, but studies with a larger sample size are necessary to determine if there is any negative impact on student grades

DISCLOSURES

The authors have nothing to disclose