

A Staff-Student Co-Enquiry Investigation of Peer to Peer Objective Structured Clinical Examination (OSCE) Revision in Medical Imaging

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The Development of our Staff-Student Partnership



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Students as Partners: The co-collaboration of staff and students actively engaging in the process of learning and working together (Mercer-Mapstone et al., 2017)

Our current publication – Taylor, D., & Quick, S. (2017). Planting the Seed of Staff-Student Partnership Research Project. *Teaching and Learning Together in Higher Education*. 1 (21)



What is an OSCE & OSCEs at Deakin



- **OSCE: Objective Structured Clinical Examination**
 - Structured and Objective: clinical scenario, patient, marking scheme
 - Expensive & labour intensive
- **OSCEs at Deakin & Medical Imaging:**
 - 1st and 2nd year students
 - 10 Stations held over two days
 - 5 minutes per station, with 1 minute changeover in between

P2P Learning

- **Peer learning “the use of teaching and learning strategies in which students learn with and from each other without the immediate intervention of a teacher” (Boud et al., 2014)**
- **Benefits:**
 - **Instructors: evaluative judgement, ability to teach, empathy & giving feedback, communication skills, confidence**
 - **Learners: reassurance from peers, role models, student perspective**
 - **Staff: extra teaching capacity –important when teaching resources are increasingly stretched**
- **Challenges:**
 - **Inaccuracy of peer-generated information and discomfort in feedback exchange**

Boud et al., (2014); Gill et al (2012) *The Clin Teacher*; Dickson et al (2011) *The Clin Teacher*;

Cushing et al., (2011) *Med Teacher*; Tai et al. (2017) *T&L in Med*

P2P Learning & OSCEs

- **Medical Education**

- Graduate students organisers were provided with training by staff & assisted by junior doctors to run an OSCE (Gill et al., 2012)
- Rotating roles, students derived own marking criteria and compared with staff (Cushing et al., 2011)

- **Medical Imaging**

- Novel approach in that students organised the whole OSCE
- Undergraduate students

OSCE Planning: Rationale-Decision Making

- **Aim to prepare 1st year students to eliminate ‘fear of the unknown’**
- **Something our cohort wished we could have experienced before our OSCEs**
 - **Important to us to ensure we presented the students with the most accurate representation we could**
 - **Recruitment of patients, assessors, timekeepers, student organisers**



OSCE Revision sessions

- **2 sessions – approx. 38 students signed up to attend the session**
- **3 different stations – developed based on our perceptions of our OSCE experience**
 - **Station 1: Patient Communication**
 - **Station 2: Patient Positioning and Exposures**
 - **Station 3: Start to Finish**



OSCE Revision Session Feedback

Station 1

Sally Jenson Is a 20-year-old female presenting to your imaging department with pain and distension of the abdomen. The referring doctor has requested an abdomen series.

You are required to:

- Correctly identify the patient
- Give the patient appropriate changing instructions
- Explain to the assessor which projections you will perform, and why?
- Tell the assessor which exposure factors you would use

OSCE Revision Session Feedback

Station 1

Sally Jenson Is a 20-year-old female presenting to your imaging department with pain and distension of the abdomen. The referring doctor has requested an abdomen series.

You are required to:

- Correctly identify the patient

Name, Address, DOB, X-ray Region, Pregnancy?

- Give the patient appropriate changing instructions

Piercings?, Remove all clothing except underwear, including bra and change into a gown, opening at the back

- Explain to the assessor which projections you will perform, and why?

AP Supine, or Erect (justify why) & PA Chest

- Tell the assessor which exposure factors you would use

Supine: 70kVp, 20mAs; Erect: 80kVp, 25mAs; Chest: 90kVp, 2mAs

* justification: may vary depending on patient size and AEC

Student	ID Check	Pregnancy Check	Changing Instructions	Piercing	Correct Series	Exposure Factors
1						
2						
3						
4						



Our Research Project – Aim & Participants

Aim

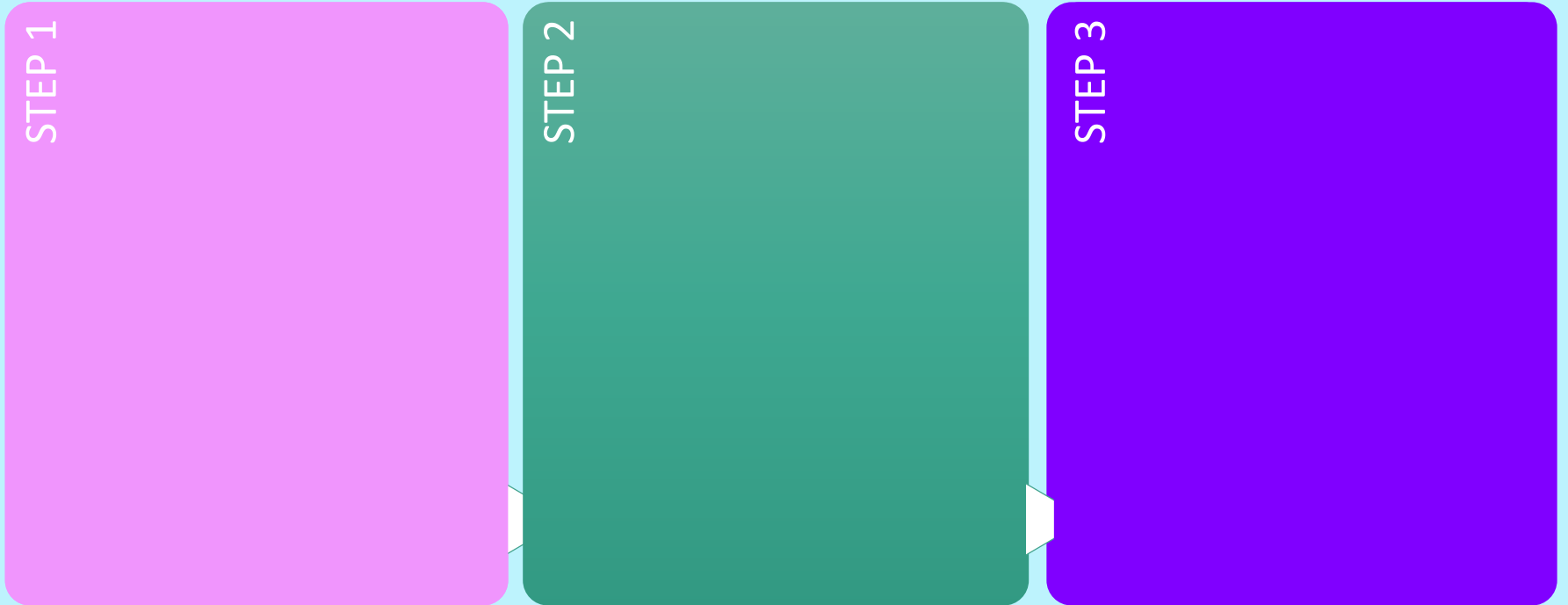
- Evaluating 1st year student perceptions of the benefits of student-led OSCEs conducted by 2nd year students in Bachelor of Medical Imaging in the context of peer-to-peer (P2P) learning

Participants

- Voluntary anonymous participation
 - n = 25 students who attended P-OSCE
 - n = 6 who didn't attend
- Organising students
 - n = 2 online questionnaire



Our Research Project - Method



Motivation for Attending the OSCE Revision Session

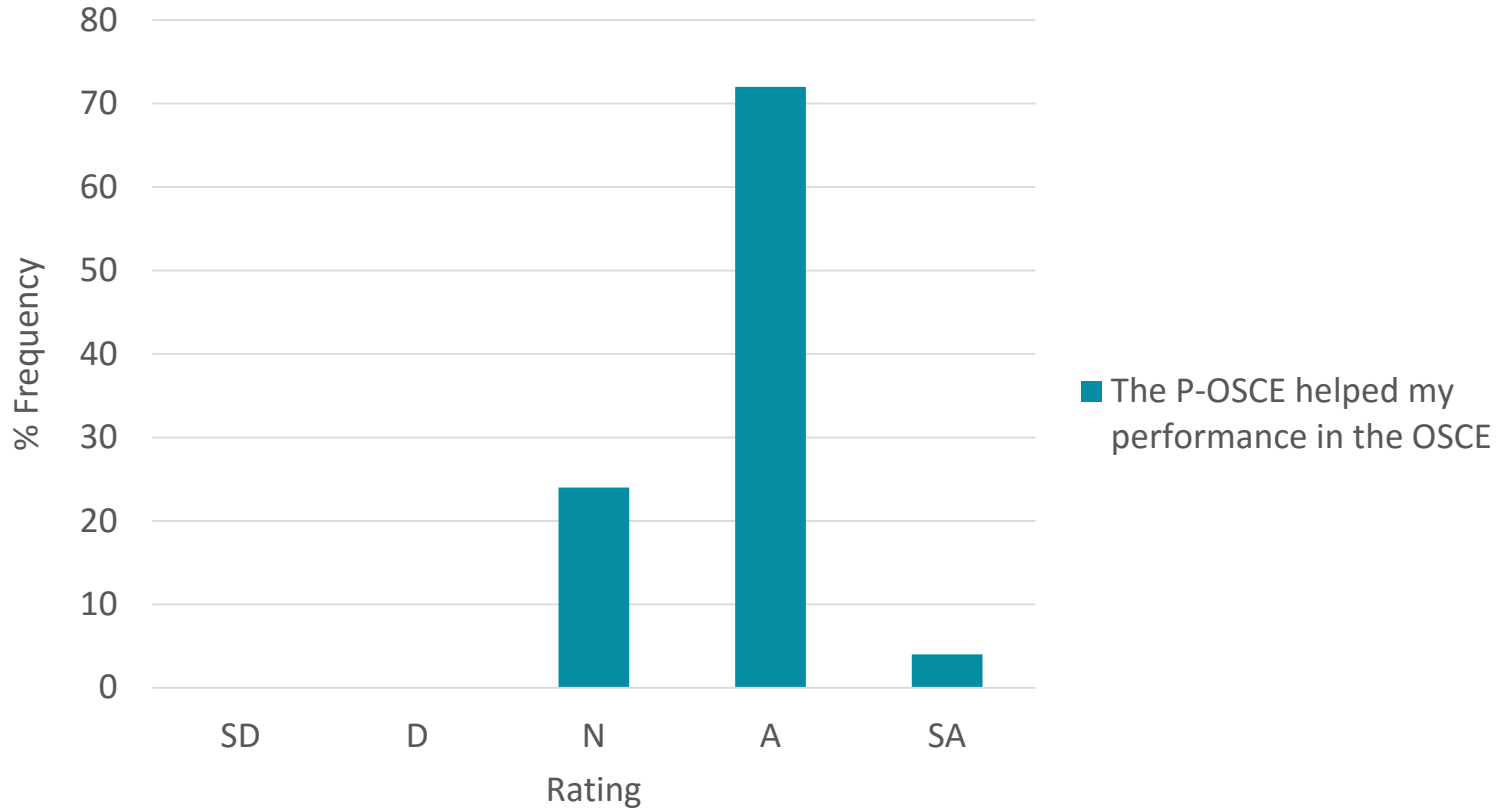
Frequency (n=25)	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>
<i>Run by students</i>	1	2	9	9	4
<i>Provide a student perspective</i>	0	1	4	12	8
<i>Experience the OSCE process (n=24)</i>	0	0	1	7	16
<i>Prepare me for the OSCE</i>	0	0	0	7	18



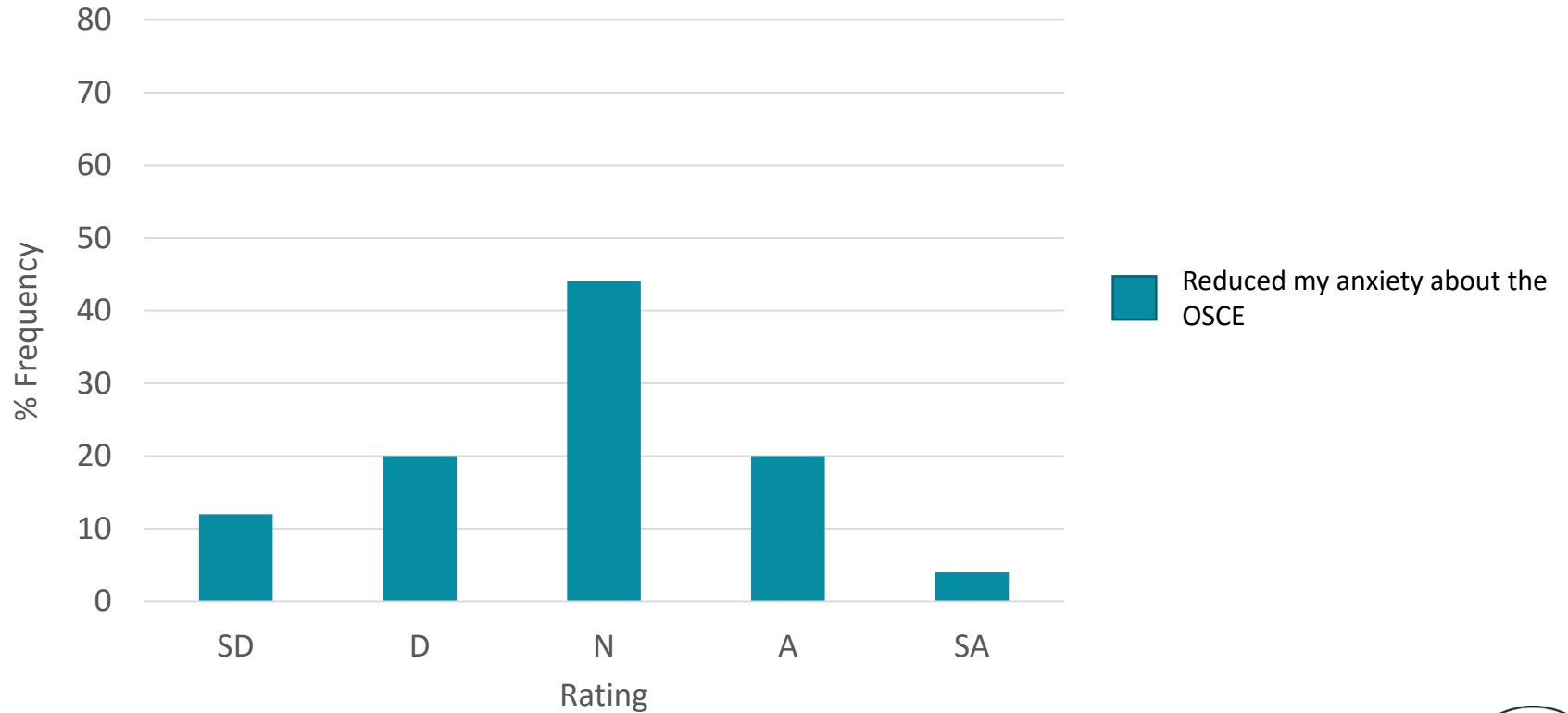
Perspectives on P-OSCE vs. OSCE

Frequency (n=25)	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>
<i>Station content was similar in both OSCEs</i>	0	0	9	15	1
<i>P-OSCE was a good preview of the OSCE</i>	0	1	5	13	6
<i>P-OSCE had a similar atmosphere to the OSCE</i>	0	3	9	10	3
<i>P-OSCE was well run</i>	0	1	4	8	12
<i>P-OSCE helped me prepare for the OSCE</i>	0	0	6	12	7
<i>P-OSCE reduced my anxiety about the OSCE</i>	3	5	11	5	1

Perspectives on P-OSCE vs. OSCE

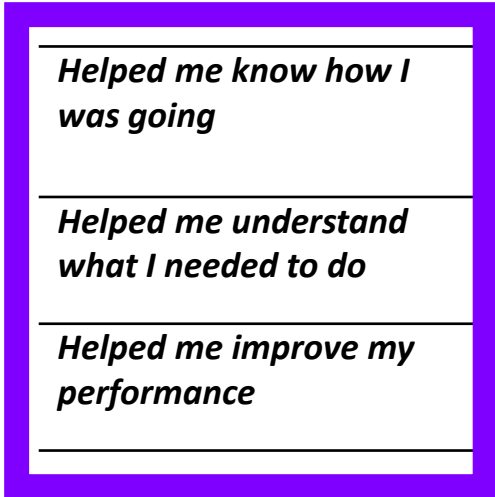


Perspectives on P-OSCE vs. OSCE

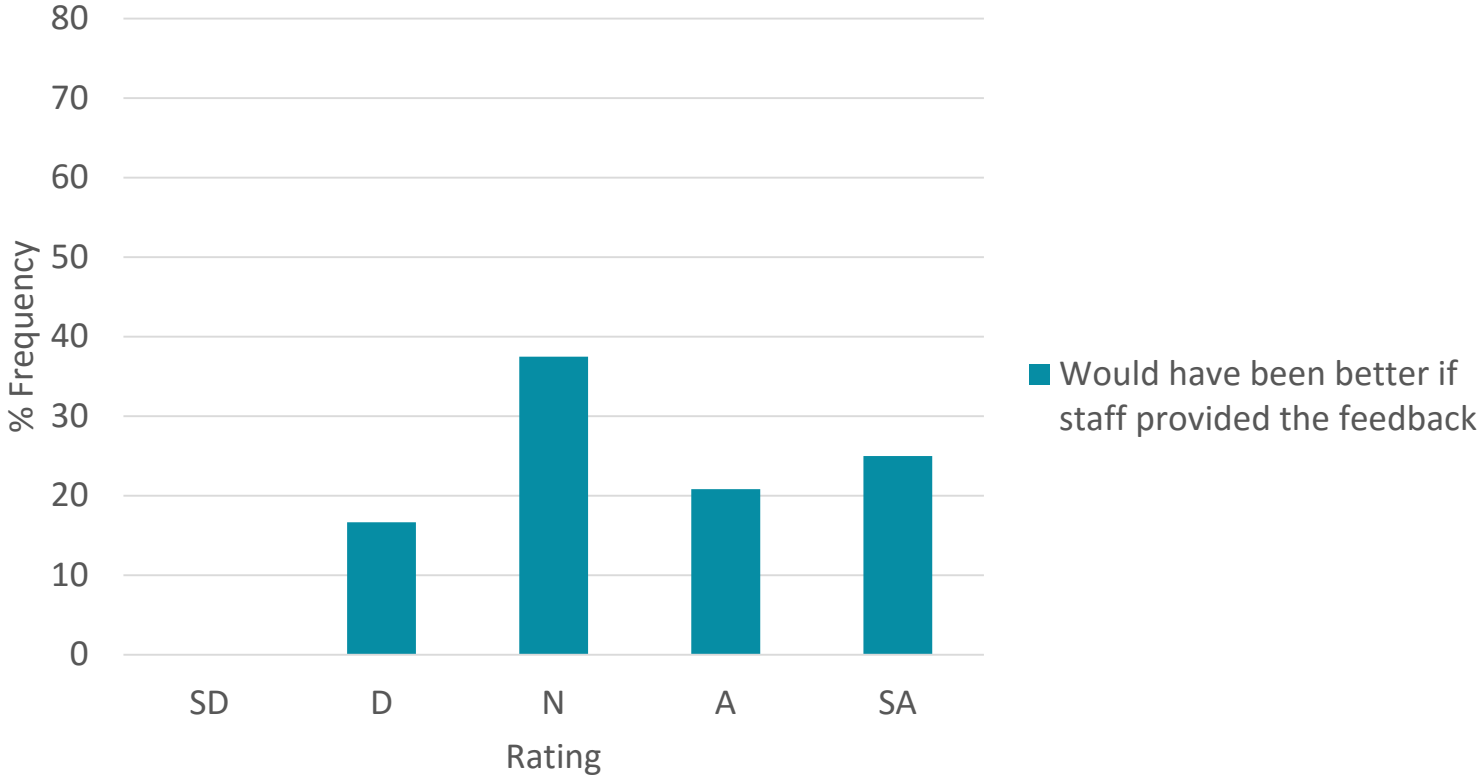


Perspectives on P-OSCE Feedback Session

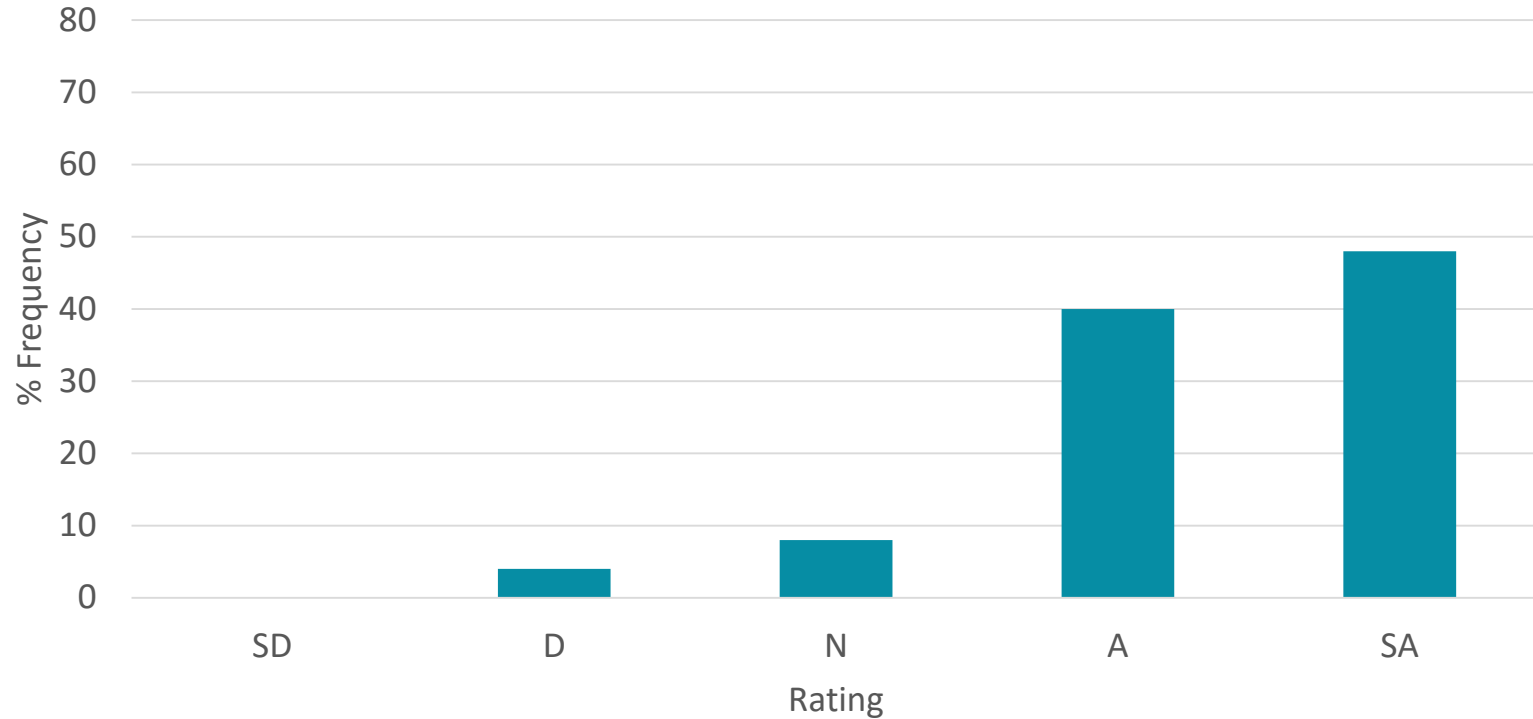
Frequency (n=24)	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly agree</i>
<i>Was well run</i>	1	0	8	12	3
<i>Was relevant to me</i>	1	1	6	13	3
<i>Helped me know how I was going</i>	1	0	6	13	4
<i>Helped me understand what I needed to do</i>	1	1	5	14	2
<i>Helped me improve my performance</i>	0	4	9	5	6



The Feedback Session



I Would Attend Another P-OSCE



Discussion

- **What I have learned from ...**
 - **running the OSCE revision sessions**
 - **the staff-student partnership**
- **The revision sessions are beneficial based on ...**
 - **the preliminary data**
 - **the overall anecdotal discussion with first years and classmates**
 - **the overall positive experience**

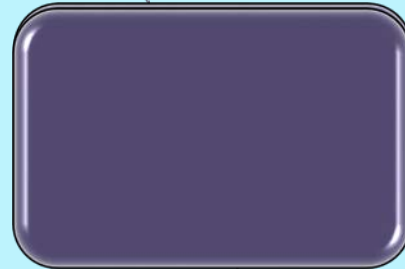


Limitations

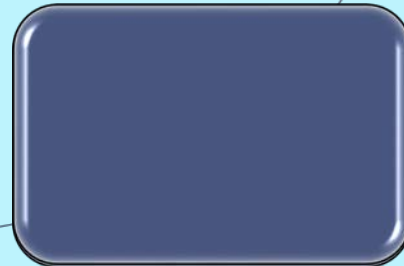
- **Subjective self-report data, objective measure of effectiveness (correlate to OSCE performance)**
- **Time lapse between P-OSCE (October 2016), OSCE (November 2016) and evaluation (April 2017)**



2017 OSCE Revision



FUTURE DIRECTIONS



Acknowledgements

- **Darci Taylor, my co-author & research partner**
- **Deakin University Medical Imaging Staff**
- **Deakin Learning Futures & School of Medicine**

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