

Peer feedback activity
on critical appraisal of a RCT
in a postgraduate-level online unit of study
in introductory clinical epidemiology

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Background

- Critical appraisal is a key skill in evidence-based healthcare practice.
- A peer feedback activity was developed where students critique each other's attempt at critical appraisal

Aim

- To improve student capability to perform critical appraisal of a RCT

Methods 1:

“Introduction to Clinical Epidemiology” unit of study

- Postgraduate level unit of study at the University of Sydney, Australia
- Designed for healthcare professionals and clinical researchers
- Most students are medical doctors who study online and part-time
- 420-460 enrolments each year

Methods 2: Process of providing peer-feedback

1. Students attempted critical appraisal of a RCT
2. Their responses were randomly exchanged with other students
3. Students reviewed the model answer (video and document) and “critical appraisal exemplars”
4. Students provided written feedback comments to a peer

*Students remained anonymous



A Randomized Trial of Vertebroplasty for Painful Osteoporotic Vertebral Fractures

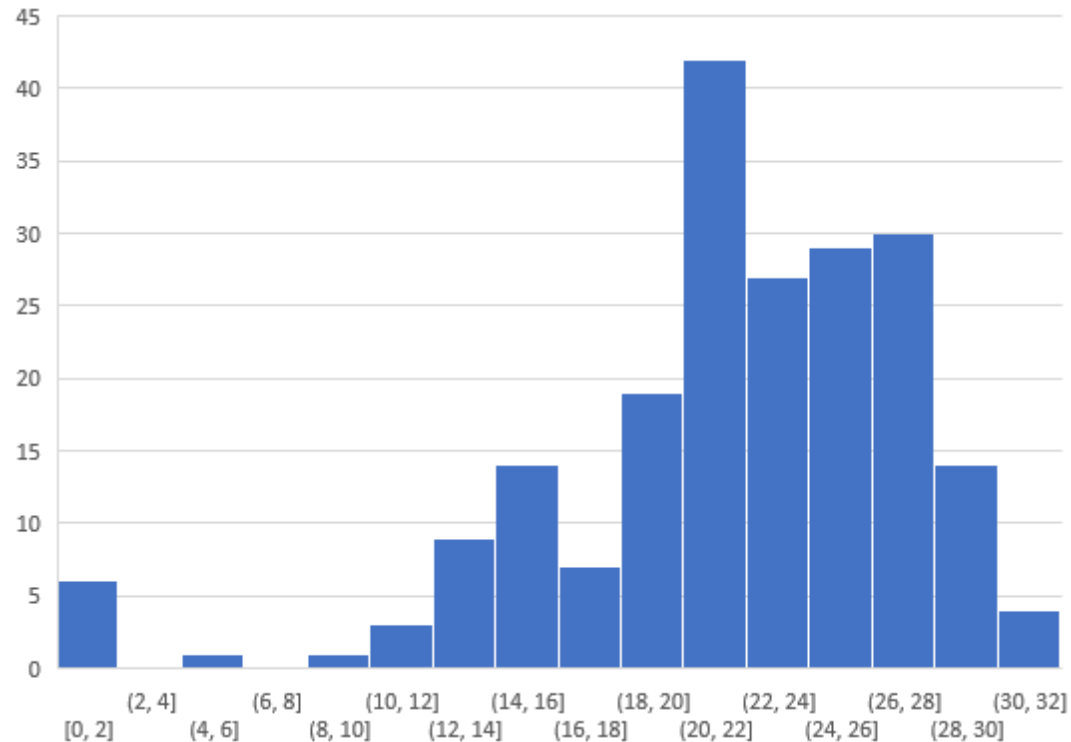
Rachelle Buchbinder, Ph.D., Richard H. Osborne, Ph.D., Peter R. Ebeling, M.D., John D. Wark, Ph.D., Peter Mitchell, M.Med., Chris Wriedt, M.B., B.S., Stephen Graves, D. Phil., Margaret P. Staples, Ph.D., and Bridie Murphy, B.Sc.

Methods 3: Marking of peer feedback activity

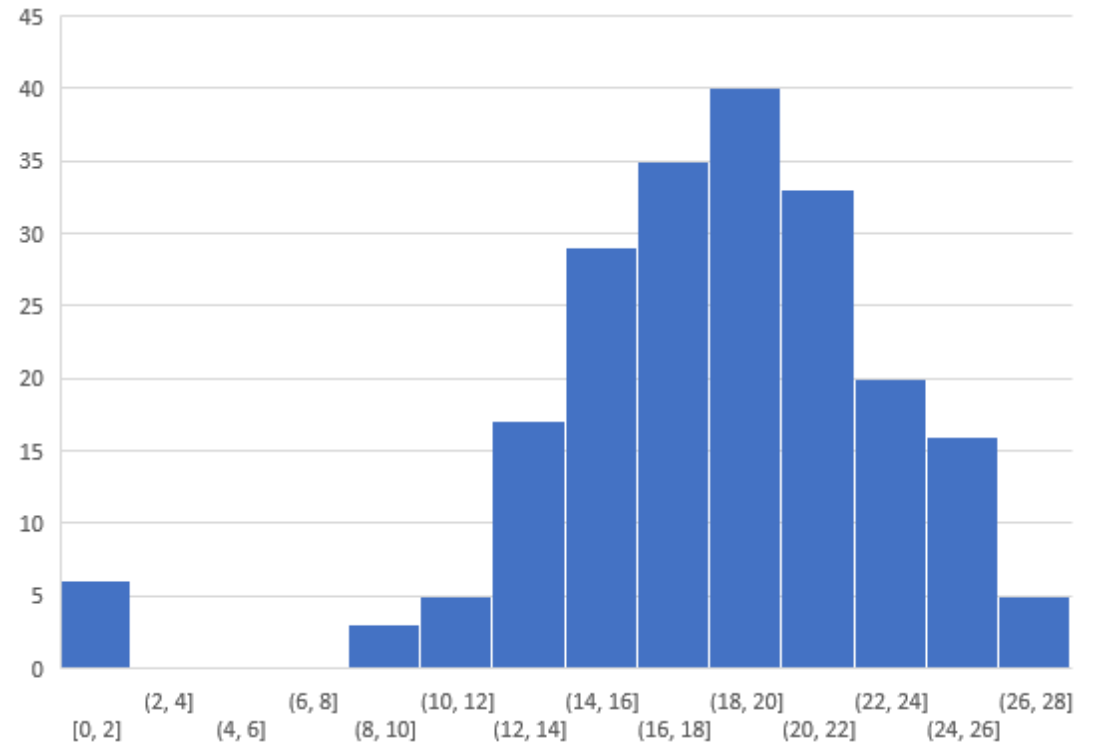
- Teachers graded quality of student peer feedback comments. Students DID NOT grade each other's responses
- Grading rubrics disclosed
 - Judgement on quality of peer responses
 - Specific feedback comments
 - Marker's depth of understanding
- Teacher feedback comments on student feedback comments returned to students.

Results 1: Mark distribution of critical appraisal of a different RCT in final assignment

“Before” (Semester 2 2020)

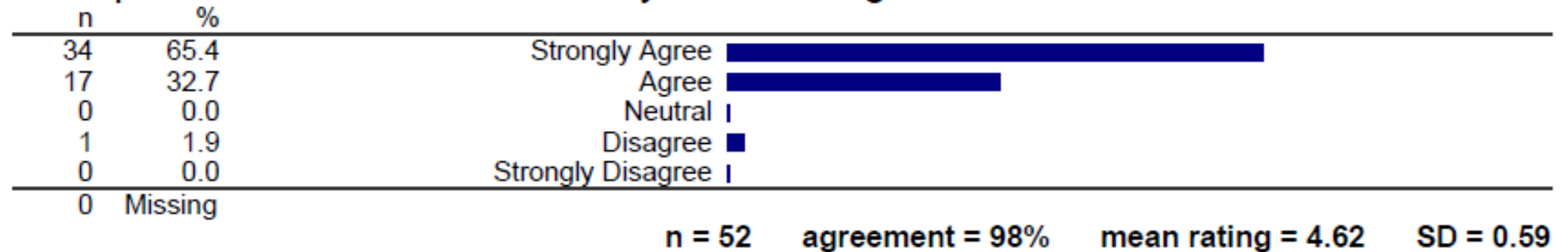


“After” (Semester 1 2021)



Results 2: Benefit of peer feedback activity

q3 I developed relevant critical and analytical thinking skills.



- “It forced me to analyse the answers and understand the exercise better.”
- “It forced me to think more deeply about the critical appraisal process.”
- “Very helpful with consolidating my knowledge.”

Results 3: Why did you feel comfortable/uncomfortable providing negative feedback?

80%!

- “Because I am also unsure whether my assessment of this person’s article review is right or not. I’m afraid to say this is wrong when I could be wrong myself.”
- “I felt slightly uncomfortable as I did not think I was the best person suited to be providing feedback, and did not want to provide inappropriate feedback. Anonymity of feedback made me feel more comfortable.”



- Emphasise that the entire process is anonymous.
- Reassure that peer will review teacher feedback.
- Teach them importance of correcting colleagues’ misunderstandings.

Limitation

- 30 minutes per student to provide feedback on student peer feedback comments
- Lack of human resources to mark peer feedback of critical appraisal of other study types
- Students are encouraged to find a partner to continue providing and receiving peer feedback informally

Conclusion

- The peer feedback activity improved student capability to critically appraise RCTs
- The activity was received well by students as an excellent scaffolding activity.

Thank you and I would love to be contacted on naomi.noguchi@sydney.edu.au 😊