# CHECK THE ANALYSIS AND DEFEND THE FOLLOW-UP

## WEEK 13 · RELAY, PEER REVIEW AND REHEARSAL

Gavin Simpson
Aarhus University

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# A CLEAN RENDER IS ONE CHECK

Can another person run the report?

Do the calculations support its claims?

Do its assumptions match the design?

# RELAY: INSPECT BEFORE EXECUTING

Read the source and data dictionary.

Make a working copy. Keep original input values.

Use checking guide.

# TRACE EVERY QUANTITY

Input → outcome → model → contrast → interval → figure → paragraph.

Check direction, units, time and replication at each step.

# AUDIT SCIENTIFIC REASONING

Where is the design represented?

What evidence from model checks is shown? A check looks for a pattern that would challenge an assumption.

Which conclusion follows from randomized allocation—or only observed association?

# RECORD THE REPAIR AND EVIDENCE

| Location | Issue | Repair | Verification |
|---|---|---|---|
| File / claim | Why it matters | Proposed action | Re-run / inspected only |

Acknowledge what remains unverified.

# NOW REVIEW THE ACTUAL PROJECT

Exchange with the next group.

Use the project peer-review sheet.

Find one design/interpretation issue and one reproducibility/communication issue.

# CHECK THE PROPOSED FUTURE EXPERIMENT

Name a change worth detecting. State how many animals or pens researchers would assign to each treatment, and how they would choose the assignments.

Compare three feasible study sizes under two plausible sets of assumptions.

What does the simulation simplify?

# BREAK AND RESET ROLES

**Break 14:55–15:10.**

Next: analyst, communicator and auditor.

# REPAIR THE MOST CONSEQUENTIAL ISSUE

15 minutes: repair or document a blocker.

12 minutes: three-minute explanation and questions.

8 minutes: remaining actions.

# CLOSE WITH CONCRETE ACTIONS

What remains? Who will do it? How will completion be checked?

Unit 14 presentations are on **Wednesday 2 December, 12:30–16:00**.

After class: **1–2 hours total**.

# DEFEND A CHOICE, THEN REVIEW ITS EVIDENCE

- Trace your original plan and reasoned revisions.
- Explain the family, structure and a plausible alternative.
- Connect a diagnostic finding to a decision.
- Review the future design and its assumptions.