

# Introduction to R and R Studio / Approaching Critical Review

Advanced Psychological Research Methods

Dr Christopher Wilson



# Overview of Today's Session

2 goals:

- Introduction to working with R and R Studio
  - 2 sets of exercises
- Discussion of critical review
  - Papers for critical review assessment
  - Suggestions for approaching the assessment



# Questions from last week?



# Section 1: Introduction to R and R Studio

Introduction to R and R Studio - Slides



# Section 2: Introduction to R and R Studio

Working with data in R and R Studio - Slides



# Section 3: Critical Review Exercise



# General information (reminder)

- The articles are on Blackboard - choose 1
- The deadlines are on Blackboard (4pm, electronic submission)

This is a 2,000 word “essay style” assessment

You should use APA formatting and referencing style

# What is critical review (for our purposes)?

- The evaluation of a piece of research to examine if:
  - The research aims and questions are logically articulated and based on a strong theoretical rationale
  - The research methods proposed are robust, valid, reliable and can answer the research questions
  - The analysis methods used are appropriate to help answer the research questions
  - The conclusions drawn from the data collected are logical, parsimonious and can be reconciled with previous findings and the wider literature



# What we are not doing:

- We are not reviewing the paper as a piece of prose or written work - a formatting, linguistic or technical issue, if it is not relevant to the research, it not important to us
- We are not finding fault for the sake of it - the research is not “bad”. It is limited in the same ways that any single piece of research is:
  1. it can only do so much in a single study
  2. every study can be improved after the fact
- We are not looking for “hypothetical” flaws

# Some tips for approaching this assignment:

# To do:

- Choose one of the papers on Blackboard for your review
- Look at some of the guides (on Blackboard) on how to approach critical evaluation

Do not amend or over-complicate the **structure** of your assignment based on these guides - only use them as guides on how to think about critical evaluation of research

# Questions?

