

Test Bank for Research Design in Clinical Psychology 5th Kazdin

Chapter 2: Introduction

Chapter Description

This chapter describes the threats to internal and external validity. It also explains the tradeoffs and the priorities of internal and external validity.

Discussion Questions

This discussion question bank provides a listing of discussion questions (2 per module), which are included for in-class use.

2.1: Types of Validity

1. Define the four types of experimental validity and the issues addressed by each, illustrating your definition with examples from your chosen field.
2. Describe a research study you would devise to address a question of interest to you. Which of the four types of experimental validity would be relevant to this study, and why?

2.2: Internal Validity

1. Explain what is meant by internal validity, illustrating your explanation by reference to a published research study or a hypothetical research study you would like to conduct.
2. Choose a published research study and examine how the author(s) addressed internal validity and threats to it. Do you find the treatment of these issues to be adequate? If not, why not?

2.3: Threats to Internal Validity

1. Choose one of the threats to internal validity, define it, and illustrate how it could be important in interpreting the results of a research study that has been discussed in the news.
2. Imagine you are designing a research study to address a question of interest to you. Which threats to internal validity would be particularly relevant to this study, and how might they influence the results?

2.4: Instrumentation as a Threat to Internal Validity

1. Describe a research study in which instrumentation played a key role. Discuss how the author(s) address instrumentation as a potential threat to internal validity, and assess whether or not the treatment of this issue was adequate.
2. Define response shift and illustrate your definition with an example of a study (real or hypothetical) taken from your field of interest. Discuss how response shift could affect the internal validity in this study, and how this problem might be addressed by the researcher(s).

2.5: Additional Threats to Internal Validity

1. Define statistical regression so that a person unfamiliar with statistics could understand it. Include an example taken from popular culture or from your field of research of how statistical regression can operate in real life, and explain how statistical regression could have affected the observed results in that example.
2. Random assignment of subjects is sometimes cited as a means to protect against selection bias, but may not offer adequate protection against this threat to internal validity. Explain the arguments for and against randomization as protection against selection bias, illustrated with an example from your field of interest.

2.6: When and How These Threats Emerge

1. Describe the four main circumstances in which threats to internal validity appear, illustrating each with an example of a real or hypothetical research study.
2. Threats to internal validity may affect even the best-designed study. Design a hypothetical study to address a topic of interest to you, and explain how sloppy execution of the study could allow threats to internal validity to influence the results.

2.7: Managing Threats to Internal Validity

1. Discuss some key ways that a researcher can guard against threats to internal validity, illustrating with an example from your chosen field of study.
2. Describe a research study you would like to do, and explain which threats to internal validity you can classify as not being plausible threats to the interpretation of your results.

2.8: External Validity

1. Explain the difference between internal and external validity in a way that a person who has never studied statistics or research design could understand. Illustrate with an example of a study from your field of interest with examples of the significance of internal and external validity for this study.

2. Choose an example of a published research study in your field, and explain how threats to external validity could affect the interpretation of the study's results.

2.9: Threats to External Validity

1. Explain how sample characteristics can be a threat to external validity. Illustrate your explanation with an example of research study that has been covered in the popular media (e.g., newspapers, television) in which sample characteristics could be a threat to external validity, and evaluate whether the popular media version of this research properly explained this threat and its implications in terms of generalizing the results of the study.
2. Explain what is meant by narrow stimulus sampling and how it can limit the generalizability of research results, illustrating with an example of a published research study in which this threat to external validity was important.

2.10: Additional Threats to External Validity

1. Explain how reactivity of assessment can be a threat to internal validity, illustrating with an example relating to a topic that interests you. If you were designing a study to address the same topic, what measures could you take to limit the influence of reactivity of assessment on your research results?
2. Explain what is mean by a cohort and how cohort effects can act as a threat to external validity. Use an example taken from either published research or a news report of some research results. Evaluate how well the author of the research or news report addressed the problem of cohort effects in discussing the research and its conclusions.

2.11: When We Do and Do Not Care about External Validity

1. Define proof of concept, using an example relevant to your area of study. Explain why external validity may not be a concern in a proof of concept study.
2. Choose an example of a proof of concept study in your field, and imagine you have the job of defending the importance of the study to the general public. Include those who may be skeptical of using public monies to fund such studies. Discuss in your argument the reason for doing proof of concept studies that may seem far removed from any pressing social concern, and the practical applications that may arise from the study you have chosen as your example.

2.12: Managing Threats to External Validity

1. Sometimes there are good reasons to conduct a study in a way that limits the generalizability of its results. Describe a study (real or hypothetical) in which this is the case, and explain why both benefits were gained by the decisions that limited

generalizability, and what was lost by these choices.

2. Explain why simply enumerating threats to external validity is not sufficient to challenge the results of a research study, and what additional requirements must be met by the person challenging the results before the challenge can be considered effective.

2.13: Perspectives on Internal and External Validity

1. Explain how parsimony and plausibility are relevant to threats to validity; illustrate your explanation with one or more examples from your chosen field.
2. Explain why internal validity is usually given priority over external validity when designing research. Illustrate your explanation with an example from your chosen field showing how the investigation of a topic may progress over time and how internal and external validity may come into play at different stages as scientific knowledge progresses.

Research Assignments

The following research assignments pertain to the main topics and/or themes of the chapter. Please respond by writing a paper consisting of 1,000-1,500 words.

Evaluating the Validity of a Published Research Study

Perform a literature review and select a recent publication in a reputable journal within your field of interest. Examine how the author(s) addressed the different types of validity, and determine if you think the treatment is adequate. Write a report summarizing your findings, including how any shortcomings in the author(s)'s treatment of issues of validity might call the conclusions into doubt.