

(14) JB Chassan (1967)

Research Design in Clinical Psychology and Psychiatry
New York: Appleton-Century-Crofts

Preamble

This book is in the Century Psychology Series (Editors: Richard M Elliot, Gardner Lindzey and Kenneth MacCorquodale; for the second edition see no. (44) below. It is the first text to be devoted to a specific sub-specialty of medicine, namely psychology and psychiatry, and the first text to include a section on crossover trials.

Aims

This volume is both a textbook on methodology and a critique of the design of research in clinical psychology and psychiatry. Along with the presentation of methodology and technique, it provides a basis for an awareness of some of the subtleties involved in the application of the methods of experimental design and of statistics to the data of human psychopathology. The book is of importance to two broad classes of readers: those who are or who plan to be fairly directly involved in the performance of clinical research and those who are the consumers of such research efforts. These consumers may be psychiatric research administrators, trained psychiatrists and clinical psychologists, research-minded psychoanalysts and psychotherapists, residents in psychiatry, physicians engaged in double-blind clinical trials, professors of psychiatry and clinical psychology, their students and trainees, editors and editorial assistants of journals publishing on research in psychiatry and clinical psychology, and the readers of relevant journal articles (Preface, page xi)

Contents (xviii+280 pages)

Foreword (Leopold Bellak)

Preface (JB Chassan)

1. Logical, epistemological, and statistical preliminaries
 - 1.1 Introduction
 - 1.2 Logic and experience
 - 1.3 Some aspects of logical reasoning and some logical fallacies
 - 1.4 A little more logic
 - 1.5 The problem of generalization
 - 1.6 From universal statements to statements of probability and of statistical significance
- References
- Suggestions for further reading
2. Some elementary statistics
 - 2.1 Introduction
 - 2.2 Testing for a statistically significant difference between two statistically independent probability estimates, or percentages
 - 2.3 Testing for a significant difference between percentages when patients are paired
 - 2.4 Student's *t*-test in comparing means from two independent samples
 - 2.5 Student's *t*-test for paired observations
 - 2.6 Parametric versus nonparametric statistics
 - 2.7 The probability of detecting a true difference
 - 2.8 The range of possible true differences which can be consistent with the same set

of data

2.9 Significance levels adjusted for multiple comparisons

References

3. Some aspects of control and randomization

3.1 Introduction

3.2 Historical and concurrent controls

3.3 Randomization

References

4. The double-blind clinical trial

4.1 The placebo and related effects

4.2 Some aspects of the influence of investigator expectations and attitudes

4.3 Proper coding procedures for the reduction of bias within the double-blind

4.4 Some limitations of the double-blind

4.5 The double-blind and the psychiatric ideal

References

Suggestions for further reading

5. Experimental design and the extensive model

5.1 Introduction

5.2 The completely randomized clinical trial

5.3 Selecting the number of treatments for a clinical trial

5.4 Further considerations concerning the question of whether to include a placebo group

5.5 Sequential design

5.6 Crossover design

5.7 Interpreting comparisons of efficacy after successive weeks of treatment

5.8 Factorial design

5.9 Statistical independence and the research setting

5.10 Screening and the question of dosage

5.11 Statistical handling of dropouts and patients with side effects

References

Suggestions for further reading

6. Some difficulties, pitfalls, and limitations of the extensive model

6.1 Introduction

6.2 The question of sample size

6.3 The question of patient characteristics and the selection of patients

6.4 Some further problems of inference from the data of an extensive design

6.5 Sample and population: the question of operational significance

6.6 Some further limitations

References

7. Intensive design

7.1 Introduction

7.2 Statistical aspects of symptom fluctuation within a given patient

7.3 A brief statistical description of the psychopathology of a single case

7.4 Logical statistical aspects of intensive design

7.5 Applications to drug evaluation

7.6 Some questions concerning the application of intensive design to drug evaluation

- 7.7 Some limitations of the intensive model in drug evaluation
- 7.8 An application to the study of interpersonal processes
- 7.9 Application to the statistical study of psychoanalytic processes

References

Suggestions for further reading

- 8. The documentation of clinical research and related topics
 - 8.1 Introduction
 - 8.2 Reliability as dependability
 - 8.3 Reliability as a measure of precision, or consistency
 - 8.4 Errors of measurement and true variation
 - 8.5 The question of test-retest reliability in clinical evaluation
 - 8.6 Interobserver reliability and interpersonal processes
 - 8.7 The question of validity and definition in clinical observation
 - 8.8 Rating scales in clinical evaluation
 - 8.9 Factor analysis of rating scales
 - 8.10 Self-reporting scales for patients
 - 8.11 The individualization of documentation
 - 8.12 Documentation of intensive psychotherapy and psychoanalysis

References

Suggestions for further reading

Appendix: Psychoanalytic Research Report Form

Index

Author

The author is JB Chassan PhD, The George Washington University School of Medicine and Hoffman-La Roche Inc. The foreword is by Leopold Bellak MD.