



Edition: 3rd Edition 2020  
 pages: 406  
 Images: 133  
 Cover: Softcover, 21,6 x 27,9  
 ISBN: 978-0-86715-800-7  
 Stock No.: 22871  
 Published: January 2020

Price  
 Subject to changes!

28,00 €

#### Quintessenz Verlags-GmbH

📍 Ifenpfad 2-4  
 12107 Berlin  
 Germany

☎ +49 (0) 30 / 76180-5

📠 +49 (0) 30 / 76180-680

✉ info@quintessenz.de

🌐 <http://nginx/deu/de>

## Book information

**Authors:** Donald Maxwell Brunette  
**Title:** Critical Thinking  
**Subtitle:** Understanding and Evaluating Dental Research  
**Short text:**

The Internet has given us access to an unprecedented amount of information, but this development also facilitates the spread of misinformation if we do not think critically and evaluate what we read. The third edition of this classic textbook has been revised based on developments in biomedical research practices over the past decade to provide readers with the most up-to-date resource for navigating the ever-expanding world of dental literature. The book covers rhetoric and logic, the scientific method, components of scientific papers, research strategies, probability and statistics, diagnostic tools and testing, and experiment design. The chapter about searching the dental literature has been updated with the most current resources and search techniques available. A new chapter about clinical decision making uses a decision tree analysis with worked-out calculations to show how critical thinking skills can be used to select the most appropriate treatment decision in a clinical scenario; this is followed by a whole chapter of exercises in critical thinking. This book emphasizes how readers can practically apply critical thinking skills to evaluate scientific literature and thereby make the most informed decisions for their patients and themselves.

#### Contents

Chapter 01. Reasons for Studying Critical Thinking  
 Chapter 02. Scientific Method and the Behavior of Scientists  
 Chapter 03. The Components of a Scientific Paper  
 Chapter 04. Rhetoric  
 Chapter 05. Searching the Dental Literature  
 Chapter 06. Logic: The Basics  
 Chapter 07. Introduction to Abductive and Inductive Logic: Analogy, Models, and Authority  
 Chapter 08. Causation  
 Chapter 09. Quacks, Cranks, and Abuses of Logic  
 Chapter 10. Elements of Probability and Statistics, Part 1: Discrete Variables  
 Chapter 11. Elements of Probability and Statistics, Part 2: Continuous Variables  
 Chapter 12. The Importance of Measurement in Dentistry  
 Chapter 13. Errors of Measurement  
 Chapter 14. Presentation of Results  
 Chapter 15. Diagnostic Tools and Testing  
 Chapter 16. Research Strategies and Threats to Validity  
 Chapter 17. Observation  
 Chapter 18. Correlation and Association  
 Chapter 19. Experimentation  
 Chapter 20. Experiment Design  
 Chapter 21. Statistics As an Inductive Argument and Other Statistical Concepts  
 Chapter 22. Judgment  
 Chapter 23. Introduction to Clinical Decision Making  
 Chapter 24. Exercises in Critical Thinking

**Categories:** Interdisciplinary, Science and Research, Student literature