Book Review:

Generalized Linear and Nonlinear Models for Correlated Data

Author: Edward F. Vonesh

Reviewed by:

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Topics covered in this book...

1. Linear models (LM)
2. Linear mixed-effects models (LME)
3. Generalized linear models (GLIM)
4. Generalized linear mixed-effects models (GLME)
5. Nonlinear models (NLM)
6. Nonlinear mixed-effects models (NLME)
7. Generalized nonlinear models (NGLM)
8. Generalized nonlinear mixed-effects models (GNLME)
Assumption of Independence
Book Summary

- This book discusses the theory and analysis of continuous or discrete correlated data in longitudinal or clustered studies using SAS.

- Special emphasis is placed on applications that require the use of generalized linear and non-linear models.
Author: Edward F. Vonesh, PhD

- Professor of Preventive Medicine at Northwestern University
- Senior research scientist at Baxter Healthcare
- Owner of Vonesh Statistical Consulting, LLC.
- SAS user since 1974
Strengths of the Book

Other topics covered in the book include:

- Missing data in longitudinal clinical trials
- Pharmacokinetic applications
- Joint modeling of longitudinal data and survival data
Strengths

- Well written, concise
- Real-world applications
- Applicable to a large audience
- All SAS codes are provided
- Datasets available online
Weakness

- Emphasis on theory and equations
Recommend?

- Statisticians
- Researchers conducting longitudinal or clustered studies in various fields
- Students who are just beginning to work with longitudinal or clustered data
Learning & Tips

- I learned how to use SAS for joint modeling of longitudinal and survival data

- How to effectively deal with missing data in longitudinal studies
Application
Other Books


Questions?