Discrete Choice Modeling for Survey Data Training Course

Professional Development Training Course Outline

Category	Research and Data Analysis	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

In an increasingly data-driven world, understanding how individuals make choices—especially in sensitive contexts—is critical for researchers, policy analysts, and data scientists. Discrete Choice Modeling (DCM) is a robust statistical technique used to analyze and predict decision-making behavior based on survey data. Discrete Choice Modeling for Survey Data Training Course is tailored to equip participants with the skills to design, collect, and analyze choice-based surveys addressing ethically complex or confidential subjects.

By integrating advanced econometric modeling, sensitive survey design, and ethical research practices, the training explores how to capture meaningful responses without compromising respondent comfort or data reliability. This course focuses on real-world applications in health, education, consumer behavior, and public policy where privacy, stigma, or personal values play a major role in choices. Ideal for researchers navigating social, psychological, or behavioral datasets, this hands-on training ensures participants can build predictive models that are statistically sound, ethically sensitive, and policy-relevant.

Programme Curriculum

Discrete Choice Modeling for Survey Data Training Course

Introduction

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Course Objectives

1. Understand the foundations of Discrete Choice Modeling (DCM) in sensitive research.
2. Design ethically sound surveys that address privacy and confidentiality.
3. Apply choice-based conjoint analysis for sensitive behavioral data.
4. Interpret model outputs using logit, probit, and mixed logit models.
5. Integrate latent variable techniques into DCM for psychological constructs.
6. Use stated preference methods for socially delicate topics.
7. Address non-response bias in sensitive survey contexts.
8. Apply best-worst scaling for values-based decisions.
9. Develop surveys using random utility theory as a framework.
10. Validate models using cross-validation and bootstrapping techniques.
11. Navigate ethical guidelines in data collection for vulnerable groups.
12. Leverage R, Stata, or Python for implementing DCM.
13. Build actionable insights for policy-making and intervention design.

Target Audiences

1. Academic Researchers
2. Policy Analysts
3. Public Health Professionals
4. Market Researchers
5. NGO Program Evaluators
6. Behavioral Economists
7. Data Scientists & Statisticians
8. Graduate Students in Social Sciences

Course Duration: 5 days

Course Modules

Module 1: Introduction to Discrete Choice Modeling in Sensitive Contexts

- Overview of DCM and its applications in sensitive topics
- Importance of modeling individual preferences
- Key challenges in researching sensitive issues
- Difference between revealed vs stated preference data
- Ethical implications in choice experiments
- **Case Study**: HIV testing preference modeling in Sub-Saharan Africa

Module 2: Designing Sensitive Survey Instruments

- Crafting non-intrusive yet informative questions
- Use of indirect questioning and anonymization
- Pretesting tools for emotional sensitivity
- Cultural and social considerations in framing
- Adaptive questionnaire design

- **Case Study**: Abortion attitudes survey in Latin America

Module 3: Data Collection Techniques for Vulnerable Populations

- Best practices in reaching sensitive subpopulations
- Ensuring confidentiality and consent
- Digital vs in-person data collection trade-offs
- Overcoming stigma and social desirability bias
- Incorporating skip logic and respondent controls
- **Case Study**: LGBTQ+ discrimination in employment decisions

Module 4: Theoretical Framework: Random Utility Theory

- Basics of utility maximization
- Formulation of the choice set and alternatives
- Application of RUT in behavioral modeling
- Underlying assumptions and limitations
- Choice probabilities and utility functions
- **Case Study**: Substance abuse treatment preferences

Module 5: Discrete Choice Model Estimation Techniques

- Conditional logit and multinomial logit models
- Mixed logit and nested logit approaches
- Incorporating covariates and interaction terms
- Model diagnostics and goodness-of-fit
- Bayesian estimation methods
- **Case Study**: Contraceptive method preferences in rural India

Module 6: Dealing with Missing and Incomplete Data

- Techniques for imputation and data cleaning
- Analyzing patterns of missingness
- Weighting adjustments and calibration
- Reducing non-response through model design
- Robustness checks in model validation
- **Case Study**: Drug use behavior surveys in urban populations

Module 7: Interpreting Results and Policy Translation

- Translating statistical findings into narratives
- Stakeholder engagement and knowledge translation
- Visualization techniques for DCM outputs
- Scenario analysis and policy simulations
- Communicating sensitive results to non-technical audiences
- **Case Study**: Domestic violence service preferences in conflict zones

Module 8: Software Implementation and Practical Applications

- Hands-on with R, Stata, or Python for DCM
- Setting up choice experiment data
- Automating model comparison and selection
- Integrating latent variables and segmentation
- Reporting and visualization best practices
- **Case Study**: Gender-based job hiring biases using R

Training Methodology

- Interactive expert-led lectures with real-world datasets
- Hands-on coding sessions in R/Stata/Python
- Group exercises and peer-reviewed design assignments
- Case study presentations with feedback
- Ethical dilemma workshops and discussion forums
- Final project on designing and analyzing a sensitive-topic DCM survey

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com