Survey Design and Analysis

US Army Logistics Management College

17-21 June 2002

The topic outline will specifically address military surveys (participants are encouraged to bring questionnaires relevant to their project for review by the class) and includes:

I. OVERVIEW OF SURVEY RESEARCH: What Is Survey Research? Advantages and Disadvantages of Types of Surveys: Personal Interviews, Telephonic, Mailed. Major Components of Survey Designs: Sampling, Data Collection, Data Analysis.

II. UNDERSTANDING THE RESEARCH PROBLEM: Define Study Objectives, Planning the Final Report, Developing Models, Literature Review, Exploratory Research, and Assessment of Available Resources.

III. PLANNING THE DATA ANALYSIS DESIGN: Overview of Data Analysis Techniques.

IV. PLANNING THE SAMPLE DESIGN: Nonprobability Sampling vs. Probability Sampling, Simple Random Sampling, Systematic Sampling, Proportional Stratified Sampling, Disproportional Sampling, Optimum Allocation, Cluster Sampling, Area Sampling, Multistage Sampling, Random Digital Dialing, and Determination of Sample Size.

V. PLANNING THE DATA COLLECTION DESIGN: Construction of the Data Collection Instrument: Content, Sequence, and Format of Questions. Special Concerns for Mailed Questionnaires, Interview Surveys, and Web-Based Surveys.

VI. EXECUTING THE SURVEY: Recruitment, Training, Supervision, and Evaluation of Interviewers. Interviewing and the Mailing of Questionnaires. Field-Work Organization. Preparation of the Data for Analysis: Editing the Questionnaires, Construction of Codes and Codebook, Cleaning the Data, Estimating Missing Data, Computation of Response Rates, Computation of Weights, Construction of Scales and Indices.

VII. REPORTING THE RESULTS OF A SURVEY: Report Organization and Table Construction.

TEXTS: Participants will receive copies of Practical Sampling, by Gary T. Henry; The Survey Research Handbook, by Pamela L. Alreck and Robert B. Settle; Questionnaire Research, by Mildred L. Patton, Your Statistical Consultant, by Rae R. Newton and Knell Erik Rudest am; and the *JMP IN* Statistical Software Package, Version 4, for Windows and Macintosh, 4th edition, SAS Institute, Inc.

DR. JOHN DANIEL

INSTRUCTOR: DR. JOHN DANIEL is an Associate Professor in the Department of Sociology and Anthropology at Howard University. He received a Ph.D. in sociology from the University of Michigan, and a JD from the Georgetown University Law Center. Dr. Daniel has taught survey research for over 30 years, and has extensive research experience, including managing research projects, developing sample designs, analyzing data, and writing reports. He has taught at Loyola University (Chicago), the University of Wisconsin-Milwaukee, Tuskegee Institute, and the University of Michigan. He has worked for the Division of Research and Statistics of the Social Security Administration and the Institute for Social Research at the University of Michigan; and has done consulting with private firms, including DuPont Chemicals and Martin Marietta, as well as various federal agencies, and the Washington DC Government.

ELIGIBILITY: Military Officers who possess OPMS Functional Area 49 (ORSA) and civilian GS-1515 analysts. A graduate degree in ORSA or ORSA-related field is preferred. Others may attend on a space available basis.

APPLICATION: Personnel desiring to attend should apply via their Training Officer through the Army Training Requirements and Resources System (ATRRS), Course Code ALMC-SE 02-501.

POINT OF CONTACT: Point of Contact at ALMC can be reached at DSN 539- 4226.

PLACE: Classroom B136, US Army Logistics Management College, Ft. Lee, VA.

CLASSIFICATION: The course is unclassified.

FUNDING: Travel and TDY payments for any personnel accepted into the course must be paid by the attendee's parent organization.

POINT OF CONTACT: Further information may be obtained from the ORSA CEP course director at DSN 539-4249/4226, commercial (804) 765-4249/4226 or e-mail orsacep@lee.army.mil