



## SALES Dataset Documentation:

*Multivariate Data Analysis*, Sixth edition

“The world’s leading authority on applied multivariate data analysis based on number of citations, as reported by Google.Scholar.”

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The sales training dataset is provided as an alternative with more “realistic” data that is “typical” of survey data in marketing. The level of measurement for the scale responses is assumed to be an “equally appearing interval” of measure, thus regression based techniques are assumed to be appropriate for use in analysis. The sales training data were collected via a mail questionnaire which was sent to 80 sales training managers at various firms throughout the United States. The questionnaire is divided into four sections:

Section One: addresses the usage of various training methods by the respondent's firm. There are 17 methods. The respondent rates all methods on a five-point scale for present frequency and frequency of use in five years. These variables are labeled A1 thru A34.

Section Two: concerns the effectiveness of training methods. Again a five-point scale is used to elicit respondent's ratings concerning the effectiveness of the 17 methods in achieving certain training objectives: (a) acquire knowledge, (b) retention of what is learned, (c) change in attitude, (d) development of interpersonal skills, (e) development of problem solving skills, and (f) participant acceptance. These variables are labeled B1 thru B96.

Section Three: concerns the ratings of the effectiveness of a training program using several different approaches: (a) reactions, (b) learning, (c) behavior on the job, and (d) results. The managers were asked to rate both the importance of these dimensions and the frequency with which they use these evaluative criterion. These variables are labeled C1 thru C34.

Section Four: includes demographic data. Variable D1 is the industry category. There are four broad categories represented in the data: (1) retail/wholesale/services, (2) consumer goods manufacturers, (3) industrial goods manufacturers, and (4) finance/insurance/real estate. Also included are D2 - annual sales, D3 - number of employees, D4 - number of salespersons, D5 - number of training department employees, and D6 whether or not the training department subscribes to training trade journals (coded "0" = NO and "1" = YES).

A list of variable/value labels for the SPSS package are provided below as additional documentation on specific details for each variable.

**VARIABLE LABEL**

A1 'CONF/DISCUSSION-PRESENT'  
A2 'LECTURE METHOD-PRESENT'  
A3 'CASE STUDY-PRESENT'  
A4 'TV-LECTURE-PRESENT'  
A5 'FILM VIEWING-PRESENT'  
A6 'VIDEO TAPE/DISC-PRESENT'  
A7 'INTERACTIVE VIDEO-PRESENT'  
A8 'ROLE PLAY:NO RECORD-PRESENT'  
A9 'ROLE PLAY:VIDEO TAPE-PRESENT'  
A10 'BEHAVIORAL MODEL-PRESENT'  
A11 'CAI-PRESENT'  
A12 'BUSINESS GAMES-PRESENT'  
A13 'BUSINESS GAMES:CAI-PRESENT'  
A14 'SENSITIVITY TRAIN-PRESENT'  
A15 'HOME STUDY-PRESENT'  
A16 'READING LISTS-PRESENT'  
A17 'IN-BASKET-PRESENT'  
A18 'CONF/DISCUSSION-IN 5 YRS'  
A19 'LECTURE METHOD-IN 5 YRS'  
A20 'CASE STUDY-IN 5 YRS'  
A21 'TV-LECTURE-IN 5 YRS'  
A22 'FILM VIEWING-IN 5 YRS'  
A23 'VIDEO TAPE/DISC-IN 5 YRS'  
A24 'INTERACTIVE VIDEO-IN 5 YRS'  
A25 'ROLE PLAY:NO RECORD-IN 5 YRS'  
A26 'ROLE PLAY:VIDEO TAPE-IN 5 YRS'  
A27 'BEHAVIORAL MODEL-IN 5 YRS'  
A28 'CAI-IN 5 YRS'  
A29 'BUSINESS GAMES-IN 5 YRS'  
A30 'BUSINESS GAMES:CAI-IN 5 YRS'  
A31 'SENSITIVITY TRAIN-IN 5 YRS'  
A32 'HOME STUDY-IN 5 YRS'  
A33 'READING LISTS-IN 5 YRS'  
A34 'IN-BASKET-IN 5 YRS'  
B1 'CONF/DISCUSSION-AQUIRE KNOW'  
B2 'LECTURE METHOD-AQUIRE KNOW'  
B3 'CASE STUDY-AQUIRE KNOW'  
B4 'TV-LECTURE-AQUIRE KNOW'  
B5 'FILM VIEWING-AQUIRE KNOW'  
B6 'VIDEO TAPE/DISC-AQUIRE KNOW'  
B7 'ROLE PLAY:NO RECORD-AQUIRE KNOW'  
B8 'ROLE PLAY:VIDEO TAPE-AQUIRE KNOW'  
B9 'BEHAVIORAL MODEL-AQUIRE KNOW'  
B10 'CAI-AQUIRE KNOW'  
B11 'BUSINESS GAMES-AQUIRE KNOW'  
B12 'BUSINESS GAMES:CAI-AQUIRE KNOW'  
B13 'SENSITIVITY TRAIN-AQUIRE KNOW'  
B14 'HOME STUDY-AQUIRE KNOW'  
B15 'READING LISTS-AQUIRE KNOWLEDGE'  
B16 'IN-BASKET-AQUIRE KNOWLEDGE'  
B17 'CONF/DISCUSSION-RETENTION'  
B18 'LECTURE METHOD-RETENTION'  
B19 'CASE STUDY-RETENTION'  
B20 'TV-LECTURE-RETENTION'  
B21 'FILM VIEWING-RETENTION'  
B22 'VIDEO TAPE/DISC-RETENTION'  
B23 'ROLE PLAY:NO RECORD-RETENTION'

B24 'ROLE PLAY:VIDEO TAPE-RETENTION'  
B25 'BEHAVIORAL MODEL-RETENTION'  
B26 'CAI-RETENTION'  
B27 'BUSINESS GAMES-RETENTION'  
B28 'BUSINESS GAMES:CAI-RETENTION'  
B29 'SENSITIVITY TRAIN-RETENTION'  
B30 'HOME STUDY-RETENTION'  
B31 'READING LISTS-RETENTION'  
B32 'IN-BASKET-RETENTION'  
B33 'CONF/DISCUSSION-ATTITUDE CHG'  
B34 'LECTURE METHOD-ATTITUDE CHG'  
B35 'CASE STUDY-ATTITUDE CHG'  
B36 'TV-LECTURE-ATTITUDE CHG'  
B37 'FILM VIEWING-ATTITUDE CHG'  
B38 'VIDEO TAPE/DISC-ATTITUDE CHG'  
B39 'ROLE PLAY:NO RECORD-ATTITUDE CHG'  
B40 'ROLE PLAY:VIDEO TAPE-ATTITUDE CHG'  
B41 'BEHAVIORAL MODEL-ATTITUDE CHG'  
B42 'CAI-ATTITUDE CHG'  
B43 'BUSINESS GAMES-ATTITUDE CHG'  
B44 'BUSINESS GAMES:CAI-ATTITUDE CHG'  
B45 'SENSITIVITY TRAIN-ATTITUDE CHG'  
B46 'HOME STUDY-ATTITUDE CHG'  
B47 'READING LISTS-ATTITUDE CHG'  
B48 'IN-BASKET-ATTITUDE CHG'  
B49 'CONF/DISCUSSION-INTER SKILLS'  
B50 'LECTURE METHOD-INTER SKILLS'  
B51 'CASE STUDY-INTER SKILLS'  
B52 'TV-LECTURE-INTER SKILLS'  
B53 'FILM VIEWING-INTER SKILLS'  
B54 'VIDEO TAPE/DISC-INTER SKILLS'  
B55 'ROLE PLAY:NO RECORD-INTER SKILLS'  
B56 'ROLE PLAY:VIDEO TAPE-INTER SKILLS'  
B57 'BEHAVIORAL MODEL-INTER SKILLS'  
B58 'CAI-INTER SKILLS'  
B59 'BUSINESS GAMES-INTER SKILLS'  
B60 'BUSINESS GAMES:CAI-INTER SKILLS'  
B61 'SENSITIVITY TRAIN-INTER SKILLS'  
B62 'HOME STUDY-INTER SKILLS'  
B63 'READING LISTS-INTER SKILLS'  
B64 'IN-BASKET-INTER SKILLS'  
B65 'CONF/DISCUSSION-PSOLVE SKILLS'  
B66 'LECTURE METHOD-PSOLVE SKILLS'  
B67 'CASE STUDY-PSOLVE SKILLS'  
B68 'TV-LECTURE-PSOLVE SKILLS'  
B69 'FILM VIEWING-PSOLVE SKILLS'  
B70 'VIDEO TAPE/DISC-PSOLVE SKILLS'  
B71 'ROLE PLAY:NO RECORD-PSOLVE SKILLS'  
B72 'ROLE PLAY:VIDEO TAPE-PSOLVE SKILLS'  
B73 'BEHAVIORAL MODEL-PSOLVE SKILLS'  
B74 'CAI-PSOLVE SKILLS'  
B75 'BUSINESS GAMES-PSOLVE SKILLS'  
B76 'BUSINESS GAMES:CAI-PSOLVE SKILLS'  
B77 'SENSITIVITY TRAIN-PSOLVE SKILLS'  
B78 'HOME STUDY-PSOLVE SKILLS'  
B79 'READING LISTS-PSOLVE SKILLS'  
B80 'IN-BASKET-PSOLVE SKILLS'  
B81 'CONF/DISCUSSION-PART ACCPT'  
B82 'LECTURE METHOD-PART ACCPT'  
B83 'CASE STUDY-PART ACCPT'  
B84 'TV-LECTURE-PART ACCPT'  
B85 'FILM VIEWING-PART ACCPT'

B86 'VIDEO TAPE/DISC-PART ACCPT'  
 B87 'ROLE PLAY:NO RECORD-PART ACCPT'  
 B88 'ROLE PLAY:VIDEO TAPE-PART ACCPT'  
 B89 'BEHAVIORAL MODEL-PART ACCPT'  
 B90 'CAI-PART ACCPT'  
 B91 'BUSINESS GAMES-PART ACCPT'  
 B92 'BUSINESS GAMES:CAI-PART ACCPT'  
 B93 'SENSITIVITY TRAIN-PART ACCPT'  
 B94 'HOME STUDY-PART ACCPT'  
 B95 'READING LISTS-PART ACCPT'  
 B96 'IN-BASKET-PART ACCPT'  
 C1 'REACTION:COURSE EVALUATION-IMP'  
 C2 'REACTION:TRAIN STAFF COMMENTS-IMP'  
 C3 'REACTION:TRAINEE FEEDBACK-IMP'  
 C4 'REACTION:SUPERVISOR FEEDBACK-IMP'  
 C5 'REACTION:OTHER-IMP'  
 C6 'LEARNING:KNOWLEDGE TESTS-IMP'  
 C7 'LEARNING:PERFORMANCE TESTS-IMP'  
 C8 'LEARNING:PRE/POST MEASURES-IMP'  
 C9 'LEARNING:TRAINING/CONTROL-IMP'  
 C10 'LEARNING:OTHER-IMP'  
 C11 'OTJ BEHAVIOR:SUPERVISORS-IMP'  
 C12 'OTJ BEHAVIOR:CO-WORKERS-IMP'  
 C13 'OTJ BEHAVIOR:SUBORDINATES-IMP'  
 C14 'OTJ BEHAVIOR:CUSTOMERS-IMP'  
 C15 'OTJ BEHAVIOR:EMPLOYEE-IMP'  
 C16 'OTJ BEHAVIOR:OTHER-IMP'  
 C17 'RESULTS:BOTTOM LINE-IMP'  
 C18 'REACTION:COURSE EVALUATION-FREQ'  
 C19 'REACTION:TRAIN STAFF COMMENTS-FREQ'  
 C20 'REACTION:TRAINEE FEEDBACK-FREQ'  
 C21 'REACTION:SUPERVISOR FEEDBACK-FREQ'  
 C22 'REACTION:OTHER-FREQ'  
 C23 'LEARNING:KNOWLEDGE TESTS-FREQ'  
 C24 'LEARNING:PERFORMANCE TESTS-FREQ'  
 C25 'LEARNING:PRE/POST MEASURES-FREQ'  
 C26 'LEARNING:TRAINING/CONTROL-FREQ'  
 C27 'LEARNING:OTHER-FREQ'  
 C28 'OTJ BEHAVIOR:SUPERVISORS-FREQ'  
 C29 'OTJ BEHAVIOR:CO-WORKERS-FREQ'  
 C30 'OTJ BEHAVIOR:SUBORDINATES-FREQ'  
 C31 'OTJ BEHAVIOR:CUSTOMERS-FREQ'  
 C32 'OTJ BEHAVIOR:EMPLOYEE-FREQ'  
 C33 'OTJ BEHAVIOR:OTHER-FREQ'  
 C34 'RESULTS:BOTTOM LINE-FREQ'  
 D1 'INDUSTRY CATEGORY'  
 D2 'ANNUAL SALES'  
 D3 'TOTAL NUMBER OF EMPLOYEES'  
 D4 'NUMBER OF SALES PERSONS'  
 D5 'NUMBER OF TRAINING DEPT EMPLOYEES'  
 D6 'READ TRADE JOURNAL'

#### VALUE LABELS

A1 TO A34

0 'NEVER' 1 'SELDOM' 2 'SOMETIMES'  
 3 'OFTEN' 4 'ALMOST ALWAYS'

B1 TO B96

1 'NOT EFFECTIVE' 2 'LIMITED EFFECTIVENESS'  
 3 'MODERATELY EFFECTIVE' 4 'QUITE EFFECTIVE'  
 5 'HIGHLY EFFECTIVE'

C1 TO C17

0 'NOT IMP AT ALL' 1 'SLIGHTLY IMP'

2 'MODERATELY IMP' 3 'VERY IMP' 4 'EXTREMELY IMP'

C18 TO C34

0 'NEVER' 1 'SELDOM' 2 'SOMETIMES'

3 'OFTEN' 4 'ALMOST ALWAYS'

D1

01 'RETAIL/WHOLESALE SERVICES'

02 'CONSUMER GOODS MFG'

03 'INDUSTRIAL GOODS MFG'

04 'FINANCE/INS/REAL ESTATE'

D6

0 'NO' 1 'YES'

#### MISSING VALUES

A1 TO A34 (MISSING=0)

C5 C10 C16 C22 C27 C33 (MISSING=0)

