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End Matter

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Sincerely,

Jing Shyr, Ph.D.
Vice President and Chief Statistician
SPSS Inc.

Kyle A. Weeks, Ph.D.
Senior Product Manager
SPSS Inc.

Linear Mixed Models procedure

Do you have data that display correlation and non-constant variability, such as data that represent students nested within classrooms or consumers nested within families? You can model not only means but also variances and covariances in your data using the powerful Linear Mixed Models procedure. Its flexibility means you can formulate a wide variety of models, such as multilevel models with fixed-effects covariances, hierarchical-linear models, random-effects models, random-coefficient models and linear-growth models. In addition, you can work with repeated measure designs, including incomplete repeated measurements in which the number of observations varies across subjects.

General Linear Models (GLM) procedure — multivariate

Do you need a flexible procedure that works simultaneously with related multiple dependent variables? SPSS' GLM multivariate procedure does just that — providing flexible design and contrast options to estimate means and variances and to test and predict means. Mix and match categorical and continuous data to build models. Because GLM multivariate doesn't limit you to one data type, you have options giving you a wealth of model-building possibilities. Also, you can easily visualize relationships using profile plots (interaction plots) resulting from estimated predicted mean values.

General Linear Models (GLM) procedure — repeated measures

Do you need to measure the same people over time, for example, to measure how overall employee satisfaction increases or decreases? Using SPSS' GLM repeated measures procedure you can analyze variances when you make the same measurement a fixed number of times on

individual subjects or cases. Get the flexibility to mix and match categorical and continuous-level predictors — including interactions. As with the GLM multivariate procedure, you can see relationships in your data using profile plots.

Nonlinear Regression (NLR) and Constrained Nonlinear Regression (CNLR) procedures

Are you working with models that have nonlinear relationships, such as predicting coupon redemption as a function of time and number of coupons distributed? Estimate nonlinear equations using one of two SPSS procedures: NLR for unconstrained problems and CNLR for both constrained and unconstrained problems. CNLR empowers you to write your own algorithms. CNLR also gives you the flexibility to:

- Use linear and nonlinear constraints on any combination of parameters
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- Compute bootstrap estimates of parameter standard errors and correlations

Everything you need for predicting numerical outcomes

SPSS' procedures for predicting numerical outcomes aren't limited to the ones we just described. The following procedures help give SPSS 11.0 what you need for prediction:

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- Survival Analysis procedures
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StatXact 5, with over 100 procedures and a 1500 page manual that is really a textbook on exact methods, provides the world's most comprehensive collection of exact procedures for significance tests and confidence intervals. Among its new features, StatXact 5 now gives you a host of new procedures for the commonly-encountered two-binomial situation. Based on recent research (Agresti and Min, *Biometrics* 2000; Chan and Zang, *Biometrics* 1999), these procedures will give you more powerful exact p-values, and shorter exact confidence intervals.

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Unconditional exact McNemar's test

Exact interaction tests in stratified 2xC tables

- comparison of C ordered binomials
- comparison two ordered multinomials

Exact test of trend for correlated binary data

Exact tests and confidence intervals for stratified Poisson data

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