



Cornell University

Office of Statistical Consulting

Colleges of Human Ecology and Agriculture and Life Sciences
Division of Nutritional Sciences

Stat Happenings #6: Statistics News You Can Use From the Office of Statistical Consulting Fall 2005

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1. Webpage

Our webpage is in the process of being moved to a new address within the next weeks. We will announce our new webpage address when it is available. Thank you for your patience during the transition period. If you experience any problems finding our webpage, please write or give us a call so we can assist you.

2. Workshops

2.1) There are still spaces in next week's "Introduction to Logistic Regression" workshop. This workshop is in two parts and is being offered Monday, November 7 from 11:15am-12:30pm and Tuesday, November 8 from 12:30-1:30pm in the Stone computer room in Mann library

2.2) The "Interpreting Regression Parameters" workshop has been expanded and redesigned this semester into two parts. The first part covers parameters of continuous predictors, including topics such as centering and standardized parameters. The second part covers parameters of categorical predictors and interactions. It will be offered November 14 and 21, from 2:30-4:30.

2.3) The Introduction to Mixed Modeling workshop will again be offered during January break, on Monday, January 19th.

Please see <http://www.human.cornell.edu/admin/statcons/> under the 'Workshop' heading for descriptions and schedules. Since the web site is in the process of being moved, you cannot register through the web page.

To register simply send a message to Statcons@cornell.edu specifying which workshop you wish to sign up for.

2.4) We would also like to remind you that CISER offers workshops on a number of statistical software programs, including SAS, SPSS, and Stata. See their website for more information: <http://www.ciser.cornell.edu/ASPs/workshops.aspx>

3. Multilevel Analysis Information

3.1) As we reported in Newsletter #51, beginning with version 12, SPSS is able to handle a much wider range of multilevel models. The speed at which these models are estimated, however, has been disappointing. For simpler models, this is not a problem, but estimation is very slow for models with even a modest number of random effects or with large data sets. On several occasions, this has been such a problem it was necessary to switch to SAS.

3.2) SPSS version 13 has a bug in the Mixed procedure. SPSS fails to report estimated coefficients, standard errors, and p-values for independent variables when the effects are very small. If you encounter this problem, rescaling your variable should solve your problem. The bug has been fixed in SPSS version 14, which should be available in Winter 2006.

3.3) The new version 9 of STATA has a new procedure to fit linear mixed models: xtmixed. Our preliminary testing showed the procedure was easy to use, and its results were consistent with those obtained in SAS, SPSS or S-Plus. Detailed information can be found under the xtmixed command. This addition to STATA is important because we have observed that the xtreg procedure from earlier versions sometimes estimates variances to be zero that are, in fact, non-zero, because of the estimation algorithm used.

3.4) The latest version 9 of SAS has incorporated the Glimmix macro as an experimental procedure named Proc Glimmix. You need to download the procedure from the SAS web page (www.sas.com) prior to using it. This procedure can fit generalized linear mixed models. Caution has to be taken, though, because for models with random effects, the default estimation routine uses pseudo-likelihood techniques; this approach has been documented as producing biased results for repeated binary data with few repeats on each subject.

4. Access to Specialized Software

The Office of Statistical Consulting has several specialized software packages that might not be readily available on campus. If you wish to try the software out before purchasing it or if you need to use it, feel free to contact us. We have StatXact, Amos version 6, MLWin, NQuery, MPlus, and the SPSS Classification Tree module.