

## Research and Statistical Support University of North Texas

## **RSS Matters**

## at the 2000 American Psychological Society Meeting

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This summer I attended the American Psychological Society (APS) annual meeting held in Miami Beach, Florida (June 8-11). In additional to presentation, I took a methodology mini-tutorial entitled "Statistical Power: Its Uses and Abuses" by Lee Sechrest, Ph.D.The thrust of Dr. Sechrest's talk can be summed up in his leading quote "Statistical power is good. Absolute concern for statistical power corrupts absolutely." For those interested in statistical power, he provided an excellent list of useful references.

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- Lipsey, M. W. (1990). *Design sensitivity: statistical power for experimental research*. Newbury Park: Sage Publications.
- McCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). "Power analysis and determination of sample size for covariance structure modeling." *Psychological Methods*, 1, 130-149.
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On a completely different subject matter, I attended a presentation on the use of the internet in teaching. Dr. Tom Ludwig from Hope College presented some pointers on designing and using Web-based activities in teaching. One good tips that he provided were to make sure that the content of a single-page would indeed fit on a single page with no scrolling necessary. Second, when designing tools for students, it is sometimes easy to want to add lots of entertainment value in the way of animations, etc. However, it is important to remember that many students will be accessing the pages from home and a 56K modem makes for a very slow download. Finally, he pointed out that while activities are wonderful visual tools to help explain a topic, they should only be used for the more difficult concepts. There is no need to take a student through an entire Web-based activity, just because we have the technology to do so.

One of the posters at the conference spoke to the predictors of how well a student will perform in a Web-based course. Dr. Michael Newlin and Dr. Alvin Wang, both of University of Central Florida, based the following findings on data from six sections of a required Statistical Methods of Psychology course of which half were Web-based and half were traditionally classroom-based. They found that Web students were more likely to have an external locus of control and to use abstract conceptualizations than traditional students. For the Webbased students, final grade in the course was significantly positively related to visits to the course homepage in the first week of class ( $\underline{r} = .47$ ) and the last week of the class ( $\underline{r} = .39$ ) and significantly positively related to number of responses to an instructor's questions ( $\underline{r} = .62$ ). I presented information at a Participant Idea Exchange on setting up a Teaching Resource Library using WebCT. The sessions on developing instructional learning using the Web were very heavily attended and it was obvious that many of the faculty were either already using the Web to supplement class material or were in the development process. While none of the attendees were jumping on the bandwagon to teach courses completely over the internet, all reported that the extensive time required to develop Web-based activities was well worth the effort to enhance the students' learning experience.