

From: [Hudes, Estie](#)
Subject: Methods Core Seminar 5/16/14 - Dr. Gregorich
Date: Friday, May 02, 2014 2:23:33 AM

If you are coming from outside CAPS, please make sure you read the information at the end of this message. Please make sure you RSVP to Estie Hudes prior to the seminar date.

Please note that i am away until May 12, and may not be able to reply to your email until then.

Dear Methods Core seminar participants,

Our May seminar will take place in two weeks, on May 16.

Topic: Power Analysis for Logistic Regression Models Fit to Clustered Data:
Choosing the Right Rho

Presenter: [Steve Gregorich, PhD](#)
Professor of Medicine
UCSF / CAPS



Time & Place: Friday, May 16, 10-11:30
McKusick Conference room
50 Beale Street, 13th floor
San Francisco, CA 94105

Abstract: When conducting power analyses for regression models fit to clustered data, a useful 'shortcut' is to calculate *effective* sample sizes (N_{eff}), which represent cluster-adjusted total sample sizes. There are different formulas for N_{eff} appropriate to different modeling contexts, but all incorporate an estimate of the intra-cluster correlation of Y . Given carefully selected N_{eff} values, standard power analysis routines that assume independent observations can be used to estimate power for clustered sampling designs. In the context of logistic regression there are two general approaches to estimating the intra-cluster correlation of Y : a phi-type coefficient and a tetrachoric-type coefficient. The bottom line is that the phi-type coefficient should be used when calculating N_{eff} . I will present background on this topic as well as some simulation results.

Short bio: Dr. Gregorich holds a PhD from the University of Texas at Austin. He is an applied statistician with interest in models for clustered/dependent data; structural equations with latent variables; psychometrics, including tests of psychometric invariance across population groups; statistical power for complex sampling

designs; missing data; and Monte Carlo simulation.

Hope to see many of you at the next seminar,
--Estie

++++
For building entrance at 50 Beale St., please RSVP to [Estie Hudes](#) ahead of time.

The CAPS Methods Core activity can now be checked directly on the website:
<http://caps.ucsf.edu/about/structure-cores/methods-core/>

Materials from past Methods Core seminars can be found at
<http://caps.ucsf.edu/about/structure-cores/methods-core/methods-core-seminars/>

Directions to CAPS:
<http://caps.ucsf.edu/about/directions-parking/>

Please note that due to construction the parking information above is incorrect. Check the link below,
[Parking Information](#)

++++

Estie Sid Hudes, PhD MPH
Specialist / Statistician
Center for AIDS Prevention Studies (CAPS) &
Department of Epidemiology & Biostatistics
University of California, San Francisco
50 Beale Street, Suite 1300
S.F., CA 94105-1823
Campus Mail: Box 0886, S.F. CA 94143-0886

Phone: 415.597.9126
Fax: 415.597.9213
email: Estie.Hudes@ucsf.edu
<http://caps.ucsf.edu/personnel/ehudes/>

CONFIDENTIALITY NOTICE: INFORMATION IN THIS MESSAGE, INCLUDING ALL ATTACHMENTS, IS INTENDED ONLY FOR THE PERSONAL AND CONFIDENTIAL USE OF THE INTENDED RECIPIENT(S) NAMED ABOVE. If the reader of this message is not an intended recipient or an agent responsible for delivering it to an intended recipient, you are hereby notified that you have received this message in error, and that any review, dissemination, distribution, or copying of this message is strictly prohibited. If you received this message in error, please notify the sender immediately, and delete the message and any hard copy print-outs. Thank you.