

From: [Hudes, Estie](#)  
Subject: Methods Core seminar in May 5/18/2012 - Dr Steve Gregorich  
Date: Friday, May 04, 2012 5:45:36 PM

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Dear Methods Core seminar participants,

Our May seminar will take place two weeks.

Topic: ~~“Use Exploratory Factor Analysis~~ Oblique Principal Component Cluster Analysis  
to uncover the underlying structure of self-report instruments"

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

Time & Place: Friday, May **18, 10-11:30**  
McKusick Conference room  
50 Beale Street, 13<sup>th</sup> floor  
San Francisco, CA 94105

**Abstract:** Self-report instruments often are developed to measure a multidimensional set of hypothesized, unobserved (or latent) constructs, each by multiple, fallible, observed items.

The relationships between a set of items and the corresponding latent constructs defines a measurement model. When investigators are unsure of how items cluster within constructs, Exploratory Factor Analysis with rotation (EFA) is the go-to method for uncovering measurement models. However, especially with very large sets of observed items, application of EFA can be a long, frustrating exercise that yields sub-optimal results. An alternative model for exploring underlying measurement models of multi-item instruments is Oblique Principal Component Cluster Analysis (OPC). In my experience, OPC easily bests EFA: it is much easier to apply and produces superior results. Once an empirical measurement model is obtained by OPC, 'Confirmatory' Factor Analysis (CFA) can be used to assess the fit of the OPC model. In this talk, I will describe the OPC model, provide example applications, and compare EFA and OPC applications to real data.

**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 this presentation,

--Estie

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CAPS address is 50 Beale Street, Suite 1300. The building is between Market and Mission.

Directions to 50 Beale Street can be found at

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

Please also note that our building has very tight security; in order to be provided with visitor passes, you will need to RSVP to me, preferably at least 2 days before the seminar. If you are even considering attending the seminar, please do RSVP, so your name will be left with the security stuff at the main building entrance.

**RSVP to [Dr. Estie Hudes](#)**

The CAPS Methods Core activity can now be checked directly on the website:

<http://caps.ucsf.edu/about/structure-cores/methods-core/>

Materials from recent seminars are put on the website. You can go directly to

<http://caps.ucsf.edu/about/structure-cores/methods-core/methods-core-seminars/>

for seminar announcements and past seminars materials. The information is being updated regularly.

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