

What is Wrong and What is Right with Cronbach's Coefficient Alpha?

Professor Klaas Sijtsma

Department of Methodology and Statistics
School of Social and Behavioral Sciences, Tilburg University

January 17, 2018 (Wednesday)

12:45 – 14:00

Room 205, Runme Shaw Building, HKU

Chair: Professor Jimmy de la Torre

Abstract:

In this presentation, I discuss three topics. First, I discuss the present-day perspective on coefficient alpha (Cronbach, 1951). Coefficient alpha is one of the most frequently used quantities in the social, behavioral and health sciences, and it is therefore remarkable that it so poorly understood, by researchers and psychometricians alike. I discuss what alpha is, how people use it, and what alpha can do for us. Second, I provide a mid-twentieth perspective on coefficient alpha by discussing Cronbach's seminal 1951 article in *Psychometrika*, and investigate why he published this article and which problems existing before 1951 in test construction research he tried to solve. I relate his intentions to the way researchers nowadays use alpha. Third, I discuss future alternatives for coefficient alpha that have been widely available to researchers for a long time, but often are unknown or badly understood. I also discuss approaches to reliability based on factor analysis and generalizability theory.

Reference:

[Sijtsma, K. \(2009\). On the use, the misuse, and the very limited usefulness of Cronbach's alpha. *Psychometrika*, 74, 107-120.](#)

About the speaker:



Klaas Sijtsma is Professor of Methods and Techniques of Psychological Research at Tilburg University. He has published more than 200 articles and chapters on methodological and statistical topics, mainly in the area of psychometrics. He is the author of the Dutch-language textbook *Test theory* (with Pieter Drenth) and a monograph on nonparametric item response theory (with Ivo Molenaar). Prof. Sijtsma was chair of the Dutch Committee on Tests and Testing (2005-2010), President of the Psychometric Society (2010-2011), and Dean of Tilburg School of Social and Behavioral Sciences (2011-2017).

~ ALL ARE WELCOME ~

Please register at:

https://hkuems1.hku.hk/hkuems/ec_regform.aspx?guest=Y&ueid=53869

For enquiries, please contact the Office of Research at 3917 8254.