



Jimmy de la Torre, profesor de la Universidad de Hong Kong impartirá la conferencia:

" Model Similarity, Model Selection, and Attribute Classification",

el día 14 de Diciembre de 2016, miércoles, en horario de 12:00 a 14:00 horas en la Sala de Grados Angel Riviere *de la Facultad de Psicología de la UAM.*

Resumen de la conferencia:

Selecting the most appropriate cognitive diagnosis model (CDM) for an item is a challenging process. Although general CDMs provide better model-data fit, specific CDMs have more straightforward interpretations, are more stable, and can provide more accurate classifications when used correctly. Recently, the Wald test has been proposed to determine at the item level whether a general CDM can be replaced by specific CDMs without a significant loss in model-data fit. The current study examines the practical consequence of the test by evaluating whether the attribute-vector classification based on CDMs selected by the Wald test is better than that based on general CDMs. Although the Wald test can detect the true underlying model for certain CDMs, it is yet unclear how effective it is at distinguishing among the wider range of CDMs found in the literature. This study investigates the relative similarity of the various CDMs proposed in the literature, and explores the implications for the Wald test. Simulations show that the Wald test cannot distinguish among additive models due to their inherent similarity, but this does not impede the ability of the test to provide higher correct classification rates than general CDMs, particularly when the sample size is small and items are of low quality. An empirical example is included to demonstrate the viability of the procedure.

Biografía breve

Jimmy de la Torre is a Professor in the Faculty of Education at The University of Hong Kong. He is also currently a Chair Professor at the National Taichung University of Education in Taiwan, and an Honorary Professor at the Universidad Autonoma de Madrid in Spain. His primary research interests are in the field of psychological and educational testing and measurement, and the use of diagnostic assessment to support classroom teaching and learning. As one of the leading researchers in the field of cognitive diagnosis modeling, his work has covered both theoretical and implementation issues in this area. In 2009, he was named by the White House as one of the recipients of the Presidential Early Career Awards for Scientists and Engineers. He also received the Jason Millman Promising Measurement Scholar Award in 2009 from the National Council on Measurement in Education. He is the editor-in-chief of the *Journal of Educational Measurement*, an associate editor of *Applied Psychological Measurement*, and a member of the Psychometric Society Board of Trustees.