Training program evaluation in non-standardized context: Complementarity across Factorial and Multilevel Analysis to obtain construct validity evidences

Program evaluation is usually applied to non-standardized intervention contexts. This implies, among others, deficiencies of: a) validated theoretical models; b) non-standard measurement instruments; c) reliable measures. In this work, we show that Factor Analysis with polychoric correlations and Multilevel Analysis could be an adequate procedure to gain construct validity evidence in non-standard evaluative contexts, where the measures are not quantitative and usually are nested. The empirical study is carried out on a sample of 2754 workers of the University of Seville. They have completed a satisfaction questionnaire about training courses aimed to prepare them for the correct performance of their jobs. We highlight the complementarities between both analytical techniques to study the differential variability provided by explained variables nested in different hierarchical level to predict the perceived satisfaction. © 2015: Servicio de Publicaciones de la Universidad de Murcia.

Factor analysis
Multilevel analysis
Program evaluation
Satisfaction
Validity