

Professional Self-Efficacy Scale for Information and Computer Technology Teachers: Validity and Reliability Study

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ABSTRACT This study aims at developing a valid and reliable scale to measure information and communication technology (ICT) teachers' self-efficacy related to the Turkish national framework of ICT competencies. For statistical procedures, data were respectively analyzed with exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). Furthermore, test-retest procedure was carried out to confirm the time invariance of the scale. EFA results revealed that the scale's seven-factor structure accounts for 65.90 percent of total variance. CFA results produced an acceptable statistical support for model-data fit between the observed item scores and the seven-dimension scale structure ($X^2/df= 1.98$, RMSEA= .073, CFI= .86). The standardized regression weights between the latent and observed variables ranged from .57 to .89 and Cronbach's alpha coefficient of the scale sub-dimensions ranged from .80 to .88. Besides, the item-scale correlations varied between values of .53 and .79. As a result, the developed scale is a likert questionnaire and composed of 33 five-point items with seven sub-dimensions.