Chapter XXXIV
Measurement of End-User Computing Satisfaction

Rodney A. Reynolds
Azusa Pacific University, USA
(on leave from Pepperdine University, USA)

BACKGROUND

Doll and Torkzadeh (1988) developed their measure of end-user computing satisfaction because “decision analysis” (examination of specific uses of computer applications in decision making) is “generally not feasible” (p. 259), but that satisfaction is a reasonable surrogate for assessing use. Doll and Torkzadeh claim that evidence from other studies support an expectation that satisfaction leads to use (as opposed to use leading to satisfaction). The Doll and Torkzadeh study focused more on broad notions of systems and applications (Mini- or mainframes, microcomputer applications, analysis, and monitor applications).

The end-user computing satisfaction scale is a multidimensional instrument. Doll and Torkzadeh (1988) started with 40 items, and reduced those first to 18 items, and then reduced the scale further to a final set of 12 items. The dimensions of the end-user satisfaction scale are content, accuracy, format, ease of use, and timeliness.

Aladwani (2003) reviewed the existing measures of information satisfaction and found the Doll and Torkzadeh (1988) measure to be less limited by particular context or application than other measures are. Aladwani applied the end-user computing satisfaction scale to assess student satisfaction with e-mail. McHaney and Cronan (1998) used the end-user computing satisfaction scale to assess responses to computer simulations.

RELIABILITY

Doll and Torkzadeh (1988) report an overall reliability (alpha) of .92 for the end-user computing satisfaction scale. The reliabilities for the specific dimensions are: Content, .89; Accuracy, .91; Format, .78; Ease of use, .82; and Timeliness .82. Torkzadeh and Doll (1991) demonstrated high test-retest reliability for the end-user computing satisfaction scale.

VALIDITY


RESULTS

Researchers typically sum the items on the entire scale or on the respective dimensions to achieve composite scores. Researchers in the literature on the end-user computing satisfaction scale do not commonly report using factor score coefficients when calculating scores.

COMMENTARY

Doll and Torkzadeh (1991) responded to concerns raised about the end-user computing satisfaction scale. They indicate that most of the concerns are misunderstandings or unreasonable demands that exceed normal standards for measurement development and use. The scale is clearly one of the more popular instruments in the literature on technology usage.

COST

The end-user computing satisfaction scale is readily available in print (Doll & Torkzadeh, 1988). The MIS Quarterly holds the copyright on the original publication, so researchers should consult that journal before assuming any rights to the use of the instrument.

LOCATION


An electronic version of the instrument is available from the author of this profile, so long as the user takes personal responsibility for protecting the rights of the copyright holder.

REFERENCES


Related Content

User Authentication and Academic Integrity in Online Assessment
[www.irma-international.org/chapter/user-authentication-academic-integrity-online/27695/](http://www.irma-international.org/chapter/user-authentication-academic-integrity-online/27695/)

A Survey of Effective Technologies to Assess Student Learning
[www.irma-international.org/chapter/survey-effective-technologies-assess-student/19663/](http://www.irma-international.org/chapter/survey-effective-technologies-assess-student/19663/)

Wavelet and Unsupervised Learning Techniques for Experimental Biomedical Data Processing
[www.irma-international.org/article/wavelet-unsupervised-learning-techniques-experimental/78330/](http://www.irma-international.org/article/wavelet-unsupervised-learning-techniques-experimental/78330/)

Development and Evaluation of a Generic Re-Purposable e-Learning Object on Data Analysis
Jillian R. Griffiths and Jenny Craven (2013). *Cases on Assessment and Evaluation in Education* (pp. 71-91).
[www.irma-international.org/chapter/development-evaluation-generic-purposable-learning/69486/](http://www.irma-international.org/chapter/development-evaluation-generic-purposable-learning/69486/)

Collaboration in Student Assessment Research: Beyond Data Collection and Reporting
Robin Capt, Heidi Taylor, Gary Kelley and Mo Cuevas (2013). *Cases on Assessment and Evaluation in Education* (pp. 55-70).
[www.irma-international.org/chapter/collaboration-student-assessment-research/69485/](http://www.irma-international.org/chapter/collaboration-student-assessment-research/69485/)