An Innovative Application of Composite-Based Structural Equation Modeling in Hospitality Research With Empirical Example

Noppadol Manosuthi, Jin-Soo Lee, Heesup HanFirst

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Abstract

Partial least squares path modeling (PLS-PM) and generalized structured component analysis (GSCA) are two key estimators derived from a full-fledged composite-based structural equation modeling (SEM). The analyses of PLS-PM and GSCA have been recently extended to mimic factor-based SEM, and the extended approaches are called PLSC and GSCAM, respectively. Simulation studies have confirmed that the relative performance of PLS-PM is comparable with that of GSCA. Similarly, GSCAM, PLSC, and the traditional factor-based SEM perform equally well in parameter recovery. Although composite-based SEM perfectly fits into the current research landscape that focuses on a prediction-oriented approach, empirical research in the hospitality context that uses PLS-PM, GSCA, PLSC, and GSCAM estimators is extremely rare. To encourage hospitality researchers to adopt these methodologies, we demonstrate an illustrative example using PLS-PM, GSCA, PLSC, and GSCAM based on the confirmatory composite analysis (CCA) procedure. Measurement and structural invariances, applications of model fit, PLSpredict, and importance-performance map analysis are incorporated into our example. Finally, practical management in the hospitality field based on this methodology is discussed.

Keywords

composite-based structural equation modeling (SEM), partial least squares path modeling (PLS-PM), consistent partial least squares (PLSC), generalized structured component analysis (GSCA), confirmatory composite analysis (CCA), invariance analysis