Does Estimation Methods in Structural Equation Modeling Impact Theory Development in Marketing?

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Abstract

This paper address the issue of estimation methods in structural equation modeling. The objective is to explore how different estimation methods can impact theory development. An accepted model, based on established marketing theory, is proposed and empirically tested on a sample of 400 customers within the Norwegian newspaper industry. The findings show how one theoretical model can be both rejected and accepted depending on the use of estimation method. When both the assumption about normality and Σ equaling $\Sigma(P)$ is violated, there are no reasons for ML, GLS and WLS to converge to the same parameter vector. It is therefor likely that in most practical situations, these methods will give deviating estimates. The estimation method used will therefor affect model acceptance and the resulting development of marketing theory. This paper discusses seven general guidelines for researchers which may help them in their theory testing and development using SEM.