EXAMINING THE EFFECT OF COMMON METHOD VARIANCE IN TECHNOLOGY-MEDIATED LEARNING RESEARCH

Abstract

This paper examines the effects of common method variance with respect to the empirical evaluation of technology mediated learning (TML). We argue that the use of self-reported data for the major dependent variable of TML, learning success, is insufficient and a major validity threat of past research results; thus, we examine the effect of common method variance in TML. We are currently conducting a study on the antecedents of learning success measured by three different approaches. We conduct this study with participants of software trainings and collected data on independent and dependent variables of our research model. In addition, we are provided with the objective learning success measures by the provider of the software training. By analyzing the data we are able to investigate how different measurement approaches to learning success impact research findings. Our research is currently in progress, and therefore we are currently not able to provide any empirical findings. The contribution to theory and practice is an assessment of the reliability of self-reported learning success measures and the impact of different measurement approaches for the relationships in a TML model. Besides the ongoing discussion in research regarding the concept of learning success measures, our paper is the first that systematically examines the impact of different measurement approaches for learning success in the light of common method variance in TML research.

Keywords: Common Method Variance; Technology-mediated Learning; Learning Success; Measurement Approaches; Self-reported Learning

Acknowledgements

The research presented in this paper was funded by the German Federal Ministry of Education and Research in the project kuLtig (www.projekt-kultig.de), FKZ 01BEX05A13.