Organisational Behaviour Model Based on Principal Component Analysis Assessment*

Adrian VÎLCU

"Gheorghe Asachi" Technical University of Iași, Romania

Ionuț-Viorel HERGHILIGIU

"Gheorghe Asachi" Technical University of Iași, Romania

Correspondence should be addressed to: Adrian VÎLCU; adrian.vilcu@academic.tuiasi.ro

Abstract

Organizational behaviour (OB) is a concept found in all areas where there are individual-group relationships. Thus, OB includes the totality of human relations, a system that is in a permanent dynamic within the organizational structures. The research includes statistical modelling of OB from the point of view of its orientation - on task (TB), on relationships (RB) and on one's own person (PB), modelling weighted by a moderating factor - the online vs hybrid education system. Thus, the analysis contains 2 target groups - one that was subjected to a completely online environment and one group that was subjected to a hybrid environment. The modelling is performed by using the Principal Component Analysis (PCA) - statistical method applied on 2 levels to reduce the input variables to the most important ones for the OB model. The 2 OB models for the two groups of respondents were compared taking into account the projection of the online/hybrid learning environment on the OB. Research hypotheses verified in the current research were stated. The novelty elements of the paper are the application of the PCA method in a hierarchical way, the application of statistical methods for OB modelling, the new perspective regarding the components of OB, the quantitative explanation of the effect of online/hybrid learning environment on OB.

Keywords: Organizational behaviour, Principal Component Analysis assessment, statistical model

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