Reviewer's report

Title: A Theory-Based Approach for the Quantitative Analysis of Organizational Culture in Occupational Health Research

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Reviewer: Ingwer Borg

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1. This paper describes theory and data that have the potential for an interesting contribution to the organizational psychology literature. Nice sample, with large N, and 30 different workplaces, random samples, 73% participation rate. (What could be described in more detail is how these various groups were invited to this study. Cover letter, wording, etc.) In the end, though, more work is needed on this paper’s theory and statistical analyses. The following comments and suggestions are hopefully helpful.

2. The purpose of the study remains somewhat vague: Developing a “realistic” instrument for measuring org. culture, find out which culture types (distinguished somehow by this instrument) are strongly related to employee health and well-being, validate the org. culture measurement instrument, etc. This purpose should be stated more clearly, so that the reader can judge to what extent this goal has been reached.

3. It remains unclear what the proposed instrument is in the end. The authors set out with a 24 item version of OCP items, but the factor analysis shows that some items are poor: OCP15 and OCP25 are virtually not explained by the four-factor solution. The first one is poorly formulated (“not constrained by rules”), the second one (“being aggressive”) needs further analyses. Also, OCP26 is not much better (“predictability”). At the very least, these items should be dropped when computing culture-type indices.

4. But is the 26-item instrument really the proposed final instrument for measuring org. culture or, rather, is it an instrument for assigning a quadruple index to an organization in terms of the 4 “culture types”? If so, a “relatively short” and “realistic” (p. 5) scale—which is what the authors attempt to develop--could also be a lot shorter. Indeed, as short as 4 items.

5. Recent studies by Borg, Groenen, Jehn et al. (2011) that embed the OCP approach into Schwartz’s general theory of universals in values (TUV) are ignored, unfortunately, although the authors first complain about the OCP’s lack of theoretical foundations and then sketch a theoretical foundation on the basis of the “competing values framework”. The TUV-based approach also leads to a 2-dimensional structure of “competing values” (risk vs. rules, and relations vs. results; self-transcendence vs. self-enhancement, and conservation vs. change; or similar interpretational labels). This framework is very similar to what the authors propose in terms of content, and so this could be used to actually strengthen their theoretical arguments.
6. A 2x2 typology or a 2-dimensional competing value theory is also more economical and, therefore, more useful for constructing “realistic” scales (i.e., short scales that can be used in practical HR work).

7. EFA is not the only method that could (or should) be used if one first proposes a competing values framework. First, given a theory, the subsequent data analysis should be “confirmatory” rather than exploratory. In any case, the EFA does not really uncover *competing* factors, but rather four factors that are *not* competing but positively correlated. That is, a person can have a high score on factor X and also high scores on all other factors, for example. Indeed, this is *more* likely than having a high score on F and low scores on other factors! To test a competing value theory, a different method of statistical analysis is needed, for example confirmatory multidimensional scaling (as in the Borg et al. paper; see above). EFA results, however, can later be embedded into an MDS solution.

8. Generally, the statistical methodology is not sufficiently derived from theorizing. It also often remains unclear exactly what was done (e.g., exactly how were the different organization profiled in terms of culture types?). More detail and more precision are needed in describing the analyses.

9. The hierarchical regression analysis is certainly possible, but one wonders why it is used in the first place because the intraclass correlations do not really ask for it. Nor are there content hypotheses that predict hierarchical effects.

10. I found it interesting to relate the OCP measures to other variables of interest which are not the usual performance, commitment, etc., but health variables (distress, depression, burnout). However, I am not familiar with such scales as the GHQ, BDI, and MBI scales, or the WHO well-being index. Can it be assumed that the reader of this journal knows these instruments? Even so, it is common practice to briefly describe even well-known instruments briefly, and present one or two sample items.

11. Tables such as Table 3 or Table 4 are pretty useless unless the items are made explicit. Codes such as OCP1, OCP2 … do not reflect the items’ content, and so the structure of the factor loadings is but a meaningless table of numbers. The reader must consult Table 1 for the items’ content. Nor very reader-friendly. Moreover, what is given in Table 1 is only in a short form, a variable label: What exactly was the complete item wording?

12. The OCP version used in this study is a unipolar rating scale, not a “Likert-type” scale (which is bi-polar).

13. Remark on p. 15: “significant between workplace variations of the four outcomes”? How was this assessed, and what is an “outcome”? I assume an overall index was computed from the items for each of the “groups”: Exactly how?

14. The final substantive conclusions remain unclear to me, because what is missing is a discussion of person-organization fit. A culture may be of “type” X, and if that is what the individual wants, it is the “right” culture for this person. I find it hard to argue that certain culture types should generally be related to certain health variables without taking P-O fit or (or other context variables) into
account.

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