A Few Comments on the Methodological Aspects of Zábrodská et al.'s Study

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This text examines the methodological and analytical aspects of Zábrodská et al.'s quantitative study of Czech academics [Zábrodská et al. 2016]. First I comment on a questionable choice researchers made in their analysis. This is followed by a note of caution about the lack of weighting of the cases in the analysis and a criticism of the choice of population in the study.

The part of Zábrodská et al.'s article describing the analysis the authors used in their study immediately gives rise to certain doubts. Although researchers obtained a response rate of 23%, that is, they received completed questionnaires from 4517 academics out of the 20 000 academics they had addressed with the request to fill in the questionnaire, they used data from only 2229 respondents, which is 10% of the addressed sample. The authors write: 'To avoid problems stemming from missing values in the analysis, we used a sample of 2229 academics all of whom fully completed the questionnaire.The effective sample thus included 10% of the researched population, which is comparable to other studies using online surveys among academic faculty [e.g. Kolsaker 2008].' [Zábrodská et al. 2016]

(1) The type of the analysis that the authors use in their study (i.e. descriptive statistics and correlations) is very capable of dealing with missing item values. It is thus remarkable and curious that the researchers used only half of the data that they had available. Regarding the exclusion of a big portion of the research sample, the authors write in a footnote: 'We recognise that excluding questionnaires with incomplete items may seem unnecessarily restrictive for the purpose of descriptive statistics and correlations reported in this article. However, in our follow-up analyses related to the project we use more advanced statistical methods, such as SEM, in which such reduction is appropriate.' [ibid.: 356] Even if this were true and SEM methods could not process data with missing values (which is not true), it makes no sense to get rid of one-half of the data in a study that is based upon descriptive statistics and correlations. This kind of omission could have a radical impact on the results of the study, producing different finding than if all the available data were used.

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(2) The authors compare their methodology to that used by Kolsaker [2008], i.e. that their data sample consist of 10% of the researched population. This fact is by no means justification for the arbitrary exclusion of half of the available data.

Further in their article the authors provide information about the composition of their sample with respect to basic characteristics such as gender, academic rank, and academic discipline and compare their sample to the characteristics of academic population provided by the Czech Statistical Office. Although they find a considerable disproportion (for example) between *academics in social sciences and humanities* in their sample (42%) and in the population (28%), they do not weight their data. It is true that such a discrepancy between the sample and the population is so robust that weighting cases would be pointless. Nevertheless, the authors should have pointed out that inappropriateness for weighting was the reason why they did not adjust their unrepresentative data.

(3) My last comment regards the choice of studied population. The authors followed the methodological decision made by Shin and Jung's [2014] to include only academics that work at universities. Although following the approaches of foreign studies is a standard procedure in the social sciences, it is worth considering the specific features of the home country. In the Czech Republic both universities and the Czech Academy of Sciences (CAS) conduct non-commercial academic research and train young researchers. The inclusion of academics from the CAS in the studied population would have been a reasonable choice that could have produced a more general picture of Czech academia, of which researchers in the CAS are certainly a part.

References

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