Title: Which dimensions of psychosocial working conditions are monitored in Europe? A comparison of seven European monitoring questionnaires

Authors:

Maren Formazin (formazin.maren@baua.bund.de)
Hermann Burr (burr.hermann@baua.bund.de)
Cecilie Aagestad (cecilie.aagestad@stami.no)
Tore Tynes (tore.tynes@stami.no)
Sannie Vester Torsen (svt@arbejdsmiljoforskning.dk)
Merja Perkio-Makela (Merja.Perkio-Makela@ttl.fi)
Clara Isabel Diaz Aramburu (cdiazara@mtin.es)
Javier Pinilla García (jpinilla@mtin.es)
Luz Galiana Blanco (luzgal@mtin.es)
Greet Vermeylen (Greet.Vermeylen@eurofound.europa.eu)
Agnes Parent-Thirion (Agnes.Parent-Thirion@eurofound.europa.eu)
Wendela Hooftman (wendela.hooftman@tno.nl)
Irene Houtman (irene.houtman@tno.nl)

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Author's response to reviews: see over
Dear editor,

dear reviewers,

we are very grateful for your kind review of our manuscript “Which dimensions of psychosocial working conditions are monitored in Europe?” and thank you very much for your feedback.

Today we are happy to re-submit our revised manuscript, based on the helpful suggestions by reviewer 1, Johannes Siegrist, with regard to the discussion section of our manuscript in which we have altered three minor, but essential points. Let us point out to you which changes we have applied:

**Request No. 1:** Authors should at least discuss why they did not conduct the next level of analysis, i.e. the application of exploratory or confirmatory factor analysis to identify to what extent the 'dimensions' of classified items are replicated as factors. It should be noted that the theoretical models mentioned identified distinct 'latent constructs' by means of testing the factorial structure of items representing the scales measuring the construct.

As pointed out by reviewer 1, assessing the factorial structure could be a possible next step. We have, however, decided against this analysis because of the way the items supposed to assess the different factors are formulated differently across the surveys.

In our revision, we now clearly state our reasons for not conducting this analysis in lines 297 to 301 (page 13):

“We have not investigated the theoretically derivable factorial structure of the dimensions underlying the items used in the seven surveys. Therefore, we cannot know for certain that the items of e.g. the DCS represent 3 distinct factors. This could be considered a limitation of our study. However, we did not carry out such an analysis because of the large differences in the formulation of items in the surveys included in the present paper.”

**Request No. 2:** While the identification of additional dimensions is considered an important achievement authors should clarify that national surveys are not an appropriate design to demonstrate their importance for health. Rather, prospective cohort studies are needed to assess their explanatory contribution.

We agree with reviewer 1 that it is vitally important to assess the impact of the working conditions on the workers’ health in a longitudinal design. We believe this can be achieved via two ways: i) by investigating the predictive validity of dimensions not covered by the classical models over a long period of time in those surveys with a longitudinal design where the development in health or labour market participation can be followed in individuals, either through questionnaires as would e.g. be possible in Sweden or the Netherlands, or in registers, e.g. in Sweden; ii) by developing job exposure matrices (JEM) based on the national data on working conditions and linking the combined exposure information with longitudinal health information via occupational codes, allowing for an estimation of the dimensions’ long-term impact on the workers’ health.

In our revision, we explicitly point out these two options in lines 365 to 384 (pages 15 / 16):

“We believe we with the present study have given a needed overview over OSH-monitoring in Europe. We hope the overview will provide input to the revisions and updates of individual countries’ surveys. Our study also found that the dimensions of DCS and ERI are covered in
most surveys plus a large variety of psychosocial dimensions not covered in these models. We believe the latter provide encouraging possibilities for research on possible health effects of psychosocial working conditions not being part of the DCS and ERI models but of interest to political stakeholders as for example “emotional demands” and “restructuring”. The surveys we have compared and the data that is collected by means of these questionnaires offer a basis for analysing the potential impact of these working conditions on the workers’ health in large samples with a prospective design. One option would be to investigate the predictive validity of dimensions not covered by the classical models over a long period of time in those surveys with a longitudinal design where the development in health or labour market participation can be followed in individuals, either through questionnaires [1, 2] or in registers [3]. Another option would be the development of job exposure matrices (JEM) based on the national data on working conditions. Linking the combined exposure information with longitudinal health information via occupational codes would allow for an estimation of the dimensions’ long-term impact on the workers’ health, based on the condition that there is sufficient variation in working conditions between the occupations. The monitoring and the scientific community could benefit from one another by combining their efforts in the research of possible health effects of these dimensions, yielding a more comprehensive picture of the psychosocial work environment.”

Request No. 3: In the paragraph on limitations authors should comment on a potential bias of their findings due to the fact that the majority of surveys comes from Northern/Western European countries. It is possible that surveys from eastern and southern Europe (if existent) identify additional critical aspects of psychosocial working conditions, e.g. in the context of precarious work, seasonal work, temporary unemployment etc.

As pointed out by reviewer 1, our analyses contain surveys mainly from Northern and Western Europe, and it is possible that further working conditions have a stronger impact on the workers’ health. In our revision, we now stress this point in lines 354 to 363 (page15), referring to work by Vives, Amable, Ferrer, Moncada, Llorens, Muntaner, Benavides & Benach and Dragano, Siegrist & Wahrendorf whose results support this view:

“Apart from the EWCS study, we have mainly analysed surveys from the northern and western European countries based on our restriction to studies carried out in the member countries of the PEROSH group “Survey development and cross culture methodology” with Spain as the only country from southern Europe. It is possible that in other European countries - as well as in other countries outside Europe - further working conditions have a stronger impact on the workers’ health as for example assessed in a scale on precarious work developed by Vives, Amable, Ferrer, Moncada, Llorens, Muntaner, Benavides & Benach [4], depending e.g. on the welfare systems in the countries. First results supporting this point were presented by Dragano, Siegrist & Wahrendorf [5]. Prospective scientific studies in a large number of countries are needed in order to evaluate which dimensions are important for health.”

We do hope we have addressed the reviewer’s comments appropriately and are looking forward to your answer.

As suggested in your email from October, 2nd, we have also checked our revised manuscript to ensure that it conforms to the journal style:

1. We have changed the manuscript’s title in order to conform to the journal style, it now reads: “Which dimensions of psychosocial working conditions are monitored in Europe? A comparison of seven European monitoring questionnaires”.
2. We have added all authors’ names in references throughout the text as well as in the reference list, avoiding the usage of “et al.”.
3. Table 1 in our paper is a wide table that cannot be fitted on an A4-page with portrait format. It is, however, a table that is most relevant to our paper and needs to be included in
the paper – it is already a shortened version, the complete table shall be published as an additional file (uploaded as “additional file 1”). We hope that you will still be able to process our manuscript. Please let us know if you want us to upload the table in a separate file.

We thank you very much for your kind cooperation!

Kind regards,
on behalf of all co-authors,
Maren Formazin

References


