



Comparison of three methods for evaluation of work postures in a truck assembly plant

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Auteur	Zare, Mohsen [1], Biau, Sophie [2], Brunet, René [3], Roquelaure, Yves [4]
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Mots-clés	direct measurement method [5], Observational method [6], Self-reported questionnaire [7], truck assembly plant [8]
Résumé en anglais	<p>This study compared the results of three risk assessment tools (self-reported questionnaire, observational tool, direct measurement method) for the upper limbs and back in a truck assembly plant at two cycle times (11 and 8 min). The weighted Kappa factor showed fair agreement between the observational and direct measurement method for the arm (0.39) and back (0.47). The weighted Kappa factor for these methods was poor for the neck (0) and wrist (0) but the observed proportional agreement (Po) was 0.78 for the neck and 0.83 for the wrist. The weighted Kappa factor between questionnaire and direct measurement showed poor or slight agreement (0) for different body segments in both cycle times. The results revealed moderate agreement between the observational tool and the direct measurement method, and poor agreement between the self-reported questionnaire and direct measurement. Practitioner Summary: This study provides risk exposure measurement by different common ergonomic methods in the field. The results help to develop valid measurements and improve exposure evaluation. Hence, the ergonomist/practitioners should apply the methods with caution, or at least knowing what the issues/errors are.</p>
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Liens

- [1] <http://okina.univ-angers.fr/mzarem/publications>
- [2] <http://okina.univ-angers.fr/s.biau/publications>
- [3] <http://okina.univ-angers.fr/r.brunet/publications>
- [4] <http://okina.univ-angers.fr/yves.roquelaure/publications>
- [5] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=23517>
- [6] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=23516>
- [7] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=20355>
- [8] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=23518>
- [9] <http://okina.univ-angers.fr/publications/ua16246>
- [10] <http://dx.doi.org/10.1080/00140139.2017.1314023>
- [11] <http://www.tandfonline.com/doi/abs/10.1080/00140139.2017.1314023?journalCode=terg20>
- [12] <http://www.ncbi.nlm.nih.gov/pubmed/28475477?dopt=Abstract>

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