

Comparison of the Strain Index and OCRA Checklist for Risk Analysis of MSDs

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Introduction

The purpose of this study was to characterize the inter-method reliability of two physical exposure assessment methods, the Strain Index (SI) and Occupational Repetitive Actions (OCRA) Checklist, often used in occupational health studies to assess the risk of musculoskeletal disorders.

Methods

Eight raters used the SI and OCRA Checklist to assess task-level physical exposures to the upper extremity of workers performing 21 cheese processing tasks. Inter-method reliability was characterized using proportion of overall agreement, Bowker's test of symmetry, Cohen's weighted kappa, and Spearman correlations.

Results

Strain Index and OCRA Checklist assessments classified job tasks into similar risk categories. Inter-method reliability was moderate overall but poor for more complex tasks.

Conclusion: The SI and OCRA Checklist are similar physical exposure assessment methods and either may be appropriate when assessing repetitive job physical exposures to the upper limbs.



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