



Ergonomics >

Volume 55, 2012 - [Issue 11](#)

1,000 18

Views | CrossRef citations to date | Altmetric

0

Articles

# Identification of factors that affect the adoption of an ergonomic intervention among Emergency Medical Service workers

Monica R. Weiler, Steven A. Lavender , J. Mac Crawford, Paul A. Reichelt, Karen M. Conrad & Michael W. Browne

Pages 1362-1372 | Received 24 Feb 2012, Accepted 13 Jul 2012, Published online: 28 Aug 2012

 Cite this article  <https://doi.org/10.1080/00140139.2012.714474>

Sample our  
Sports and Leisure  
Journals



>> **Sign in here** to start your access  
to the latest two volumes for 14 days

 Full Article

 Figures & data

 References

 Citations

 Metrics

 Reprints & Permissions

Read this article

 Share

This study explored factors contributing to intervention adoption decisions among Emergency Medical Service (EMS) workers. Emergency Medical Service workers ( $n = 190$ ), from six different organisations, participated in a two-month longitudinal study following the introduction of a patient transfer-board (also known as slide-board) designed to ease lateral transfers of patients to and from ambulance cots. Surveys administered at baseline, after one month and after two months sampled factors potentially influencing the EMS providers' decision process. 'Ergonomics Advantage' and 'Patient Advantage' entered into a stepwise regression model predicting 'intention to use' at the end of month one ( $R^2 = 0.78$ ). After the second month, the stepwise regression indicated only two factors were predictive of intention to use: 'Ergonomics Advantage,' and 'Endorsed by Champions' ( $R^2 = 0.58$ ). Actual use was predicted by: 'Ergonomics Advantage' and 'Previous Tool Experience.' These results relate to key

concepts identified in the diffusion of innovation literature and have the potential to further ergonomics intervention adoption efforts.

Practitioner Summary. This study explored factors that potentially facilitate the adoption of voluntarily used ergonomics interventions. EMS workers were provided with foldable transfer-boards (slideboards) designed to reduce the physical demands when laterally transferring patients. Factors predictive of adoption measures included perceived ergonomics advantage, the endorsement by champions, and prior tool experience.

Keywords:

- intervention adoption
- ergonomics intervention
- injury prevention
- EMS
- firefighter

## Acknowledgement

This study was supported by National Institute of Occupational Safety and Health (NIOSH) grant 1R21 OH009378-01A1.

### Related Research Data

[The Health Belief Model and Sick Role Behavior](#)  
Source: Health Education Monographs

[Job Demands, Job Decision Latitude, and Mental Strain: Implications for Job Redesign](#)  
Source: Administrative Science Quarterly

[Affective and Cognitive Factors in Preferences](#)  
Source: Journal of Consumer Research

[Designing ergonomic interventions for EMS workers—part II: Lateral transfers](#)  
Source: Applied Ergonomics

[Intervention practices in musculoskeletal disorder prevention: A critical literature review](#)  
Source: Applied Ergonomics

[Promoting Safe Patient Handling](#)  
Source: Rehabilitation Nursing

[Individual differences and usage behavior](#)

## Related research

People also read

Recommended articles

Cited by  
18

### Information for

Authors

R&D professionals

Editors

Librarians

Societies

### Opportunities

Reprints and e-prints

Advertising solutions

Accelerated publication

Corporate access solutions

### Open access

Overview

Open journals

Open Select

Dove Medical Press

F1000Research

### Help and information

Help and contact

Newsroom

All journals

Books

### Keep up to date

Register to receive personalised research and resources  
by email



Sign me up



Copyright © 2026 Informa UK Limited [Privacy policy](#) [Cookies](#) [Terms & conditions](#)

[Accessibility](#)

 Taylor and  
Francis Group

Registered in England & Wales No. 01072954  
5 Howick Place | London | SW1P 1WG