

Rationale and Design of a Novel Method to Assess the Usability of Body-Worn Absorbent Incontinence Care Products by Caregivers

Sophie Kanerva Rice, Leslie Pendrill, Niclas Petersson, Jesper Nordlinder, Anne Farbrot
Journal of Wound Ostomy and Continence Nursing, Sept/Oct 2018, Vol.45/No. 5; pg 456-464.

Background & aims

The purpose of this study was to develop and test a new method to measure the usability of absorbent incontinence care products from the caregivers' perspective and to investigate if the method can be used to differentiate between product types in a product change. The research applies a new method to guide the best choice of product types to facilitate the easiest product change. Being the first ever scientific study of usability of absorbing incontinence products, the study was published in the Journal of Wound, Ostomy and Continence Nursing (vol 45, no 5, Sept/Oct 2018). View the JWOCN article [here](#).

Study design & methods

Design and evaluation of a new method designed to assess the usability of body-worn absorbent incontinence care products for lay caregivers were completed. The evaluation included evaluations of effectiveness (product fit), efficiency (time and physical workload), and satisfaction. Cameras were installed to monitor task performance; product changes and postures were timed by test moderators; product fit was evaluated based on defined product fit scores, and satisfaction scores were based on an eight-question questionnaire tailored to target areas of importance when changing absorbing incontinence products. Supplementary information can be found here: <http://links.lww.com/JWOCN/A44>



**Body-worn Pads
with Mesh Brief**

All-in-One Brief

Belted Brief

Pull-up Pants

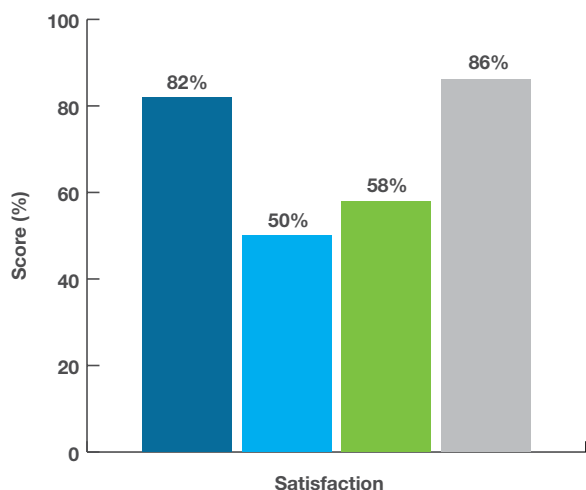
Each product type was given a usability score, determined by how well it performed on four metrics, which were reported with 95% confidence intervals:

- Effectiveness (how well the product fit the user when applied as intended)
- Caregiver time (how long it took to change a product)
- Caregiver workload (the effort required to change a product)
- Caregiver satisfaction (determined by a subjective questionnaire)

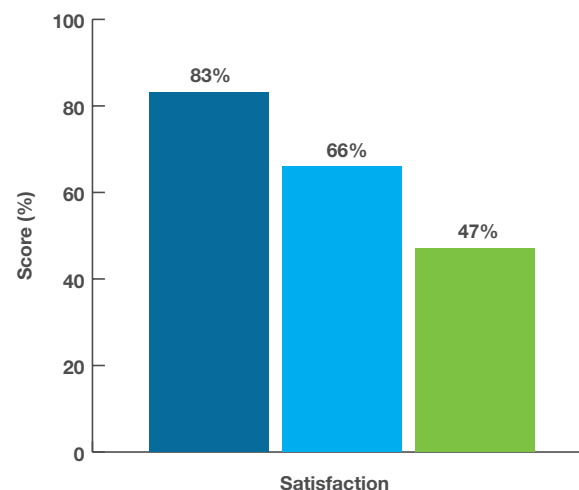
Results

The Usability study concludes that product type matters and products with a high usability score improve efficiencies in changing and ergonomic workload. Results showed that belted and pants products have significantly higher overall usability scores compared to an all-in-one product or pad with fixation. For changes in the standing position, TENA Pants has a 72% higher satisfaction score than TENA Slip and TENA Flex has a 64% higher satisfaction score than TENA Slip. For changes in the lying position, TENA Flex has a 76% higher satisfaction score than TENA Comfort.

Changes in Standing Position



Changes in Lying position



■ Belted Pad ■ All-in-One ■ Pad with Fixation Pants ■ Pants

Conclusions

The first ever study on usability of absorbing incontinence product types describes a method that demonstrates differentiation of usability based on product type, indicating validity of the method. Belted briefs and pull-up pants product types score significantly higher usability scores than all-in-one briefs and two-piece product types. The results of the study can guide the best choice of incontinence product type to facilitate the easiest product change. An understanding of the easiest product changes in different care settings can lead to care efficiencies through significant time savings and reduced ergonomic workload for carers, thereby saving cost and improving working conditions for carers.

For the full study, please visit: www.TENA.co.uk/professionals/products/product-usability/