報文

老年健常者と障害者の椅座位着脱動作特性に基づく快適衣服設計
重心動揺を指標として

東京家政大学　岡田宣子

Clothing Design for the Elderly and Handicapped Based on Sitting Body Movement While Dressing and Undressing

Nobuko Okada
Faculty of Home Economics, Tokyo Kasei University
1-18-1 Kaga, Itabashi-ku, Tokyo 173-8602 Japan

Abstract

To identify the key characteristics in clothing design that can help the elderly dress and undress themselves, a test was carried out using a subject group of 12 men and women between the ages of 69-90 (average age 78.5 yrs). Four people in the group suffered from a variety of physical disabilities including Parkinson’s disease, rheumatism, hemiplegia and stroke (paralysis of the arm). When the sitting subjects put on and took off a variety of upper and lower garments, the amount of body movement was measured.

The following results were ascertained:

1) Loss of balance was a key problem when the subjects dressed and undressed themselves. They suffered additional loss of balance when putting on their socks due to the awkward body movements required to accomplish this task.
2) There was a marked increase in the amount of instability with the handicapped subjects.
3) Apparel preferences of the elderly depend on the state of health and the amount or nature of the disability. Preferences are also determined by the ease with which garments can be put on and taken off.
4) Front opening blouses were found to be the most practical garments for the elderly. Clothing design plays a key role in resolving dressing and undressing problems for the elderly. Upper body garment design should be based around the looseness of the bust line, the distance from the bust line to the arm hole and the cap height at the center of the sleeve.

(Received September 19, 2013)
(Accepted for Publication December 27, 2013)

Keywords：衣服設計　clothing design，高齢者　the elderly，着脱　dressing and undressing，障害者　handicapped person，重心動揺　body movement，