

## **Identifying Appropriate Interior Spatial Structure Based on MDS Analysis of User Needs.** Lee, Y.S., Ahn, J.Y.,

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Establishing cultural identity in house planning and design has been considered important since the globalization issue appeared. It is particularly true in less developed countries because there are more possibilities to adopt the spatial characteristics of more advanced countries without deliberate consideration about the fit between their lifestyles and those physical environments.

The purpose of this study was to recommend an appropriate spatial structure for residential behaviors in relation to work space. To find the structure, Multi-Dimensional Scaling analysis was used. The respondents consisted of 349 middle class housewives living in apartments in the Capital region of Korea. All the data were collected through a questionnaire survey. Eight residential behaviors were dressing/undressing, bathing, cooking, cloth washing, drying, folding, ironing, and home managing/bookkeeping behavior. These were presented in pair wise format, thereby 28 sets of comparison were generated. Each set was measured using 5 point likert-type scale which indicated from 'very close' to 'very remote' in terms of present and desired distance between them.

To improve upon future residential interior designs, the following points were suggested. First, a laundry space needs to be developed independently, being separated from both the bathroom and the kitchen/dining space. Second, a new area which gives housewives some territoriality needs to be considered. Third, a space configuration which satisfies the organic relationships among a series of laundry behaviors such as washing, drying, ironing and folding, needs to be systematically planned, with two adjoining separate zones of wet and dry utilities. Finally, the present bathroom needs to be incorporated into the private bedroom rather than to the workspace such as wet utility space which has been common in mass produced apartments in Korea. Cultural differences in residential unit plans among countries were discussed and a design alternative reflecting the results was developed. The actual plan and constructed interior case example will be presented.