VALIDATING A VISUAL INSTRUMENT OF RESIDENTIAL INTERIOR IMAGE PREFERENCE

Mi Hye Hong and Yeun Sook Lee, Yonsei University

People differ in their preference for different environmental settings (Kaplan, 1978). Differences among individuals arise from their fundamental unique preferences (Jung, 1921, 1971). Among the preferences, environmental preference is referred to as environmental disposition in Environmental Personology. Environmental preference of an individual is his/her way of responding to the environment, and is recognized as an important method of predicting the person's environmental behavior and of surveying the person's lifestyle as it reflects his/her personality (Craik, 1976; Craik & McKechnie, 1978; Lee, 1992; Little, 1989). The residential interior does not merely reflect society's fashion trends, product markets, or simple coincidence, but also reflects the individual's (who created and possesses the space) specific preferences. Thus, one can predict consumers' preferences in residential interiors by knowing their environmental disposition, in particular, their residential environmental disposition (Lee et al., 1997). Despite their methodological importance, objective test and scales in residential interior environmental design research have rarely been attempted. If environmental preferences toward residential interiors can be measured, the power of predicting clients' preferences will be increased.

The Interior Image Preference Scale (IIPS; Lee, 1997) has been devised to explore individual differences in residential interior preference using computer simulation (Lee et al., 1997, 1998). It is in early stages of development, and it has not undergone extensive evaluation. To disseminate the IIPS, validity and reliability need to be continuously established. Accumulated scientific empirical evidence will make the scale solid and objective.

The purpose of this study is to empirically validate the IIPS, which is a newly developed visual instrument for evaluating individual environmental disposition, especially one's residential interior image preference.

The IIPS was developed on the basis of environmental disposition theory. This scale includes 3 sub-scales that measure traditionalism-modernity, masculinity-femininity, and simplicity-complexity. These 3 popular dimensions were selected on the basis of their importance in design history and in current interior markets, among the various dimensions of residential interior images. The Traditionalism-Modernity scale (TM) is composed of 20 sets of paired images. The Masculinity-Femininity scale (MF) and Simplicity-Complexity scale (SC) are composed of 30 sets each. Those images were produced in order to measure the systematic variable effect "traditionalism-

modernity", "masculinity-femininity" and "simplicity-complexity" respectively controlling the other major tendencies in each case (Lee et al., 1997, 1998).

The research adopted a questionnaire survey. The data were collected from Oct. 10th, 1997 to Nov. 14th, 1997. The subjects were 399 undergraduate students and 30 professors of a Dept. of Interior Design. The main data of this research were collected from students. Data from professors as experts in this field were planned for comparative discussion in case of questionable situation from students' data. With respect to content validity and construct validity of IIPS, discrimination and similarity structure of scales and characteristics of 12 prototype residential interior images were examined in comparison with the originals. 429 questionnaires were analyzed to validate the IIPS using frequency, percentage, mean, and Multi-Dimensional Scales.

The major results of this research were:

1. All 80 items of IIPS were discriminated by three criteria such as traditionalism-modernity, masculinity-femininity, and simplicity-complexity as expected at the time of the instrument developmental stage. For example, items of TM scale actually presented traditionalism-modernity properties as intended, rather than presenting masculinity-femininity, or simplicity-complexity. Twenty items of TM scale were found to be distinguished by traditionalism-modernity (100-60% of subjects), and 30 items of MF scale were found to be distinguished by masculinity-femininity (97-62%). Most of the items of SC scale were found to be distinguished by simplicity-complexity (100-64%) except three items (SC 19, SC 09, SC 03).

2. The TM scale was composed of items that were relatively easy to differentiate. The MF and SC scales showed a tendency to contain items that were easy or difficult to differentiate.

3. All 80 items of IIPS showed a cluster distribution according to the similarity structure of sub-scales. Three sub-scales of IIPS (e.g., traditionalism-modernity, masculinity-femininity and simplicity-complexity) were structured pretty well by those 3 dimensions.

4. Twelve prototype residential interior images of the IIPS showed a tendency to accord with descriptors that expressed them in comparison with the originals.

5. Regarding the traditionalism-modernity preference scale, subjects showed more sensitive responses to Oriental Traditionalism than to Western Traditionalism. The reason may be due to the fact that the respondents were more familiar with Oriental Traditionalism than Western Traditionalism. In fact, a substantial number conceived Western Traditionalism as Modernism because it was introduced after 1970 in Korea. Therefore, Western Traditionalism was not analyzed as a traditional tendency.

In conclusion, the profiles about specific characteristics of the IIPS were outlined. This research revealed the IIPS to have content validity and construct validity for evaluating preferences of three properties of residential interior image in empirical research. The IIPS was found to be a potential objective tool to measure the residential interior image preferences of people. However, three items (SC 19, SC 09, SC 03), which were found to have a low discriminative rate among students, even though a high positive response from professors, necessitate continuous evaluation and improvement.

A visual tool, which is used for observing an individual's residential interior preference or environmental disposition, is an essential part of a methodological process for the development of residential environment design research. This research presents a baseline for the IIPS's validity and supports IIPS as a promising tool. However, the validation of the IIPS is far from complete. A continuous and thorough verification and establishment of the IIPS's reliability and validity should take place in order for the instrument to develop into a more objective tool.

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