

EVALUATION AND REFINEMENT OF SURVEY SCALES IN INTERNATIONAL MARKETING RESEARCH

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ABSTRACT

The growth of international marketing has coincided with a greater need for valid and reliable construct measurement as a prerequisite for sound theory development. Many scholars have noted that international research has been fragmentary and lacking strong theoretical bases (e.g., Albaum and Peterson 1984; Aulakh and Kotabe 1993; Sekaran 1983; Sullivan 1994). As a result of methodological neglect, scholars have been unable to create a meaningful, theoretically derived, and empirically tested body of knowledge that provides direction to ongoing research. Standardization of definitions and use of valid scales is critical to the progress of international marketing research. Scales developed in one national setting may be inadequate for measuring constructs in other countries.

To address this problem, we present a step-wise procedure for evaluation and refinement of valid and reliable survey-based measurement scales for use in international research. To illustrate, we evaluate and refine a scale for assessing country-of-origin image (COI). The procedure is briefly summarized below.

1. Obtain a scale that has been validated for use in the home culture/language.
2. Translate the scale into the language of the target country using the translation/back-translation method. Achieve calibration and translation equivalence.
3. Test the original and each translated version of the scale by administering them to independent samples of representative subjects, native to each target country.
4. Confirm that the factor structure or dimensionality of scale versions is consistent.
5. Assess metric equivalence and internal consistency by evaluating the reliability all scale versions using Cronbach's alpha.
6. Assess construct validity of each scale version by checking convergent and discriminant validity in confirmatory factor analysis (Anderson and Gerbing 1982; Bagozzi, Yi, and Phillips 1991).
7. During the above steps, refine the scale as desired to achieve the optimal level of parsimony, based on theory, retaining identical items across all versions of the scale.
8. As an additional check of construct validity, assess the nomological validity of each scale (Mullen 1995).

To illustrate the procedure described above, we evaluated and refined a scale for measuring COI. Accordingly, a questionnaire was created and data obtained from samples of households and students in each of Japan, Turkey, and the United States. Analyses were then conducted as outlined in the above procedure. Results indicated that the scale performed well in each cross-cultural setting with regard to consistency and pattern of factor structure, internal consistency, as well as convergent, discriminant, and nomological validity. Based on the procedure highlighted above, this implies that the resulting "COISCALE" may be suitable for a wide variety of settings worldwide. The scale distinguishes seven facets of COI that are theoretically meaningful and stable across varying populations: *people*, *negative product*, *positive product*, *advertising*, *distribution*, *price*, and *political situation*. The COISCALE is an improvement over past measures in that it taps these dimensions simultaneously in a parsimonious manner. It is hoped that study outcomes will contribute to the process by which measurement instruments are designed and employed for international marketing research.

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