

RESEARCH NOTE

Assessing the Predictive Validity of Two Methods of Measuring Self-Image Congruence

M. Joseph Sirgy¹
Dhruv Grewal²
Tamara F. Mangleburg³
Jae-ok Park⁴

Kye-Sung Chon⁵
C. B. Claiborne⁶
J. S. Johar⁷
Harold Berkman²

The predictive validity of two measurement methods of self-image congruence—traditional versus new—were compared in six studies involving different consumer populations, products, consumption settings, and dependent variables (brand preference, preference for product form, consumer satisfaction/dissatisfaction, brand attitude, and program choice). The traditional method is based on tapping the subject's perception of product-user image and the subject's perception of his/her self-image along a predetermined set of image attributes and adding the self-congruity scores across all image dimensions. Three problems were identified and discussed in relation to the traditional method: (1) the use of discrepancy scores, (2) the possible use of irrelevant images, and (3) the use of the compensatory decision rule. The new method is based on tapping the psychological experience of self-congruity directly and globally. The findings demonstrated the predictive validity of the new method over and beyond the traditional method.

described in terms of a set of attributes such as friendly, modern, youthful, and traditional. The personal image attributes associated with a product are distinguished from functional or utilitarian attributes in that the latter describe the product in terms of tangible costs and benefits such as quality, price, and performance (Sirgy 1982). Specifically, personal images of a product reflect the stereotype of the generalized users of that product and are determined by a host of factors such as advertising, price, and other marketing and psychological associations. Throughout this article, we will refer to personal images associated with a product as *product-user image*.

Consumer self-concept researchers have long theorized that a product-user image interacts with the consumer's self-concept generating a subjective experience referred to as *self-image/product-image congruity* or *self-image congruence* or *self-congruity* for short. Over the last 25 years of research in consumer self-concept, marketing scholars have used the notion of self-image congruence to explain and predict different facets of consumer behavior such as product use, product ownership, brand attitude, purchase motivation, purchase intention, brand choice, brand adoption, store preference, store loyalty, and so forth (for literature reviews, see Claiborne and Sirgy 1990; Sirgy 1982,

Products, suppliers, and services are assumed to have personal images, just as people do. Personal images can be

1985a). Throughout this article, we will refer to the consumer self-concept as *self-image*. The self-image involves perceptions of oneself along image dimensions related to the product user.

Theoretically speaking, the effect of self-image congruence on consumer behavior has been explained by *self-congruity theory* (Sirgy 1986). This theory proposes that consumer behavior is determined, in part, by the congruence resulting from a psychological comparison involving the product-user image and the consumer's self-concept (e.g., actual self-image, ideal self-image, social self-image). This psychological comparison can be categorized as high or low self-congruity. High self-congruity is experienced when the consumer perceives the product-user image to match that of his or her self-image, and vice versa. Self-congruity affects consumer behavior through self-concept motives such as the needs for self-consistency and self-esteem.

Self-image congruence is a significant area of research in consumer behavior/marketing, because it provides the marketing manager with strategic insights concerning positioning and advertising research and may also serve as a basis for market segmentation. With respect to brand positioning, marketers have traditionally employed self-image congruence methods and measures to uncover product-user images that are most congruent with self-images of target consumers. Thus, a brand is positioned to establish or reinforce brand associations with a specific image of the product user. In this manner, self-image congruence may also be used to segment markets into groups of consumers who perceive congruence with the product-user image versus those who do not.

Measures of self-image congruence also play a significant role in advertising research. For example, in advertising, there are two common approaches used in developing ad campaigns. These are the value-expressive (image) appeal and utilitarian (functional) appeal (Johar and Sirgy 1991; Park, Jaworski, and Macinnis 1986; Snyder and DeBono 1985). Whereas the utilitarian strategy focuses on presenting functional and performance-related attributes, the image strategy involves building a personality for the product or creating an image of the product user (Ogilvy 1963). Let us use a toothpaste example to illustrate these two advertising appeals. Advertising Crest toothpaste using a utilitarian appeal may involve an ad stressing the benefits of Crest in terms of cavity prevention and plaque and tartar control. A value-expressive appeal, on the other hand, may involve an ad showing children brushing with Crest. Here, the ad is likely to appeal to children, because they can identify with it. The target consumers empathize with the characters by vicariously feeling and experiencing the benefits of the advertised product.

In addition to the importance of self-image congruence for advertising practitioners, researchers are also interested in understanding the theoretical relevance and contribution of self-image congruence in relation to consumer behavior. Indeed, self-image congruence has been used to explain and predict consumers' attitudes and purchase

intentions. However, the traditional measure of self-image congruence used by practitioners and researchers may be of questionable validity and subject to a number of limitations.

Given the theoretical and managerial relevance of self-image congruence, developing valid measures of self-image congruence is an important issue. Toward this end, we describe the traditional method of measuring self-image congruence and address three key problems: (1) the use of discrepancy scores, (2) the possible use of irrelevant images, and (3) the use of the compensatory decision rule. Many of these limitations stem from the assumption that self-image congruence is a piecemeal process. In contrast, in this research, we assume that self-image congruence is a holistic, gestalt-like perception. As such, traditional measures, which assume a piecemeal process, may not adequately capture the holistic nature of self-image congruence and, therefore, may have limited predictive validity.

We begin with a discussion of the problems associated with the traditional method. Then, we describe a new method designed to alleviate the problems inherent with the traditional method. We report six studies designed to compare the predictive validity of the traditional method vis-à-vis the new method. We hypothesize that the new method of measuring self-image congruence is likely to be more predictive of a variety of consumer behaviors, such as brand attitude, preference, consumer satisfaction/dissatisfaction, and purchase behavior, because it more adequately taps the holistic, gestalt-like nature of self-image congruence.

THE TRADITIONAL METHOD OF MEASURING SELF-IMAGE CONGRUENCE

The traditional method of measuring self-image congruence is based on tapping the subject's perception of the product-user image, the subject's perception of his or her self-image in relation to the product-user image, mathematically computing a discrepancy or ratio score with each image dimension, and then summing the discrepancy scores across all dimensions. Indeed, most studies in consumer self-concept research have measured self-image congruence using some kind of mathematical discrepancy index between consumer self-concept and the product-user image (for literature reviews, see Claiborne and Sirgy 1990; Sirgy 1982, 1985a). For example, the following mathematical index involving the sum of absolute discrepancy scores is commonplace:

$$\sum_{i=1}^n |P_i - S_i|$$

where

P_i = rating of product-user image along image dimension i and

S_i = rating of self-image along image dimension i .

It should be noted that self- and product-user image dimensions have been traditionally measured using semantic differential scales or Likert-type scales. These measures are mostly tailor made—that is, the image dimensions are elicited as a function of the product used (e.g., Ericksen and Sirgy 1989, 1992; Sirgy 1985b; Sirgy and Samli 1985), with the exception of a few studies using a standard set of image dimensions (e.g., Malhotra 1981, 1987, 1988; Martin and Bellizzi 1982).

In comparing the predictive strength of the Euclidean-distance index versus the absolute-difference index in relation to product preference, Maheshwari (1974) showed that there were no significant differences between these two indices. Similar results were obtained in a study conducted by Sirgy and Danes (1981). Malhotra (1988) used a variation of the Euclidean-distance index in another study with higher predictiveness of preference and intentions than past studies. Sirgy (1985b) used an absolute-difference index to predict brand preference and purchase intention. From this review of the literature on the mathematical indices of self-image congruence measures (traditional method), one can note that the absolute-difference measure seems highly representative of these measures. We point this out because the absolute-difference index was used as representative of the traditional method in the six studies reported in this article.

The traditional method allows marketing researchers to plot the product-user profile as well as the consumer self-image profile along all image dimensions. By pitting these two profiles together on one plot, marketers can determine which image dimensions are responsible for self-congruity and which ones for incongruity. Furthermore, the goal for marketers is to position the brand using the most congruous image and design communication messages that reinforce that image. Similar profiles can be plotted for competing brands. The goal is to select not only an image most congruent with the self-image of target consumers but also a differentiated image—that is, different enough from the product-user images of competing brands.

Methodological Problems Inherent in the Traditional Method of Measuring Self-Image Congruence

The traditional method of measuring self-image congruence is besieged with three key problems: (1) the use of discrepancy scores, (2) the possible use of irrelevant images, and (3) the use of the compensatory decision rule. These problems relate, in part, to the assumption that self-image congruence is a multidimensional, piecemeal process. We address these in some detail.

The use of discrepancy scores. The use of discrepancy scores involves a multitude of problems. A number of

researchers have questioned the use of discrepancy or distance scores (Berger-Gross 1982; Cronbach and Furby 1970; Johns 1981; Peter, Churchill, and Brown 1993; Wall and Payne 1973). In particular, discrepancy measures have been criticized as being potentially unreliable, having systematic correlations with their components, having spurious correlations with other variables, having questionable construct validity, and restricting variance (see, e.g., Johns 1981; Peter et al. 1993).

However, the most important problem with the traditional method is the fact that the method does not incorporate any reference to the psychological congruity experience. A better method involves measures that can capture the congruity experience more directly. The traditional method captures the congruity experience indirectly by combining two psychological constructs mathematically. An example of the use of direct measures of self-image congruence is illustrated in a study conducted by Sirgy, Johar, Samli, and Claiborne (1991). They tested the hypothesis that consumer behavior is more predicted by functional congruity than by self-image congruence but that self-image congruence biases functional congruity. Specifically, the following self-image congruence measure was employed:

$$\sum_{i=1}^n D_i$$

where

D_i = psychological or subjective difference between product-user image and self-image along image dimension i .

Respondents were presented with a list of 20 beer brands and asked to select one brand with which they were familiar. Then, respondents were presented with a list of image dimensions (outdoorsy/homebody, sporty/quiet, classy/folksy, professional/hard hat, patriotic/continental, conservative/modern, leader/follower, and city person/country person) and asked to indicate the extent to which there were differences between the beer brand image and their self-image. Responses were recorded on a 5-point difference scale (0 = *no difference between beer image and self-image* to 4 = *lot of difference between beer image and self-image*). A self-image congruence score was computed by summing the difference scores. The results of the study provided support for the hypotheses and, as a result, also provided some evidence for the predictive validity of a direct measure of self-image congruence in relation to attitude and intention.

The use of predetermined images. The second major problem with the traditional-based measures is the use of predetermined image dimensions. By presenting subjects with a list of predetermined images, subjects are forced to indicate congruence or incongruence with images that they may or may not associate with the product. Thus, a better

method is one that captures self-congruity in a way through images that are conjured up by subjects at the moment of response. Consider the example of a subject who sees herself as young, sexy, and attractive (self-image) and may experience a high level of self-image congruence with a sports car that she sees as being driven by people who are young, sexy, and attractive (product-user image). However, the traditional method may involve more than these three image dimensions. The measures may include other image dimensions, such as masculine, feminine, classy, and vibrant, among others. The subject who has an image of the sports car only in terms of young, sexy, and attractive has to respond to the measurement items of the other image dimensions too. But self-congruity pertaining to these other image dimensions may not be meaningful (i.e., these dimensions may have very little to do with the subjective experience of self-image congruence), and, therefore, these scores constitute random error in measurement. Thus, one can argue that a new method of measuring self-image congruence can be devised in such a way to allow subjects to indicate self-congruity with only those images that are most relevant to him or her—that is, those images that reflect the product-user image in the mind of that subject and that subject alone.

The use of a compensatory decision rule. Note that the traditional method of self-image congruence employs the compensatory decision rule in integrating the self-congruity scores across all image dimensions. The underlying assumption here is that subjects experience self-congruity with a variety of image dimensions and then integrate the information across all image dimensions additively. In other words, consumers experiencing self-congruity with more than one image dimension use the compensatory decision rule to form a judgment. One can easily argue against the validity of the compensatory rule assumption.

For example, Johar and Sirgy (1991) have argued that value-expressive appeals (advertising appeals that trigger self-image congruence) may be more persuasive when consumers have low involvement with products. Conversely, utilitarian appeals are likely to be more persuasive when consumers have high involvement with products. Highly involving products may force consumers to cognitively elaborate on the message. Thus, consumers' judgments of highly involving products are likely to be based on a decision calculus that approximates the compensatory decision rule (Montgomery and Svenson 1976; Payne 1982). Value-expressive appeals work best when there is low involvement with the product. This is because images are processed holistically or globally, not analytically or piecemeal and then integrated using complex decision calculus.

Thus, one can increase the overall predictiveness of self-image congruence measures by using global instead of dimension-based cues. This global or holistic measure can be operationalized through response cues that guide subjects to conjure up an image of the product user and guides them to indicate their self-congruity with that image in a global manner.

FIGURE 1
Different Methods of Measuring
Self-Image Congruence

	global measures	dimension-based measures
direct measures	problem-free	problem: use of predetermined images
indirect measures	problem: use of discrepancy scores	problems: use of discrepancy scores and predetermined images

THE NEW METHOD OF MEASURING SELF-IMAGE CONGRUENCE

Based on the analysis of the shortcomings of the traditional method of measuring self-image congruence, a new method was designed to deal with these shortcomings. In particular, the new method assumes that self-image congruence is a holistic, gestalt-like perception and, therefore, helps to alleviate problems associated with the traditional method as follows. First, the new method deals with the problem of discrepancy scores by measuring the self-congruity experience directly—rather than indirectly through product-user image and self-image and then combining these ratings using a difference or ratio index. Second, the new method deals with the problem of the use of irrelevant images by using a methodological procedure to induce subjects to conjure up the product-user image at the moment of response—rather than through a predetermined set of image dimensions identified through a pretest using another set of subjects. Third, the new method deals with the problem of the compensatory decision rule by using a procedure that guides subjects to focus on the product-user image and rate the self-congruity experience holistically or globally (see Figure 1).

The new method of measuring self-image congruence can be exemplified as follows. Subjects are instructed to

Take a moment to think about [product x]. Think about the kind of person who typically uses [product x]. Imagine this person in your mind and then describe this person using one or more personal adjectives such as, stylish, classy, masculine, sexy, old, athletic, or whatever personal adjectives you can use to describe the typical user of [product x]. Once you've done this, indicate your agreement or disagreement to the following statement: This [product x] is consistent with how I see myself [in situation y].

TABLE 1
Study Characteristics

<i>Study</i>	<i>Sample</i>	<i>Method</i>	<i>Product(s)</i>	<i>Dependent Variable</i>
1	270 shoppers	Survey, mall intercept	Reebok running shoes	Brand attitude
2	229 working women	Mail survey	Three clothing styles (classic, feminine, and dramatic styles)	Clothing style preference
3	152 tourists	Mail survey	Tourist destination of Norfolk, VA	Consumer satisfaction/dissatisfaction with a tourist destination
4	428 students	In-class survey	Car, camera, tires, watch, soft drinks, TV, beer, aspirin	Brand preference
5	320 students	In-class survey	Sierra Club credit card	Attitude toward environmental credit cards
6	252 students	Survey, observation	Marketing versus nonmarketing major	Overt behavior

Subjects would then mark their response on a Likert-type scale. Note this method does not cue subjects to a specific image category or dimension. The method cues subjects to conjure up their own image of the product user. Then, the method guides them to indicate their global perception of degree of match or mismatch between how they see themselves (self-image) and the product-user image. In other words, this measurement procedure captures self-image congruence directly (not by measuring product-user image and self-image separately) and globally (not by asking subjects to indicate their perception of congruity with the predetermined images). This method of measuring self-image congruence has not been used in past studies in consumer self-concept. However, this method will be the focus of six studies reported in this article.

With respect to the managerial utility of this method, marketing researchers can use overall self-image congruence scores to segment markets into groups of consumers who perceive congruity versus those who do not. In addition, researchers can easily compute descriptive statistics (e.g., means and standard deviations) for each verbally stated image. Similar profiles can be constructed in relation to competing brands. Thus, the marketing manager can identify most congruent images of their brand and competing brands and take action accordingly.

RESEARCH OBJECTIVES AND HYPOTHESIS

The present set of studies seek to overcome the limitations of the traditional method of measuring self-image congruence by evaluating the predictive validity of the new method against the traditional method. In particular, we hypothesize that the new method is likely to be more predictive of consumer behavior than the traditional method primarily because it taps the psychological experience of congruity more directly. The studies reported in the following section are designed to test this hypothesis. Also, the studies are designed to test the predictive validity of these two methods across a variety of consumer behaviors (e.g., brand preference, brand attitude, preference for product form, program choice, and consumer satisfac-

tion/dissatisfaction) using different products, services, and programs and involving different consumer populations (see Table 1). This is done to determine the robustness of the findings.

STUDY 1

Study 1 involved two stages of data collection. The first stage involved using two focus groups (see Table 2) to elicit the exact images associated with athletic shoes and Reebok in particular that were to be used for the traditional measure of self-image congruence. The second stage involved a mall-intercept type of market survey. The product category was athletic shoes, and the brand was Reebok. This product and brand were selected because we suspected that consumers have strong stereotypic images of wearers of athletic shoes and, in particular, wearers of Reebok. We suspected that the image associated with the athletic shoes and Reebok user is that of a casual and active person. Also, since product-user images usually change as a function of the situation, the images were elicited in the context of wearing tennis shoes in a casual situation.

Approximately 270 consumers were intercepted in a shopping mall. Interviewers asked shoppers to participate in a marketing study on tennis shoes. They were told that the questionnaire took about 10 minutes to complete. They were also given a T-shirt as an incentive. The measures used—based on the traditional method, the new method, and the brand preference measure for Reebok shoes—are all shown in Table 3.

Results

The correlation between brand preference and the new measure was .373 ($p < .01$), and it was .027 ($p > .10$) between preference and the traditional measure. A standard multiple regression was performed with both the new and the traditional measures as independent variables and preference as the dependent variable. The results indicated a high and significant beta weight for the new measure ($\beta = .373$, $p < .001$), whereas the traditional measure did not achieve significance ($\beta = -.021$, $p > .10$). These results

TABLE 2
Description of Pretests

Study	Pretest	Sample	Method	Purpose	Results
1	1	20 adult consumers	Focus groups (two)	To elicit images associated with athletic shoes and Reebok in particular. These images were used in constructing the traditional measure of self-image congruence.	List of nine images associated with athletic shoes and Reebok users.
2	1	10 judges	Personal interview	To develop clothing style stimuli for study.	Four line drawings of different clothing styles.
	2	50 women	Survey	To develop list of image adjectives for each of the four clothing styles (used in constructing the indirect image measure)	Two image adjectives per clothing style.
3	1	45 elderly tourists	Focus groups (three)	To develop list of adjectives representing the typical tourist in Norfolk, VA.	List of adjectives describing typical tourist in Norfolk.
	2	30 current tourists	On-site personal interviews	To refine list of adjectives of typical tourist of Norfolk (used for the traditional measure).	List of five adjectives describing typical tourist of Norfolk.
4	1	39 students	Survey	To elicit product-user images for each of the eight products (image items used to construct the traditional measure for study).	List of images for each of eight products.
5	1	Panel of marketing experts	Survey	To evaluate face validity of image attributes gleaned from literature on environmental activism.	List of image attributes associated with users of environmental credit cards.
6	1	10 students	Focus group	To elicit images associated with typical marketing student (images used to construct the traditional measure for study).	List of nine image attributes associated with typical marketing student.

provide support for the hypothesis that the new method of measuring self-image congruence is more predictive of brand preference over and beyond the predictiveness of the traditional method (see Table 4).

A rigorous test of the differential predictiveness of the two measures involves the following set of regression analyses. The first set entered the traditional measure into the regression equation ($R^2 = .001$), followed by the new measure ($R^2 = .139$). If the hypothesis (that the new measure is more predictive than the traditional measure) is true, then we should expect the R^2 change due to the addition of the new measure to be significant. In this case, the R^2 change was .138 ($p < .001$). Conversely, if we enter the new measure first ($R^2 = .139$), followed by the traditional measure ($R^2 = .139$), we should expect the R^2 change to be nonsignificant. This was highly evident (R^2 change = .000, $p > .10$). These results provide additional support for the hypothesis.

With respect to convergent validity, however, the correlation between the two independent variables was $-.012$, which was unexpected. We expected the two measures to be moderately correlated, which would have provided some evidence for convergent validity.

STUDY 2

Study 2 focused on clothing styles and the preference for different outfit styles for working women. We selected clothing styles because we felt that different clothing styles

tend to be associated with different images of women and that these images are clear. In Study 1, although we felt that there may be a clear image associated with Reebok shoes, we noted from the qualitative responses that some subjects did not have a clear image of Reebok users. Perhaps due to the lack of perceptual clarity of Reebok, the traditional indirect/dimension-based method performed very poorly. Therefore, Study 2 was designed to test the predictive validity of the self-image congruence measurement methods using a product category having very clear stereotypic images of the product user—namely, women's apparel and clothing styles.

Study 2 involved three stages. The first stage involved a preliminary procedure in which certain images were elicited for different clothing styles. The results of the preliminary procedure were used to design the pretest questionnaire, which, in turn, was used to develop the final questionnaire for the main survey (see Table 2).

Two universities in the same region in the Southeast were chosen for this study. A sample of 500 women was drawn from the two universities (250 each). The sample was stratified with respect to women faculty (1/3) and women staff (2/3) selected randomly from the university faculty and staff directories. Women with job titles that indicated workers who might wear uniforms were excluded from the sampling frame. Also, women who participated in the preliminary test were eliminated from the mailing list. Data were collected via a mailed questionnaire. A total of 234 completed questionnaires were re-

TABLE 3
Measures

Study	Traditional Method	New Method	Dependent Variable
1	<p>Product-user image (5-point SD): "Do you believe the typical person who wears Reebok tennis shoes in casual situations is: [active/not active, health oriented/not health oriented, comfort oriented/not comfort oriented, style oriented/not style oriented, athletic/not athletic, young/old, casual/formal, easygoing/not easygoing]?"</p> <p>Self-image (5-point SD): "Please indicate how you see yourself in casual situations using the adjectives below. I see myself as: [same image dimensions used to measure product-user image]."</p>	<p>Self-image congruence (5-point LT; alpha = .83):</p> <ul style="list-style-type: none"> • "Wearing Reebok shoes in casual situations is consistent with how I see myself." • "Wearing Reebok shoes in casual situations reflects who I am." • "People similar to me wear Reebok shoes in casual situations." 	<p>Brand preference (5-point SD; alpha = .92): Respondents indicated their degree of liking or preference for Reebok relative to other brands of tennis shoes on scales anchored by <i>very poor</i> and <i>very good</i>; <i>very unsatisfactory</i> and <i>very satisfactory</i>; and <i>very unfavorable</i> and <i>very favorable</i>.</p>
2	<p>Product-user image (7-point LT): "Do you believe the woman wearing outfit 1 (picture) is: [dramatic, sporty, delicate, professional, feminine, practical, business-like, sensuous]?"</p> <p>Self-image (7-point LT): "Please indicate how you see yourself at work using the adjectives given below: [same image dimensions used to measure product-user image]."</p>	<p>Self-image congruence (7-point LT; alpha = .90 for classic outfit and .91 for feminine and dramatic outfits):</p> <ul style="list-style-type: none"> • "This outfit is consistent with how I see myself at work." • "This outfit reflects who I am at work." • "People similar to me wear outfits like this at work." • "The kind of person who typically wears this outfit at work is very much like me." • "This outfit is a mirror image of me at work." 	<p>Clothing style preference (7-point LT; alpha = .83 for classic outfit, .77 for feminine outfit, and .73 for dramatic outfit):</p> <ul style="list-style-type: none"> • "I usually wear an outfit like this to work." • "I would prefer to buy an outfit like this for work." • In response to "Which of the outfits would you choose for work?" respondents selected one of the four outfits. (7 = <i>choose</i>, 1 = <i>did not choose</i>)
3	<p>Product-user image (5-point LT): "The typical tourists who visit Norfolk are [family-oriented, conservative, practical, friendly] people."</p> <p>Self-image (5-point LT): "I am a [same image dimensions used to measure product-user image] person."</p>	<p>Self-image congruence (5-point LT; alpha = .87): "The typical visitors (or tourists) to Norfolk [reflect the type of person who I am; are similar to me; are very much like me]."</p>	<p>Consumer satisfaction/dissatisfaction (alpha of 3 global measures = .82):</p> <ul style="list-style-type: none"> • Maddox's 5-point Face scale • Andrews and Withey's 7-point Delighted/Terrible scale • Nonverbal graphic scale (0 = <i>not at all satisfied</i>, 50 = <i>mixed feelings</i>, 100 = <i>totally satisfied</i>)
4	<p>Product-user image (5-point LT): "Imagine a person who might possess (or prefer to buy) [focal brand] and compare him/her with a typical person who might prefer to buy [referent brand]. Indicate your agreement or disagreement to the following items that describe the person who might typically prefer to buy [focal brand]. Circle the number which most closely reflects your opinion." Eight products were tested, each having 7 to 10 image attributes. Example: "An owner of a Honda Civic is a more <i>stylish</i> person than an owner of a Chevy Chevette."</p> <p>Self-image (5-point LT): "Indicate your agreement or disagreement to the following items that describe your 'actual self'—that is, the sort of person you think you are, or the way in which you actually see yourself." Example: "I am the type of person who is <i>stylish</i>."</p>	<p>Self-image congruence (5-point LT; alpha = .82):</p> <ul style="list-style-type: none"> • "People who [use focal brand] are much more like me than people who [use referent brand]." • "I can identify with those people who prefer a [focal brand] over a [referent brand]." • "I am very much like the typical person who prefers to [use focal brand] rather than a [referent brand]." • "The image of the [user of focal brand] is highly consistent with how I see myself." 	<p>Brand preference (5-point LT; alpha ranged from .72 to .98 across the eight products):</p> <ul style="list-style-type: none"> • "I like [focal brand] better than [referent brand]." • "I would use [focal brand] more than I would use [referent brand]." • "[Focal brand] is my preferred brand over [referent brand]." • "I would be inclined to buy a [focal brand] over a [referent brand]."

(continued)

TABLE 3 Continued

Study	Traditional Method	New Method	Dependent Variable
5	<p>Product-user image (9-point LT; 6 "They are . . ." items)</p> <p>Self-image (9-point LT; 6 "I am . . ." items)</p> <ul style="list-style-type: none"> • "I am [they are] the kind of person who considers the broad spectrum of issues (both local and national) which influence the environment, even though those issues do not affect me directly." • "I am [they are] the kind of person who might be in touch with nature. Even in my daily life, I am aware of the plant and animal life around me." • "I am [they are] the kind of person who sees all life as connected. Each species has a place in the harmony of creation and needs to be protected." • "I am [they are] the kind of person who is more interested in the long-term impact of our environmental choices." • "I am [they are] the kind of person who sees all life as sacred. All creatures have life, rights, and suffering of their own." • "I am [they are] the kind of person who thinks our natural resources are finite, nonrenewable, and dwindling; therefore, we must conserve them at all costs." 	<p>Self-image congruence: "Please circle the number of the alternative that best expresses how you see your self-image as an ecological advocate as compared to the image of the typical user of a credit card like the Sierra Club credit card." (1 = very dissimilar, 5 = very similar)</p>	<p>Brand attitude (5-point rating scale; 1 = unlikely, 5 = likely; alpha = .77):</p> <ul style="list-style-type: none"> • "What is the likelihood you will see the benefit of a credit card that makes a statement about you, like the Sierra Club Card?" • "What is the likelihood that you will recommend that your friends use an environmental credit card like the Sierra Club Card?" • "What is the likelihood that you will feel you have made a contribution after using an environmental credit card like the Sierra Club Card?" • "What is the likelihood that you will use a credit card like the Sierra Club Card?" • "What is the likelihood that you will look for more information on environmental credit cards?" • "What is the likelihood that you will compare the benefits of several environmental credit cards?"
6	<p>Product-user image (5-point SD): "Please circle the number for each item that best describes how you see the typical person enrolled in the marketing program in this university. The typical marketing student is [modern, friendly, confident, exciting, professional, sophisticated, wants to be rich, business-like, sociable/outgoing]."</p> <p>Self-image (5-point SD): "Circle the number for each item that best describes the way you see yourself. I see myself as [same image dimensions used to measured product-user image]."</p>	<p>Self-image congruence (5-point LT; alpha = .85):</p> <ul style="list-style-type: none"> • "I am very much like the typical marketing student." • "I can identify with marketing students." • "I am not at all like any of the marketing students I know." (reverse coded) • "The image of the typical marketing student is very dissimilar from the kind of person I am." • "I feel my personal profile is similar to a marketing major." • "I do not have anything in common with a marketing major." (reverse coded) 	<p>Choice: Whether student was a marketing major versus another major (52 marketing majors, 200 other students).</p>

NOTE: SD = semantic differential scale; LT = Likert-type scale.

turned, producing a response rate of 46.8 percent. Five were unusable, producing 229 observations (45.8 percent). The measures pertaining to the traditional and new methods, and clothing style preferences are all briefly described in Table 3.

Results

As shown in Table 4, the correlation between preference for the classic style outfit and the new self-image congruence measure was .748 ($p < .001$), and it was $-.344$ ($p < .001$) between preference and the traditional measure. A standard multiple regression was performed with both new and traditional measures as independent variables and

preference for the classic outfit as the dependent variable (see Table 4). The results showed a high and significant beta weight for the direct measure ($\beta = .688$, $p < .001$), whereas the indirect measure was found to be considerably weaker but nevertheless achieved significance ($\beta = -.161$, $p < .01$). Both independent variables accounted for 58.3 percent of the variance in preference, $F(2, 190) = 132.123$, $p < .001$.

Entering the traditional measure first in the regression equation produced a beta weight of $-.344$ with an R^2 of .118; when this was followed by the new measure ($R^2 = .583$), the R^2 change was found to be noticeably large and significant ($p < .01$). In contrast, when we entered the new measure first ($R^2 = .559$), followed by the traditional

TABLE 4
Predictive and Convergent Validity of the Traditional Versus New Measures of Self-Image Congruence

Study	Dependent Variable	Relationship	Correlation	β Weight	df
1	Preference for Reebok shoes (ARS)	ARS/NM	.373**	.373**	2, 208
		ARS/TM ^a	-.027	-.021	2, 208
		NM/TM ^a	-.012	—	—
2	Preference for classic clothing style (PCCS)	PCCS/NM	.748**	.688**	2, 190
		PCCS/TM ^a	-.344**	-.161**	2, 190
		NM/TM ^a	-.321*	—	—
	Preference for feminine clothing style (PFCS)	PFCS/NM	.747**	.720**	2, 187
		PFCS/TM ^a	-.299**	-.130*	2, 187
		NM/TM ^a	-.252**	—	—
	Preference for dramatic clothing style (PDCS)	PDCS/NM	.725**	.714**	2, 192
		PDCS/TM ^a	-.334**	-.065	2, 192
		NM/TM ^a	-.391**	—	—
3	Satisfaction with travel destination (STD)	STD/NM	.321**	.355**	2, 150
		STD/TM ^a	-.036	-.034	2, 150
		NM/TM ^a	-.36**	—	—
4	Brand preference (BP) ^b	BP/NM	.522**	.581**	2, 224
		BP/TM ^a	-.255***	-.154**	2, 224
		NM/TM ^a	-.336**	—	—
5	Attitude toward environmental credit card (AECC)	AECC/NM	.416**	.389**	2, 242
		AECC/TM ^a	-.267**	-.065	2, 242
		NM/TM ^a	-.478**	—	—
6	Choice of marketing major (CMM)	CMM/NM	.327**	.297**	2, 242
		CMM/TM ^a	-.169*	.000	2, 242
		NM/TM ^a	-.457	—	—

NOTE: NM = new method of measuring self-image congruence; TM = traditional method of measuring self-image congruence.

a. Negative correlations and beta weights are expected because of the discrepancy scores: the higher the discrepancy score, the lower the self-image congruence.

b. Brand preference across eight product categories (automobile, camera, tires, watch, soft drinks, TV, beer, headache remedy).

* $p < .05$. ** $p < .01$.

measure ($R^2 = .583$), the R^2 change was nonsignificant ($p > .10$). These results provide evidence for the predictiveness of the new measure, which is over and beyond the predictiveness of the traditional measure. The correlation between the new and the traditional measures related to the classic style outfit was $-.321$ ($p < .01$), supporting the convergent validity of both measures. A similar pattern of results was found with regard to the feminine and dramatic outfits (see Table 4).

STUDY 3

Study 3 focused on a different consumer behavior phenomenon—namely, consumer satisfaction with a travel/tourist destination (Norfolk, Virginia). The purpose of this study was to test the predictive validity of self-image congruence measures in relation to consumer satisfaction, a consumer behavior study that self-concept researchers have long neglected. Most self-image congruence studies have focused mostly on prepurchase types of consumer behavior (for literature reviews, see Claiborne and Sirgy 1990; Sirgy 1982, 1985a). Self-concept researchers have long argued that self-image congruence effects should also extend to postpurchase behaviors, but no research has yet been undertaken to empirically demonstrate this effect. Therefore, this study was designed to

test the predictive validity of self-image congruence measures in relation to a “new” consumer behavior variable—namely, consumer satisfaction/dissatisfaction.

This study involved two stages. The first stage involved a preliminary procedure to elicit the images associated with the destination (see Table 2). The second stage involved the actual test. The sample population involved individuals who had actually visited the city of Norfolk, Virginia, between May and September 1990 and participated in pleasure travel activities during their visit to Norfolk. A self-administered mail questionnaire was sent to 382 individuals who met the above criteria. A second mailing of the same questionnaire was sent 2 weeks later. The overall response rate was 58.9 percent. After eliminating the unusable responses, 152 responses were coded for data analysis. The items used for the indirect and direct measures of self-image congruence and the dependent variable of consumer satisfaction/dissatisfaction with the tourist destination of Norfolk are presented in Table 3.

Results

As shown in Table 4, the correlation between consumer satisfaction/dissatisfaction and the new measure was $.321$ ($p < .01$), and it was $-.036$ ($p > .10$) for the traditional measure. A standard multiple regression was performed with both new and traditional measures as independent

variables and consumer satisfaction/dissatisfaction as the dependent variable (see Table 4). The results showed a high and significant beta weight for the new measure ($\beta = .355, p < .01$), whereas the traditional measure did not achieve significance ($\beta = .034, p > .10$). Both independent variables accounted for 12 percent of the variance in satisfaction scores, $F(2, 150) = 9.624, p < .05$. Entering the traditional measure first in the regression equation produced a beta weight of $-.036$ with an R^2 of $.001$; when this was followed by the new measure ($R^2 = .12$), the R^2 change was noticeably large and significant ($p < .01$). In contrast, when we entered the new measure first ($R^2 = .103$), followed by the traditional measure ($R^2 = .12$), the R^2 change was nonsignificant ($p > .10$). These results, in conjunction with the results of Studies 1 and 2, provide additional evidence for the strength of the predictiveness of the new method over and beyond that of the traditional method. Furthermore, a correlation of $-.336$ ($p < .01$) was obtained between the new and traditional measures, supporting the convergent validity of the two measures.

STUDY 4

Study 4 focused on eight different products. The purpose of this study was to test the predictive validity of the new method of self-image congruence measurement relative to the traditional method across a wide range of products. Also, from the qualitative responses of Studies 1, 2, and 3, we learned that some subjects had a hard time responding to the new self-image congruence measure because a referent product was not provided. For example, one consumer may think that the product-user image of a Carole Little outfit is not businesslike if she used a Jones New York outfit as a referent; another may conjure the image of dramatic if compared with other designers. Note that the referent product may make a difference in identifying a product-user image. This study was designed with this in mind. Specifically, subjects were instructed to make judgments about brands (focal brands) in relation to referent brands.

Eight different samples were obtained, each corresponding to a different product (eight products used in the study). Marketing students were used as consumer subjects for this study. The products selected were products commonly used by college students. These were (1) auto, (2) camera, (3) tires, (4) watch, (5) soft drinks, (6) TV, (7) beer, and (8) headache remedy. A total of 428 students completed the questionnaire, producing a response rate of 76 percent. Specifically, the responses were broken down as follows: auto ($n = 53$), camera ($n = 39$), watch ($n = 47$), beer ($n = 64$), tires ($n = 35$), soft drinks ($n = 70$), TV ($n = 70$), and headache remedy ($n = 70$).

As has been done in Studies 1, 2, and 3, the traditional measurement method involved the traditional absolute-difference index. To elicit the product-user images for each of the selected products, a preliminary study was conducted (see Table 2). The image attributes generated from the pretest were then used to develop both the product-user

image and the consumer's self-image measures. The items used for the traditional measure, as well as items used for the new measure and the dependent measure of brand preference, are all briefly described in Table 3.

Results

Table 4 shows that the correlation between brand preference and the new measure is high and significant ($r = .522, p < .001$). This correlation is higher than the correlation between preference and the traditional measure ($r = -.255, p < .001$). A standard multiple regression was performed with both new and traditional measures as independent variables and brand preference as the dependent variable (see Table 4). The results showed a high significant beta weight for the new measure ($\beta = .581, p < .001$), whereas the traditional measure showed a weak but significant beta weight ($\beta = -.154, p < .006$). Both independent variables accounted for 30.1 percent of the variance in preference scores, $F(2, 224) = 49.55, p < .001$. These results provide some evidence for the predictive validity of the new method in relation to the traditional one.

Entering the traditional measure first in the regression equation produced an R^2 of $.065$. When this was followed by the new measure ($R^2 = .301$), the R^2 change was noticeably large and significant ($p < .01$). In contrast, when we entered the new measure first ($R^2 = .272$), followed by the traditional measure ($R^2 = .301$), the R^2 change was nonsignificant ($p > .10$). These results, in conjunction with the results of Studies 1, 2, and 3, provide additional evidence that the new method is more predictive of brand preference over and beyond that of the traditional method.

Table 4 shows that the correlation between the traditional measure and the corresponding new measure is moderate and significant ($r = -.336, p < .001$). These results provide some evidence for the convergent validity of the two self-image congruence methods.

STUDY 5

Study 5 focused on a credit card that promotes an environmental organization (Sierra Club). The purpose of this study was to test the predictive validity of the new versus traditional methods of measuring self-image congruence using a different consumer behavior variable—namely, brand attitude. Also, in contrast to the preceding studies in which the product may have involved several image dimensions, we thought that perhaps the evidence would be strong if we were to use a product with a unified image. We chose the Sierra Club credit card because we thought that it might be associated with a unified image of the environmentalist.

A sample of 320 junior and senior business majors served as subjects. The data collection took place through classes with credit assigned for completing the survey. Image attributes were developed from the literature on environmental activism. This list was refined to ensure face validity by a panel of marketing experts in a prelimi-

nary procedure (see Table 2). For the traditional measure of self-image congruence, respondents rated themselves and rated the typical user of an environmental credit card like the Sierra Club credit card. The absolute-difference index was used as the traditional measure of self-image congruence. Table 3 presents the six items used in the traditional measure of self-image congruence, as well as items used for the new measure and the dependent measure of attitude toward the environmental credit card.

Results

The correlation between the new measure and attitude ($r = .416, p < .001$) was found to be greater than its traditional counterpart ($r = -.267, p < .001$; see Table 4). A standard multiple regression was performed with both self-image congruence measures as independent variables and attitude as the dependent variable. The results showed a high and significant beta weight for the new measure ($\beta = .389, p < .001$), whereas the traditional measure did not achieve significance ($\beta = -.065, p > .10$). Both independent variables accounted for 17.8 percent of the variance in attitude scores, $F(2, 242) = 49, p < .001$.

To evaluate whether the new measure is more predictive of consumer behavior than the traditional measure, attitude scores were regressed on the traditional measure, and the R^2 was compared with the regression involving both measures. Again, we expected that the R^2 involving both measures would be significantly higher than the R^2 involving the traditional measure alone. The results showed that the R^2 involving both measures (.178) was significantly higher ($p < .01$) than the R^2 involving the traditional measure alone (.071). Conversely, we expected that the R^2 involving both measures would not be significantly higher than the R^2 involving the new measure alone. The results showed that the R^2 involving both measures (.178) was not significantly higher ($p > .10$) than the R^2 involving the new measure alone (.173). These results provide additional support for the greater predictiveness of the new method (see Table 4).

The correlation between the traditional and new measures was moderate, as expected ($r = -.478, p < .001$). This correlation provides some support for the convergent validity of the two self-image congruence methods.

STUDY 6

A possible criticism of Studies 1 through 5 is the potential problem that the new method of measuring self-image congruence generates measures that may share considerable method variance with the consumer behavior dependent measure because both are global measures and that the traditional method does not have this problem. To counter this possible criticism, Study 6 was designed to test the predictiveness of the new versus traditional methods of measuring self-image congruence in relation to actual consumer behavior (overt behavior that can be observed directly, not through self-report). We focused on

college students' choice of major—specifically, on students' choice of a marketing major. The overt behavior is whether students enrolled in a mass section of a Principles of Marketing course are declared marketing majors versus others. Thus, the observed consumer behavior was whether a particular subject who participated in the study was registered in the class as a marketing major. A total of 252 students participated in this study for 1 percent extra credit (of the total class grade). A focus group was conducted to generate image attributes for the typical marketing student (see Table 2). The items used for the traditional and new measures of self-image congruence are presented in Table 3. For the dependent choice measure, we used the students' social security numbers to find out what their majors were. Hence, the dependent measure was a categorical variable involving two categories—marketing major versus others. On the basis of social security numbers, then, 52 students were found to be marketing majors, and 200 were found to be other majors.

Results

Because the dependent variable is a discrete variable, logistic regression was conducted. The correlation between the new measure and program choice ($r = .327, p < .001$) was found to be substantially greater than its traditional counterpart ($r = -.169, p < .01$). When both were entered into the regression equation simultaneously, the partial correlation of the traditional measure was reduced to .000 ($p > .10$), while the partial correlation of the new measure was .297 ($p < .001$; see Table 4).

The idea that the new measure is more predictive of consumer behavior than the traditional measure was tested by conducting a discriminant analysis in which program choice scores were related to the traditional measure, comparing the R^2 (square of the canonical correlation) with the R^2 (square of the canonical correlation) involving both measures. We expected that the R^2 involving both measures would be significantly higher than the R^2 involving the traditional measure alone. The results show that the R^2 involving both measures (.13) is significantly higher ($p < .01$) than the R^2 involving the traditional measure alone (.028). Conversely, we expected that the R^2 involving both measures would not be significantly higher than the R^2 involving the new measure alone. The results show that the R^2 involving both measures (.13) is not significantly higher ($p > .10$) than the R^2 involving the new measure alone (.106). These results provide additional support for the hypothesis (see Table 4). Furthermore, the correlation between the two measures of self-image congruence was $-.457 (p < .01)$, supporting the convergent validity of both measures.

CONCLUSION

The results of six studies provided support for the high predictiveness of the new method over and beyond the traditional one. Consistent findings were evident from six

studies predicting different consumer behaviors (i.e., brand preference, product form preference, brand attitude, program choice, and consumer satisfaction; see Table 1). The findings were consistent across a variety of goods and services, across different consumer populations, and across different consumption settings.

We believe that the new method of measuring self-image congruence is more predictive than the traditional method because of three key factors. First, it is very likely that the new method captures the experience of self-congruity more directly than the traditional method. Second, the traditional method may contain more measurement error than the new method. This is perhaps due to the use of predetermined images in the traditional measures. These predetermined images may or may not correspond to the specific image a subject may have about the product-user image of a given product or brand. The new method, on the other hand, forces subjects to conjure up their own images of the product user and respond accordingly. Finally, the new method may be more predictive of consumer behavior than the traditional method because it is designed to capture the self-congruity experience in a holistic and global manner. The traditional method may fail to capture the self-congruity experience by summing self-congruity scores over a set of image dimensions. Subjects are not likely to use a compensatory decision calculus in integrating the self-congruity information across a variety of image dimensions.

ACKNOWLEDGMENTS

Dhruv Grewal acknowledges the support of a University of Miami School of Business Summer Research Grant. The authors would like to express their gratitude and appreciation for the comments made by the *JAMS* editor and the three reviewers.

REFERENCES

- Berger-Gross, Victoria. 1982. "Difference Score Measures of Social Perceptions Revisited: A Comparison of Alternatives." *Organizational Behavior and Human Performance* 29:279-285.
- Claiborne, C. B. and M. Joseph Sirgy. 1990. "Self-Congruity as a Model of Attitude Formation and Change: Conceptual Review and Guide for Future Research." In *Developments in Marketing Science*. Vol. 13. Ed. B. J. Dunlap. Cullowhee, NC: Academy of Marketing Science, 1-7.
- Cronbach, Lee J. and Lita Furby. 1970. "How We Should Measure 'Change'—or Should We?" *Psychological Bulletin* 74 (1): 68-80.
- Ericksen, Mary Kay and M. Joseph Sirgy. 1989. "Achievement Motivation and Clothing Behavior of Working Women: A Self-Image Congruence Analysis." *Journal of Social Behavior and Personality* 4 (4): 307-326.
- and ———. 1992. "Employed Females' Clothing Preference, Self-Image Congruence, and Career Anchorage." *Journal of Applied Social Psychology* 22 (5): 408-422.
- Johar, J. S. and M. Joseph Sirgy. 1991. "Value Expressive Versus Utilitarian Advertising Appeals: When and Why to Use Which Appeal." *Journal of Advertising* 20 (September): 23-24.
- Johns, Gary. 1981. "Difference Score Measures of Organizational Behavior Variables: A Critique." *Organizational Behavior and Human Performance* 27:443-463.
- Maheshwari, Arun K. 1974. *Self-Product Image Congruence: A Macro-Level Analysis*. Ann Arbor, MI: University Microfilms International.
- Malhotra, Naresh K. 1981. "A Scale to Measure Self-Concepts, Person Concepts, and Product Concepts." *Journal of Marketing Research* 18:456-464.
- . 1987. "Validity and Structural Reliability of Multi-Dimensional Scaling." *Journal of Marketing Research* 24:164-173.
- . 1988. "Self-Concept and Product Choice: An Integrated Perspective." *Journal of Economic Psychology* 9 (March): 1-28.
- Martin, Warren S. and Joseph Bellizzi. 1982. "An Analysis of Congruous Relationships Between Self-Image and Product Images." *Journal of the Academy of Marketing Science* 10 (4): 473-489.
- Montgomery, H. and O. Svenson. 1976. "On Decision Rules and Information Processing Strategies for Choice Among Multi-Attribute Alternatives." *Scandinavian Journal of Psychology* 17:283-292.
- Ogilvy, David. 1963. *Confessions of an Advertising Man*. New York: Ballantine Books.
- Park, C. Whan, Bernard J. Jaworski, and Deborah J. MacInnis. 1986. "Strategic Brand Concept-Image Management." *Journal of Marketing* 50 (October): 135-145.
- Payne, J. W. 1982. "Contingent Decision Behavior." *Psychological Bulletin* 2:382-402.
- Peter, J. Paul, Gilbert A. Churchill, Jr., and Tom J. Brown. 1993. "Caution in the Use of Difference Scores in Consumer Research." *Journal of Consumer Research* 19 (March): 655-662.
- Sirgy, M. Joseph. 1982. "Self-Concept in Consumer Behavior: A Critical Review." *Journal of Consumer Research* 9 (December): 287-300.
- . 1985a. "Self-Image/Product-Image Congruity and Consumer Decision-Making." *The International Journal of Management* 2 (December): 49-63.
- . 1985b. "Using Self-Congruity and Ideal Congruity to Predict Purchase Motivation." *Journal of Business Research* 13 (June): 195-206.
- . 1986. *Self-Congruity: Toward a Theory of Personality and Cybernetics*. New York: Praeger.
- and Jeffrey Danes. 1981. "Self-Image/Product-Image Congruence Models: Testing Selected Indirect Models." In *Advances in Consumer Research* Vol. 9. Ed. Andrew Mitchell. Ann Arbor, MI: Association for Consumer Research, 556-561.
- , J. S. Johar, A. Coskun Samli, and C. B. Claiborne. 1991. "Self-Congruity Versus Functional Congruity: Predictors of Consumer Behavior." *Journal of the Academy of Marketing Science* 19 (Fall): 363-375.
- , ———, and Michael Wood. 1986. "Determinants of Product Value-Expressiveness: Another Look at Conspicuousness, Differentiation, and Common Usage." In *Developments in Marketing Science*. Vol. 9. Ed. Naresh Malhotra. Cullowhee, NC: Academy of Marketing Science.
- and A. Coskun Samli. 1985. "A Path Analytic Model of Store Loyalty Involving Self-Concept, Store Image, Socioeconomic Status, and Geographic Loyalty." *Journal of the Academy of Marketing Science* 13 (Summer): 265-291.
- Snyder, Mark and Kenneth G. DeBono. 1985. "Appeals to Image and Claims About Quality: Understanding the Psychology of Advertising." *Journal of Personality and Social Psychology* 49 (3): 586-597.

Wall, Toby D. and Roy Payne. 1973. "Are Deficiency Scores Deficient?" *Journal of Applied Psychology* 58 (3): 322-326.

ABOUT THE AUTHORS

M. Joseph Sirgy, Ph.D. from University of Massachusetts, is currently a professor of marketing at Virginia Tech. His research interests are mostly in self-concept, quality of life, and systems theory.

Dhruv Grewal, Ph.D from Virginia Tech, is currently an associate professor of marketing at the University of Miami. His research interests are mostly in pricing and product quality.

Tamara F. Mangleburg, Ph.D. from Virginia Tech, is currently an assistant professor of marketing at Florida Atlantic University. Her research interests are primarily in family decision making.

Jae-ok Park, Ph.D. from Virginia Tech, is currently an associate professor of clothing and textiles at Hanyang University in Korea. Her research interests focus on the social psychology of clothing and patronage of clothing retailers.

Kye-Sung Chon, Ph.D. from Virginia Tech, is an endowed professor of hospitality and tourism management at the University of Houston. His research interests are mainly in the social psychology of travel and leisure behavior.

C. B. Claiborne, Ph.D. from Virginia Tech, is currently an associate professor of marketing at James Madison University. His research interests are mainly focused on self-concept, quality of life, environmental marketing, and sports marketing.

J. S. Johar, Ph.D. from McGill University, is currently a professor of marketing at California State University—San Bernardino. His research interests are mainly in self-concept and value-expressive advertising.

Harold Berkman, Ph.D., is currently a professor of management and associate dean of the Graduate School of Business at the University of Miami. He is the Academy of Marketing Science Distinguished Professor of Business and is the founder of the Academy of Marketing Science. He currently serves as the organization's executive director. His research interests are mostly in consumer behavior and advertising.