## OFFICE OF SCALE RESEARCH

# Technical Report #9302

### A Psychometric Critique of Shopping-Orientation Scales

by

Letty Workman

#### A Psychometric Critique of Shopping Orientation Scales

Thirty-three multi-item scales used to measure consumer shopping orientations published in major marketing journals between 1980 and 1989 are reviewed. The scale characteristics and procedures used for assessing reliability and validity of each are discussed. While the findings indicate an overall acceptable reliability of the measures, there exist problems in the establishment of validity for the construct. These are noted and recommendations for future scale use and development are made.

#### Introduction

Consumer life styles and shopping orientations have been found to be useful predictors of various aspects of consumption behavior such as store loyalty and preferences for types of retail outlets (Reynolds and Darden 1974). It has also been determined that shoppers possessing different orientations have different information needs and preferences for sources of communication, thus providing important implications for retail strategy.

While the measurement of consumer shopping orientations is widely acknowledged in the marketing literature as becoming increasingly useful in developing improved retail strategy, the critical assessment and comparison of the instruments used in obtaining this information with respect to reliability and validity has been lacking. In particular, the construct itself has been described and only roughly defined by researchers from the perspective of representing particular consumer attitudes toward or interests in product or store attributes, to representing general consumer behavioral tendencies, consumer profiles and consumer lifestyles.

The purpose of this study is to investigate shopping orientation scales in an effort to assess some of the psychometric quality of the measures. Scale characteristics, construct descriptions and definitions, and the various types of reliability and validity of the measures employed will be examined using the criteria discussed by Campbell and Fiske (1959), Kaplan (1963), Cronbach (1971), Peter (1979, 1981), Churchill (1979, and Peter 1984), Nunnally (1979), Revelle (1979), John and Reodder (1981), Fornell (1987), Gerbing and Anderson (1988), Bagozzi and Yi (1991), and DeVellis (1991). A discussion of the findings will be presented and recommendations and conclusions will be drawn accordingly.

#### **Background**

Marketers have found it useful to refine the segmentation of specific target markets by analyzing the shopping orientations of these segments beyond the domain of economics. Given that consumers shop for a variety of reasons, such as for personal needs, socializing, enjoyment or as the result of others' influences, etc., it is important to understand these reasons in order to identify patterns which enable improved prediction of consumption behavior. Previous research spanning nearly thirty years has identified a variety of shopping orientations or shopper taxonomies.

Based on consumer orientations toward stores and the purchasing process, Stone's (1954) seminal work identified four types of shoppers: the economic shopper, the personalizing shopper, the ethical shopper, and the apathetic shopper. Price, quality, and efficiency were found to be important attributes

for economic shoppers, but ethical shoppers would tend to focus more on their sense of obligation toward community, thus practicing local store loyalty. And while personalizing shoppers would be more interested in developing close relationships with store personnel and individualizing the shopping experience, the apathetic shopper would be more interested in minimizing the overall effort required to shop due to a general lack of interest in the activity.

Thus, Stone's economic and personalizing shoppers could be described as being most interested in particular product and store attributes within a shopping environment, while apathetic and ethical shoppers could be described as focusing more on their individual lifestyles and values before deciding where to undertake their various shopping activities. Based on his/her dominant attitudes toward deriving the highest value for minimum cost, for example, it would be reasonable to expect that the economic shopper would shop more frequently at a discount store such as Wal-Mart, over a more upscale department store such as Dillards. In contrast, the personalizing shopper, who prefers to individualize the shopping experience, would most likely prefer shopping at a store offering a very high level of customer service, such as Nordstrom.

Just as particular attitudes can drive consumer shopping behavior, so also can the way in which consumers live their lives. A working mother in the 1990s, for example, has a lack of time such that she desires to minimize the time she must spend performing mundane chores such as grocery shopping. Thus, to this consumer, convenience and structure within a shopping environment enabling ease in location of products would most likely be considered very important attributes. Similarly, a consumer driven by a value system toward supporting his/her community, i.e., an "ethical shopper," would tend to be loyal to local retail stores and would most likely not be an outshopper.

The work of Stephenson and Willet (1969) produced a four-way shopper typology for six product categories which classified shoppers according to their shopping process: Store-loyal shoppers, compulsive and recreational, convenience, and price-bargain shoppers. Reynolds and Darden (1974) expanded the list of shopping orientations by developing additional life-style profiles such as special shopper and quality shopper. Tauber (1972) identified a set of motives classified as either personal or social which explain why the consumer may gain satisfaction from the shopping activity itself.

The description of these studies' domains spans across the importance of particular product and store attributes as perceived by consumers, to a more broadly encompassing focus by other consumers on values and general styles of life.

Thus, the literature has suggested that there are many and diverse reasons why consumers shop, and in order for marketers to match strategies to better meet consumer needs, it is important to link the various shopping orientations to marketplace behavior (Lumpkin 1985). However, in order to effectively determine this orientation-behavior connection, thus enabling comparisons, generalizations and predictions across consumer segments, it is first necessary to clearly define the domain of the "shopping orientation" construct in order to ensure that the scales which purport to measure it are appropriate. Marketers can then be ensured of the existence and quality of measurement reliability and validity, thus having greater confidence in the accurate prediction of consumer behavior. This paper will explore these and related issues.

#### Methodology

The data for this study were collected from a review of the articles published between 1980 and 1989 in the **Journal of the Academy of Marketing Science**, and the **Journal of Consumer Research**. These were the most popular publications in the field of marketing during the past decade for scholarly articles investigating consumer shopping orientation constructs. From a review of over seven hundred articles, twelve studies were found which measured these constructs using multi-item scales. Eleven of the twelve studies involved the use of multiple scales for measuring different shopping orientation constructs. Thus, the total sample for this study is comprised of thirty-three consumer shopping orientation scales.

#### Multi-item Measures

Single item scales were not included in the study for several reasons. Churchill (1979) and Peter (1981) have discussed the limitations associated with the use of single item measures. These include the significant probability of single item measures having low correlations with the particular attribute being measured, but concurrently relating to other attributes. In addition, multi-item scales are more likely to produce more reliable estimates since measurement error typically decreases as the number of items increases. Finally, single item scales limit the number of gradations to be developed not to exceed the number of steps in the rating scale.

#### Criteria for Assessment and Hypotheses

Several influences on the reliability of the shopping orientation scales are tested here. In their seminal work, Churchill and Peter (1984) found that a significant positive relationship exists between the number of items used in a scale and the reliability, as well as between the number of response alternatives and reliability. Thus, the following hypothesis are also tested in this study.

H1: The number of scale items and level of internal consistency have a significant positive correlation.

H2: The number of scale points and level of internal consistency have a significant positive correlation.

In addition, the Churchill and Peter (1984) study revealed that overall, sampling characteristics have little effect on reliability estimates, but a negative and significant relationship was found to exist between sample size and scale reliability. Based on this, it is reasonable to expect to find the following among the shopping orientation scales:

H3: Sample size and internal consistency have a negative significant correlation.

This study will also examine additional scale characteristics such as sample and research types, the mean number of items per scale, the mean number of response alternatives, and the alpha ranges and alpha mean. The frequencies of the years and journals of publication and number of scale uses will be investigated, as well.

In addition to investigating the scales' reliability characteristics, this study will also analyze the procedures used to establish the convergent, discriminant, and nomological validity. Validation criteria used to assess each scale will be drawn from procedures discussed previously by Churchill (1979), Peter (1981), Gerbing and Anderson (1988), and Bagozzi and Yi (1991).

#### **Scale Characteristics and Findings**

#### Univariate Statistics and Reliability

Table 1 provides a summary of the characteristics of each scale included in this study, highlighting sample size, number of scale items used, number of response alternatives (scale points), and the respective Cronbach's alpha reliability coefficients. Sample sizes ranged from 105 to 806, with a mean of 462 respondents. The types of subjects used in the studies consisted of college students and heads of households, with ten of the studies using the former and two using the latter. All of the studies could be characterized as conducting correlational research rather than experimental.

The number of articles measuring shopping orientation constructs published per year were one in 1980, one in 1981, one in 1982, one in 1983, one in 1984, four in 1985, one in 1988, and two in 1989, with the mean year of publication 1984. Seven of the decade's articles were published in the **Journal of the Academy of Marketing Science**, while five were published in the **Journal of Consumer Research**.

The mean number of items per scale was 5.5 from a range of 2 to 15 items. The mean number of response alternatives was 5.9 from a range of 4-9 scale points. While Arora's 1982 study did not report a reliability coefficient for the "Involvement (Store)" scale, his subsequent 1985 study using approximately the same scale reported an alpha value of 0.68. Thus all studies, with this exception, reported reliability coefficient values.

Of the thirty-two scales in the analysis reporting alphas, the mean reliability coefficient value was 0.70, from a range of 0.52 for the "Store Familiarity Importance" scale, to 0.95 for the "Shop with Children" measure. Thus, based on Churchill's and Peter's (1984) criteria of 0.80 or higher as an acceptable reliability coefficient value, thirteen measures were generally acceptable, as seen in Table 1<sup>(3)</sup>. Ten of the measures had reliabilities of 0.70-0.79, and seven were in the range of 0.60-0.69. Two of the coefficient alphas reported were quite low with values below 0.60.

Only four measures from the domain reviewed were used in more than one study. Arora used the "Involvement (Store)" scale in both 1982 and 1985, but reliability was reported only for 1985 at 0.68. The two studies had essentially the first 11 items in common. (Items 11-14 were used just in 1982 whereas items 15-18 were used only in the 1985 study). The "Innovativeness (Shopping)" scale was used by Raju (1980) achieving an alpha of 0.85, and again in 1984 by Hawes and Lumpkin with an alpha level of 0.61. "Personalizing Shopper" had the highest frequency of use appearing in three studies (Hawes and Lumpkin 1984; Lumpkin 1985; and Saegert, Hoover and Hilger 1985). The respective alpha levels of these works were 0.83, 0.85, and 0.82. "In-Shopping Preference" was used twice by Hawes and Lumpkin (1984) and by Hozier and Stem (1985). Both studies reported alpha levels of 0.76.

In addition to reporting Cronbach's alpha for reliability, only one study, that of Carlson and Grossbart (1988), reported the coefficient beta value of 0.91 for the "Shop with Children" scale. According to the criterion of obtaining at least a value of 0.50 for this coefficient to be acceptable (John and Roedder 1981), this beta value is quite high, providing evidence of its unidimensionality.

Similarly, only one study (Hozier and Stem 1985) reported performing a test-retest reliability assessment, and none reported using alternate forms. Hozier and Stem (1985) also reported performing a correlation analysis, but again, they are unique in this respect. Item-total correlations were performed in two studies, those of Raju (1980), and Moschis (1981).

A correlation analysis of the thirty-two scales reporting reliability coefficients was performed to test the proposed hypotheses. The analysis indicated the following:

Variable	Correlation with Alpha	p-value	
Number of Scale Items	-0.36337	.3347	
Number of Scale Points	-0.11455	0.5189	
Sample Size	-0.15750	0.3737	

While these results look "good" on a conceptual level, the sample size of this study was considerably low and most likely affected the statistical significance.

Churchill and Peter (1984) reported a significant positive association between the number of scale items and the reliability coefficients in their database. In addition, Bruner and Hensel (1993) obtained a 0.21 correlation between these variables using a sample of 750 multi-item scales reported in six top marketing journals in the 1980s. Thus, while the correlation failed to be statistically significant in this study, it is reasonable to expect to find evidence supporting the hypothesis when using a larger sample.

In their study, Churchill and Peter (1984) also found a significant positive association between the number of scale points and internal consistency. However, Bruner and Hensel (1993) found only weak evidence to support this relationship, and this study had similar results.

Unexpectedly, Churchill and Peter (1984) found support that a significant negative relationship existed between the sample size and internal consistency. The results of Bruner and Hensel (1993) supported this finding with a -0.21 correlation. Again, it is reasonable to expect that if the sample size were increased in this study, similar findings would be obtained.

#### Validity

Table 1 provides a summary of the methods used by the authors in this study for assessing the convergent, discriminant, and nomological validity of the measures used.

Exploratory factor analysis was reported in all but two of the studies, Moschis (1981) and Arora (1982), which did not report any type of validity assessments. While exploratory factor analysis has been widely used as a preliminary technique for reducing the number of scale items and for confirming the researcher's hypotheses as to the nature of the item groupings (DeVellis 1991), this technique lacks the ability to fully test for a scale's unidimensionality, a critical and basic assumption of measurement theory (Gerbing and Anderson 1988; Bagozzi and Yi 1991). None of the studies, however, reported performing a confirmatory factor analysis, nor were there any reporting the use of the MTMM matrix (Campbell and Fiske, 1959) for testing convergent and discriminant validity. The studies of Raju (1980) and Hozier and Stem (1985), however, did report performing inter-item correlation analyses for the purpose of examining nomological validity.

Thus, the results of this analysis reveal a general failure across all studies of shopping orientations within the 1980s to firmly establish construct validity. A discussion of some associated implications of this and future research follows.

#### **Discussion**

An important consideration when comparing the reliabilities and validities of the measures within this study is whether or not they are actually measuring the same construct. Researchers should identify those scales which are most reliable when attempting to measure consumer shopping orientations, but if the scale with the highest reliability is not actually measuring the same construct of interest (i.e., the validity has not been properly established), then its use is questionable.

This issue centers around the unidimensionality of the constructs and the nomological validity of the measures. It involves assessing the theoretical and empirical relationships between different constructs and their measures (Peter 1981). It is important that the given construct demonstrate conceptual consistency across research, and evidence of this can be examined by comparing the direction of the magnitude of correlations between the measure of interest and another measure where the predicted relationship has been previously established.

Despite the importance of the shopping orientation construct to marketing strategists, over the last decade there has been little critical analysis of its domain and validity. In reviewing the measures within this study, it is apparent that the construct's measurement has been approached from quite diverse perspectives. While some scales appear to be measuring cognitive or affective attitudes of consumers such as whether or not they are price conscious when shopping, other scales seem to be more focused on a general tendency of behavior or a consumer lifestyle, such as an exploratory or innovative shopper. A discussion of this follows by examining similarities and differences between some of the scale descriptions and definitions.

#### Construct Descriptions and Definitions

Table 3 provides a summary of the descriptions and definitions of the shopping orientation constructs as discussed by the authors in each study. Many of the authors focused their attention on measuring attitudes and interests of consumers. For example, Moschis (1981) approached his research from the perspective of consumer roles, which are defined as including the knowledge, skills, attitudes, and predispositions of consumers. Similarly, Carlson and Grossbart (1988) were interested in

explaining the processes by which people acquire skills, knowledge, and attitudes relative to their functioning in the marketplace. In addition, Arora's (1982, 1985) scale of "Involvement" measured the degree of interest a consumer has in shopping and his/her attitudes about particular store attributes.

In contrast to measuring attitudes, however, Raju (1980) and Lumpkin (1985) used the words, "lifestyle," and "profile," respectively, to describe their instruments' foci. These two seem to be measuring general habits or tendencies of a consumer's behavior. Hawes and Lumpkin (1984) were specifically interested in the "intermarket patronage," or shopping behavior of outshoppers. Similarly, Lumpkin and Hunt (1989) investigated the retail patronage behavior, or store choice, of a particular market segment, elderly consumers.

Thus, it is apparent that there exist various definitional and descriptive distinctions within the "shopping orientations" construct. While some of the measures focus specifically on measuring consumer attitudes or cognitions, others focus on measuring actual consumption behavior. Still, in reviewing the names of the scales examined in this study, one could reasonably group the measures into clusters representing sub-constructs or dimensions, such as Dickerson and Gentry's (1983) "Price Consciousness" and Lumpkin's (1985) "Sales Advertising Watcher." It would be reasonable to expect that these two scales, among others, would share some characteristics, thus coming close to measuring the same shopping orientation sub-construct. Once this has been determined, the researcher can more readily assess the significance of the scales' differing reliabilities of 0.67 and 0.84 respectively.

It is clear that in order to more critically interpret the particular differences in scale characteristics and reliabilities, an examination of actual scale items comprising the measures should be performed. The most appropriate scale to apply in a given research context can then be more readily determined. A discussion of a sample of such comparisons follows.

#### Comparison of Sub-Constructs and Scale Items

Based on their frequency of use in the literature, four shopping orientation sub-constructs have been selected for this discussion: 1) the price conscious shopper; 2) the personalizing shopper; 3) the recreational shopper; and 4) the convenience oriented shopper. Each will be discussed in turn.

The <u>Price Conscious Shopper</u>. In this study, the sub-construct is represented by the "Price Consciousness" scale used by Dickerson and Gentry (1983), the "Careful Shopping" scale used by Hawes and Lumpkin (1984), the "Advertising Special Shopper" measure employed by Lumpkin (1985), and the "Store Pricing Importance" scale used by Saegert, Hoover and Hilger (1985). These four Likert type measures are comprised of five to six response alternatives, three to five items, and reliabilities spanning from 0.66 to 0.84 (Table 1).

The number of shared items among these scales is fairly high. The Dickerson and Gentry (1983) and Lumpkin (1985) scales share an item exactly, "I shop a lot for specials," and these two scales, plus the Hawes and Lumpkin (1984) scale have at least one item measuring the consumer's tendency to watch for advertisements and sales. On the Saegert, Hoover and Hilger (1985) scale, consumers are asked to rate the importance of particular store attributes such as low prices and specials. Thus, this scale is also quite similar to those discussed above.

Based on the similarity of items of the first three scales described above, the marketer's research would likely benefit most by using the "Advertising Special Shopper" measure comprised of four items employed by Lumpkin (1985) due its greater evidence of reliability.

<u>The Personalizing Shopper</u>. Four scales, three of which are called "Personalizing Shopper," comprise this sub-construct in studies by Hawes and Lumpkin (1984), and Lumpkin (1985). The additional scales within this sub-construct group are Lumpkin's (1985) "Self-Confidence (Shopping)," and Saegert, Hoover and Hilger's (1985) "Familiarity" scale. These four Likert type measures are comprised of five to six response alternatives and two to four items. The reliability range of this sub-construct group is 0.77 to .085 (Table 1).

The "Personalizing Shopper" scales used by Hawes and Lumpkin (1984) and by Lumpkin (1985) are almost exactly the same. Hawes and Lumpkin (1984) used two of the three items employed by Lumpkin (1985). The reliability subsequently improved from 0.83 to 0.85, thus it would be recommended to use this scale in its entirety.

The "Familiarity" scale used by Saegert, Hoover and Hilger (1985) is comprised of four items, only one of which is similar to one on the other scale by the same name. This scale's reliability was 0.82, which is lower, and it also seems to be measuring a number of different aspects of the construct. For example, this scale is comprised of items asking the consumer whether or not friends and neighbors shop at the store, whereas the former scale focuses only on the consumer's personal preferences of where to shop.

The Lumpkin (1985) "Self-Confidence (Shopping)" scale shares no items with the others within this sub-construct group. The two items comprising it focus on the self-image of the consumer, and its reliability is significantly lower at 0.77.

Thus, depending on the specific attributes of interest of the researcher, the three item version of "Personalizing Shopper" with an alpha of 0.85, or the more broadly focused four item scale "Familiarity" by Saegert, Hoover and Hilger (1985) (alpha = 0.82) seem to be the best choices to employ when measuring the "Personalizing Shopper" sub-construct.

The Recreational Shopper. This sub-construct is a broader dimension describing attitudes, behavioral tendencies or consumer lifestyles toward the enjoyment of shopping and is represented by seven scales. They include Raju's (1980) "Exploration Through Shopping" and "Innovativeness (Shopping), Hawes and Lumpkin's (1984) "Shopping Mall Usage" and "Innovativeness (Shopping)," Arora's (1985) "Shopping Prone," Lumpkin's (1985) "Shopping Enjoyment" and O'Guinn and Faber's (1989) "Emotional Lift." These seven Likert type measures are comprised of five to seven response alternatives, three to ten items, and their reliabilities range from 0.53 to 0.89.

The two innovativeness scales offer a significant contrast in terms of number of items and reliability coefficients. While the Hawes and Lumpkin (1984) scale is comprised of four items with an alpha of 0.61, the Raju (1980) scale has ten items and an alpha of 0.85. The four item scale has all of its items in common with the ten item scale and is, therefore, a subset of the longer version.

The items in these scales and those of the seven item "Exploration Through Shopping" scale used by Raju (1980) seem to describe a general tendency on the part of consumers to enjoy trying new products, stores, and experiences. Based on reliability coefficients and the desire to more thoroughly capture the innovativeness attributes of this shopping orientation sub-construct, both scales employed by Raju (1980) would seem to be preferable within this sub-group.

"Shopping Prone," (Arora 1985) a four item scale with an alpha of 0.53, has one item which also measures this tendency: "I like to keep up with changes in styles and fashions." The other three items of this scale, however, relate to time and information aspects of shopping. "Exploration Through Shopping," also mentioned above, shares such an item as well.

The "Shopping Enjoyment" (Lumpkin 1985) scale shares one item with the "Emotional Lift" (O'Guinn and Faber 1989) and with the "Shopping Mall Usage" (Hawes and Lumpkin 1984) scale with respect to the consumer receiving a "psychological lift" or "high," thus enjoying the shopping experience. While "Emotional Lift" focuses expressly on this aspect of shopping, "Shopping Enjoyment" more broadly relates to consumer interests and preferences about with whom and where to shop.

Thus, even though an attempt has been made in this study to group the scales by shopping orientation sub-constructs, those representing the "Recreational" shopper are quite diverse in focus. Again, it would be the specific dimensions or attributes of interest to the researcher and the highest reliability coefficients realized in previous research which should guide the decision about which scale to employ.

The Convenience Oriented Shopper. This sub-construct is also broadly focused and is represented by seven measures. The authors and scales included within this sub-construct are Hawes and Lumpkin's (1984) "In-Home Shopper;" Saegert, Hoover and Hilger's (1985) "Convenience (Shopping Ease)" and "Convenience (Store Features);" and the four convenience scales used by Lumpkin and Hunt (1989). The seven Likert type measures are comprised of four to six response alternatives and four to ten items. The reliability range of this sub-construct group is from 0.62 to 0.84.

The seven item "In-Home Shopper" and the six item "Convenience Getting to Store" scales have two similar items which are related to a consumer valuing the ability to order products over the phone. While the balance of items of the former scale relate specifically to a consumer's interest in shopping through catalogs and direct mail, those of the latter relate to store features and services.

The remaining five scales within this sub-construct group all relate to particular attributes and services provided by a store such as delivery, parking, knowledgeable salespersons, hours open for business, and the structure of the store format. The four item "Ease of Movement Within Store" has the highest reliability of 0.77, while the others fall within the range of 0.62 to 0.73. Thus, in selecting the most appropriate scale to use, it is again a decision regarding the particular store attributes of interest to the researcher and the degree of reliability desired.

#### **Recommendations**

In their study of 750 uses of scales in the marketing literature from 1980-1989, Bruner and Hensel (1993) found evidence indicating that the level of reliable measurement varies widely from one construct to another. This suggests that the constructs may also vary significantly in their difficulty of measurement, and this should be kept in mind when considering the following recommendations.

Thirty-two of the thirty-three scales in this study reported Cronbach's alpha values, a widely accepted criterion for assessing a measure's internal consistency. Those measures were shown to be somewhat reliable, with a mean alpha value of 0.70. Forty-one percent of the studies realized Churchill's criteria of 0.80 and higher. However, two of the scales, "Store Familiarity Importance" and "Shopping Prone," would not be recommended for use as previously constructed due to unacceptably low alpha values of 0.52 and 0.53, respectively.

In addition, within the "Price Conscious Shopper" sub-construct, the "Store Pricing Importance" scale used by Saegert, Hoover and Hilger (1985) is not recommended for future use due to its similarity with other scales, such as "Advertising Special Shopper" employed by Lumpkin (1985), with higher reliability.

Within the "Personalizing Shopper" sub-construct, it is recommended that the Lumpkin (1985) three item scale be used due to the higher reliability of 0.85 over the two item version with an alpha of 0.83. In addition, the use of Lumpkin's (1985) "Self-Confidence (Shopping)" scale is not recommend for use in its current form due to low reliability and being comprised of only two items.

Similarly, for the "Recreational Shopper" sub-construct, Raju's (1980) ten item scale, "Innovativeness (Shopping)" is recommended for use over that of Hawes and Lumpkin (1984) due to higher item number and alpha value. Within this sub-construct, the seven item "Exploration Through Shopping" used by Raju (1980) is also recommended due to its breadth.

Within the "Convenience Oriented Shopper" sub-construct, there exist no particularly superior scales due to diverse areas of focus and varying coefficient alpha values. It is therefore advised to focus on the specific attributes of interest in selecting the most appropriate measure of this sub-construct.

As mentioned previously, the shopping orientation construct has been quite useful to marketers for segmentation practices and subsequent retail strategic planning. However, in that the existence of unidimensionality in each scale within this study's domain is highly suspect, as evidenced in the analyses of a sample of four shopping orientation sub-constructs, it is apparent that future studies would benefit significantly from investigating construct dimensionality and measure validation.

Performing the additional analyses of confirmatory factor analysis or calculating coefficient beta would significantly improve the overall quality of future shopping orientation scale research. After the dimensionality has been established for a scale, assessing the convergent, discriminant and nomological validities would ensure future researchers that the construct is appropriately represented.

Carlson and Grossbart (1988) performed the only analysis of coefficient beta (John and Roedder, 1981) for their scale, "Coshopping," and it was quite high at 0.91. It is apparent that other measures discussed in this study could also be improved, along with subsequent research quality, from this additional analysis. In particular, Saegert, Hoover and Hilger's (1985) measure for "Familiarity," Arora's (1985) "Shopping Prone," and Hawes and Lumpkin's (1984) "In-Home Shopper" are all scales which appear, based on the examination of their items, to be measuring multiple dimensions. Further investigation of the dimensionality of these scales, as well as the validity of all measures within this study, are in order for future research.

#### Conclusion

This study has evidenced the need for increased attention to the areas of reliability, unidimensionality, and validity in the measurement of consumer shopping orientations. Specifically, the construct has been only roughly defined and at best, described. However, even the descriptions lack structure and span from discussions of cognitive and affective consumer attitudes and interests, to broader dimensions such as consumer behavioral profiles and lifestyles.

The degree of overlap in item use among the measures investigated in this study is significantly low, and the methods employed to assess validity for the shopping orientation construct are generally incomplete over the last ten years. While many of the reliability values appear to be acceptable on the surface, researchers are advised in the future to carefully evaluate scale items, and attention should be given to assessing scale validity. While the shopping orientation construct has provided important information to researchers and practitioners in the past, there is work to be done in the future to improve its measurement quality.

#### **REFERENCES**

- Arora, Raj (1982), "Consumer Involvement in Retail Store Positioning, "Journal of the Academy of Marketing Science, 10, 2, (Spring), 109-124.
- Arora, Raj (1985), "Involvement: It's Measurement for Retail Store Research," <u>Journal of the Academy of Marketing Science</u>, 13, 2, (Spring), 109-124.
- Baggozzi, Richard P. (1991), "Structural Equation Models in Marketing," Ann Arbor, MI: The University of Michigan, 335-379.
- Baggozzi, Richard P. And Youjae Yi (1991), "Multitrait-Multimethod Matrices in Consumer Research," Journal of Consumer Research, 17 (March), 426-439.
- Bruner, Gordon C. and Paul J. Hensel (1993), "Multi-Item Scale Usage in Marketing Journals," <u>Journal of the Academy of Marketing Science</u>, 21 (Fall), 339-344.
- Campbell, Donald T. and Donald W. Fiske (1959), "Convergent and Discriminant Validity by the Multitrait-Multimethod Matrix," <u>Psychological Bulletin</u>, 56 (March), 81-105.
- Carlson, Les and Sanford Grossbart (1988), "Parental Style and Consumer Socialization of Children," <u>Journal of Consumer Research</u>, 15 (June), 77-94.
- Churchill, Gilbert A. and J. Paul Peter (1984), "Research Design Effects on the Reliability of Rating Scales: A Meta-Analysis," <u>Journal of Marketing Research</u>, 21 (November), 360-375.
- Cox III, Eli P. (1980), "The Optimal Number of Response Alternatives for a Scale: A Review," <u>Journal of Marketing Research</u>, 17 (November), 407-422.
- Crask, Melvin R. and Fred D. Reynolds (1978), "An Indepth Profile of the Department Store Shopper," <u>Journal of Retailing</u>, 54, 2 (Summer), 23-32.
- Cronbach, Lee J. (1971), "Test Validation," <u>Educational Measurement</u>, Second Edition, R.L. Thorndike, ed. Washington, D.C.: American Council of Education, 443-507.
- Darden, William R. and Dub Ashton (1974), "Psychographic Profiles of Patronage Preference Groups," <u>Journal of Retailing</u>, 50, 4 (Winter), 99-112.
- DeVellis, Robert F. (1991), Scale Development: Theory and Applications, Newbury Park, CA: Sage.
- Dickerson, Mary Dee and James W. Gentry (1983), "Characteristics of Adopters and Non-Adopters of Home Computers," <u>Journal of Consumer Research</u>, 10 (September), 225-235.

- Didow Jr., Nicholas M., Kevin Lane Keller, Hiram C. Barksdale, Jr., and George R. Franke (1985), "Improving Measure Quality by Alternating Least Squares Optimal Scaling," <u>Journal of Marketing Research</u>, 22 (February), 30-40.
- Fornell, Claes (1987), "A Second Generation of Multivariate Analysis: Classification of Methods and Implications for Marketing Research," <u>Review of Marketing</u>, Michael J. Houston, ed., Chicago: American Marketing Association, 407-450.
- Gerbing, David W. And James C. Anderson (1988), "An Updated Paradigm for Scale Development Incorporating Unidimensionality and Its Assessment," <u>Journal of Marketing Research</u>, 25 (May), 1886-192.
- Hawes, Jon M. And James R. Lumpkin (1984), "Understanding the Outshopper," <u>Journal of the</u> Academy of Marketing Science, 12, 4 (Fall), 200-218.
- Heeler, Roger M. and Michael L. Ray (1972), "Measure Validation in Marketing," <u>Journal of Marketing</u> <u>Research</u>, 9 (November), 361-370.
- Hozier, George C. And Donald E. Stem (1985), "General Retail Patronage Loyalty as a Determinant of Consumer Outshopping Behavior," <u>Journal of the Academy of Marketing Science</u>, 13, 1 (Winter), 32-46.
- Hunt, Shelby D. (1976), "The Nature and Scope of Marketing," Journal of Marketing, 40 (July), 17-28.
- Jacoby, Jacob (1978), "Consumer Research: A State of the Art Review," <u>Journal of Marketing</u>, 42 (April), 87-96.
- John, George and Deborah L. Roedder (1981), "Reliability Assessment: Coefficients Alpha and Beta," AMA Educators' Proceedings, 354-357.
- Kaplan, Abraham (1963), <u>The Conduct of Inquiry: Methodology for Behavioral Science</u>, New York: Harper and Row.
- Korgaonkar, Pradeep K. (1984), "Consumer Shopping Orientations, Non-Store Retailers, and Consumers' Patronage Intentions: A Multivariate Investigation," <u>Journal of the Academy of Marketing Science</u>, 12, 1 (Winter), 11-22.
- Lumpkin, James R. And James B. Hunt (1989), "Mobility as an Influence on Retail Behavior of the Elderly: Testing Conventional Wisdom," <u>Journal of the Academy of Marketing Science</u>, 17, 1 (Winter), 1-12.
- Lumpkin, James R. (1985), "Shopping Orientation of the Segmentation of the Elderly Consumer," <u>Journal of the Academy of Marketing Science</u>, 13, 2 (Spring), 271-289.
- Moschis, George P. (1981), "Patterns of Consumer Learning," <u>Journal of the Academy of Marketing</u> Science, 9 (2) (Spring), 110-126.

- Moschis, George P. (1976), "Shopping Orientations and Consumer Uses of Information," <u>Journal of</u> Retailing, 52, 2 (Summer), 61-70.
- Nunnally, Jum C. (1979), <u>Psychometric Theory</u>, New York: McGraw-Hill.
- O'Guinn, Thomas, and Ronald J. Faber (1989), "Compulsive Buying: A Phenomenological Exploration," <u>Journal of Consumer Research</u>, 16 (September), 147-157.
- Peter, J. Paul and Gilbert A. Churchill, Jr. (1986), "Relationships Among Research Design Choices and Psychometric Properties of Rating Scales: A Meta-Analysis," <u>Journal of Consumer Research</u>, (December), 272-2821
- Raju, P.S. (1980), "Optimum Stimulation Level: Its Relationship to Personality, Demographics, and Exploratory Behavior," Journal of Consumer Research, (December), 272-282.
- Revelle, W. (1979), "Hierarchical Clustering and the Internal Structure of Tests," <u>Multivariate Behavior Research</u>, 14 59-69.
- Reynolds, Fred D. and William R. Darden (1974), "Shopping Orientations and Usage Rates," <u>Journal of Marketing Research</u>, 8 (November), 505-508.
- Saegert, Joel, Robert J. Hoover, and Marye Tharp Hilger (1985), "Characteristics of Mexican American Consumers," <u>Journal of Consumer Research</u>, 12 (June), 104-109.
- Singh, Jagdip, Roy D. Howell, and Gary K. Rhoads (1990), "Adaptive Designs for Likert-Type Data: An Approach for Implementing Marketing Surveys," <u>Journal of Marketing Research</u>, 27 (August), 304-321.
- Strahan, R. and K. Gerbasi (1972), "Short, Homogenous Version of the Marlowe-Crowne Social Desirability Scale," <u>Journal of Clinical Psychology</u>, 34, 414-424.
- Stephenson, Donald and Ronald P. Willet (1969), "Analysis of Consumers' Retail Patronage Strategies," in P.R. MacDonald (ed.), <u>Marketing Involvement in Society and Economy</u>, Chicago: American Marketing Association, 316-322.
- Stone, Gregory P. (1954), "City and Urban Identification: Observations on the Social Psychology of City Life," <u>American Journal of Sociology</u>, 60 (July), 36-45.
- Swain, A.J. (1975), "Analysis of Parametric Structure for Variance Matrices," unpublished dissertation, Department of Statistics, University of Adelaide.
- Tauber, Edward M. (1972), "Why do People Shop?" Journal of Marketing, 36 (October), 46-59.
- Tigert, Douglas J. (1969), "Psychographics: A Test-Retest Reliability Analysis," <u>AMA Fall Conference Proceedings</u>, 310-315.

Wells, William D. (1975), "Psychographics: A Critical Review," <u>Journal of Marketing Research</u>, 12 (May), 196-213.

**Table 1. Scale Characteristics** 

Author and Year	Scale Name	Sample	Scale Items	Scale Points*	Coeff. Alpha	Methods of Assessing Convergent, Discrimination, and Nomological Validity
Raju	Exploration Through Shopping	105	7	L-7	0.873	Exploratory Factor Analysis
(1980)	Innnovativeness (Shopping)	105	10	L-7	0.853	inter-item correlations and
	Risk Taking	105	9	L-7	0.833	a subjective classification
	Information Seeking	105	12	L-7	0.843	process were employed.
Moschis	Store Familiarity					
(1981)	Importance	806	4	L-5	0.52	None reported
Arora (1982)	Involvement (Store)	190	14	L-9	**	None reported
Dickerson Analysis & Gentry (1983)	Price Consciousness	639	4	L-6	0.67	Exploratory Factor
Hawes &	Careful Shopping	581	4	L-6	0.73	Exploratory Factor Analysis
Lumpkin	Personalizing Shopper	581	3	L-6	0.833	Contend validity was deemed
(1984) constructs	In-Home Shopper		581	7	L-6	0.76 adequate given the
	Shopping Innovation Loyalty to Local Merchants Negative Attitude Toward	581	4 581	L-6 3	0.61 L-6	include items similar to those 0.76 used in other (unspecified) studies.
	Shopping Condition	581	5	L-6	0.71	
	Shopping Mall Usage [Shopping Mall Oriented] Traditional Sex Role	581	3	L-6	0.76	
	Orientation	581	2	L-6	0.76	
Arora	Shopping Prone	273	4	L-7	0.53	Correlations between scores
(1985)	Involvement (Store) [IMP]	273	15	L-7	0.68	on each were compared to examine nomological validity only.
Hozier & Analysis,	General Retail Patronage		705	10	L-4	0.873 Exploratory Factor
Stem (1985)	Loyalty					examination of scale and single item scores and comparison of item scores with a behavioral measure.
Lumpkin	Self-Confidence (Shopping)	373	2	L-6	0.77	Exploratory Factor Analysis
(1985)	Advertising Special Shopper	373	4	L-6	0.843	
	Personalizing Shopper	373	3	L-6	0.853	
	Shopping Enjoyment	373	9	L-6	0.833	
	Propensity to Shop [Shopping Propensity]	373	3	L-6	0.61	

**Table 1. Scale Characteristics (Continued)** 

Author	Scale		Scale	Scale	Coeff.	Methods of Assessing Convergent,
and Year	Name	Sample	Items	Points*	Alpha	Discrimination, and Nomological Validity
Saegert,	Familiarity	299	4	L-5	0.823	Exploratory Factor Analysis
Hoover,	Convenience (Shopping Ease)	299	7	L-5	0.843	
& Hilger	Convenience (Store Features)	299	6	L-5	0.73	
	Store Pricing Importance [Price]	299	3	L-5	0.66	
Carlson & Analysis Grossbart (1988)	Coshopping	451	3	L-5	0.953	Exploratory Factor
Lumpkin & Hunt	Physical Aspects in Store Ease of Finding Items	789	4	L-5	0.67	Exploratory Factor Analysis
(1989)	in Store Ease of Movement	789	5	L-5	0.72	
	Within Store Convenience Getting to	789	4	L-5	0.77	
	Store	789	6	L-5	0.62	
O'Guinn & Faber (1989)	Emotional Lift	636	3	L-5	0.893	Exploratory Factor Analysis

<sup>\*</sup>The "L" refers to Likert-type scale and the number indicates the intervals on the response scale. \*\*None reported in Arora (1982) but alpha of 0.68 reported in Arora (1985).

<sup>[]</sup>refers to original scale name

<sup>3</sup>Indicates scales with 0.80 and above coefficient alphas

**Table 2 Construct Descriptions and Definitions** 

Author and Year	Scale Construct Names	Construct Descriptions and Definitions
Raju (1980)	Exploration Through Shopping Innovativeness (Shopping) Risk Taking Information Seeking	A lifestyle type instrument expressing attitudes, interests, activities, and intentions concerning exploratory tendencies in the consumer context. Areas such as innovativeness, brand switching, variety seeking, and several others were represented. The items were presumed to offer the best general representation of exploratory tendencies in the consumer context (p.277).
Moschis (1981)	Store Familiarity Importance	The research is approached from the perspective of the consumer role, which is defined as including the knowledge, skills, attitudes, and predispositions that make an individual a more or less effective consumer in the marketplace. Four classifications of consumer skills are explored; 1) direct-simple, 2) indirect-simple, 3) direct-complex, and 4) indirect-complex (p.112-113). Attitudes toward stores were defined as "affective orientations toward stores and cognitive orientations concerning the name of the store as indicator of product quality and performance," (p.122).
Arora (1982)	Involvement (Store)	This measure focuses on the importance of the store's attributes in the respondent's patronage decisions regarding the store (p.113).
Dickerson & Gentry (1983)	Price Consciousness	The scale measures a person's interest in sales and sensitivity to pricing. The authors are purporting to measure an aspect of consumer lifestyles (p.229).
Hawes & Lumpkin (1984)	Careful Shopping Personalizing Shopper In-Home Shopper Shopping Innovation Loyalty to Local Merchants Negative Attitude Toward Local Shopping Shopping Mall Usage Traditional Sex Role Orientation	The study focuses on intermarket patronage by examining the characteristics of "outshoppers," consumers who forego the convenience of hometown shopping and travel to out-of-town markets to purchase products (p.200).
Arora (1985)	Shopping Prone Involvement (Store)	Similar to Arora (1982), these measures focus on the importance of the degree of concern for or interest in the products respondents' buy (p.233), and in the patronage decisions regarding the store (p.232).

**Table 2.2 Construct Descriptions and Definitions (continued)** 

Author and Year	Scale Construct Names	Construct Descriptions and Definitions
Hozier & Stem (1985)	General Retail Patronage Loyalty	The scale is described as representing the attitudinal profile of outshoppers (p.32), and is said to measure the strength of retail patronage loyalty (p.33).
Lumpkin (1985)	Self-Confidence (Shopping) Advertising Special Shopper Personalizing Shopper Shopping Enjoyment Propensity to Shop	The author refers to Stone's seminal work (1954), on orientations, which are described as specific types of shoppers. This study focuses on the shopping orientation profiles of elderly consumers (p.272).
Saegert, Hoover, & Hilger	Familiarity Convenience (Shopping Ease) Convenience (Store Features)	This study investigates some of the variables that have been claimed to be important characteristics of Hispanic consumers (p. 104).
(1985)	Store Pricing Importance	
Carlson & Grossbart (1988)	Coshopping	The authors seek to explain and predict differences in parents' consumer socialization tendencies, which are described as the processes by which young people acquire skills, knowledge, and attitudes relevant to their functioning in the marketplace (p.77).
Lumpkin & Hunt (1989)	Physical Aspects in Store Ease of Finding Items in Store Ease of Movement Within Store Convenience Getting to Store	The study investigates the retail patronage behavior (store choice) of elderly consumers, and how it relates to this segment's psychographic profiles, convenience needs, and in information source usage (p.1).
O'Guinn & Faber (1989)	Emotional Lift	In the context of exploring compulsive shopping behavior, the authors devised this scale which measures the enjoyment a consumer expresses receiving from the shopping experience. The scale is referred to as "emotional lift," (p.152).