

DOMESTIC-MADE VERSUS IMPORTED MEN'S DRESS SHIRTS:  
COLLEGE MEN'S ATTITUDES AND QUALITY PERCEPTION

by

Shiuh-Miin Lin

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Approved:

-----  
Barbara E. Densmore,  
Chairman

-----  
Mary H. Marshall

-----  
Marjorie J. Norton

-----  
Ruth A. Smith

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(ABSTRACT)

The purposes of this study were (1) to identify selected consumers' attitudes toward purchasing domestic-made shirts and those imported from a low-wage country, and (2) to evaluate the relative effects of price, brand name, and country-of-origin on perception of quality of men's dress shirts. A convenience sample of 120 male undergraduate students registered at Virginia Tech completed questionnaires in selected classes.

Research hypotheses that consumers' attitudes toward selected beneficial and imagery attributes would be more positive for domestic shirts than for imported shirts were supported in the single cue situation. The effects of price, brand name and country-of-origin on consumers' quality perception were significant with price and brand name slightly more important than country-of-origin. The interactions between price and country-of-origin, and between brand name and country-of-origin were not significant.

From the findings of the study, one may conclude that if no information except country-of-origin is known, as in the measurement of attitudes toward purchasing, consumers will have more positive attitudes toward U.S.-made than imported shirts. However, if price and brand name are presented simultaneously as in the measurement of perceived quality, country-of-origin will become less dominant than if it is investigated isolatedly.

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## CHAPTER I

### INTRODUCTION

The United States apparel industry has faced growing competition from the apparel industry abroad within the past two decades. According to American Apparel Import Digest: 1985 Annual Issue (American Apparel Manufacturers Association, 1985a), the U.S. apparel imports in 1985 represented almost nine garments per capita, an increase from six garments per capita only five years previously. Regardless of quota restrictions, imports of apparel from overseas have been projected to grow continuously (Arpan, de la Torre & Toyne, 1982; Dickson, 1984; Hinerfeld, 1982). The most frequently recognized cause of increased imports is the low-wage scale in foreign countries such as China, Hong Kong, South Korea, and Taiwan. Since apparel production is labor-intensive, this enables low-wage countries to be more price-competitive than United States producers. Low-cost foreign apparel goods affect U.S. manufacturers, retailers, and consumers. In support of free trade, retailers want to import low-cost apparel goods with which they can offer competitive prices ("How Imports," 1986; Nordquist, 1985; Wallach, 1984). On the other hand, import competition has been one factor that has led U.S. apparel manufacturers either to close down their plants or to move their

manufacturing to overseas locations. This in turn has resulted in a loss of jobs for U.S. employees ("Give America," 1987; Hinerfeld, 1982; Nordquist, 1985). Economically, low-cost imported apparel will reduce the apparel consumption cost for consumers, and thus consumers can get better value for the dollar (Arpan, de la Torre & Toyne, 1982; Nordquist, 1985).

Concerning the U.S. government's policy on imports, Nordquist (1985) stated that efforts have focused on promoting free trade in textile fiber products and at the same time encouraged the domestic textile and apparel industries to increase exports. This policy intends to serve two purposes: (1) to enhance the export market for industrial goods; and (2) to protect domestic industry. It seems that in order to carry out the first purpose, the U.S. government is likely to maintain its friendly relations with foreign countries; therefore, it may not help the U.S. apparel industry by increasing quota restrictions despite their current difficulties.

In view of the problems of enforcing more restriction, domestic apparel manufacturers lobbied for stringent label disclosure of country-of-origin in part so that U.S.-made apparel could be easily differentiated from imports. Before, only imported textile fiber products had to be

labeled with the name of the country of manufacture. Now, products completely made in the U.S. need to be labeled "Made in U.S.A." or some other clear and equivalent term, a regulation that is also applied in mail-order advertising ("Rules and," 1986). Along with the identification of products made in the U.S., the "Crafted with Pride U.S.A. Council, Inc." has sponsored television commercials to encourage nationalism and to link U.S.-labeled apparel goods with the image of high quality, high fashion, and good design. The Council's approach may affect consumers' perception of domestic-made merchandise, change their attitudes, and eventually change their purchasing behavior. In light of the debate about the effects of low-cost imported apparel on the U.S. economy, this study attempts to identify consumers' attitudes concerning this controversy. Specifically the following questions will be addressed: (1) Are domestic apparel goods considered better in quality than imported goods? (2) Are imported apparel goods perceived to offer more reasonable prices? (3) Will promotional strategies increase the salience of country-of-origin?

Past studies related to the foregoing questions are scanty and the results are rather inconsistent (Alderson, 1980; Dickerson, 1982; Jayachandran, Kyj, & Pal, 1985; McLean, Roper, & Smothers, 1986; Sternquist & Davis, 1986). This study attempts to reassess American consumers'

attitudes toward purchasing imported versus domestic-made apparel. Because men's dress shirts have exhibited considerable import penetration, this apparel category was selected for study (Dardis, Spivak, & Shih, 1985). In addition, this study explored the relative effects of selected cues (price, brand name, and country-of-origin) on quality perception for this product category.

Perceived quality is generally regarded as one important means to predict consumers' purchasing intentions (Morgan, 1985; Olshavsky, 1985). Studies in the past have examined the effects of an individual cue (i.e., price or country-of-origin) or a combination of two cues (price and brand name, brand name and country-of-origin) on the perceived quality of a product. However, no study has directly compared the potency of these three cues (price, brand name, and country-of-origin). Instead of looking at the isolated effect of country-of-origin on consumers' quality perception, simultaneously examining price, brand name, and country-of-origin could provide a better understanding about how and when country-of-origin influences inferred product quality. At the same time, the role of price and brand name in this special design case could also be identified.

In summary, the purposes of this study are (1) to identify the attitudes of selected American consumers toward purchasing domestic-made men's dress shirts and those imported from a low-wage country, and (2) to ascertain the relative effects of selected cues (price, brand name, and country-of-origin) on perception of quality of men's dress shirts.

With this updated data and a more in-depth understanding of consumers' purchasing attitudes, the domestic apparel manufacturers and retailers may be better equipped to develop more effective promotional strategies. Identification of the independent or combined effects of selected cues on perception of quality of men's dress shirts can help U.S. manufacturers and retailers to implement strategies to change consumers' perception of their merchandise and to effectively compete against imports.

## CHAPTER II

### REVIEW OF LITERATURE

The review of literature includes three sections. The first sections provide integrated theoretical perspectives of attitudes and perceived quality. The next section reviews empirical studies of consumers' quality perception. This approach introduces the operationalization of quality in past studies. The last section concerns product evaluations of men's dress shirts. This literature supports the argument that there are no significant physical quality differences among brands and, therefore, consumers' quality perception is likely to be affected by the manipulation of selected cues (price, brand name, and country-of-origin).

#### **An Integrated Theoretical Perspective of Attitudes**

Since attitudes toward purchasing imported and domestic goods are a primary concern in this study, it is important to evaluate the measurement of attitudes. The theoretical perspective of attitude formation will be reviewed. A school of research has attempted to model consumer attitudes. The models, which are called multiattribute models, view an alternative (e.g., product, brand name, or service) as a bundle of attributes. The attitude (overall affect) is a reflection of an individual's beliefs as to the

degree to which given alternatives possess certain attributes weighted by the salience of each attribute to the individual (Wilkie & Pessemier, 1973). The advantage of multiattribute models over the simpler "overall affect" approach (unidimensional attitude scales) is the ability to diagnose brand strength and weakness on relevant product attributes. This kind of cognitive structure measurement assists in developing effective attitude change strategies (Lutz & Bettman, 1977).

A number of different multiattribute attitude models have been developed to predict consumer attitudes toward a service, a brand, or the act of purchasing. While each one has its own specific utility, all the models seek to assess consumer feelings toward various attributes. The conceptualization of these models will be introduced, and then several models suitable for this study will be reviewed in detail. Finally, the value of each model is analyzed.

In order to apply the multiattribute models, the first step is to have a list of attributes which are exhaustive, semantically meaningful, and salient to consumers rather than objective product characteristics directly measurable and controllable by the producer. These attributes have to be independent of each other in order to avoid double and triple counting of the impact of some attributes (Ahtola, 1984; Myers & Shocker, 1981; Wilkie & Pessemier, 1973).

The second step is to measure an individual's beliefs (also termed expectancy) about the attributes of an alternative. The attribute beliefs are measured either by a semantically continuous dimension or by category (nominal dimension), which depends on a consumer's mental schema. The strength of the belief that a brand possesses an attribute is measured by bipolar probability scales such as "true-false," "probable-improbable," and "likely-unlikely." The semantic description "likely-unlikely" is suggested to be more valid (Wilkie & Pessemier, 1973).

Comparison among brands can be rated within each attribute or by rating all attributes of a brand. In the case of evaluating all attributes within a brand, halo effects may appear which will impair the diagnostic analysis of the strength and weakness of a product, a brand, or service (Wilkie & Pessemier, 1973). A halo effect occurs when an individual is brand loyal. People tend to consistently give more favorable belief ratings across attributes for a favored brand. It has been suggested that by rating all brands within each attribute, the halo effect could be diminished (Wilkie & Pessemier, 1973).

The third step of the multiattribute approach is to measure an individual's subjective value (affect) toward an attribute of a product. Seven-point bipolar scales on



"goodness-badness" are usually used. Finally, attitude (overall affect) is determined by first adjusting the belief for each attribute by its value, and then summing across beliefs to arrive at a total attitude score for each brand.

Of the various attitude models, Fishbein's multi-attribute attitude model is widely accepted (Mazis, Ahtola & Klippel, 1975), and is expressed as:

$$A_o = \sum_{i=1}^n B_i A_i$$

$A_o$  = an individual's attitude toward an object,  $o$ ;  
 $B_i$  = an individual's strength of belief about attribute  $i$  of the attitude object;  
 $A_i$  = the evaluation of  $B_i$ ;  
 $n$  = number of salient attributes.

Two scales (A and B) were developed for measuring value and belief strength. The A scale is a seven-point bipolar semantic differential scale coded from +3 to -3 with anchors of "good" and "bad". The B scale is a seven-point bipolar scale coded from +3 to -3 with anchors of "probable" and "improbable" (Fishbein & Raven, 1962).

A variation of the basic Fishbein model is the "Adequacy-Importance" model, and is the most widely used form (Mazis, Ahtola, & Klippel 1975). Two aspects distinguish this form from the Fishbein model: the Adequacy-Importance model substitutes importance ( $P_i$ ) for the value evaluation ( $A_i$ ). The model is formalized as:

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

$A_o$  = an individual's attitude toward an object,  $o$ ;

$D_i$  = an individual's evaluation of object  $o$  in terms of the attribute dimension  $i$ ;

$P_i$  = importance of attribute  $i$  for the person;

$n$  = number of attribute dimensions.

Scale  $D_i$  is a seven-point bipolar scale coded from 7 to 1 which indicate "very satisfactory" and "very unsatisfactory" respectively. Scale  $P_i$  is a seven-point bipolar scale coded from 7 to 1 to indicate the degree of importance. "Of more importance" and "of less importance" are the anchors.

In addition to the two models above, others have been proposed: the Rosenberg model (Rosenberg, 1956), the Cohen model (Cohen & Ahtola, 1971), the Ahtola Vector model (Ahtola, 1975), the Ideal-Point model (Myers & Shocker, 1981), and Moller's probability multiattribute choice model (Moller, 1983). The question of their relative appropriateness was addressed by Myers and Shocker (1981) who proposed that, by identifying the inherent nature of product attributes and the relations of attributes to overall affect, the selection of the appropriate measuring scale and the multiattribute model could be implied. Consumers process different types of attributes in different ways when they are asked to give evaluations of an

alternative. Therefore, it is necessary to develop different research instruments for product attributes which are inherently different.

Myers and Shocker classified product attributes into three categories: product referent, task or outcome referent, and user referent. Product referent attributes pertain to the physical characteristics (PC) and the pseudo-physical characteristics (PPC) of a product. Physical characteristics are the most objective types of product attributes (e.g., color intensity, fiber density) upon which there is a general consensus about an alternative's rating. Pseudo-physical characteristics, on the other hand, are derived from properties of a product and involve slightly subjective views (e.g., coolness, shininess). Task or outcome referent attributes are those which are perceived to be benefits. The beneficial product attributes (BEN) always involve positive values (e.g., durability, comfort). The last group of product attributes are user referent, or image (IM) attributes. Image attributes are the attributes relative to expressive properties; they indicate how the use of the product represents the user to other people (e.g., a prestigious look).

Among these three product attribute classes, both BEN and IM are more related to consumer semantics and have

greater relevance for marketing decision making, while FC and PPC are more meaningful for product manufacturers because they are more concrete and actionable. From the consumer's viewpoint it is the BEN and/or IM that stimulate the desire for a product.

Having proposed the typology of product attributes, Myers and Shocker analyzed the relationships of product attributes to overall affect. The characteristic (CHAR) was used to represent both FC and PPC because the properties of FC and PPC were similar, and thus they were operationalized in the same way. The relationship of a continuous CHAR attribute (e.g., shininess) to affect was proposed to be a unimodal curvilinear shape (See Figure 1). Either too much or too little of the attribute would lead to negative affect. As for a categorical CHAR (e.g., the type of the fiber), the relationship with affect was proposed to be irregular (See Figure 2). BEN attributes have a monotonic relationship with affect because they are intrinsically desirable, and thus the affect will increase with more of the BEN (See Figure 3). IM attributes, like BEN, were proposed to have a monotonic relationship with affect, but the affect could be either positive or negative since some individuals may view owning IM as good, while others perceive them to be bad (See Figure 4).

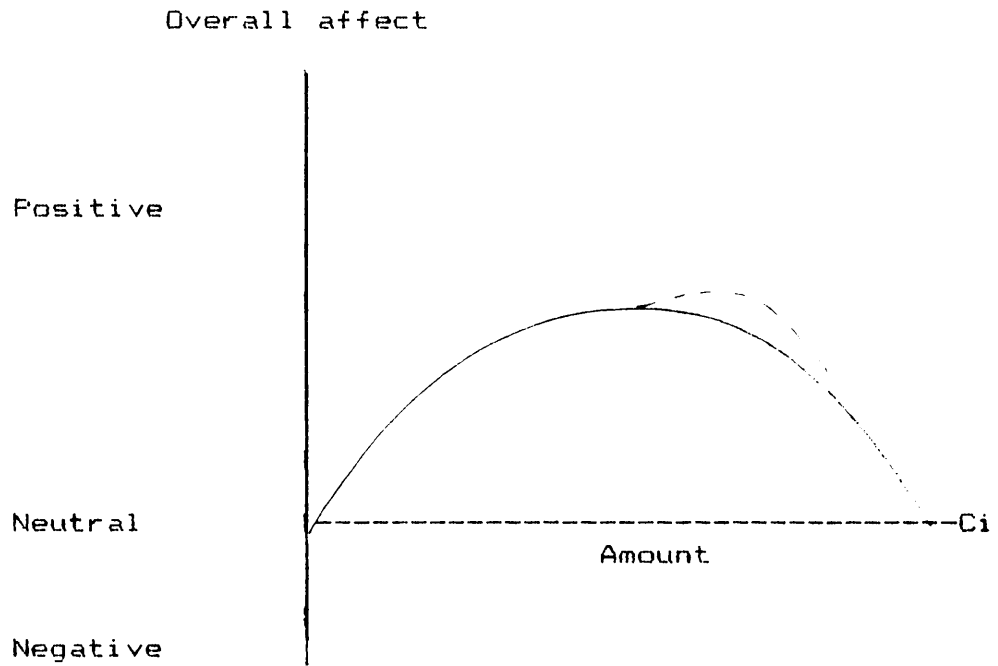


Figure 1. Continuous Product Referent Attributes Relative to an Individual's Overall Affect

Note: From James H. Myers and Allan D. Shocker (1981). The nature of product-related attributes. Research in Marketing, 5, pp 219.

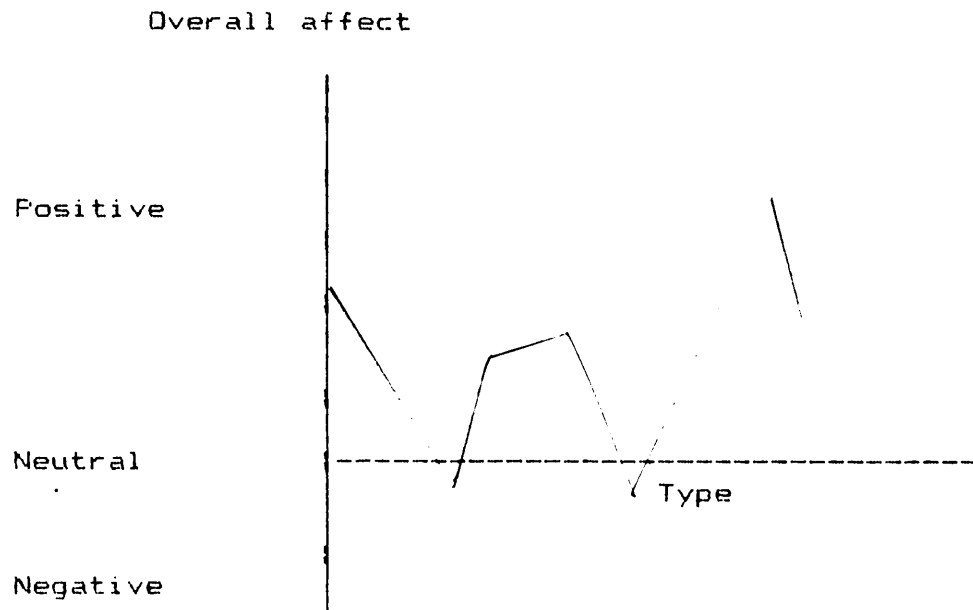


Figure 2. Categorical Product Referent Attributes Relative to an Individual's Overall Affect

Note: From James H. Myers and Allan D. Shocker (1981). The nature of product-related attributes. Research in Marketing, 5, pp 220.

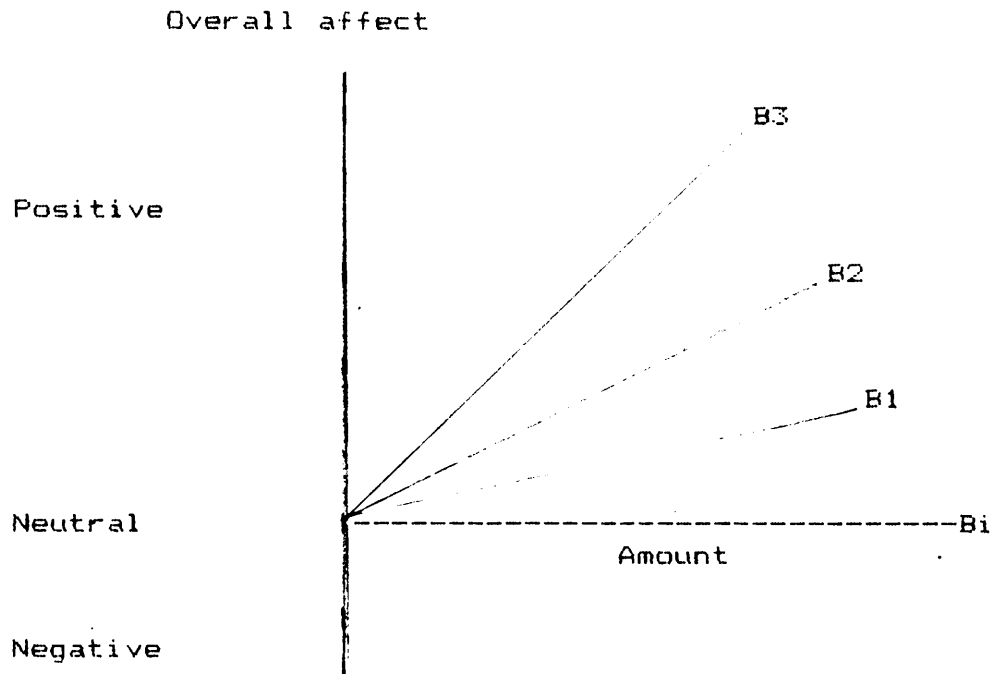


Figure 3. Beneficial Product Attributes Relative to an Individual's Overall Affect

Note: From James H. Myers and Allan D. Shocker (1981). The nature of product-related attributes. Research in Marketing, 5, pp 221.

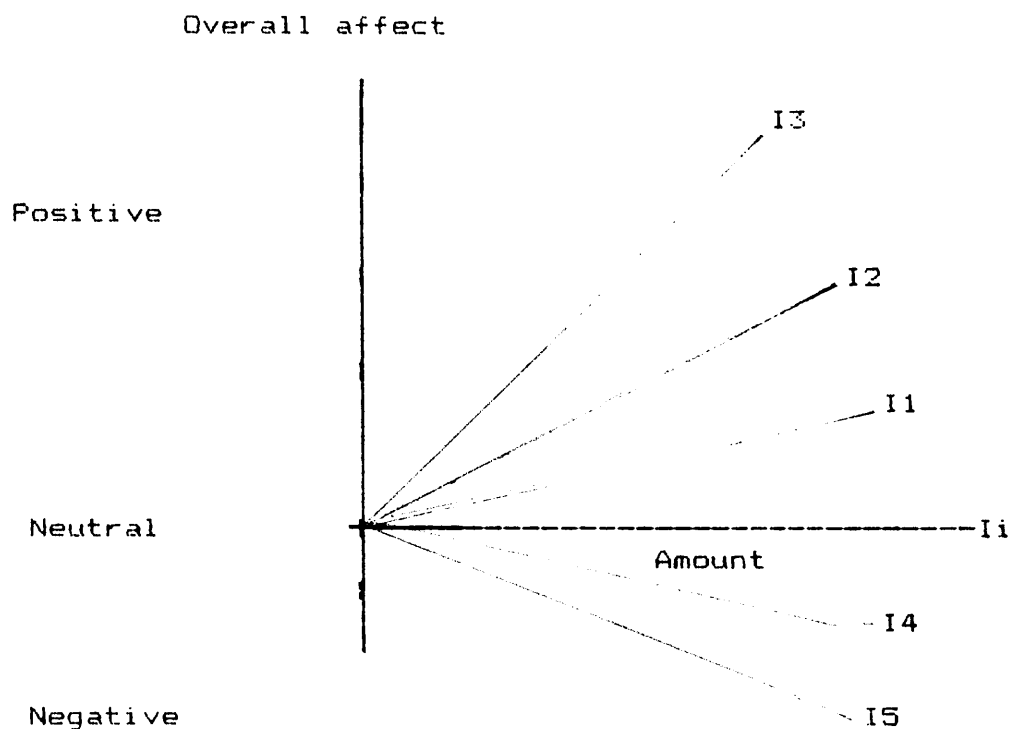


Figure 4. Imagery Product Attributes Relative to an Individual's Overall Affect

Note: From James H. Myers and Allan D. Shocker (1981). The nature of product-related attributes. Research in Marketing, 5, pp 222.



In light of the differential relationship of each type of attribute with overall affect, Myers and Shocker proposed the appropriate multiattribute attitude models for each of the attribute classes. The Ahtola Vector model was recommended for CHAR, while the "adequacy-importance" multiattribute model was recommended for BEN because it is semantically meaningful for consumers. In other words, BEN attributes have the possibility of being desirable, and thus there is a need for a unipolar dimension for coding affect rather than bipolar dimension for coding the affect. Therefore, a model which considers only the relative importance was considered for the present study. In the case of IM attributes, the Fishbein model was suggested because it provides a bipolar affect dimension with bipolar coding.

In light of Myers and Shocker's classification schema of product attributes and attitude models, this study applied their proposition to the examination of consumers' attitudes. The selected attributes of men's dress shirts were BEN and IM because they are meaningful to marketers and consumers. The Adequacy-Importance model is used for beneficial type attributes, while Fishbein's model is used for the image attribute.

### Quality Perception

It has been recognized that by identifying consumers' quality perceptions of an alternative, consumers' attitudes and purchasing behavior may be predicted (Jacoby, Olson & Haddock, 1971; Olshavsky, 1985; Szybillo & Jacoby, 1974). However, quality is an abstract attribute that may reflect several product characteristics. Without knowing the concrete product-related attributes that consumers use to judge quality, marketers cannot ascertain consumers' needs and wants. In this section, quality perception will be examined in order to provide grounding for the second research purpose of this study.

Olson and Reynolds (1983) presented a theoretical scheme, called the means-end chain model, describing consumers' cognitive structure of product-related knowledge in memory. This approach was said to be useful for understanding the benefits (such as quality) consumers seek when they purchase products and the attributes that are indicators of these benefits.

Olson and Jacoby (1972) dichotomized the attributes that signal quality into intrinsic and extrinsic cues. Intrinsic cues were stated to be derived from the actual physical product which cannot be experimentally manipulated without also changing the physical characteristics of the

product itself (e.g., color or texture). Extrinsic cues, on the other hand, were stated to be derived from product-related attributes but not a part of the physical product (e.g., price, store image, brand name). These are consistent with Olson and Reynolds' concept of concrete and abstract attributes.

The relative effects of extrinsic cues and intrinsic cues on consumers' quality perception have been the subject of many investigations. Intrinsic cues are objective surrogates for quality evaluations, while extrinsic cues are irrelevant. However, if consumers cannot discriminate the differences among brands based on intrinsic cues, they tend to make quality judgments based on extrinsic cues (Zeithaml, 1986). Weber's law could be invoked as an explanation for insensitivity to intrinsic differences. This law suggests that there is some minimum amount of sensory change in the level of stimulus intensity that is necessary before any change is noticed. This concept is expressed as:

$$\frac{\Delta I}{I} = K$$

I = the initial intensity of the stimulus.

$\Delta I$  = the smallest increase in the intensity of the stimulus just sufficient to yield a report of different from the subject. It is often labeled the "just noticeable difference" (JND) increment.

K = Weber's ratio or constant which has been found to vary across sensory channels. (Wheatley, Chiu, & Goldman 1981, p. 103)

The model suggests that as the intensity level,  $I$ , increases, the greater the change in intensity ( $\Delta I$ ) necessary to be perceptually meaningful. A change in cue intensity will not be noticed if the change is below the just noticeable difference (JND). Therefore, when attempting to change consumers' perceptions of an alternative by manipulating the intrinsic or extrinsic cues, the change in cue intensity needs to be checked for its discernability to consumers. Otherwise, quality perception will not be affected.

Weber's constant ( $K$ ) suggests that consumers have different sensibilities to different cues. Accordingly, it is deduced that the constant for extrinsic cues may be smaller than that of intrinsic cues, leading to greater reliance on extrinsic cues for quality assessments since small differences are more easily detected. For example, when an intrinsic cue such as fabric durability is evaluated, usually a sensitive instrument is needed to evaluate differences. However, a brand name or a country of source, once it is recognized, is easy to differentiate from competitors', even with little experience. Similarly, price, a numerical representation, is highly visible to consumers and it is relatively easy to differentiate one price point from others. Therefore, although intrinsic cues are accurate surrogates for quality judgments, consumers are

likely to be less sensitive to them than to extrinsic cues. This notion has been empirically supported by Szybillo and Jacoby (1974) and Wheatly, Chiu, and Goldman (1981).

Among various extrinsic cues, price, brand name, and country-of-origin have received greater attention for their impact on consumers' quality perception. It is frequently claimed that high price, brand familiarity, and U.S.-made products will enhance the perception of quality. On the other hand, low price, unknown brand, and imported products are used as low-quality signals. However, no study has directly compared the potency of these three cues to identify their relative effects on consumers' quality perception. Since these three cues are always simultaneously available to consumers in natural purchasing situations, consumers may make trade offs among cues to arrive at quality judgments. Therefore, the second purpose of this study is to ascertain the relative effects of selected cues (price, brand name, and country-of-origin) on consumers' quality perception.

#### **Consumers' Quality Perception: A Review of Empirical Studies**

In the following literature review, the effects of price, brand name, and country-of-origin on consumers' quality perception will be reviewed.

### Influence of Price on Quality Perception

Early studies proposed that with other cues held constant, price was indeed a determinant of perceived quality (Jacoby, Olson, & Haddock, 1971; Szybillo & Jacoby, 1974). However, the credibility of using a single cue to signal perceived quality was criticized by later researchers. As Olson (1977) noted, the single-cue studies were overly simplified and the results concerning price effects had doubtful external validity and limited internal validity.

Andrews and Valenzi (1971) tested the influence of other cues on price-quality ratings. They combined price, brand name, and store cues to test subjects' impression of product quality. Female students were asked to rate their quality perception of 27 hypothetical brands of sweaters or shoes based on all possible combinations of three levels (high, medium, and low) of each of the cues. The results revealed that both the unique effects of the three selected cues and interaction effects (price x brand name, and price x store name) were statistically significant. Price explained the largest portion of the variance of perceived quality.

Wheatley and Chiu (1977) studied the relative effects of price, store image, product and respondent

characteristics on perception of quality. In this study, carpet specimens were investigated through a 2x2x2 within-subject factorial design which consisted of two levels of price and store prestige and two shades of color. The objective quality of carpet specimens was held identical except for color. A pretest revealed that the darker of the two shades was perceived to be of higher quality. Besides this, the prestige of stores investigated was pretested for distinguishability to participants. The range of prices was set higher or lower than actual retail prices. The subjects were housewives who had previously purchased carpeting. They were presented the eight specimens of carpeting one at a time and asked to rate each specimen independently. The findings indicated that high quality was associated consistently with a high price, a high prestige store, and a dark color as hypothesized. The price cue in this experiment accounted for the greatest variance in quality perception followed by store and color cues respectively. The interactions between consumer demographic characteristics and the three selected quality-related cues were small but were statistically significant. The researchers suggested that, although the interaction effects were small, their aggregate effects on quality judgments should not be overlooked in a real-life merchandise setting.

Wheatley, Chiu, and Goldman (1981) conducted a 3x3 between-subjects factorial experiment to investigate the relative importance of physical quality and price cues on the perception of quality. In their experiment, identically colored carpet specimens with three different levels of physical quality were used (low, medium, and high). According to the judgment of the carpet manufacturer and several retailers, the actual prices of the carpets being tested (\$9, \$11, and \$13 per square yard) were directly related to their quality. The three specimens at each quality level were randomly marked \$9, \$11, and \$13 nullifying any actual price-quality relationship. Subjects in the nonrandom sample, consisting of 171 females who had purchased carpeting at least once, were asked to examine all of the nine specimens, and then each was randomly assigned to rate the quality of one of the nine. The results indicated that the physical cue as an independent variable accounted for most of the variance in perceived quality although the price effect was still statistically significant. Although the price cue proved to be less effective than the intrinsic physical cue, the researchers found that subjects showed more sensitivity to changes in price than in physical quality. The perception of quality linearly increased as the price increased. Conversely, as the physical quality increased from medium to high, the subjects' quality perception declined. In addition, it was



stated that although the interaction between price and physical cues was not statistically significant, increasing/decreasing the price did enhance/diminish perception of quality.

The effect of price cues on quality perception is not always significant in multicue settings, as indicated by several studies. Jacoby, Olson, and Haddock (1971) examined the main and interaction effects of three cues -- price, composition differences (product physical differences), and brand name -- on perception of beer quality. The experiment consisted of two levels of price (present, absent), brand name (present, absent), and composition differences across beer samples (present, absent) as between-subjects factors, and three beer samples as a within-subject factor. A total of 136 male students participated in this "beer taste-testing study." The results indicated that only one cue (beer samples) was strong enough to consistently affect quality perception. Price exerted an effect upon the perception of product quality only when it was the only cue permitted to vary, but not when embedded in a multicue setting. Brand image influenced quality perception while the effect of price was not significant. However, it was noted that the composition differences across beer samples had a significant effect on perceived quality ratings only when supported by brand name

cue. Therefore, the researchers concluded that the variables that influenced quality perception appeared to manifest themselves primarily through interaction with other variables.

Gardner (1971) explored the degree to which the price-quality relationship could be generalized. The researcher used a  $6 \times 2 \times 3$  factorial design which consisted of six price levels, two brand levels (brand name present or not present), and three products which were normally purchased by college students (tooth paste, a men's dress shirt, and a suit). Repeated measures were taken across the three products. Ten subjects were used in each of the 12 between-subjects conditions. The two extreme points of price were pretested to make sure that the prices fell within consumers' acceptance range. Brands selected (Crest toothpaste, Arrow shirt, and Palm Beach suit) were those most widely known by the sample studied and those consistent with the price ranges established. Subjects were shown cards describing selling points, the price, and a brand name or no brand identification of the products, and then responded to a questionnaire about quality. The results revealed that price did not affect product quality perception for all three products, whether branded or not. A well-known brand name, on the other hand, greatly influenced quality perception for all three products.

Szybillo and Jacoby (1974) tested the hypothesis that, other things equal, intrinsic cues (physical product differences) would be stronger determinants of perceived quality judgments than would extrinsic cues. A  $2 \times 3 \times 3$  factorial design was employed, which consisted of two price levels (present vs. absent), three store image levels (high, low, and no information provided) as between-subjects factors, and three physically different qualities of hosiery as the within-subjects factor. To make sure that participants could identify the differences between the store image and physical product differences across the various hosiery samples, a pretest was conducted. The results indicated that a majority of the quality rating variance was explained by actual physical differences in hosiery samples. The store image effect was shown to be statistically significant. The price effect was insignificant when embedded in a multicue setting. The reason why the physical cues became such a dominant factor was because, as the researchers explained, the physical differences in hosiery samples were much more visible to participants than in beer samples or carpet specimens.

Dodds and Monroe (1985) investigated the price and brand name interaction effects on product quality perception. In this study, a  $2 \times 3 \times 2$  between-subjects factorial experiment was conducted. The three independent

variables were price level, odd-even price, and brand. Price cues consisted of three levels (high, medium, and low). Within each level, there were odd and even prices. Brand name was manipulated as present or absent. A convenience sample of 368 undergraduates was chosen to evaluate a hypothetical FM stereo cassette headset. Subjects were randomly assigned to 12 treatment groups. The findings indicated that a strong price x brand interaction masked the price and brand name effects. However, subjects' perception of product quality increased as price increased and with the presence of a well-known brand name.

#### **Influence of Brand Name on Quality Perception**

Compared to the price effect, the effects of brand name have received much less attention in previous research, even though brand name may transmit a great deal of information to the consumer. Its effect on quality perception might be comparable to or even greater than price for certain products (Stokes, 1985).

A study by Andrews & Valenzi (1971) indicated that the effect of brand name significantly explained the quality perception variance for sweaters and dress shoes in a multicue setting in which price was included. Jacoby, Olson, and Haddock (1971), in a study of the relative effect of price and brand image on beer quality perception,

concluded that brand image was a more important determinant of perceived quality than was price.

Gardner (1971) tested the marginal contribution of brand name to subjects' product quality perception and found that the brand name communicated information affecting perception of product quality on all three products (toothpaste, men's dress shirt, and men's suit). The incorporation of a well-known brand and price always led to a higher perceived level of product quality. Similar results were reported by Dodds and Monroe (1985) who found that the presence of a well-known brand enhanced the price effect on quality perception.

#### **Influence of Country-Of-Origin on Quality Perception**

Gaedeke (1973) examined consumers' attitude toward quality of products made in developing countries as well as in the U.S. For this study, college students were chosen as consumer surrogates. When the subjects used a single information cue, country-of-origin, to rank the quality of products in general and certain classes of products in particular, the United States was ranked significantly higher than any of the developing countries. Another test in this study involved labeling imports with well-known U.S. brand names. The findings indicated that the country-of-origin cue did not significantly affect subjects' attitude

about the quality of branded products in general. However, specific branded textiles were evaluated more or less favorably when subjects were made aware of the product's origin. For example, Sears' "Perma Prest" dress shirts with country-of-origin indicated by "Made in Hong Kong" were ranked much higher than was the same brand without country-of-origin. In contrast, Weinstock's "Centura" dress shirts made in South Korea were ranked much lower without the indication of origin. Results from this study seem to suggest that the presence of a country of origin will influence the effect of a brand name on quality perception. In other words, there is interaction between brand name and country-of-origin.

Dickerson (1982) investigated consumers' perception of quality of imported apparel in relation to various buying patterns and demographic variables. In this study, a structured telephone interview schedule was used to survey 408 consumers randomly selected from 10 chosen areas of the eastern U.S. When consumers were asked to make general comparisons of imported clothing items with those produced in the U.S., nearly 64 percent stated that they perceived imported clothing as inferior. However, when participants were asked to indicate the reasons for infrequently or never buying imports, they were unable to articulate their reasons. The findings of this study seem to suggest that

participants tend to use extrinsic cues (in this case, country-of-origin) to infer the quality of intrinsic cues (physical quality differences).

Alderson (1980) investigated the relationship between consumers' demographic characteristics and their attitudes, awareness, and purchase practices toward imported clothing. A structured questionnaire was distributed to a sample of 300 females who were selected from the Tidewater area of Virginia. The findings indicated that quality of construction, dressing well, and care instructions were perceived to be important, whereas knowledge of country-of-origin and brand name were not important. Twice as many respondents agreed that imported apparel was not as good a buy, not as well made, not as superior in quality, not as long lasting, and not as expensive looking as the U.S.-made clothing. The findings seem to imply that, although imported clothing is perceived to be lower in quality, country-of-origin may not be taken into consideration when other salient attributes are available.

Festervand, Lumpkin and Lundstrom (1985) compared consumers' quality perception of imports from developed countries with that of U.S. products. In the comparison between consumers' general attitudes toward the quality of imports and that of domestic products, the results indicated

that consumers perceived the imports as equal to those made in the U.S., but not superior to American products overall. With respect to quality ratings by product categories, the U.S. fashion merchandise items were ranked in first place. People apparently favor domestic products if country-of-origin is examined independent of other quality cues.

The stereotype of domestic products was not observed in a study by McLean, Roper, and Smothers (1986) who investigated women's preferences for either imported or domestic blouses. One specific objective was to ascertain the reasons for the consumers' purchases of imported versus domestic women's blouses. A questionnaire was distributed to two groups: college students and club women. The respondents were asked to select their important purchasing "motives" from the following: construction quality, apparent durability, fabric quality, attractive price, better fit and/or sizing, color, designer label or brand name, unusual detail (trim, styling, etc.), and coordination with existing wardrobe. The findings revealed the three most frequently indicated purchase motives by both groups were: coordination with existing wardrobe, unusual detail, and color, regardless of the country of production. The lowest-ranked motives for both groups were apparent durability, and designer label or brand name. Country-of-origin was found to have little influence on purchase motives. In



conclusion, the researchers suggested that further research use other items of apparel to determine purchase motives of consumers toward imported versus domestic-made apparel.

✓ Bilkey and Nes (1982) criticized the literature on country-of-origin effect on perceived quality. They suggested that most of the studies were conducted too simply in that country-of-origin was the only information communicated for quality evaluations. Therefore, biases were likely. The authors speculated that the relation between country-of-origin and product quality was likely to be positively related to the degree of economic development of that country; a person may judge his/her own country's products relatively more favorably than imports. Moreover, in natural purchasing situations other cues might interact with country-of-origin. Bilkey and Nes proposed that a multicue setting conforming to a real-life purchasing condition was necessary for detecting the extent of country-of-origin effect on a product evaluation.

Johansson, Douglas, and Nonaka (1985) developed a form of multiattribute attitudinal model to investigate the impact of country-of-origin on product evaluations. They claimed that, in light of the single cue research limitation, their model made relevant product attributes available to respondents in addition to country-of-origin for making

evaluations. The findings indicated no consistent tendency to underrate or overrate cars of a given national origin in the two respondent groups investigated (U.S. graduate students and Japanese college students). However, the researchers cautioned that it was premature to conclude that country-of-origin effects were relatively minor. Instead, it was more appropriate to state that country-of-origin effects may be less marked than had generally been believed.

Jayachandran, Kyj, and Pal (1985) conducted a survey to identify the determinant garment attributes which consumers use to make purchase decisions. The relative importance of selected garment attributes was examined by two methods. One method (simple average method) was to average the perceived importance scores for each attribute item, and then to compare the average score across attributes. The other method was factor analysis which offered simultaneous examinations of garment attributes. The researchers' purpose in using factor analysis was to counteract the limitation of the simple average method. It was claimed that most of the studies about the apparel industry investigated buying decisions by looking at garment attributes separately rather than simultaneously. The limitation of examining garment attributes separately was that consumers' trade-offs among the desirable attributes were not considered. Attributes considered important may

not be the determinant attributes. When using the simple average method to analyze the importance of garment attributes, the findings revealed that participants gave the highest importance scores to comfort, pattern/design, color combination, and durability; and gave the lowest importance ratings to advertised brand, American made, fashioned in Paris/London, and fashioned in Taiwan/Hong Kong. However, when the participants' preferences for the garment source of origin were elicited, "U.S.-made" received a strong preference.

Due to the inconsistent findings about the importance of garment source of origin, Jayachandran et al. recognized a need to overcome the controversy by using factor analysis which resulted in the identification of seven factors. They concluded that the most important factor was brand visibility, while source of origin and color/design were of less importance. The researchers' interpretation of this finding was that a highly visible brand or store name seems to encompass all possible positively-valued attributes; therefore, brand visibility becomes the most important factor for making purchase decisions.

Sternquist and Davis (1986) studied the effects of price and country-of-origin on consumers' quality perception. A 2x2 within-subjects factorial experiment was

conducted which consisted of two levels of store status (high prestige vs. low prestige) and two different countries as sources (domestic vs. Korea). Four identical sweaters were labeled with the four combinations of the factors. A convenience sample consisting of 49 female college students were asked to view the four sweaters and give their overall quality ratings. The results indicated that store status significantly influenced respondents' quality perception, while country-of-origin did not.

Results from past studies concerning the effect of country-of-origin on quality perception imply that, if consumers are asked not to think of other salient attributes, they can judge product quality on source of origin. However, if other attributes are presented simultaneously, country-of-origin seems to be considered less important in the decision process. It is generally recognized that domestic-made merchandise is frequently perceived to be higher in quality than are foreign-made goods, at least when the U.S. is compared to less developed countries. Nonetheless, to what extent the country-of-origin cue exerts its influence on quality perception is not yet known. Given that price and brand name seem to have a significant impact on consumers' quality perception, these two cues are likely to moderate the effect of country-of-origin on quality judgments. A high price and/or a well-

known brand may enhance the perception of quality of imported goods, and thus reduce the perceived quality differences between imported and domestic-made goods. Conversely, when a low price and/or an unknown brand is associated with merchandise, country-of-origin is likely to be a dominant factor for inferring product quality, and thus increases the perceived quality differences between the two sources of origin. In light of this, the present study combines price and brand name cues with country-of-origin to examine how price and brand name mediate the effect of country-of-origin on consumers' perception of quality.

All of the quality-related studies reviewed except Dodds and Monroe (1985) adopted a straight-forward single dimension rating of quality. This does not assure that all consumer subjects are interpreting quality in the way intended by the researchers. Instead, quality may be interpreted any way the consumer chooses (Holbrook & Corfman, 1985; Zeithaml, 1986). Multi-item measurements have been recommended to provide a better prediction of consumer behavior and the identification of the attributes which determine the quality perception. In light of this, salient quality-related attributes were provided for the evaluation of product quality in the present research.

### Product Evaluations of Men's Dress Shirts

There are two purposes in this section: (1) to examine the physical quality differences among brands in this product class, and (2) to identify the salient quality-related shirt attributes.

Gale and Dardis (1970) questioned whether there was a positive correlation between the price and quality for men's durable press dress shirts. Factors investigated concerning quality included the physical attributes of the product (e.g., fabric breaking strength and tear strength, and laundering durability) and wearer's impression of a shirt's comfort and appearance. The results from objective product performance tests suggested that price was significant in predicting the performance of garment construction, but not usually significant in predicting fabric performance (durability, soil release, comfort, fabric appearance). The researchers concluded that higher price did not always mean higher objective quality, and thus using price alone in predicting product performance might be inadequate.

In addition to the product performance tests, Gale and Dardis (1970) conducted a small-scale assessment of the effect of price and brand name on the intention to buy. Ten brands of men's white dress shirts were manipulated in three different situations: without any labels or prices, with

prices, and with both prices and brand names. Participants' intentions to buy under the three different situations were analyzed. The data revealed that the presence of price caused six of the ten respondents to switch to shirts of a higher price. When brand names were given with price, half of the respondents switched to another brand. The results seem to imply that if consumers are not sure about the physical quality difference among brands, their selection is likely to be affected by brand name and price cues which are extrinsic. However, the small sample size necessitates that generalizing from the findings needs to be done cautiously.

Morris and Prato (1978) studied the price/quality relationship for men's shirts. The quality evaluation was based on objective performance measures consisting of color fastness, appearance, seam strength, and fabric strength. Both wear study methods and laboratory methods were used in order to measure these quality-related factors. The results indicated that there was a positive price/quality correlation in shirt construction, but negative price/quality correlation in color fastness, appearance, and fabric strength. That is, the lower-priced shirts generally surpassed the higher-priced shirts in overall performance. The researchers suggested that inasmuch as the shirts were similar in appearance and since performance information is unavailable at purchase point, price and

brand name would have been the only criteria for the consumer to use in selection.

Dardis, Spivak, and Shih (1985) investigated whether there were quality differences between domestic-made dress shirts and imported ones. A total of eight dress shirts with similar appearance and identical fiber content were selected to provide garments from two sources (domestic and imported) and two brand name types (national and private). The quality test was based on a laboratory examination of garment appearance before and after repeated launderings. The results indicated that imported shirts were of the same, if not higher, objective quality than domestic shirts.

In summary, results from past research indicate that often there are few physical quality differences among dress shirts. Accordingly, this study assumed that consumers would use extrinsic cues, such as price, brand name, and country-of-origin, to infer intrinsic quality-related attributes.



## CHAPTER III

## STATEMENT OF PROBLEM

The purpose of this section is fivefold: (1) to provide a theoretical basis for the research; (2) to present theoretical definitions; (3) to describe the objectives; (4) to state the hypotheses under investigations; and (5) to identify the limitations of the study.

## Theoretical Framework

Attitude is assumed to be one determinant of consumers' purchasing behavior. An attitude is defined as a predisposition to respond in a specific manner to particular stimuli including people, objects, and situations (Silverman, 1974, p. 518). The schematic conception of attitude consists of a cognitive component, an affective component, and a behavioral component (Williams, 1982). These components are interrelated ways of understanding, feeling about, and acting toward an attitude object.

As noted previously, attitude models consider attitude (overall affect) as a reflection of an individual's beliefs as to the degree to which given alternatives possess certain attributes weighted by the salience of each attribute to the individual.

Attitude itself is multiattribute in nature and product quality is one of the important attitude-related attributes. According to attitude models, an individual's attitude toward product quality is acquired by adjusting his belief about product quality by the subjective value associated with the quality. However, the way a person forms his belief (perception) is another complicated issue because quality itself is also multiattribute in nature. A number of studies have attempted to identify salient quality-related attributes from which consumers infer product quality. These investigations suggested that although theoretically, consumers consider intrinsic cues (attributes) as accurate surrogates for quality evaluation, they are less sensitive to the differences in intrinsic cues than in extrinsic cues. Therefore, there is the possibility that extrinsic cues will be used to make quality judgments of the intrinsic cues. However, this is more likely when consumers are not certain about intrinsic differences among brands and such differences are difficult to detect.

Findings from past research indicate that a well-known brand, a high price, or a U.S.-origin are often associated with high perceived quality, while an unknown-brand, a low price, or foreign country-of-origin (especially a less-developed country) were frequently associated with low perceived quality. However, the relative effects of the

three cues on consumers' quality perception have not been examined.

Based on this conceptual framework, two purposes were identified for this study: (1) to identify the attitudes of selected American consumers toward purchasing domestic-made men's dress shirts and those imported from a low-wage country, and (2) to ascertain the relative effects of selected extrinsic cues (price, brand name, and country-of-origin) on perception of quality of men's dress shirts.

#### Theoretical Definitions

Attitude is a reflection of an individual's beliefs as to the degree to which given alternatives possess certain attributes weighted by the salience of each attribute to the individual.

Quality Perception is an individual's beliefs as to the degree to which given alternatives possess physical quality-related attributes.

Beneficial attributes (BEN) are one category of product attributes which are perceived to be benefits and always involve positive values.

Imagery attributes (IM) are one category of product attributes which indicate how the use of the product represents the user to other people. An individual's value toward IM could be either positive or negative.

### Objectives

1. To examine whether consumers' attitudes toward purchasing domestic-made men's dress shirts differ from attitudes toward purchasing shirts imported from a low-wage country in terms of selected beneficial and imagery attributes.
2. To ascertain the relative importance of the effect of price, brand name, and country-of-origin on quality perception.
3. To identify how price and brand name interact with country-of-origin on quality perception.

### Research Hypotheses

1. Consumers' attitudes toward beneficial attributes will be more positive for domestic-made shirts than for imported shirts.
2. Consumers' attitudes toward the imagery attribute will be more positive for domestic-made shirts than for imported shirts.
3. The effect of price and/or brand name on consumers' quality perception will be significantly greater than that of country-of-origin.
4. Brand name and country-of-origin will interact such that country-of-origin will have a greater effect on quality perception for an unknown brand than for a well-known brand.

5. Price and country-of-origin will interact such that country-of-origin will have a greater effect on quality perception for a low-priced shirt than for a high-priced shirt.

#### Limitations

1. The results can not be generalized beyond the convenience sample investigated
2. The relationship between manipulated cues and the perception of quality of men's dress shirts may not be generalized to other clothing items which involve discernable physical quality differences because the effects of extrinsic cues on such products will be less dominant.
3. The relationship between manipulated cues and the perception of quality of men's dress shirts may not be generalized to fashion-type clothing because intrinsic quality-related attributes of such items are likely to be different from those of men's dress shirts.
4. The generalizability of this study is confined to the brand names selected.

## CHAPTER VI

## PROCEDURE

This study investigated (1) selected consumers' attitudes toward purchasing domestic-made dress shirts and those imported from a low-wage country, and (2) the relative effects of price, brand name, and country-of-origin on perception of quality of men's dress shirts. A three-part questionnaire was developed to measure attitudes, perception of quality, and respondents' demographic characteristics and purchasing practices. The data were analyzed through tabulation, paired-comparison t-tests, and analysis of variance. Details of the various steps in the procedure follow.

**Design of Study**

The design of this study consisted of two parts: (1) an intrasubject comparison of attitudes toward purchasing domestic-made and imported men's dress shirts, and (2) a nested 2x2x2 between-subjects factorial design to study the effects of price, brand name, and country-of-origin on perceived quality of shirts.

The manipulated factors consisted of brand name (well-known and unknown), price nested within each brand name (low

and medium for the unknown brand; medium and high for the well-known brand), and country-of-origin (U.S.A. and a low-wage country). Participants were randomly assigned to the eight treatment groups to obtain equal sized cells of 15 (See Table 1).

Table 1  
Between-Subjects Factorial Design

	Arrow		Ashley & Reid	
	Well-known brand		Unknown brand	
	\$32	\$17	\$17	\$9
Made in U.S.A.	---	---	---	---
Imported	---	---	---	---

--- represents perceived quality rating.

Note: Every subject was provided with one brand-price-country combination.



### Selection of Product

Men's dress shirts were selected as the product to be evaluated for this study. One reason was that imported dress shirts have gained a significant share in the U.S. marketplace; therefore, many consumers were likely to be familiar with them. The other reason was that this product's quality-related attributes (intrinsic cues) were quite similar across various brands. Consumers' perceptions of quality were more likely to be attributable to the extrinsic variables (price, brand name, country-of-origin) than they would be for apparel products varying more in intrinsic characteristics.

### Selection of Price

Two men's specialty stores, two department stores, and one discount store in Blacksburg, VA were visited to obtain information about the retail price of men's dress shirts, in order to set up price levels which would be considered reasonable by the subjects. Two price levels were nested within each of the two brand names. The price levels of \$9 and \$17 were used for the unknown brand; \$17 and \$32 were used for the well-known brand. The price range between the medium and high prices was larger than that between the low and medium prices, based on Weber's law ( $\Delta I/I=K$ ) (Wheatley, Chiu, & Goldman 1981) which indicates that as the absolute magnitude of price increases, a greater difference

between two prices is necessary if consumers are to perceive them as different.

#### Selection of Brand Name

Arrow was selected for the well-known brand, while Ashley & Reid was the unknown brand. The unknown brand with a retail price of \$9.97 was selected from a low-price department store. This represented their lowest priced man's dress shirt.

#### Selection of Country-of-Origin

According to the Apparel Import Digest: Apparel Import Data Through May 1985 (American Apparel Manufacturers Association, 1985b), the major shippers of non-knit cotton shirts to the U.S. were Hong Kong, India, Taiwan, and South Korea. A common feature of these countries was their low labor cost. Based on this, a low-wage country (an overall concept) was compared to the United States. The reason for not using a specific low-wage country was to avoid possible respondent bias toward a particular country.

#### Development of Measures

The following terms were operationally defined for this study.

## Operational Definitions

Attitudes: An individual's attitude was obtained by multiplying his belief and value responses for each selected attribute, and then summing across the attributes. The belief scale measured the degree to which a given shirt possessed the selected attribute. The value scale measured the degree of importance or value of each selected attribute to the individual. The attributes included beneficial and imagery attributes.

Beneficial attributes (BEN): BEN attributes selected for the study were: strong fabric, durable seams, neat construction, durable to washing, a good buy, color and fabric pattern variety, and collar shape variety.

Imagery attribute (IM): The IM attribute selected for the study was a consumer's willingness to support the U.S. apparel industry.

Quality Perception: An individual's quality perception was obtained by summing across his responses to the questions about the likelihood that the given shirt possessed selected physical attributes. The physical attributes selected were: strong fabric, durable seams, neat construction, and durable to washing.

To evaluate attitudes toward purchasing domestic-made men's dress shirts and imported shirts, two measures were developed based on certain multiattribute attitude models. An Adequacy-Importance model was used for the selected BEN attributes, while the Fishbein model was used for the selected IM attribute. To measure perceived quality, a multi-item quality rating instrument was utilized. Details of the instruments used in the present study are given below.

#### Attitudes Toward Purchasing

An Adequacy-Importance model used to measure BEN attributes consisted of two scales: a belief scale and a value scale. The belief scale was a seven-point bipolar scale with anchors "very likely" (scale value=7) and "very unlikely" (scale value=1). The value scale was a seven-point bipolar scale with anchors "of more importance" (scale value=7) and "of less importance" (scale value=1). The belief-related statements are listed in the Appendix as questions 5-18. The value-related statements are numbers 19-25.

An individual's total attitude score toward a country as a source was obtained by multiplying together the value and belief responses for each attribute, and then summing across the seven BEN attributes producing scores greater

than zero. The possible score range was from 7 to 343. The higher the score, the more favorable attitude the respondent had. It was expected that consumers' attitudes would be more positive for domestic-made than for imported shirts.

The Fishbein model was selected to measure the IM attribute. The model consisted of two scales: a belief scale and a value scale. The belief scale was a seven-point bipolar scale with anchors of "strongly agree" (7) and "strongly disagree" (1). The value scale was a seven-point bipolar scale with anchors of "very good" (3) and "very bad" (-3). The belief-related questions are items 26-27 in the Appendix. The value-related questions are items 28-29. The calculation of an individual's attitude score was the same as that of the Adequacy-Importance model, producing scores ranging from -21 to +21 where a more positive score reflected a more favorable attitude toward a country.

#### Perceived Quality

A multi-item instrument was developed to measure perceived quality. Four quality-related attributes were investigated: strong fabric, durable seams, neat construction or workmanship, and durability to washing. These quality-related attributes were the same as those used in the attitude measurement. The quality rating scale was a seven-point bipolar scale with anchors of "very likely" (7)

and "very unlikely" (1). A respondent's total quality perception score was obtained by summing across the four quality attributes and could range from 4 to 28. The more positive the score, the higher the quality perceived. Statements for perceived quality are listed in the Appendix, items 1-4.

### Pretesting

A pretest was conducted to assure that subjects perceived the price and brand name cues as the researcher had intended. The pretest was done on another sample group by interviewing students individually on campus. Ten subjects were asked to respond to the questions below.

- (1) Do you perceive the price level of \$9 to be the same as \$17 when buying a man's dress shirt?
- (2) Do you perceive the price level of \$17 to be the same as \$32 when buying a man's dress shirt?
- (3) Are Arrow brand men's dress shirts a well-known brand or an unknown brand?
- (4) Are Ashley & Reid brand men's dress shirts a well-known brand or an unknown brand?

The results revealed that all of the subjects interviewed perceived the price cues and brand name cues as the researcher had intended.

### Data Collection

A total of 120 male undergraduate students who were enrolled in an introductory statistics course at Virginia Tech was used as a convenience sample for this study. Subjects were expected to be homogeneous in age but heterogeneous in academic major. Subjects' class level and nationality were elicited to exclude graduate students and international students. Subjects' major and shirt purchasing practices for dress shirts were also elicited for describing the sample. Questions related to sample description are listed in the Appendix, numbers 30-33.

The data were collected from April 28 through May 14, 1987. Eight instructors of introductory statistics classes were asked to administer the questionnaire 15 minutes before the class was over. Male students remained in the classroom for this survey and female students were allowed to leave. The class instructor read the following excerpt to the subjects prior to administering the instrument:

The researcher is a graduate student in the Clothing and Textiles department who is investigating how consumers determine the quality of various types of dress shirts and also consumers' attitudes toward purchasing U.S.-made dress shirts and imported shirts. Your

contribution to this research will help apparel manufacturers and retailers develop shirts which meet consumers' needs and wants.

Subjects then responded to the three-part questionnaire: perceived quality, attitudes, and demographic characteristics/shirt purchasing practices, in this order. Due to the researcher's nationality which might have sensitized subjects, thus affecting their answers, it was deemed wiser to allow individual instructors to administer the instruments. A total of 139 questionnaires were completed. Eight of these were obtained from non-Americans, and were discarded. Nine questionnaires were discarded for incompleteness, and two questionnaires were discarded at random to maintain equal cell sizes for data analysis. Consequently, the sample consisted of 120 respondents.

#### Data Analysis

The followings statistical hypotheses were tested:

H0:1 There are no attitude differences toward the domestic-made shirts and the imported shirts in terms of the beneficial attributes.

H0:2 There are no attitude differences toward the domestic-made shirts and the imported shirts in terms of the imagery attribute.



HO:3 There is no difference in the effects of price, brand name and country-of-origin on quality perception.

HO:4 There is no interaction between brand name and country-of-origin on consumers' quality perception.

HO:5 There is no interaction between price and country-of-origin on consumers' quality perception.

Frequency and percentage distributions were calculated to describe respondents' demographic characteristics and shirt purchasing practices. Paired-comparison t-tests were performed to test the first two null hypotheses which compared the respondents' attitudes toward purchasing U.S.-made and low-wage-country-made men's dress shirts in terms of BEN and IM attributes. A one-tailed alpha = .05 was used as the significance level. To test the difference in respondents' beliefs about the BEN attributes, paired-comparison t-tests were performed using one-tailed alpha = .05 significance level.

To examine the relative effects of price, brand name, and country-of-origin on respondents' quality perception, three-way analysis of variance with nested design (price nested within brand) was performed. Null hypotheses tested were numbers 3-5, using alpha = .05 significance level. Due to the nested design, the source of variance did not include

the interaction between price and brand name, and the second order interaction (price x brand x country-of-origin). To test the difference between prices within brand, t-tests were performed which used the test with one-tailed alpha = .01 as the significance level.

## CHAPTER V

### FINDINGS AND DISCUSSION

This chapter presents the findings based on data collected from the 120 subjects and includes four sections. The first section describes the demographic characteristics and purchasing practices of the respondents. The second section analyzes respondents' attitudes toward purchasing U.S.-made dress shirts and toward those imported from a low-wage country in terms of the beneficial attributes. The third section analyzes respondents' attitudes toward the two countries as sources in terms of the imagery attribute. The fourth section analyzes the effects of price, brand name, and country-of-origin on consumers' quality perception. The final section discusses the results of the hypotheses tested.

#### Description of the Sample

The demographic information obtained from each respondent's questionnaire provided an overall view of the sample. This information included the respondent's college, class level, nationality, and shirt purchasing practices. Respondents represented all of the seven undergraduate colleges with two falling into the "other" group. These respondents may have been special students or double major students. No student majored in Veterinary Medicine

because the classes in which the questionnaire was administered were sophomore level. Percentage and frequency data for the respondents by college are shown in Table 2.

Table 2  
Distribution of Respondents by College

College	Frequency	Percent
Arts and Sciences	64	53.3
Business	20	16.7
Agriculture and Life Sciences	12	10.0
Engineering	8	6.7
Human Resources	7	5.8
Architecture and Urban Studies	6	5.0
Other	2	1.7
Education	1	0.8
Total	120	100.0

Of the students in the sample, 12.5 percent were freshmen, 40.0 percent were sophomores, 29.2 percent were juniors, and 18.2 percent were seniors. All were American because only American students' responses were analyzed and international students' responses were discarded.

A majority of the students (72.5 percent) purchased their own dress shirts. This finding would support the assumption that college students were able to provide their attitudes toward purchasing and quality perception of men's dress shirts.

#### **Analysis of Attitudes in Terms of Beneficial Attributes**

A paired-comparison t-test was used to test for differences in consumers' attitudes toward U.S.-made dress shirts and toward imported dress shirts in terms of the selected beneficial attributes. The results revealed that respondents' overall attitude toward the two countries as sources of dress shirts differed significantly ( $t=8.37$ ,  $P<0.0001$ ). Domestic shirts received a mean attitude score of 205.14 (S.E.=4.63) whereas imported shirts received a mean attitude score of 168.25 (S.E.=4.86). This meant that the respondents had a more favorable attitude toward U.S.-made shirts than toward shirts made in a low-wage country. When the mean belief score for each beneficial attribute was examined separately, domestic shirts were believed to be

better on six of the seven selected beneficial attributes (strong fabric, durable seams, neat construction or workmanship, washing durability, color and fabric pattern variety, and collar shape variety) since paired-comparison t-tests produced P values  $< 0.05$ . The only BEN attribute whose difference was not significant was "a good buy." The mean belief scores for the BEN attributes of shirts, according to where they were made, are shown in Table 3.

When the importance of the seven selected BEN attributes was elicited, respondents rated neat construction as the most important attribute. The remaining attributes ranked in the following order: a good buy, durable to washing, durable seams, strong fabric, color and fabric pattern variety, and collar shape variety (See Table 4).

TABLE 3  
Mean Belief Scores on Beneficial Attributes

BEN Attributes	<u>Domestic</u>		<u>Imported</u>		t	P level
	mean	S.E.	mean	S.E.		
Strong fabric	5.32	0.09	4.08	0.12	9.00	0.0001
Durable seams	5.28	0.09	3.99	0.13	9.22	0.0001
Neat construction	5.49	0.10	4.34	0.13	7.69	0.0001
Durable to washing	5.24	0.10	3.93	0.14	8.59	0.0001
A good buy	4.73	0.12	4.50	0.14	1.33	0.1850
Color and fabric pattern variety	5.62	0.10	5.00	0.12	4.58	0.0001
Collar shape variety	4.89	0.12	4.41	0.13	3.38	0.001



TABLE 4  
Mean Importance Scores on Beneficial Attributes

BEN Attributes	Mean	S.E.
Strong fabric	5.68	0.11
Durable seams	5.81	0.10
Neat construction	6.00	0.09
Durable to washing	5.82	0.10
A good buy	5.91	0.11
Color and fabric variety	5.33	0.13
Collar shape variety	4.11	0.15

### Analysis of Attitudes in Terms of the Imagery Attribute

A paired-comparison t-test was performed to compare consumers' attitudes toward U.S.-made shirts and toward imported shirts in terms of the selected imagery attribute. The results indicated that respondents' attitudes toward the two countries as sources differed significantly ( $t=7.28$ ,  $P<0.0001$ ). Domestic-made shirts received a mean attitude score of 9.38 (S.E.=0.82), whereas imported shirts received a mean attitude score of 0.88 (S.E.=0.54). This meant that respondents had a more positive attitude toward domestic shirts than imported shirts.

The reasons for the more favorable attitude toward domestic shirts are revealed by examining respondents' beliefs and values. Respondents agreed that buying U.S.-made dress shirts helps the U.S. apparel industry (mean=5.91, S.E.=0.10) and considered this action to be desirable (mean=1.46, S.E.=0.13). When they were asked if refusing to buy imported shirts would help the U.S. apparel industry, they agreed slightly (mean=3.48, S.E.=0.15) and considered this action to be close to "neutral" (mean=-0.17, S.E.=0.15). The results revealed that if a choice is based only on country-of-origin, respondents would choose domestic-made dress shirts to help the U.S. apparel industry.

### Analysis of Perceived Quality

Results from the three-way analysis of variance as shown in Table 5 reveal that 36 percent of the total variance were explained by the cues manipulated. The unique effects of price, brand name, and country-of-origin were all significant, in that brand name was the most important cue followed by price and country-of-origin in the given order. Twice as much variance was explained by brand name as by price. The interaction effects between country-of-origin and price, and country-of-origin and brand name were not significant.

The means in Table 6 indicate that respondents perceived domestic-made shirts to be higher in quality than imported shirts, and they perceived Arrow brand shirts (a well-known brand) to be higher in quality than Ashley & Reid (an unknown brand). In order to compare the effect of price on perceived quality under brand name, t-tests were performed. The results indicated that under Arrow brand name, \$32 shirts were perceived to be higher in quality than \$17 shirts ( $t=2.95$ ,  $P<.01$ ), and under Ashley & Reid brand name, \$17 shirts were perceived to be higher in quality than \$9 shirts ( $t=3.36$ ,  $P<.01$ ).

TABLE 5  
Perceived Quality: Three-Way Analysis of Variance

Source	DF	Sum of squares	Mean square	F ratio	P level
Price (Brand)	2	40.20	20.10	11.37	0.0001
Brand	1	42.01	42.01	23.75	0.0001
Country	1	22.97	22.97	12.99	0.0005
Country x Price (Brand)	2	3.51	1.80	0.99	0.3741
Country x Brand	1	2.85	2.85	1.61	0.2067
Error	112	198.08	1.77		
Total	119	309.62			

Table 6  
 Mean Scores for Perceived Quality by Price, Brand name, and  
 Country-of-Origin

	Arrow Well-known Brand		Ashley & Reid Unknown Brand		Avg. by Country
	\$32	\$17	\$17	\$9	
Made in U.S.A.	6.10	5.17	5.67	3.85	5.20
Imported	5.55	4.58	4.00	3.15	4.32
Avg. by Price	5.82	4.88	4.83	3.50	
Avg. by Brand	5.35		4.17		

### Discussion

Five research hypotheses were established for predicting the findings of the present study. The first two hypotheses predicted that consumers would exhibit significantly more favorable attitudes toward domestic shirts compared to imported shirts as revealed in both beneficial and imagery attributes. Both hypotheses were strongly supported and findings were consistent with the findings of Dickerson (1982), in that respondents indicated that imported clothing was generally inferior to domestic clothing. Also, the present findings were mostly consistent with Alderson's findings (1980) that respondents indicated that imported apparel was not as good a buy, as well made, nor as long lasting as the U.S.-made clothing.

In relation to past studies, however, the IM attribute has not been included. Findings of the present study shed new light on consumer behaviors in that consumers' purchasing behavior may not always be triggered by the characteristics of a product but by nationalism. American consumers may want to purchase U.S.-made apparel regardless of the price or quality of imported apparel. Further research should use other types of products and different respondents to investigate more about consumers' willingness to support the U.S. apparel industry.

Results from the three-way analysis of variance revealed that price, brand name, and country-of-origin all affected consumers' quality perception. The research hypothesis was substantiated because the effects of price and brand name were greater than that of country-of-origin.

The present findings were consistent with the critique of Bilkey and Nes (1982), in that they speculated that the findings from examining the effects of country-of-origin isolatedly may not be generalized to the findings when other information cues were available besides country-of-origin. However, the findings were contradictory to those of Johansson et al. (1985), and Sternquist and Davis (1986). Johansson et al. found that in a multicue setting there was no consistent tendency to underrate or overrate cars of a given national origin. Sternquist and Davis discovered that the effect of country-of-origin on perceived quality was not significant in a store-status-included multicue setting.

The significant effect of price on perceived quality in the present study was consistent with the findings of Andrews and Valenzi (1971), Wheatley and Chiu (1977), and Wheatley, Chiu, and Goldman (1981). These studies indicated that the price cue remained significant in a multicue setting.

The present finding about the brand name effect on perceived quality was consistent with that of Andrews & Valenzi (1971), in that they indicated that brand name effect was significant in a price-included multicue setting.

Consistent with prior research, none of the interactions of the three cues were significant. However, an examination of the means presented in Table 6 reveals that the difference in means for perceived quality of Arrow brand shirts (5.17 vs. 4.58) is smaller than that for Ashley & Reid brand shirts (5.67 vs. 4.00) when the price was constant at \$17.



## CHAPTER VI

## SUMMARY AND IMPLICATIONS

This chapter consists of three sections. The first section provides a summary of the entire study. The next section discusses some implications of the present findings. The final section offers recommendations for future studies.

## Summary

The purpose of this study was to identify selected consumers' attitudes toward purchasing men's dress shirts made in the U.S. and those imported from a low-wage country, and to evaluate the relative effects of price, brand name, and country-of-origin on perception of quality of men's dress shirts. A three-part questionnaire was developed to measure attitudes, perception of quality, and respondents' demographic characteristics and shirt purchasing practices.

The convenience sample consisted of 120 American male undergraduate students who were enrolled in an introductory statistics course at Virginia Polytechnic Institute and State University. Subjects completed questionnaires in their class rooms.

Paired-comparison t-tests were used to analyze respondents' attitudes toward domestic-made and imported men's dress shirts in terms of the selected beneficial attributes (BEN) and the imagery attribute (IM). The findings indicated that respondents had more positive attitudes toward domestic shirts than toward imported shirts for both types of attributes. Regarding the BEN attributes, respondents believed that domestic-made dress shirts were better in quality-related attributes (strong fabric, durable seams, neat construction or workmanship, and washing durability), and were available in more variety in color and fabric pattern and in collar shape.

The findings for beliefs about beneficial quality-related attributes of imported shirts were consistent with the literature reviewed in which imported apparel products were frequently perceived to be lower in quality than domestic goods when no information except country-of-origin was known (Dickerson, 1982; Festervand, Lumpkin, & Lundstrom, 1985; Gaedeke, 1973).

As the importance of the seven selected BEN attributes was elicited, respondents rated neat construction as the most important attribute. The remaining attributes ranked in the following order: a good buy, durable to washing, durable seams, strong fabric, color and fabric pattern

variety, and collar shape variety. Regarding the attitudes toward the IM attribute, respondents agreed that buying U.S.-made dress shirts helps the U.S. apparel industry and considered this to be a desirable action. On the other hand, respondents slightly agreed that refusing to buy imported shirts would help the U.S. apparel industry and considered this action to be close to "neutral". The findings about respondents' attitudes toward the selected imagery attribute may reveal that consumers were willing to support the U.S. apparel industry.

Three-way analysis of variance was performed to investigate the effects of price, brand name, and country-of-origin on respondents' perception of quality. The results revealed that (1) \$32 Arrow brand men's dress shirts were perceived to be higher in quality than \$17 Arrow brand men's dress shirts, (2) \$17 Ashley & Reid brand shirts were perceived to be higher in quality than \$9 shirts under the same brand name, (3) Arrow brand shirts were perceived to be higher in quality than Ashley & Reid shirts, (4) U.S.-made shirts were perceived to be higher in quality than imported shirts, (5) the unique effect of country-of-origin on perceived quality was slightly less significant than that of price and brand name, and (6) the interactions between country-of-origin and price, and country-of-origin and brand name were not significant. However, the data indicated that

country-of-origin tended to have a greater effect on perceived quality for the unknown brand than for the well-known brand.

From the findings of the study, one may conclude that if no information except country-of-origin is known as in the measurement of attitudes toward purchasing, consumers will have more positive attitudes toward U.S.-made shirts than imported shirts. However, if price and brand name are presented simultaneously as in the measurement of perceived quality, the effect of country-of-origin on perceived quality will become less dominant than that of price and brand name.

The limitations of this study need to be recognized. First, the product used in this study, men's dress shirts, is a rather standardized apparel item. Consequently, the relative importance of the selected BEN attributes to consumers may not be generalized to a fashion type product. The second limitation of this study was that the effects of price, brand name, and country-of-origin on consumers' quality perception may not be generalized to a fashion type product because the intrinsic quality-related attributes for such items may not be the same as those for men's dress shirts. The third limitation of this study is limited generalizability due to the sample, which may not represent

the general consumer population. Also, the finding about the effect of brand name on quality perception was confined to the brand names selected.

### Implications

Results from the present study imply that American manufacturers and retailers should consider the effect of country-of-origin on consumers' attitudes toward purchasing and consumers' quality perception of their products because respondents in the present study indicated that they were willing to support the U.S. apparel industry by buying U.S.-made shirts and refusing to buy imported shirts. They perceived U.S.-made shirts to be higher in quality than shirts imported from a low-wage country in a price and brand name included multicue setting.

The findings of the present study also have an implication for the Crafted with Pride U.S.A. Council, Inc. That is, the council needs to continue promoting Americanism to alleviate import competition.

### Recommendations for Future Studies

1. The study could be replicated with other respondents to determine the amount of agreement with the results of this study. Similar results with other groups would provide external validity for the research.

2. The present study could be replicated with other categories of apparel to provide a comparison of the effect of country-of-origin on quality perception.
3. The present study could be replicated with other brand names to provide a comparison of the effect of brand name cues on perceived quality.
4. Store status could be used as an independent variable to assess perceived quality changes.
5. Further research should investigate more about consumers' willingness to support the U.S. apparel industry and to refuse to buy the imported apparel products by using other types of products and different respondents, especially in a multicue environment.

## REFERENCE LIST

- Ahtola, O. T. (1975). The vector model of preferences: An alternative to the Fishbein model. Journal of Marketing Research, 12(1), 52-59.
- Ahtola, O. T. (1984). Price as a "give" component in an exchange theoretic multicomponent model. Advances in Consumer Research, 11, 623-626.
- Alderson, D. H. (1980). Imported clothing: Female consumers' attitudes, awareness, and purchasing practices in relation to selected demographic variables. Master's thesis, Virginia Polytechnic Institute & State University.
- American Apparel Manufacturers Association (1985a). Apparel Import Digest: 1985 Annual Issue.
- American Apparel Manufacturers Association (1985b). Apparel Import Digest: Apparel Import Data Through May 1985.
- Andrews, I. R., & Valenzi, E. R. (1971). Combining price, brand, and store cues to form an impression of product quality. Proceedings of the 79th Annual Convention of the American Psychological Association, 649-650.
- Arpan, J. S., de la Torre, J., & Toyne, B. (1982). The U.S. Apparel Industry: International Challenge, Domestic Response. Athens, GA: Georgia State University.
- Bilkey, W. J. & Nes, E. (1982) Country-of-origin effects on product evaluations. Journal of International Business Studies, 13(1), 89-99.
- Cohen, J. B., & Ahtola, O. T. (1971). An expectancy x value analysis of the relationship between consumer attitudes and behavior. Proceedings of the Second Annual Conference of the Association for Consumer Research, 344-364.
- Dardis, R., Spivak, S. M., & Shih, C. M. (1985) Price and quality differences for imported and domestic men's dress shirts. Home Economics Research Journal, 13(4), 391-399.

- Dickerson, K. G. (1982). Imported versus U.S.-produced apparel: Consumer views and buying patterns. Home Economics Research Journal, 10(3), 241-252.
- Dickson, C. A. (1984). Textiles and clothing business professionals for the twenty-first century: Moving toward diversity. Clothing and Textiles Research Journal, 2(2), 14-18.
- Dodds, W. B., & Monroe, K. B. (1985). The effects of brand and price influence on subjective product evaluation. Advances in Consumer Research, 12, 85-90.
- Festervand, T. A., Lumpkin, J. R., & Lundstrom, W. J. (1985). Consumers' perceptions of imports: An update and extension. Akron Business and Economic Review, 16(1), 31-36.
- Fishbein, M., & Raven, B. H. (1962). The AB scales: An operational definition of belief and attitude. Human Relations, 15, 35-45.
- Gaedeke, R. (1973). Consumer attitudes toward products made in developing countries. Journal of Retailing, 49(2), 13-24.
- Gale, A., & Dardis, R. (1970). Predicting product performance by price. Textile Chemist and Colorist, 2(10), 159-163.
- Gardner, D. M. (1971). Is there a generalized price-quality relationship? Journal of Marketing Research, 8, 241-243.
- Give America a fighting chance: Stop unfair imports (1987, March). Washington DC: Fiber, Fabric and Apparel Coalition for Trade.
- Hinerfeld, N. A. (1982, Dec.). Demographics, technology to affect apparel marketing. Apparel World, pp. 20-24.
- Holbrook, M. B., & Corfman, K. P. (1985). Quality and value in the consumption experience: Phaedrus rides again. In J. Jacoby & J. Olson (Eds.), Perceived Quality (pp. 31-57). Lexington, MA: Lexington Books.
- How imports, particularly from the Far East, serve the needs of American retailers and customers. (1986, April). Stores, pp. 13-24.



- Jacoby, J., Olson, J. C., & Haddock, R. A. (1971). Price, brand name, and product composition characteristics as determinants of perceived quality. Journal of Applied Psychology, 55(6), 570-579.
- Jayachandran, C., Kyj, M. J., & Pal, S. (1985, Sept.). Apparel purchasing behavior: How to promote Americanism. Apparel World, pp. 146-149.
- Johansson, J. K., Douglas, S. F., & Nonaka, I. (1985). Assessing the impact of country of origin on product evaluations: A new methodological perspective. Journal of Marketing Research, 22(4), 388-396.
- Lutz, R. J., & Bettman, J. R. (1977). Multiattribute models in marketing: A bicentennial review. In A. G. Woodside, J. N. Sheth, & P. D. Bennett (Eds.), Consumer and Industrial Buying Behavior (pp. 137-149). New York: Elsevier North-Holland, Inc.
- Mazis, M. B., Ahtola, O. T., & Klippel, R. E. (1975). A comparison of four multi-attribute models in the prediction of consumer attitudes. Journal of Consumer Research, 2(1), 38-52.
- McLean, F. P., Roper, L. L., & Smothers, R. (1986). Imported versus domestic blouses: Women's preferences and purchase motives. Home Economics Research Journal, 14(3), 306-313.
- Moller, K. E. (1983). Perceived uncertainty in brand choice: A probabilistic multiattribute choice model. Research in Marketing, 6, 199-230.
- Morgan, L. A. (1985). The importance of quality. In J. Jacoby & J. Olson (Eds.), Perceived Quality (pp. 61-64). Lexington, MA: Lexington Books.
- Morris, M. A., & Prato, H. H. (1978). Performance of garments related to initial cost. Home Economics Research Journal, 7(2), 76-84.
- Myers, J. H., & Shocker, A. D. (1981). The nature of product-related attributes. Research in Marketing, 5, 211-236.
- Nordquist, B. K. (1985). International trade in textiles and clothing: Implications for the future. Clothing and Textile Research Journal, 3(2), pp. 35-39.

- Olshavsky, R. W. (1985). Perceived quality in consumer decision making: An integrated theoretical perspective. In J. Jacoby & J. Olson (Eds.), Perceived Quality (pp.1-29). Lexington, MA: Lexington Books.
- Olson, J. G. (1977). Price as an informational cue: Effects in product evaluating. In A. G. Woodside, J. N. Sheth, & P. D. Bennett (Eds.), Consumer and Industrial Buying Behavior (pp. 267-286). New York: Elsevier North-Holland, Inc.
- Olson, J. G., & Jacoby, J. (1972). Cue utilization in the quality perception process. Proceedings of the Third Annual Conference of the Association for Consumer Research, 167-179.
- Olson, J. G., & Reynolds, T. J. (1983). Understanding consumers' cognitive structures: Implications for advertising strategy. In L. Percy & A. G. Woodside (Eds.), Advertising and Consumer Psychology (pp. 77-90). Lexington, MA: Lexington Books.
- Rosenberg, M. J. (1956). Cognitive structure and attitudinal affect. Journal of Abnormal and Social Psychology, 53(3), 367-372.
- Rules and regulations under textile fiber products identification act of 1986. Federal Trade Commission.
- Silverman, R. E. (1974). Psychology (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Sternquist, B. & Davis, B. (1986). Store status and country of origin as information cues: Consumer's perception of sweater price and quality. Home Economics Research Journal, 15(2), 124-131.
- Stokes, R. C. (1985). The effects of price, package design, and brand familiarity on perceived quality. In J. Jacoby & J. Olson (Eds.), Perceived Quality (pp. 233-246). Lexington, MA: Lexington Books.
- Szybillo, G. J., & Jacoby, J. (1974). Intrinsic versus extrinsic cues as determinants of perceived product quality. Journal of Applied Psychology, 59(1), 74-78.
- Wallach, J. (1984, January). Strategies for developing more workable programs for imports. Stores, pp. 38-41.

- Wheatley, J. J., & Chiu, J. S. Y. (1977). The effects of price , store image, and product and respondent characteristics on perceptions of quality. Journal of Marketing Research, 14, 181-186.
- Wheatley, J. J., Chiu, J. S. Y., & Goldman A. (1981). Physical quality, price, and perceptions of product quality: Implications for retailers. Journal of Retailing, 57(2), 101-117.
- Williams, T. G. (1982). Consumer Behavior: Fundamentals & Strategies. St. Paul, MN: West Publishing Company.
- Wilkie, W. L., & Pessemier, E. A. (1973). Issues in marketing use of multi-attribute attitude models. Journal of Marketing Research, 10(4), 428-441.
- Zeithaml, V. A. (1986). Defining and relating price, perceived quality, and perceived value. Unpublished working paper, Texas A&M University.

APPENDIX

CONSUMERS' QUALITY PERCEPTION AND PURCHASING ATTITUDES  
TOWARD DOMESTIC-MADE MEN'S DRESS SHIRTS AND IMPORTED  
DRESS SHIRTS

A 1987 STUDY OF THE OPINIONS OF VIRGINIA TECH MALE STUDENTS





- | Coding        | 1   | 2 | 3 | 4 | 5 | 6 | 7           |
|---------------|---|---|---|---|---|---|-------------|
| Q-10          | Low-wage-country-made dress shirts: Durable to washing  |   |   |   |   |   |             |
| Very unlikely | -----   |   |   |   |   |   | Very likely |
| Q-11          | U.S.-made dress shirts: Neat construction or workmanship (e.g., collar lies symmetrically)          |   |   |   |   |   |             |
| Very unlikely | -----   |   |   |   |   |   | Very likely |
| Q-12          | Low-wage-country-made dress shirts: Neat construction or workmanship                                |   |   |   |   |   |             |
| Very unlikely | -----   |   |   |   |   |   | Very likely |
| Q-13          | U.S.-made dress shirts: A good buy for the money  |   |   |   |   |   |             |
| Very unlikely | -----   |   |   |   |   |   | Very likely |
| Q-14          | Low-wage-country-made dress shirts: A good buy for the money  |   |   |   |   |   |             |
| Very unlikely | -----   |   |   |   |   |   | Very likely |
| Q-15          | U.S.-made dress shirts: A wide choice in color and fabric pattern (pattern such as stripes, checks) |   |   |   |   |   |             |
| Very unlikely | -----   |   |   |   |   |   | Very likely |
| Q-16          | Low-wage-country-made dress shirts: A wide choice in color and fabric pattern                       |   |   |   |   |   |             |
| Very unlikely | -----   |   |   |   |   |   | Very likely |





Q-23 A good buy for the money

Of less importance ----- Of more importance

Q-24 Available in a wide variety of color and fabric pattern

Of less importance ----- Of more importance

Q-25 Available in a wide variety of collar shapes

Of less importance ----- Of more importance

In this section, we would like to have your opinions about buying U.S.-made dress shirts versus imported shirts. Please check one space on the scale for each statement.

Coding 1 2 3 4 5 6 7

Q-26 Buying U.S.-made dress shirts helps U.S. apparel industry

Strongly disagree ----- Strongly agree

Coding 7 6 5 4 3 2 1

Q-27 Refusing imported dress shirts helps U.S. apparel industry

Strongly disagree ----- Strongly agree



Q-31 What's your class standing? (circle one number)

1. FRESHMAN
2. SOPHOMORE
3. JUNIOR
4. SENIOR
5. GRADUATE
6. OTHER

Q-32 What is your nationality? (circle one number)

1. AMERICAN
2. INTERNATIONAL STUDENT
3. OTHER

Q-33 Who generally buys your dress shirts?  
(circle one number)

1. YOURSELF
2. SOMEONE BESIDES YOURSELF

Your contribution to this research is greatly appreciated. Thank you very much.

Shiuh-Miin Lin

**The vita has been removed from  
the scanned document**