

THE INFLUENCE OF BRAND NAME
ON THE PERCEPTION OF
PRODUCT VALUE

By

JERRY JAMES ECCHER

Bachelor of Science

Southern Illinois University

Carbondale, Illinois

1968

Submitted to the Faculty of the Graduate College
of the Oklahoma State University
in partial fulfillment of the requirements
for the Degree of
MASTER OF SCIENCE
May, 1970

OKLAHOMA
STATE UNIVERSITY
LIBRARY
OCT 12 1970

THE INFLUENCE OF BRAND NAME
ON THE PERCEPTION OF
PRODUCT VALUE

Thesis Approved:

Donice A. Hawes

Thesis Adviser

Sarahy Paville

N. Durham

Dean of the Graduate College

762204

ACKNOWLEDGEMENTS

The writer wishes to express his sincere appreciation for the help and guidance of Dr. Donice Hawes, Head, Department of Clothing, Textiles, and Merchandising at Oklahoma State University. Acknowledgement is extended to Miss Dorothy Saville and Dr. B. C. Hamm for serving as members of the advisory committee and to Dr. David Bee for his guidance during the statistical analysis of the research.

In addition, the author is grateful for the understanding and encouragement of John, Ida, and Charlotte during the course of his graduate study.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
II. BACKGROUND FOR STUDY	6
III. METHODS AND PROCEDURE	19
The Design of the Study	19
The Test Materials	21
The Semantic Differential	23
The Sample	23
The Pilot Study	25
IV. FINDINGS, ANALYSIS, AND DISCUSSION	27
V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	48
SELECTED BIBLIOGRAPHY	51
APPENDIX A	53
APPENDIX B	57

LIST OF TABLES

Table	Page
I. Mean Values of Expensive Shirt With Three Brand Names as Rated by Entire Sample of 51 Females and 49 Males	28
II. Mean Values of Inexpensive Shirt With Three Brand Names as Rated by Entire Sample of 51 Females and 49 Males	29
III. Mean Values of Expensive Shirt With Three Brand Names as Rated by 51 Females	30
IV. Mean Values of Inexpensive Shirt With Three Brand Names as Rated by 51 Females	31
V. Mean Values of Expensive Shirt With Three Brand Names as Rated by 49 Males	32
VI. Mean Values of Inexpensive Shirt With Three Brand Names as Rated by 49 Males	33
VII. Results of Wilcoxon Matched-Pairs Signed-Ranks Test to Determine if the Expensive and Inexpensive Shirts, Identified With the Arrow Brand Name, Were Similarly Perceived by 51 Females and 49 Males	36
VIII. Results of Wilcoxon Matched-Pairs Signed-Ranks Test to Determine if the Expensive and Inexpensive Shirts, Identified With the Penney's Brand Name, Were Similarly Perceived by 51 Females and 49 Males	37
IX. Results of Wilcoxon Matched-Pairs Signed-Ranks Test to Determine if the Expensive and Inexpensive Shirts, Identified With the Medalist Brand Name, Were Similarly Perceived by 51 Females and 49 Males	38
X. Results of Wilcoxon Matched-Pairs Signed-Ranks Test to Determine if There Was a Meaningful Difference in the Perceived Value of the Expensive Shirt, Identified With the Arrow Brand Name, by 51 Females and 49 Males	41
XI. Results of Wilcoxon Matched-Pairs Signed-Ranks Test to Determine if There Was a Meaningful Difference in the Perceived Value of the Expensive Shirt, Identified With the Penney's Brand Name, by 51 Females and 49 Males	42

XII.	Results of Wilcoxon Matched-Pairs Signed-Ranks Test to Determine if There Was a Meaningful Difference in the Perceived Value of the Expensive Shirt, Identified With the Medalist Brand Name, by 51 Females and 49 Males	43
XIII.	Results of Wilcoxon Matched-Pairs Signed-Ranks Test to Determine if There Was a Meaningful Difference in the Perceived Value of the Inexpensive Shirt, Identified With the Arrow Brand Name, by 51 Females and 49 Males . .	44
XIV.	Results of Wilcoxon Matched-Pairs Signed-Ranks Test to Determine if There Was a Meaningful Difference in the Perceived Value of the Inexpensive Shirt, Identified With the Penney's Brand Name, by 51 Females and 49 Males	45
XV.	Results of Wilcoxon Matched-Pairs Signed-Ranks Test to Determine if There Was a Meaningful Difference in the Perceived Value of the Inexpensive Shirt, Identified With the Medalist Brand Name, by 51 Females and 49 Males	46

LIST OF FIGURES

Figure	Page
1. White Shirt Identified With Arrow Brand Name	20
2. White Shirt Identified With Penney's Brand Name	20
3. White Shirt Identified With Medalist Brand Name	20
4. The Semantic Differential	24

CHAPTER I

INTRODUCTION

Retailing has undergone extraordinary change and development during the past fifty years. Changes in the areas of pricing, competition, promotion, and variety of products have brought about complexities which both the retailer and the consumer must face. Individuals in marketing are aware of the relationship between retailing and consumer behavior. They realize that studying and understanding the consumer will lead to a more efficient use of marketing resources and more effective solutions to marketing problems. Entenberg states that an understanding of what consumers want and are willing to purchase in the way of goods and services is of major importance--not only to marketing and retail managers, but also to the entire economy.¹ Hence, increased knowledge concerning consumer behavior will benefit both the retailer and the consumer.

Conceptualization of the procedure an individual employs in reaching a purchase decision has been achieved through a model of the decision-making process. This model specifies the elements involved in decision making and represents the nature of the relationship among these elements. Undoubtedly, most retailers are primarily interested in the final stage of this process, that of the actual purchase. The

¹Robert D. Entenberg, Effective Retail and Market Distribution (New York, 1966), p. 9.

purchase process consists of four interacting categories of variables: (1) preshopping purchase intentions; (2) consumer characteristics; (3) store environment characteristics; and (4) purchase outcomes.² One aspect of the third variable, brand name, was the major concern of this research project.

A better understanding of some of the variables which make up the characteristics of a store's environment has been achieved through research conducted by Brown³, Massey⁴, and McConnell⁵. Their research in the areas of display and price served as a stimulus for this investigation of brand name. It is only through research and investigation of all the variables involved in the consumer decision-making process that consumer behavior can be fully comprehended.

The objective of this study was to investigate the influence of brand name on the perception of product value. It was hoped that this study would contribute to a clearer understanding of consumer behavior.

The hypotheses tested were as follows:

- (1) The perceived value of a product will vary directly with brand name identification.
- (2) Products identified with the same brand name, but differing

²James F. Engel, David T. Kollat, and Roger D. Blackwell, Consumer Behavior (New York, 1968), p. 447.

³Thomas Lee Brown, "Display Influence on the Perception of Product Value" (unpub. Master's report, Oklahoma State University, 1966).

⁴Morris E. Massey, "Consumer Reactions to Price-Quality Relations: A Pilot Study" (unpub. Master's thesis, The University of Texas, 1962).

⁵J. Douglas McConnell, "The Price-Quality Relationship in an Experimental Setting," Journal of Marketing Research, V (August, 1968), pp. 300-303.

in value, will be similarly perceived.

- (3) Based on brand name, there will be a meaningful difference in the perceived value of a product by males and females.

Due to diversified influences consumers are motivated to purchase a particular product. The first hypothesis was designed to reflect the importance of brand name identification in the decision-making process. This hypothesis sought to determine the extent to which specific brand names influence the perception of product value. Verification of this hypothesis was accomplished by examining the mean ratings of a single product, specifically a man's white dress shirt, when it was identified with three different brand names. Perception and brand image, two important marketing concepts, play an important role in understanding and explaining this first supposition.

In the second hypothesis the phenomenon of brand image was of main concern. Because a consumer is unable to objectively evaluate and consider the numerous brand names before him, he categorizes each one according to psychological qualities and limitations which he has established. Past experience and stored information cause him to respond to a particular brand name in a manner which he has learned over time. Testing the second hypothesis by means of the Wilcoxon Matched-Pairs Signed-Ranks test should indicate that the process is so innate that the individual fails to even consider the actual physical qualities of the product.

The third hypothesis investigated the extent to which a consumer characteristic influenced the perception of product value. At this point, the effect of brand name, together with the gender of the respondent, was analyzed to determine their influence on the perception

and the decision-making processes. The method of analysis employed was the Wilcoxon Matched-Pairs Signed-Ranks Test.

Throughout this report the term "value" was used to denote the desirability or worth of a thing to a consumer. Its definition also encompasses the utility of a commodity for satisfying a human want. Retailers, or for that matter anyone interested in the economy of our country, should be concerned with the influence a brand name can exert on the perceived value of a product. Even though a major limitation of this report was that it concerned only one product, a man's white dress shirt, the final results and conclusions could serve as a foundation for future research projects pertaining to the subject of brand name.

With the average growth rate of large retail institutions reaching an impressive 9.9 percent over the last decade, an additional stimulus has been given to individuals desiring to comprehend the variables involved in the decision-making process.⁶ As retail operations continue to grow and expand, realization of the need to understand those factors which motivate the consumer to the point of purchase becomes even more acute.

Limitations

The limitations of this research project fell into two categories. The first was the nature of the design and the second was methodology.

Even though the results revealed a correlation between brand name identification and perceived product value, application should primarily be made to product categories in which items are nondistinguishable,

⁶"Retail Sales Ring Up Riddle for Economists," Business Week, March 1, 1969, p. 28.

i.e., staple goods. An additional factor to be considered was that the subjects did not handle the products. Using slides of white shirts to replicate a display situation (store window, magazine illustration, newspaper advertisement, etc.), rather than the actual products, was decided after considering the number of subjects involved in the project (one hundred) and the importance of creating a controlled, realistic situation. A final limitation was that the sample was restricted to only one population.

CHAPTER II

BACKGROUND FOR STUDY

One's full comprehension of the relationship between brand name, product value, and the consumer decision-making process is dependent upon his understanding of perception. The phenomenon of perception has long been the target of research and investigation on the part of psychologists. Presently, it is also of concern to marketing men. The accomplishments of these two disciplines regarding the study of perception are indeed voluminous. For this reason, only principles of perception relating to the subject of this research report will be the main areas of concern and discussion.

Because perception depends on the role that it plays in one's general system of psychology, and because it is not a simple scientific concept, Dember believes it is very difficult to define perception.¹ He views it as a complicated construct whose main function is to help organize knowledge and thereby facilitate communication.² Definitions of perception are as numerous and diverse as the theories about perception. These theories range from the Core-Context Theory which views perception not as a single item, but as a group of interrelated parts, to the Gestalt Theory which disavows the logic of the Core-Context

¹William N. Dember, The Psychology of Perception (New York, 1961), p. 24.

²Ibid.

Theory and represents the unit as a complete product. Even though there are a wide variety of definitions and theories, each one seems to focus on a basic relationship involved in perception. This relationship is between the input, or stimulation impinging on the organism, and the output, or behavior of the organism.

Hence, perception may be defined as: "The complex process by which people select, organize, and interpret sensory stimulation into a meaningful and coherent picture of the world."³ Taking cues from the field and organizing them into meaningful ideas or concepts is a principal activity involved in the perception process.⁴ Gordon explains this phenomenon in the following manner:

The process of conscious perceiving - of classifying, categorizing, or associating to a stimulus - is largely one of giving verbal responses to the neural impulses propagated by a stimulus, or of applying verbal labels to the stimuli.⁵

When stimuli are detected by the five senses and sensation occurs, perception begins. Between the input an individual receives and his output, lie his mental processes. The extent to which complexities occur during the perception process depends on differences in the range and pattern of relevant aspects of input as well as from differences in types and patterns of potential output.⁶

³ Bernard Berelson and Gary A. Steiner, Human Behavior (New York, 1964), p. 88.

⁴ Rollie Tillman and C. A. Kirkpatrick, Promotion; Persuasive Communication in Marketing (Homewood, 1968), p. 57.

⁵ Jesse E. Gordon, Personality and Behavior (New York, 1963), p. 174.

⁶ Dember, p. 3.

found it

The complex mental processes which an individual undergoes in classifying and interpreting sensations occur within a hypothetical construct referred to as the central control unit.⁷ The basic facilities for memory, thinking, and behaving are stored in this unit. Also contained within the central control unit are those characteristics which form an individual's psychological make-up: his personality characteristics, values, attitudes, past experiences, and stored information.

In the process of behaving, persons develop certain ways of reacting to particular stimuli. These patterns of behavior are commonly referred to as response traits.⁸ It is these predispositions or response traits that affect perception and influence the action which an individual may take. For example, the stimulus "Saks Fifth Avenue" will elicit learned response traits which contain the elements a person has stored in his memory and learned through past experience. A response to such a stimulus might include his attitude toward the store, his past experience with the store, and how his values relate to its image. The categories of meaning which are stored in one's central control unit serve to meaningfully interpret and classify sensations. Past experience and stored information is one such category that fulfill this function.

The influence of past experience on the perception process has been demonstrated by Combs and Snygg through the use of a stereoscope.

⁶Dember, p. 3.

⁷Engel, p. 21

⁸Ibid., p. 42.

The design of their particular research project was as follows:

When different pictures are exposed to the left and right eye in the stereoscope under controlled conditions, individuals tend to see what their past experience 'sets' them to see. Thus, when a group of teachers from North and South of the border looked at a picture of a bull fighter with one eye and a baseball player with the other, the Mexican school teachers 'saw' the bull fighter, while the American teachers 'saw' the ball player.⁹

Another example of the influence of past experience on visual perception has been shown by Ames through his trapezoidal window demonstration. The results of his study included the following summation:

When an observer who has had long past experience with rectangular configurations looks at the rectangular window, he assumes that what he sees is a rectangular configuration of a specific size and shape at a specific distance, due to the specific characteristics of his stimulus pattern, irrespective of the particular value of its trapezoidal characteristics. At the same time he takes account of the trapezoidal characteristics of his stimulus pattern and translates them into a specific inclination of the rectangular configuration relative to his particular spatial point of view.¹⁰

In a research project conducted by McGinnies, the influence of past experience and stored information on perception was exemplified. The research instruments used in the experiment consisted of a tachistoscope and electrodes to measure a respondent's galvanic skin responses. Subjects were shown words, some of which were socially unacceptable, at very rapid exposure rates. When asked to report what they had seen, the subjects did not correctly report the obscene words as well as they did the nonobscene words. McGinnies explains the results in this manner:

⁹ Arthur W. Combs and Donald Snygg, Individual Behavior (New York, 1959), p. 100.

¹⁰ Adelbert Ames Jr., "Visual Perception and the Rotating Trapezoidal Window," Psychological Monographs, Vol. 65 (1951), p. 22.

The findings are interpreted as representing conditioned avoidance of verbal symbols having unpleasant meanings to the observer. The stimulus word serves as a cue to deeply imbedded anxiety which is revealed in autonomic reactivity as measured by the GSR. Avoidance of further anxiety is contemporaneously aroused in the form of perceptual defense against recognition of the stimulus object.¹¹

As an individual develops and grows, so do the number of stored categories of meaning within his central control unit. Because our sense organs are constantly bombarded by a multitude of stimuli, the selective nature of perception enables us to focus our attention on a few of these stimuli clearly at one time.¹² Bruner has analyzed the sequence of events which occur when inputs are received into the system and has described the sequence in terms of a four-stage comparison process:

1. Primitive categorization - the process that results in the perceptual isolation of an object or an event with certain characteristic qualities.
2. Cue search - analysis of the input begins in order to 'place' it into the proper category of meaning.
3. Confirmation check - the search is narrowed for additional confirmatory cues to check the tentative placement of identity.
4. Confirmation completion - it is a characteristic of this state that openness to additional cues is drastically reduced, and incongruent cues are either normalized or 'gated out.' This final stage in the process of perceptual identification is marked by termination of cue searching.¹³

The categorization of stimuli, which is an integral part of the perception process, is closely related to the image an individual may

¹¹ Elliott McGinnies, "Emotionality and Perceptual Defense," Psychological Review, Vol. 56 (1949), p. 251.

¹² Clifford T. Morgan and Richard A. King, Introduction to Psychology (New York, 1966), p. 341.

¹³ Jerome S. Bruner, "On Perceptual Readiness," Psychological Review, Vol. 64 (1957), pp. 130-131.

hold toward a specific company, product, or brand. According to Wright and Warner, the worth of a product is measured in terms of values that result fundamentally from the interaction of perception, learning, and motivation.¹⁴

During the preceding discussion of perception, response traits were defined as characteristic modes of reacting and behaving to particular stimuli which a person acquires. The concepts of imagery and response traits are closely related. Imagery, like response traits, provides a means for classifying and remembering all experiences.¹⁵ The concept of imagery becomes extremely important and necessary when one considers the fact that most nationally advertised packaged brands do not have an exclusive product selling point which may act as a sales determinant all by itself.¹⁶ Martineau has defined product image in the following manner: "... the total set of attitudes, the halo of psychological meanings, the associations of feeling, the indelibly written esthetic messages over and above the bare physical qualities."¹⁷

Another definition includes those factors which shape the particular image a consumer may hold:

The image of a product includes not only the picture the consumer has of the intrinsic qualities of the product, but also all the ideas he has about it - the sort of people who use it, the kind of stores that sell it, the character of the

¹⁴John S. Wright and Daniel S. Warner, Advertising (New York, 1966), p. 75.

¹⁵D. B. Lucas and S. H. Britt, Marketing and Advertising (New York, 1963), p. 17.

¹⁶William D. Tyler, "The Image, The Brand, and The Consumer," Journal of Marketing, XXII (October, 1957), p. 163.

¹⁷Pierre Martineau, Motivation in Advertising (New York, 1957), p. 146.

advertisements about it, the 'personality' of the firm that makes it - the total, in other words, of all the stimuli received by the buyer that are related to the product.¹⁸

Once the consumer has utilized the factors which make up his image of a product to decide on a specific generic grouping, then brand image becomes relevant. It is product imagery which plays an important role in increasing sales of a generic product category, and brand imagery which is concerned with increasing sales of a particular brand. Like the concept of product image, brand image offers an explanation as to why two products that are technically identical are purchased by different people. In other words, "Brand image is the buyer's picture of how a specific brand differs from other brands."¹⁹ The following reference points out the significance of this phenomenon in connection with consumer behavior:

The image that a brand has acquired in the public mind is as important, if not more so, than any tangible attributes of the product in spelling the difference between consumer acceptance and rejection.²⁰

A basic marketing concept underlying the importance of brand image formation is the fact that an emotional feeling about a product can be the strongest selling point that many items - for which no specific product advantage exists - can have.²¹ One major factor influencing the "quality image" of a product is price.²² Leavitt suggests that

¹⁸Wright, p. 75.

¹⁹Tillman, p. 198.

²⁰C. H. Sandage and Vernon Fryburger, Advertising Theory and Practice (Homewood, 1958), pp. 206-207.

²¹Tyler, p. 163.

²²Louis Cheskin, Why People Buy (New York, 1959), p. 65.

consumers impute quality on the basis of price. The results of his experiments indicate that consumers will often choose the higher-priced of two alternative brands when the only differential information is price.²³ In a study conducted by McConnell the price-quality relationship was also investigated. It revealed that after twenty-four trials, in which price was the only variable, quality differences for three brands were perceived by subjects when no quality differences existed.²⁴

Many of the factors which influence an individual's image of a company and product also affect his image of a particular brand. Factors such as packaging, price, distributors, media used for advertising, and the content of the advertised message all play an important role in image formation. Because consumers generally know little about the actual quality of a product, most people buy symbols, not products.²⁵ According to Hepner, the fact that no certain qualities dominate the consumer's association with one brand more often than with another, means that no one specific association is completely preempted forever by a single brand.²⁶

Twedt has compiled a list of factors which influence the consumer's hierarchy of brand choice. He categorizes them in the following manner:

²³Harold J. Leavitt, "A Note on Some Experimental Findings About the Meanings of Price," The Journal of Business, XXVII (1954), p. 209.

²⁴McConnell, p. 301.

²⁵Cheskin, p. 64.

²⁶Harry Hepner, Advertising - Creative Communication With Consumers (New York, 1964), p. 220.

. . . there is a hierarchy of choice which ranges from brand insistence, when all of the consumer's purchases of a given product category are of one brand, and she will accept no substitutes; to brand preference, when the consumer prefers a given brand, but will accept others; to brand acceptance, when the consumer is willing to accept a brand even though it is not her favorite; to brand ignorance, when the consumer has no direct knowledge of the characteristics of a given brand; and finally to brand rejection, when the consumer has tried a brand and found it wanting.²⁷

The image that a consumer holds toward a particular brand can take several different forms. Tyler has categorized them into three kinds of images:

The first image is one that gives you a subjective feeling about the brand. It is one that makes you feel that this is your kind of product when you hear or see the name. . . . Another image is the objective kind. This is advertising that simply tries to sell you the product emotionally, without argument. The difference is that this kind of advertising does not try to get you involved with the product through the process of self-identification. . . . The third is the most overlooked today. This is advertising that sells by implanting a literal image in the consumer's mind. A visual image. A picture.²⁸

Thus far, the discussion of product and brand imagery has been concerned with those elements and characteristics which make up this marketing concept. Although management is interested in facts such as: the elements which shape an individual's product image, the consumer's hierarchy of brand choice, and the three kinds of brand images, it is more concerned with a basic marketing decision. This decision concerns how management can build an effective image in the eyes of the consumer. When one considers the important influence brand image alone exerts on the perceived value of a product, the weight of the marketing decision

²⁷ Dik Warren Twedt, "The Consumer Psychologist," Understanding Consumer Behavior, ed. Martin M. Grossack (Boston, 1964), pp. 59-60.

²⁸ Tyler, p. 164.

becomes evident. Executives have realized the need to secure evidences about consumer patterns of response or resistance to products in order to help guide management decision making.²⁹

Besides perception and brand image, another concept should be mentioned to insure total understanding of the subject under investigation. For purposes of this study the concept relates to the method used to measure a person's perception of product value. The semantic differential was utilized by the researcher because an individual can indicate both the direction and intensity of his judgements.³⁰

The unique advantage of the semantic differential is its highly generalized technique of measurement which must be adapted to the requirements of each research problem to which it is applied.³¹ Therefore, formulation of the concepts and scales which comprise a differential depends on the specific purposes and objectives devised by the investigator. The semantic differential was developed by Osgood to measure the connotative meaning of concepts as points in what he has called "semantic space."³² ("Semantic space" is defined as a region of some unknown dimensionality through which each semantic scale passes to represent a straight line function, and a sample of such scales then represents a multidimensional space.)³³ The format for use of this

²⁹Bardin H. Nelson, "Seven Principles in Image Formation," Journal of Marketing, XXVI (January, 1962), p. 67.

³⁰Charles E. Osgood, George J. Suci, and Percy H. Tannenbaum, The Measurement of Meaning (Urbana, 1957), p. 20.

³¹Ibid., p. 76.

³²Fred N. Kerlinger, Foundations of Behavioral Research (New York, 1964), p. 564.

³³Osgood, p. 25.

research tool involves providing a subject with a concept to be differentiated and a number of scales, or bipolar pairs, on which he can indicate both the direction and intensity of his judgements.

In the semantic differential "concept" refers to the stimulus which a subject receives and proceeds to rate. Concepts to be differentiated are most often single words or noun phrases, but can also take a nonverbal form, as exemplified through the use of slides in this study. After selection of the concept, the scales, or bipolar pairs, must be chosen. These are seven-point rating scales and their selection is based on factors related to the particular concept under investigation. Usually, each scale measures one, sometimes two, of the basic dimensions or factors which are behind the scales - evaluation, potency, and activity.³⁴

Regarding selection of appropriate scales, Osgood and his colleagues have the following remarks:

Ideally we should like to use one specific scale to represent each of the factors or dimensions of the semantic space. . . . In practice, however, since specific scales are neither perfectly aligned with factors nor perfectly reliable, we use a small sample of closely related scales to represent each factor, deriving a score from their average which is assumed to be both more representative and more reliable than scores on individual scales.³⁵

In determining the appropriate scales for the present study, the two main criteria for selecting scales were considered. These criteria are factor representation and relevance to the concepts used.³⁶

Several of the scales chosen for the differential represent no

³⁴ Kerlinger, p. 567.

³⁵ Osgood, p. 78.

³⁶ Kerlinger, p. 569.

particular factor; however, they do appear to have relevance to the concept of product value. These three scales are:

Well Known Brand Name	- - - - -	Little Known Brand Name
Reliable Brand	- - - - -	Unreliable Brand
Favorite Brand	- - - - -	Brand Which I would Never Buy

The remaining scales in the differential do represent two factors.

The first factor deals with product quality, which is represented by:

High Quality Product	- - - - -	So-So Quality Product
Well Made	- - - - -	Poorly Made
High Quality Fabric	- - - - -	Low Quality Fabric
Very White	- - - - -	Not So White
Free From Wrinkles	- - - - -	Wrinkled
Very Attractive	- - - - -	So-So Appearance

The second factor was concerned with product status and was represented by three scales:

Looks Expensive	- - - - -	Looks Cheap
Sold Almost Anywhere	- - - - -	Limited Availability
Something Special	- - - - -	Just Another Shirt

In formulating the semantic differential, Mindak has given advertising and marketing men several suggestions for possible modifications. The first of these deals with selection of bipolar terms for the scales. Even though Osgood's original differential dealt primarily with single-word adjectives, Mindak suggests the use of descriptive nouns and phrases to make the differential even more sensitive in evoking subtle distinctions in the images of physically similar products.³⁷ He also

³⁷William A. Mindak, "Fitting the Semantic Differential to the Marketing Problem," Journal of Marketing, XXV (April, 1961), p. 29.

recommends that built-in control concepts, such as "my favorite brand" or "brand which I would never buy," be used so that the control profiles can be compared with test or competitive concepts.³⁸

Application of the semantic differential to marketing research projects has become accepted by investigators because the evaluative dimension of the differential has displayed validity as a measure of attitude.³⁹ The report by Brown⁴⁰ dealing with the influence of display on the perception of product value, and the study concerning the relationship between price and quality conducted by McConnell⁴¹ employed the semantic differential to collect the research information. Mindak also used a semantic differential to measure various facets of a product's image among a number of purchasers.⁴²

³⁸Mindak, p. 30.

³⁹Osgood, pp. 192-193.

⁴⁰Brown.

⁴¹McConnell.

⁴²Mindak, pp. 30-33.

CHAPTER III

METHODS AND PROCEDURE

To test the stated hypotheses, the research design was in the form of a survey. The measurement of the influence of brand name on the perception of product value was achieved through the use of a semantic differential.

The Design of the Study

The two products used in this study, white dress shirts for men, were similar in styling but different in quality and price. Each shirt was photographed, in color, in three different settings. A sign bearing the name of a particular brand also appeared in each of the six settings. Three brand names were used and each shirt appeared in a setting with a different brand name (Figure 1, 2, and 3). A seventh setting, the control, in which one of the white shirts appeared without a brand name, was also included in the test situation.

The test sample consisted of students in two sections of a course taught on the Oklahoma State University campus, spring semester, 1969. There were fifty-five individuals in one section and forty-five in the other. The total number of females in the two sections was fifty-one and the total number of males was forty-nine. The respondents in the sample viewed the seven slides of the white shirts for ten seconds each. The subjects completed one of the seven semantic differentials.



Figure 1. White Shirt Identified With Arrow Brand Name



Figure 2. White Shirt Identified With Penney's Brand Name



Figure 3. White Shirt Identified With Medalist Brand Name

provided after viewing each slide. The slides were presented to both sections in a random order.

Every member of the sample was given a nine page packet of materials. In addition to the instructions and general information included on the cover sheet, the respondents were also given verbal instructions regarding completion of the semantic differentials (Appendix A). The second page contained a short questionnaire which members of the sample were asked to complete (Appendix A). Items in the questionnaire included: gender of the respondent, his age, his specialization and rank in college, his father's occupation, and the income bracket of his parents.

A mean was computed for each of the twelve scales on the seven semantic differentials. This information was established for three different groups: the entire sample; the female members of the sample; and the male members of the sample. Besides presenting the means in the form of profiles, a statistical test was also employed. The collected data and the three hypotheses were tested and interpreted by means of profiles and the Wilcoxon Matched-Pairs Signed-Ranks Test.¹

The Test Materials

Choice of products in numerous categories may be influenced by brand name, but the investigator was particularly interested in the influence of brand name on the perceived value of clothing items. Three major criteria were considered in deciding what particular test material would be chosen. The first of these was that the product

¹Sidney Siegel, Nonparametric Statistics For the Behavioral Sciences (New York, 1956), pp. 75-83.

should be identifiable to most consumers. This meant that it should be a standardized item, available in various price and quality categories, but still retaining its basic characteristics in the eyes of the consumer. Secondly, because it should be an identifiable product, individuals should possess definite ideas and attitudes regarding its features, including brand name. A final criterion involved the extent to which the product was advertised and displayed. Because the researcher was also interested in the influence of brand name on product value as perceived through a display, whether in a store window, magazine illustration, or newspaper advertisement, the product should be highly publicized and therefore familiar to most consumers.

Because of the three criteria, two white dress shirts for men were chosen as the test products. They were different in price and quality, but were similar in styling and other visual characteristics. The features and styling characteristics of the two shirts included: button down collar (medium length); button flap; left-hand pocket; a fabric content of 65 percent Dacron and 35 percent cotton; and a permanent press finish. One of the shirts retailed at a price of \$7.50 and the other retailed at a price of \$3.50.

Colored slides of the white shirts were taken at the Photo and Graphic Arts Center on the Oklahoma State University campus. The shirts were removed from their plastic bags and reinforced with a piece of white cardboard to retain their shape when placed in the display shirt stand. Each shirt was photographed with three different brand names. These brand names were Arrow, Penney's, and Medalist. Each brand name was in one-inch high black letters and was placed on a 7 1/2" X 3 3/4" piece of gray construction paper. The brand name card

was positioned in the lower part of the slide. An additional slide was photographed of one of the white shirts without brand identification to be used as the control.

The Semantic Differential

The influence of brand name on the perceived value of the white shirts was measured through the use of a semantic differential. This semantic differential consisted of twelve pairs of bipolar words and phrases, each of which was a seven-point rating scale. Selection of the scales, or bipolar pairs, was based on features related to the product chosen for the study, a man's white dress shirt (Figure 4).

One factor influencing the success of this research project was the use of appropriate scales in the semantic differential. Thirty-five students majoring in Clothing, Textiles, and Merchandising at Oklahoma State University were asked to list qualities and characteristics they desired when purchasing a white shirt. Twelve bipolar pairs were chosen for the differential from this list of desired characteristics.

After viewing the slides, respondents completed a semantic differential for each slide. Members of the sample checked the blank on each of the seven-point rating scales that most closely described their opinion of the product. This information served as a basis for the data analyzed.

The Sample

Students in two sections of a marriage course taught in the department of Family Relations and Child Development were chosen as the

Well Known Brand Name	_____	Little Known Brand Name
Reliable Brand	_____	Unreliable Brand
Favorite Brand	_____	Brand Which I Would Never Buy
High Quality Product	_____	So-So Quality Product
Looks Expensive	_____	Looks Cheap
Well Made	_____	Poorly Made
High Quality Fabric	_____	Low Quality Fabric
Very White	_____	Not So White
Free From Wrinkles	_____	Wrinkled
Very Attractive	_____	So-So Appearance
Sold Almost Anywhere	_____	Limited Availability
Something Special	_____	Just Another Shirt

Figure 4. The Semantic Differential

sample for the actual test situation. The total number of individuals in the sample was one hundred. There were fifty-one female and forty-nine male students in these two sections. The students involved differed in age, specialization and rank in college, occupation of father, and the income bracket of their parents. Of the individuals in the sample, thirty-one were twenty-one years of age; twenty-eight were twenty years of age; nineteen were twenty-two years of age; sixteen were nineteen years of age; three were eighteen years of age; two were twenty-three years of age; and one was twenty-four years of age. The academic classifications of these students were as follows: forty-six were seniors; twenty-two were sophomores; twenty-one were juniors; and eleven were freshmen.

The Pilot Study

The main objective in administering the pilot study was to obtain results necessary to construct a more valid test situation. It was designed to analyze the effectiveness of the twelve scales on the semantic differential in measuring the influence of brand name on the perception of product value. Another purpose was to determine the adequacy of the verbal instructions and the information on the cover sheet of the rating scales which were presented to direct and instruct the members of the sample in completing the necessary information.

The presentation of the test information for the study followed a procedure similar to that which had been used for the pilot study. At the conclusion of the pilot study, the twenty female students were asked to comment on the adequacy of the written and verbal instructions, the characteristics of the white shirt which were or were not listed on

the semantic differential, and any part of the total survey they felt was inadequate or questionable.

After evaluating these comments and suggestions, one major change resulted. During the pilot study the slides of the white shirts were shown for seven seconds each. Because a majority of those in the sample felt that seven seconds was not ample time to evaluate the product, the time period was extended to ten seconds when the actual test was given.

CHAPTER IV

FINDINGS, ANALYSIS, AND DISCUSSION

The initial step in the analysis of the data was to determine the mean value for each of the scales on the seven semantic differentials. Each rating scale was assigned a number (+7 to +1 from left to right) and the mean was computed based on the number of respondents. The sample was divided into three groups. The first group contained all members of the sample, the second contained only the female respondents, and the third contained only the male respondents. The mean for each item (scale and concept), as rated by these three groups, can be found in Tables I through VI.

In order to graphically represent the average rating of a concept (expensive shirt with Arrow brand name, inexpensive shirt with Arrow brand name, expensive shirt with Penney's brand name, etc.) on each scale, the differential output was converted into profiles. Construction of the profiles was achieved by plotting the mean value for each of the twelve scales for a particular concept on a semantic differential. The division of the sample into three groups in averaging the mean for the various scales was also employed in presenting the profiles. The profiles were categorized according to their ratings by the entire sample, the female respondents, and the male respondents. For ease of comparison, many of the profiles were placed on the same differential (Appendix B).

TABLE I

MEAN VALUES OF EXPENSIVE SHIRT WITH THREE BRAND NAMES AS RATED
BY ENTIRE SAMPLE OF 51 FEMALES AND 49 MALES

(RATINGS ARE SCORED +7 TO +1, LEFT TO RIGHT ON THE SCALE)

Scale Rated	Mean Values			
	Expensive With Arrow Brand Name	Expensive With Penney's Brand Name	Expensive With Medalist Brand Name	Expensive With No Brand Identification
Well Known Brand Name/Little Known Brand Name	6.57	5.90	1.90	3.51
Reliable Brand/Unreliable Brand	6.14	4.71	2.99	3.92
Favorite Brand/Brand Which I Would Never Buy	5.24	3.59	2.42	3.66
High Quality Product/So-So Quality Product	5.75	3.77	3.10	3.77
Looks Expensive/Looks Cheap	5.31	4.00	3.78	3.96
Well Made/Poorly Made	5.71	4.15	3.59	4.01
High Quality Fabric/Low Quality Fabric	5.57	3.88	3.62	3.89
Very White/Not So White	4.38	3.65	3.46	3.44
Free From Wrinkles/Wrinkled	5.41	4.83	4.02	4.15
Very Attractive/So-So Appearance	5.32	4.28	3.66	3.85
Sold Almost Anywhere/Limited Availability	5.73	4.22	2.44	3.91
Something Special/Just Another Shirt	4.56	2.77	2.40	3.04

TABLE II

MEAN VALUES OF INEXPENSIVE SHIRT WITH THREE BRAND NAMES AS RATED
BY ENTIRE SAMPLE OF 51 FEMALES AND 49 MALES

(RATINGS ARE SCORED +7 TO +1, LEFT TO RIGHT ON THE SCALE)

Scale Rated	Mean Values		
	Inexpensive With Arrow Brand Name	Inexpensive With Penney's Brand Name	Inexpensive With Medalist Brand Name
Well Known Brand Name/Little Known Brand Name	6.74	6.00	1.86
Reliable Brand/Unreliable Brand	6.29	4.82	2.88
Favorite Brand/Brand Which I Would Never Buy	5.14	3.86	2.34
High Quality Product/So-So Quality Product	5.86	4.11	3.14
Looks Expensive/Looks Cheap	5.41	4.25	3.80
Well Made/Poorly Made	5.83	4.30	3.65
High Quality Fabric/Low Quality Fabric	5.53	4.08	3.55
Very White/Not So White	4.11	3.85	3.33
Free From Wrinkles/Wrinkled	5.76	4.78	4.30
Very Attractive/So-So Appearance	5.58	4.28	3.77
Sold Almost Anywhere/Limited Availability	5.88	4.29	2.30
Something Special/Just Another Shirt	4.12	3.04	2.30

TABLE III

MEAN VALUES OF EXPENSIVE SHIRT WITH THREE BRAND NAMES AS RATED BY 51 FEMALES

(RATINGS ARE SCORED +7 TO +1, LEFT TO RIGHT ON THE SCALE)

Scale Rated	Mean Values		
	Expensive With Arrow Brand Name	Expensive With Penney's Brand Name	Expensive With Medalist Brand Name
Well Known Brand Name/Little Known Brand Name	6.54	6.02	1.48
Reliable Brand/Unreliable Brand	6.28	4.98	2.90
Favorite Brand/Brand Which I Would Never Buy	5.50	3.94	2.26
High Quality Product/So-So Quality Product	5.86	3.90	3.04
Looks Expensive/Looks Cheap	5.30	4.16	3.72
Well Made/Poorly Made	5.70	4.34	3.66
High Quality Fabric/Low Quality Fabric	5.66	4.04	3.52
Very White/Not So White	4.20	3.54	3.30
Free From Wrinkles/Wrinkled	5.44	4.84	4.20
Very Attractive/So-So Appearance	5.46	4.54	3.72
Sold Almost Anywhere/Limited Availability	5.86	4.40	2.32
Something Special/Just Another Shirt	4.66	2.92	2.40

TABLE IV

MEAN VALUES OF INEXPENSIVE SHIRT WITH THREE BRAND NAMES AS RATED BY 51 FEMALES

(RATINGS ARE SCORED +7 TO +1, LEFT TO RIGHT ON THE SCALE)

Scale Rated	Mean Values		
	Inexpensive With Arrow Brand Name	Inexpensive With Penney's Brand Name	Inexpensive With Medalist Brand Name
Well Known Brand Name/Little Known Brand Name	6.80	6.08	1.68
Reliable Brand/Unreliable Brand	6.52	5.08	2.90
Favorite Brand/Brand Which I Would Never Buy	5.44	4.02	2.44
High Quality Product/So-So Quality Product	6.20	4.20	3.12
Looks Expensive/Looks Cheap	5.52	4.34	3.90
Well Made/Poorly Made	6.02	4.52	3.78
High Quality Fabric/Low Quality Fabric	5.82	4.26	3.62
Very White/Not So White	3.86	3.74	3.02
Free From Wrinkles/Wrinkled	5.86	4.90	4.36
Very Attractive/So-So Appearance	5.88	4.44	3.96
Sold Almost Anywhere/Limited Availability	6.08	4.54	2.24
Something Special/Just Another Shirt	4.20	3.16	2.40

TABLE V

MEAN VALUES OF EXPENSIVE SHIRT WITH THREE BRAND NAMES AS RATED BY 49 MALES
(RATINGS ARE SCORED +7 TO +1, LEFT TO RIGHT ON THE SCALE)

Scale Rated	Mean Values		
	Expensive With Arrow Brand Name	Expensive With Penney's Brand Name	Expensive With Medalist Brand Name
Well Known Brand Name/Little Known Brand Name	6.60	5.78	2.32
Reliable Brand/Unreliable Brand	6.00	4.44	3.08
Favorite Brand/Brand Which I Would Never Buy	4.98	3.24	2.58
High Quality Product/So-So Quality Product	5.64	3.64	3.16
Looks Expensive/Looks Cheap	5.32	3.84	3.84
Well Made/Poorly Made	5.72	3.96	3.52
High Quality Fabric/Low Quality Fabric	5.48	3.72	3.72
Very White/Not So White	4.56	3.76	3.62
Free From Wrinkles/Wrinkled	5.38	4.82	3.84
Very Attractive/So-So Appearance	5.18	4.02	3.60
Sold Almost Anywhere/Limited Availability	5.60	4.04	2.56
Something Special/Just Another Shirt	4.46	2.62	2.40

TABLE VI

MEAN VALUES OF INEXPENSIVE SHIRT WITH THREE BRAND NAMES AS RATED BY 49 MALES
(RATINGS ARE SCORED +7 TO +1, LEFT TO RIGHT ON THE SCALE)

Scale Rated	Mean Values		
	Inexpensive With Arrow Brand Name	Inexpensive With Penney's Brand Name	Inexpensive With Medalist Brand Name
Well Known Brand Name/Little Known Brand Name	6.68	5.92	2.04
Reliable Brand/Unreliable Brand	6.06	4.56	2.86
Favorite Brand/Brand Which I Would Never Buy	4.84	3.70	2.24
High Quality Product/So-So Quality Product	5.52	4.02	3.16
Looks Expensive/Looks Cheap	5.30	4.16	3.70
Well Made/Poorly Made	5.64	4.08	3.52
High Quality Fabric/Low Quality Fabric	5.24	3.90	3.48
Very White/Not So White	4.36	3.96	3.64
Free From Wrinkles/Wrinkled	5.66	4.66	4.24
Very Attractive/So-So Appearance	5.28	4.12	3.58
Sold Almost Anywhere/Limited Availability	5.68	4.04	2.36
Something Special/Just Another Shirt	4.04	2.92	2.20

The first hypothesis was formulated to investigate the influence of diverse brand names on the perceived value of a specific product. Through the use of two dress shirts, similar in styling but different in quality and price, the researcher was able to determine the influence of three different brand names on the perceived value of these products. To accomplish this, each shirt was photographed with the following brand names: Arrow, Penney's, and Medalist. If proven correct, the first hypothesis would reveal that the perceived value of each shirt varied directly with brand name identification, i.e., the products would be perceived differently with each of the three brand names.

The results of that portion of the study devoted to testing this hypothesis can be found in Tables I and II and in Appendix B-1 and B-2. In both cases the ratings by the entire sample of the two shirts, photographed with each of the three brand names, are presented. It is evident from the data without the use of a statistical test, that the perceived values of both shirts was influenced by brand name identification. As revealed in the profiles of the expensive and inexpensive shirts, the Arrow brand was always rated highest while the Penney's brand ranked in the middle range and the Medalist brand consistently received the lowest rating on the differential. Even though the profiles for each of the three brand names did not overlap, the mean values for scale eight showed a less significant difference than the other scales. It is assumed that a major reason for this occurrence was due to the color quality of the slides.

On the basis of the sample it can be concluded that the first hypothesis was supported by the population. Therefore, the perceived

value of the two men's dress shirts varied directly with brand name identification.

The data obtained from the entire sample used in supporting the first hypothesis was also applicable in testing the second hypothesis. This hypothesis, rather than investigating the ratings for each shirt individually, was concerned with comparing the ratings of the expensive and inexpensive shirts when identified with the same brand name. It supported the supposition that the two shirts would be similarly perceived.

Unlike the profiles for the first hypothesis, the profiles for the shirts of different value, identified with each of the three brand names, overlapped (Appendix B-3). The result was that neither shirt, expensive nor inexpensive, was rated higher than the other on all scales. In order to determine if the two shirts were similarly perceived when identified with the Arrow, Penney's and Medalist brand names, a nonparametric statistical test was utilized.

The Wilcoxon Matched-Pairs Signed-Ranks Test was chosen because it not only considers the direction of the differences within pairs, but also their relative magnitude. Scales four through twelve on the semantic differentials for the white shirts identified with a brand name provided the data to be analyzed. Because the first three scales on these differentials could have been completed without viewing the product, they were not included in the test. The differentials were paired according to brand name; therefore, the statistical test was completed on the paired scores for the Arrow, Penney's, and Medalist brand names (Tables VII through IX). The null hypothesis was that the perceived values of the expensive and inexpensive men's dress shirts, identified

TABLE VII

RESULTS OF WILCOXON MATCHED-PAIRS SIGNED-RANKS TEST TO DETERMINE IF THE EXPENSIVE AND INEXPENSIVE SHIRTS, IDENTIFIED WITH THE ARROW BRAND NAME, WERE SIMILARLY PERCEIVED BY 51 FEMALES AND 49 MALES

Scale Rated	Mean Values of Expensive Shirt With Arrow Brand Name As Rated By Entire Sample	Mean Values of Inexpensive Shirt With Arrow Brand Name As Rated By Entire Sample	d	Rank of d	Rank With Less Frequent Sign
High Quality Product/So-So Quality Product	5.75	5.86	-.11	-3	
Looks Expensive/Looks Cheap	5.31	5.41	-.10	-2	
Well Made/Poorly Made	5.71	5.83	-.12	-4	
High Quality Fabric/Low Quality Fabric	5.57	5.55	.04	1	1
Very White/Not So White	4.38	4.11	.27	7	7
Free From Wrinkles/Wrinkled	5.41	5.76	-.35	-8	
Very Attractive/So-So Appearance	5.32	5.58	-.26	-6	
Sold Almost Anywhere/Limited Availability	5.73	5.88	-.15	-5	
Something Special/Just Another Shirt	4.56	4.12	.44	9	9
					T=17

TABLE VIII

RESULTS OF WILCOXON MATCHED-PAIRS SIGNED-RANKS TEST TO DETERMINE IF THE EXPENSIVE AND INEXPENSIVE SHIRTS, IDENTIFIED WITH THE PENNEY'S BRAND NAME, WERE SIMILARLY PERCEIVED BY 51 FEMALES AND 49 MALES

Scale Rated	Mean Values of Expensive Shirt With Penney's Brand Name As Rated By Entire Sample	Mean Values of Inexpensive Shirt With Penney's Brand Name As Rated By Entire Sample	d	Rank of d	Rank With Less Frequent Sign
High Quality Product/So-So Quality Product	3.77	4.11	-.34	-8	
Looks Expensive/Looks Cheap	4.00	4.25	-.25	-6	
Well Made/Poorly Made	4.15	4.30	-.15	-3	
High Quality Fabric/Low Quality Fabric	3.88	4.08	-.20	-4.5	
Very White/Not So White	3.65	3.85	-.20	-4.5	
Free From Wrinkles/Wrinkled	4.83	4.78	.05	1	1
Very Attractive/So-So Appearance	4.28	4.28	0.00		
Sold Almost Anywhere/Limited Availability	4.22	4.29	-.07	-2	
Something Special/Just Another Shirt	2.77	3.04	-.27	-7	
					<u>T=1</u>

TABLE IX

RESULTS OF WILCOXON MATCHED-PAIRS SIGNED-RANKS TEST TO DETERMINE IF THE EXPENSIVE AND INEXPENSIVE SHIRTS, IDENTIFIED WITH THE MEDALIST BRAND NAME, WERE SIMILARLY PERCEIVED BY 51 FEMALES AND 49 MALES

Scale Rated	Mean Values of Expensive Shirt with Medalist Brand Name As Rated By Entire Sample	Mean Values of Inexpensive Shirt With Medalist Brand Name As Rated By Entire Sample	d	Rank of d	Rank With Less Frequent Sign
High Quality Product/So-So Quality Product	3.10	3.14	-.04	-2	
Looks Expensive/Looks Cheap	3.78	3.80	-.02	-1	
Well Made/Poorly Made	3.59	3.65	-.06	-3	
High Quality Fabric/Low Quality Fabric	3.62	3.55	.07	4	4
Very White/Not So White	3.46	3.33	.13	7	7
Free From Wrinkles/Wrinkled	4.02	4.30	-.28	-9	
Very Attractive/So-So Appearance	3.66	3.77	-.11	-6	
Sold Almost Anywhere/Limited Availability	2.44	2.30	.14	8	8
Something Special/Just Another Shirt	2.40	2.30	.10	5	<u>5</u>
					T=24

with the same brand name, would not differ. For each of the three brand names tested the same procedure was carried out.

First, the difference score, d , for each matched pair (scale four through twelve) was determined. The difference scores were then ranked (the rank of 1 was assigned to the smallest d , the rank of 2 to the next smallest d , etc.). Those ranks arising from positive d 's and those arising from negative d 's were attached with the appropriate sign. The total, T , of the rank with the less frequent sign was then calculated. According to the null hypothesis, the sum of the ranks having a plus sign and the sum of the ranks having a negative sign would be about equal. If this were not true, the null hypothesis would be rejected. The region of rejection, α , consisted of all values of T which were so small that the probability associated with their occurrence under the null hypothesis was equal to or less than the level of significance, .05, for a two-tailed test. Because the direction of the differences was not predicted, a two-tailed region of rejection was employed.

The Wilcoxon test was conducted on the paired scores of the expensive and inexpensive shirts with each of the three brand names. In reporting the results the brand names were analyzed individually. The results of the test for the Arrow brand name revealed that the null hypothesis was accepted (Table VII). That is, the perceived values of the expensive and inexpensive men's dress shirts, identified with the Arrow brand name, did not differ. However, based on the results of the test for the Penney's brand name, the null hypothesis was rejected (Table VIII). The alternative hypothesis, which stated that the perceived values of two shirts, identified with the Penney's brand name,

would differ, was accepted. For the Medalist brand name, the null hypothesis was accepted (Table IX).

The third hypothesis was concerned with determining if the values of men's dress shirts are similarly perceived by males and females. According to this hypothesis, there would be a meaningful difference in the perceived values of the shirts by the males and females. Like the profiles for the second hypothesis, the profiles overlapped for the expensive and inexpensive shirts rated by fifty-one females and forty-nine males (Appendix B-4 and B-5). In order to determine if the shirts were perceived differently with the Arrow, Penney's and Medalist brand names, the Wilcoxon Matched-Pairs Signed-Ranks Test was utilized again. This test was conducted on the ratings of the expensive and inexpensive shirts by the male and female members of the sample (Tables III through VI). The procedure used in testing the pairs for the second hypothesis was also carried out for the pairs of the third hypothesis.

For each test pair, the null hypothesis was: based on brand name, the perceived values of the two shirts by males and females would not differ. The results of this statistical test on the ratings of the expensive shirt with the three brand names, revealed that the null hypothesis was accepted in two cases and rejected in another (Tables X through XII). For the expensive shirt identified with the Arrow and Medalist brand names, the perceived value by males and females did not differ. However, with the Penney's brand name, the perceived value of the expensive shirt differed.

When the Wilcoxon test was applied to the ratings of the inexpensive shirt with each brand, the null hypothesis was accepted only once (Tables XIII through XV). This occurred when the inexpensive shirt

TABLE X

RESULTS OF WILCOXON MATCHED-PAIRS SIGNED-RANKS TEST TO DETERMINE IF THERE WAS
A MEANINGFUL DIFFERENCE IN THE PERCEIVED VALUE OF THE EXPENSIVE SHIRT,
IDENTIFIED WITH THE ARROW BRAND NAME, BY 51 FEMALES AND 49 MALES

Scale Rated	Mean Values of Expensive Shirt With Arrow Brand Name As Rated By 49 Males	Mean Values of Expensive Shirt With Arrow Brand Name As Rated By 51 Females	d	Rank of d	Rank With Less Frequent Sign
High Quality Product/So-So Quality Product	5.64	5.86	-.22	-6	
Looks Expensive/Looks Cheap	5.32	5.30	.02	1.5	1.5
Well Made/Poorly Made	5.72	5.70	.02	1.5	1.5
High Quality Fabric/Low Quality Fabric	5.48	5.66	-.18	-4	
Very White/Not So White	4.56	4.20	.36	9	9
Free From Wrinkles/Wrinkled	5.38	5.44	-.06	-3	
Very Attractive/So-So Appearance	5.18	5.46	-.28	-8	
Sold Almost Anywhere/Limited Availability	5.60	5.86	-.26	-7	
Something Special/Just Another Shirt	4.46	4.66	-.20	-5	
					<u>T=12</u>

TABLE XI

RESULTS OF WILCOXON MATCHED-PAIRS SIGNED-RANKS TEST TO DETERMINE IF THERE WAS A MEANINGFUL DIFFERENCE IN THE PERCEIVED VALUE OF THE EXPENSIVE SHIRT, IDENTIFIED WITH THE PENNEY'S BRAND NAME, BY 51 FEMALES AND 49 MALES

Scale Rated	Mean Values of Expensive Shirt With Penney's Brand Name As Rated By 49 Males	Mean Values of Expensive Shirt With Penney's Brand Name As Rated By 51 Females	d	Rank of d	Rank With Less Fre- quent Sign
High Quality Product/So-So Quality Product	3.64	3.90	-.26	-3	
Looks Expensive/Looks Cheap	3.84	4.16	-.32	-5.5	
Well Made/Poorly Made	3.96	4.43	-.34	-7	
High Quality Fabric/Low Quality Fabric	3.72	4.04	-.32	-5.5	
Very White/Not So White	3.76	3.54	.22	2	2'
Free From Wrinkles/Wrinkled	4.82	4.84	-.02	-1	
Very Attractive/So-So Appearance	4.02	4.54	-.52	-9	
Sold Almost Anywhere/Limited Availability	4.04	4.40	-.36	-8	
Something Special/Just Another Shirt	2.62	2.92	-.30	-4	

T=2

TABLE XII

RESULTS OF WILCOXON MATCHED-PAIRS SIGNED-RANKS TEST TO DETERMINE IF THERE WAS A MEANINGFUL DIFFERENCE IN THE PERCEIVED VALUE OF THE EXPENSIVE SHIRT IDENTIFIED WITH THE MEDALIST BRAND NAME, BY 51 FEMALES AND 49 MALES

Scale Rated	Mean Values of Expensive Shirt With Medalist Brand Name As Rated By 49 Males	Mean Values of Expensive Shirt With Medalist Brand Name As Rated By 51 Females	d	Rank of d	Rank With Less Fre- quent Sign
High Quality Product/So-So Quality Product	3.16	3.04	.12	2	
Looks Expensive/Looks Cheap	3.84	3.72	.12	2	
Well Made/Poorly Made	3.52	3.66	-.14	-4	4
High Quality Fabric/Low Quality Fabric	3.72	3.52	.20	5	
Very White/Not So White	3.62	3.30	.32	7	
Free From Wrinkles/Wrinkled	3.84	4.20	-.36	-8	8
Very Attractive/So-So Appearance	3.60	3.72	-.12	-2	2
Sold Almost Anywhere/Limited Availability	2.56	2.32	.24	6	
Something Special/Just Another Shirt	2.40	2.40	0.00		
					T=14

TABLE XIII

RESULTS OF WILCOXON MATCHED-PAIRS SIGNED-RANKS TEST TO DETERMINE IF THERE WAS A MEANINGFUL DIFFERENCE IN THE PERCEIVED VALUE OF THE INEXPENSIVE SHIRT, IDENTIFIED WITH THE ARROW BRAND NAME, BY 51 FEMALES AND 49 MALES

Scale Rated	Mean Values of Inexpensive Shirt With Arrow Brand Name As Rated By 49 Males	Mean Values of Inexpensive Shirt With Arrow Brand Name As Rated By 51 Females	d	Rank of d	Rank With Less Frequent Sign
High Quality Product/So-So Quality Product	5.52	6.20	-.68	-9	
Looks Expensive/Looks Cheap	5.30	5.52	-.22	-3	
Well Made/Poorly Made	5.64	6.02	-.38	-4	
High Quality Fabric/Low Quality Fabric	5.24	5.82	-.58	-7	
Very White/Not So White	4.36	3.86	.50	6	6
Free From Wrinkles/Wrinkled	5.66	5.86	-.20	-2	
Very Attractive/So-So Appearance	5.28	5.88	-.60	-8	
Sold Almost Anywhere/Limited Availability	5.68	6.08	-.40	-5	
Something Special/Just Another Shirt	4.04	4.20	-.16	-1	
					<u>T=6</u>

TABLE XIV

RESULTS OF WILCOXON MATCHED-PAIRS SIGNED-RANKS TEST TO DETERMINE IF THERE WAS A MEANINGFUL DIFFERENCE IN THE PERCEIVED VALUE OF THE INEXPENSIVE SHIRT, IDENTIFIED WITH THE PENNEY'S BRAND NAME, BY 51 FEMALES AND 49 MALES

Scale Rated	Mean Values of Inexpensive Shirt With Penney's Brand Name As Rated By 49 Males	Mean Values of Inexpensive Shirt With Penney's Brand Name As Rated By 51 Females	d	Rank of d	Rank With Less Frequent Sign
High Quality Product/So-So Quality Product	4.02	4.20	-.18	-1.5	
Looks Expensive/Looks Cheap	4.16	4.34	-.18	-1.5	
Well Made/Poorly Made	4.08	4.52	-.44	-8	
High Quality Fabric/Low Quality Fabric	3.90	4.26	-.36	-7	
Very White/Not So White	3.96	3.74	.22	3	3
Free From Wrinkles/Wrinkled	4.66	4.90	-.24	-4.5	
Very Attractive/So-So Appearance	4.12	4.44	-.32	-6	
Sold Almost Anywhere/Limited Availability	4.04	4.54	-.50	-9	
Something Special/Just Another Shirt	2.92	3.16	-.24	-4.5	
					<u>T=3</u>

TABLE XV

RESULTS OF WILCOXON MATCHED-PAIRS SIGNED-RANKS TEST TO DETERMINE IF THERE WAS A MEANINGFUL DIFFERENCE IN THE PERCEIVED VALUE OF THE INEXPENSIVE SHIRT, IDENTIFIED WITH THE MEDALIST BRAND NAME, BY 51 FEMALES AND 49 MALES

Scale Rated	Mean Values of Inexpensive Shirt With Medalist Brand Name As Rated By 49 Males	Mean Values of Inexpensive Shirt With Medalist Brand Name As Rated By 51 Females	d	Rank of d	Rank With Less Frequent Sign
High Quality Product/So-So Quality Product	3.16	3.12	.04	1	1
Looks Expensive/Looks Cheap	3.70	3.90	-.20	-5.5	
Well Made/Poorly Made	3.52	3.78	-.26	-7	
High Quality Fabric/Low Quality Fabric	3.48	3.62	-.14	-4	
Very White/Not So White	3.64	3.02	.62	9	9
Free From Wrinkles/Wrinkled	4.24	4.36	-.12	-2.5	
Very Attractive/So-So Appearance	3.58	3.96	-.38	-8	
Sold Almost Anywhere/Limited Availability	2.36	2.24	.12	2.5	2.5
Something Special/Just Another Shirt	2.20	2.40	-.20	-5.5	
					<u>T=12.5</u>

was identified with the Medalist brand name. The alternative hypothesis was accepted when the shirt was identified with the Arrow and Penney's brand names. In other words, the perceived value of the inexpensive shirt, identified with the Arrow and Penney's brand names, as rated by males and females, differed.

The total results of the statistical test for the third hypothesis indicated that when both the expensive and inexpensive shirts were identified with the Medalist brand name, the ratings by the males and females did not differ. When the expensive and inexpensive shirts were identified with the Penney's brand name, the ratings differed. With the Arrow brand name, there was a meaningful difference in the perceived value of the inexpensive shirt by the males and females, but there was no difference in the perceived value with the expensive shirt.

The results of the ratings by the entire sample of the expensive shirt with no brand identification can be found in Table I and Appendix B-6. From the profile, it is evident that the shirt tended to be rated in the center of the differential.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Various variables can influence a consumer's perception of product value. In order to fully comprehend consumer behavior each of these variables must be studied and understood. The objective of this report was to investigate the influence of brand name on the perception of product value. The hypotheses tested were as follows:

- (1) The perceived value of a product will vary directly with brand name identification.
- (2) Products identified with the same brand name, but differing in value, will be similarly perceived.
- (3) Based on brand name, there will be a meaningful difference in the perceived value of a product by males and females.

To achieve the stated objective, fifty-one female and forty-nine male students attending Oklahoma State University rated slides of similar products for which the only variable was brand name. The products were two men's white dress shirts, similar in styling and other visual characteristics, but different in quality and price. One shirt retailed at a price of \$7.50 and the other retailed at a price of \$3.50. Each shirt was photographed with the following brand names: Arrow, Penney's, and Medalist. A seventh photograph of one shirt, appearing without brand identification, was used for the control.

The semantic differential was chosen to measure the influence of brand name on the perception of product value. The differential consisted of twelve pairs of bipolar words and phrases, each of which was a seven-point rating scale. Selection of the scales, or bipolar pairs, was based on features related to the product chosen for the study. The respondents completed a semantic differential after viewing each of the seven slides.

In analyzing the data, a mean for each of the twelve scales on the seven differentials was computed. The means were established for three different groups: the entire sample; the female members of the sample; and the male members of the sample. Through the use of profiles the data for each of the three hypotheses were graphically represented.

The profiles for both the expensive and inexpensive shirts, identified with the three brand names and rated by the entire sample, indicated that the perceived values of the products varied directly with each brand name. None of the profiles overlapped, thus supporting the first hypothesis.

The profiles for the second hypothesis, concerned with comparing the ratings of the expensive and inexpensive shirts identified with the three brand names, overlapped. The Wilcoxon Matched-Pairs Signed-Ranks Test was used to determine if the two shirts of different value were similarly perceived when identified with the same brand name. The results of this nonparametric test revealed that the shirts of different value, identified with the Arrow and Medalist brand names, were similarly perceived by the entire sample. However, when the shirts were identified with the Penney's brand name, the value ratings differed.

According to the third hypothesis there would be a meaningful difference in the perceived value of a product by males and females, based on brand name. To determine if the ratings by the males and females supported this hypothesis, the Wilcoxon test was utilized again. When both the expensive and inexpensive shirts were identified with the Penney's brand name, the value ratings by the males and females differed, but with the Medalist brand name the ratings of the two shirts did not differ. The ratings by the males and females did not differ when the expensive shirt was identified with the Arrow brand name, although the ratings differed when the inexpensive shirt was thus identified.

Results of this investigation indicated that the first hypothesis, stating that the perceived value of a product will vary directly with brand name identification, was totally supported. In two out of three instances the second hypothesis was accepted. When identified with the Arrow and Medalist brand names, the shirts of different value were similarly perceived. The third hypothesis was supported when both shirts were identified with the Penney's brand and also when the inexpensive shirt was shown with the Arrow brand name.

The researcher would recommend several changes for consideration in future projects concerned with the perception of product value:

- (1) Use a variety of clothing items to measure the influence of brand name on the perception of product value. BL
- (2) Use actual products, in realistic display situations, for ratings rather than slides.
- (3) Use a more representative sample of the whole population.
- (4) Investigate the influence of variables, other than the brand name, on the perception of product value.

SELECTED BIBLIOGRAPHY

Ames, Adelbert Jr. "Visual Perception and the Rotating Trapezoidal Window." Psychological Monographs, Vol. 65 (1951), 1-31.

✓ Berelson, Bernard and Gary A. Steiner. Human Behavior. New York: Harcourt, Brace & World, Inc., 1964.

Brown, Thomas Lee. "Display Influence on the Perception of Product Value." (unpub. Master's report, Oklahoma State University, 1966).

Bruner, Jerome S. "On Perceptual Readiness." Psychological Review, Vol. 64 (1957), 123-152.

Cheskin, Louis. Why People Buy. New York: Liveright Pub. Corp., 1959.

Combs, Arthur W. and Donald Snygg. Individual Behavior. New York: Harper & Row, Publishers, 1959.

✓ Dember, William N. The Psychology of Perception. New York: Holt, Rinehart and Winston, 1961.

Engel, James F., David T. Kollat, and Roger D. Blackwell. Consumer Behavior. New York: Holt, Rinehart and Winston, 1968.

Entenberg, Robert D. Effective Retail and Market Distribution. Cleveland: World Pub. Co., 1966.

Gordon, Jesse E. Personality and Behavior. New York: The Macmillan Company, 1963.

Hepner, Harry. Advertising - Creative Communication With Consumers. New York: McGraw-Hill Book Company, Inc., 1964.

Kerlinger, Fred N. Foundations of Behavioral Research. New York: Holt, Rinehart and Winston, 1964.

Leavitt, Harold J. "A Note on Some Experimental Findings About the Meanings of Price." The Journal of Business, XXVII (1954), 205-210.

Lucas, D. B. and S. H. Britt. Marketing and Advertising. New York: McGraw-Hill Book Company, Inc., 1963.

Martineau, Pierre. Motivation in Advertising. New York: McGraw-Hill Book Company, Inc., 1957.

- Massey, Morris E. "Consumer Reactions to Price-Quality Relations: A Pilot Study." (unpub. Master's thesis, The University of Texas, 1962).
- McConnell, J. Douglas. "The Price-Quality Relationship in an Experimental Setting." Journal of Marketing Research, V (August, 1968), 300-303.
- McGinnies, Elliott. "Emotionality and Perceptual Defense." Psychological Review, Vol. 56 (1949), 244-251.
- Mindak, William A. "Fitting the Semantic Differential to the Marketing Problem." Journal of Marketing, XXV (April, 1961), 28-33.
- Morgan, Clifford T. and Richard A. King. Introduction to Psychology. New York: McGraw-Hill Book Company, Inc., 1966.
- Nelson, Bardin H. "Seven Principles in Image Formation." Journal of Marketing, XXVI (January, 1962), 67-71.
- Osgood, Charles E., George J. Suci, and Percy H. Tannenbaum. The Measurement of Meaning. Urbana, Ill.: University of Illinois Press, 1957.
- "Retail Sales Ring Up Riddle for Economists." Business Week (March 1, 1969), 28-30.
- Sandage, C. H. and Vernon Fryburger. Advertising Theory and Practice. Homewood, Ill.: Richard D. Irwin, Inc., 1958.
- Siegel, Sidney. Nonparametric Statistics For the Behavioral Sciences. New York: McGraw-Hill Book Company, Inc., 1956.
- Tillman, Rollie and C. A. Kirkpatrick. Promotion; Persuasive Communication in Marketing. Homewood, Ill.: Richard D. Irwin, Inc., 1968.
- Twedt, Dik Warren. "The Consumer Psychologist." Understanding Consumer Behavior. Ed. Martin M. Grossack. Boston: The Christopher Pub. House, 1964.
- Tyler, William D. "The Image, The Brand, and The Consumer." Journal of Marketing, XXII (October, 1957), 162-165.
- Wright, John S. and Daniel S. Warner. Advertising. New York: McGraw-Hill Book Company, Inc., 1966.

APPENDIX A

APPENDIX A-1

COVER SHEET OF MATERIALS GIVEN TO MEMBERS
OF THE SAMPLE

You have been selected to participate in an experiment which will be the basis for my master's thesis. The quality of this research depends entirely on the accuracy of the collected data; therefore, it depends on YOU!

Please fill out the short questionnaire on the following page. You need not put your name on any of these pages.

You will be shown slides of seven similar products. After viewing each slide you will rate each product on one of the seven separate sheets provided. There is a separate sheet for each product. There are twelve different scales on each sheet; please rate every product on each of the twelve scales.

Each scale has seven blanks or choices. You are to check the blank which you believe most correctly describes the product. Remember - you will have twelve check marks for each product. Since the ratings are based on your opinion, there is no right or wrong answer.

Work as quickly as possible without sacrificing accuracy.

Thank you.

APPENDIX A-2

VERBAL INSTRUCTIONS GIVEN TO MEMBERS
OF THE SAMPLE

You will be rating seven similar products. Remember - there is a separate sheet for each product. The first three scales on each sheet refer to general information about the product. Also, each scale has seven choices, it is up to you to check the blank that most closely describes the product to you. For example, if you felt the product was colorful, you would check the blank near the colorful end of the scale if the scale went from colorful to dull. You will have twelve check marks for each product.

I will show you the first slide for ten seconds, then you will rate the product on the first sheet. We will then go on to the next slide and so on until all seven slides are shown. Since the ratings are based on your opinion, there is no right or wrong answer.

Because viewing time is only ten seconds, your close attention is required. Please work quickly without sacrificing accuracy.

APPENDIX A-3

QUESTIONNAIRE COMPLETED BY MEMBERS OF THE SAMPLE*

Male _____ Female _____

Age _____

Student Classification:

Freshman _____

Sophomore _____

Junior _____

Senior _____

Graduate _____

Father's Occupation: _____

Income Bracket of Your Parents:

Under \$3,000 _____

\$3,000 - \$4,999 _____

\$5,000 - \$6,999 _____

\$7,000 - \$9,999 _____

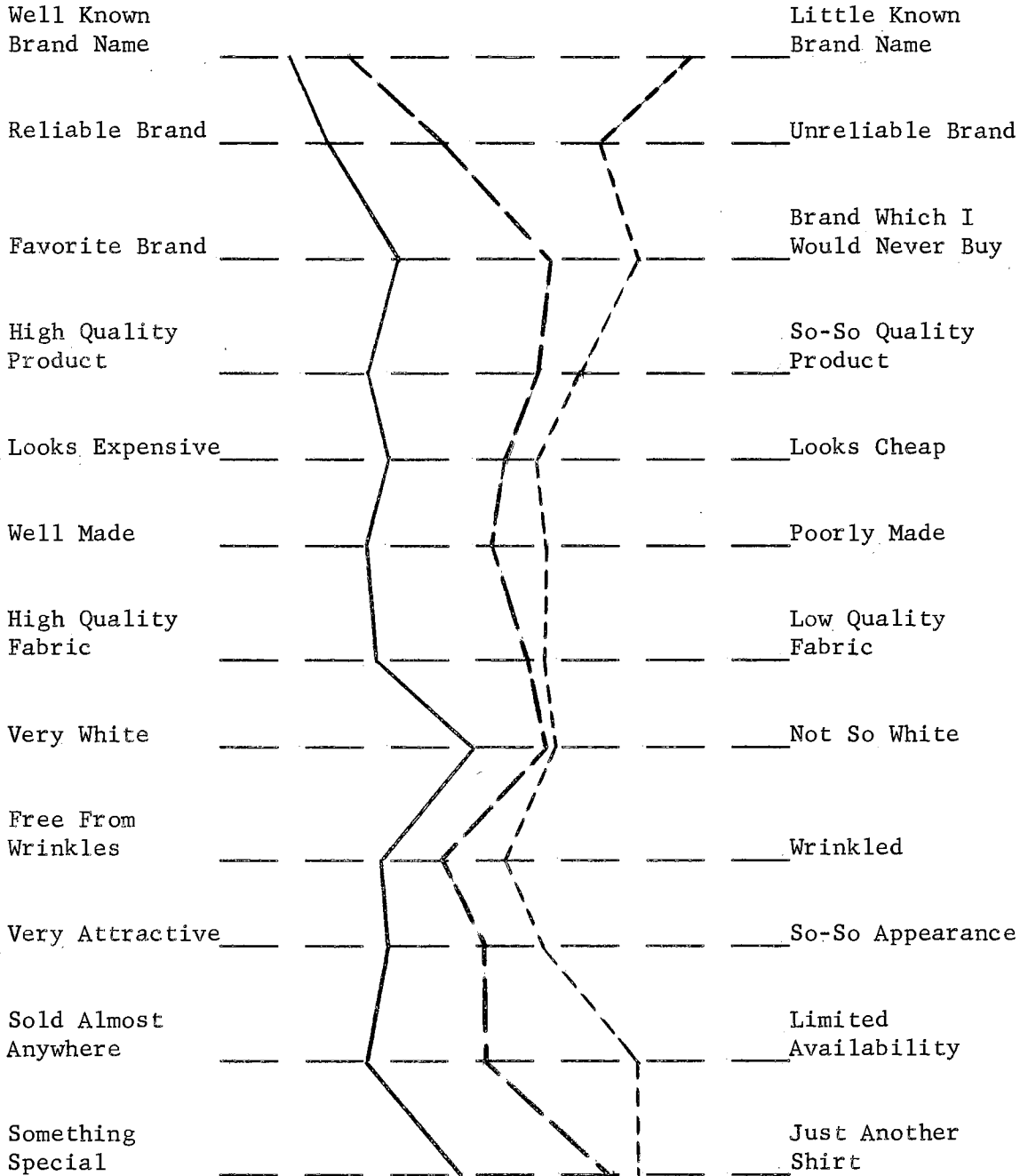
\$10,000 and over _____

*After collecting the information it was decided that only the question regarding the gender of the respondent would be used for this study.

APPENDIX B

APPENDIX B-1

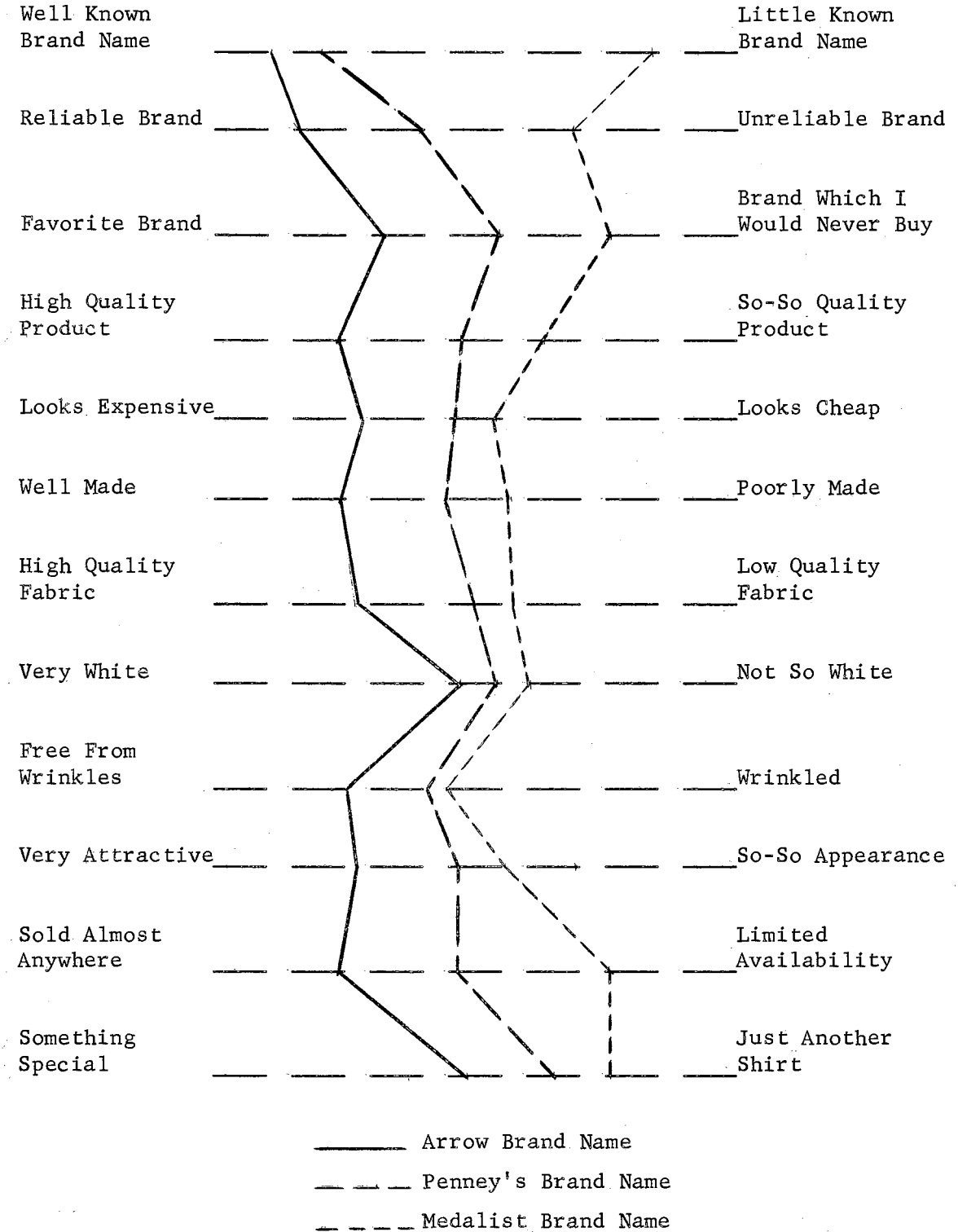
PROFILE RATINGS OF EXPENSIVE SHIRT WITH THREE BRAND
 NAMES BY ENTIRE SAMPLE OF 51 FEMALES AND 49 MALES



———— Arrow Brand Name
 - - - - Penney's Brand Name
 - . - . Medalist Brand Name

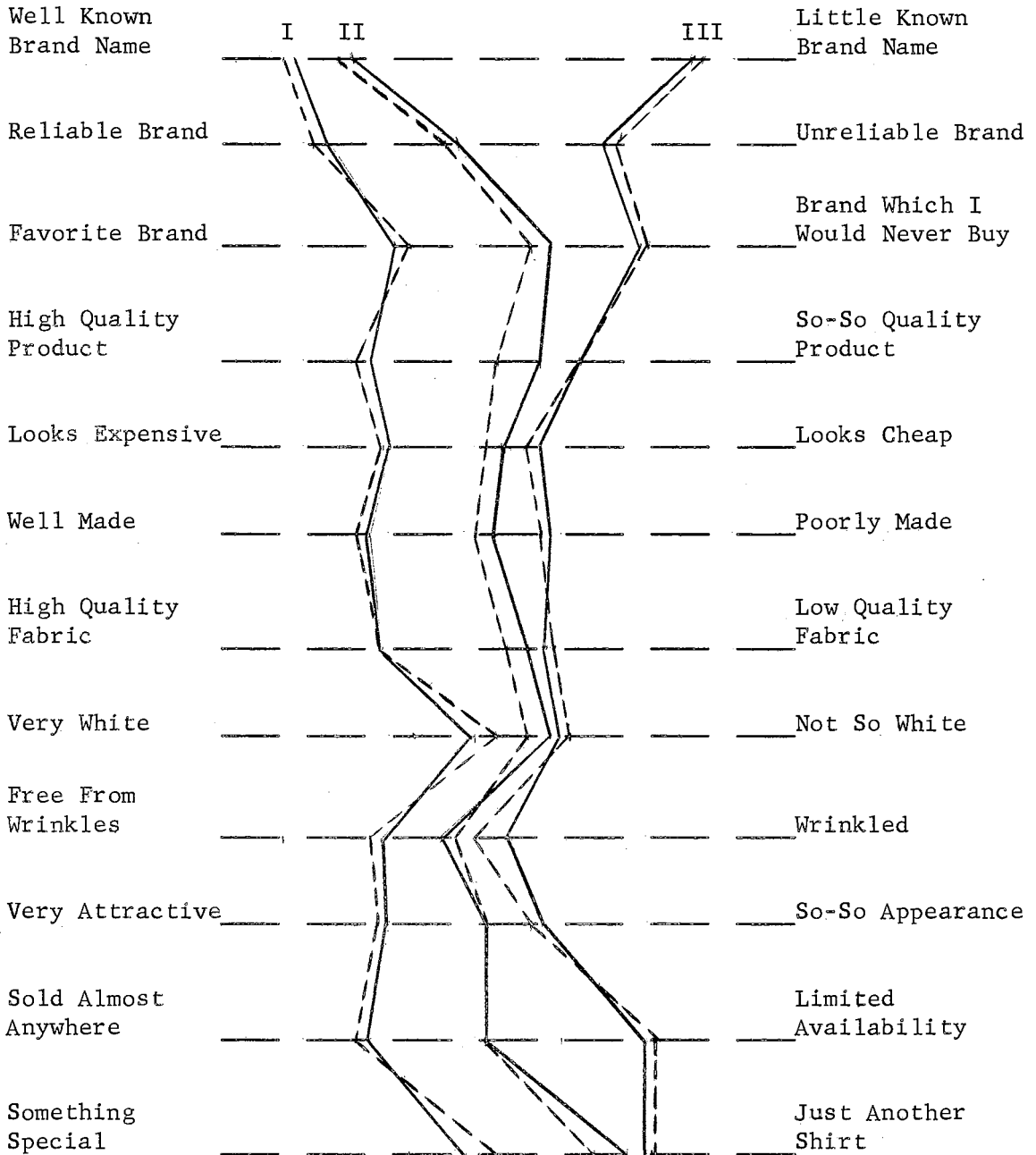
APPENDIX B-2

PROFILE RATINGS OF INEXPENSIVE SHIRT WITH THREE BRAND
 NAMES BY ENTIRE SAMPLE OF 51 FEMALES AND 49 MALES



APPENDIX B-3

PROFILE RATINGS OF EXPENSIVE AND INEXPENSIVE SHIRTS
WITH THREE BRAND NAMES BY ENTIRE SAMPLE
OF 51 FEMALES AND 49 MALES



Expensive Shirt

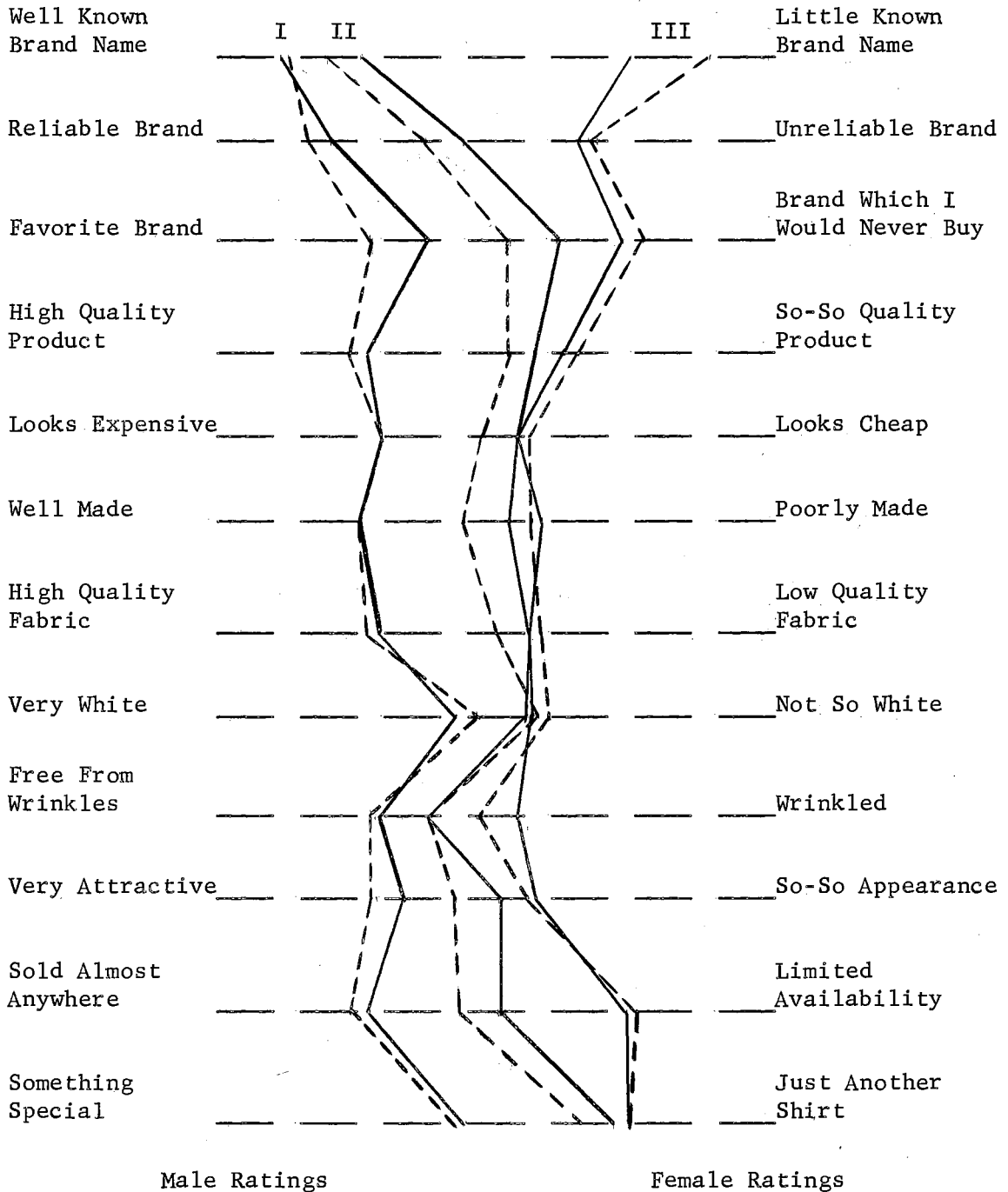
Inexpensive Shirt

I _____ Arrow Brand Name
 II _____ Penney's Brand Name
 III _____ Medalist Brand Name

I _____ Arrow Brand Name
 II _____ Penney's Brand Name
 III _____ Medalist Brand Name

APPENDIX B-4

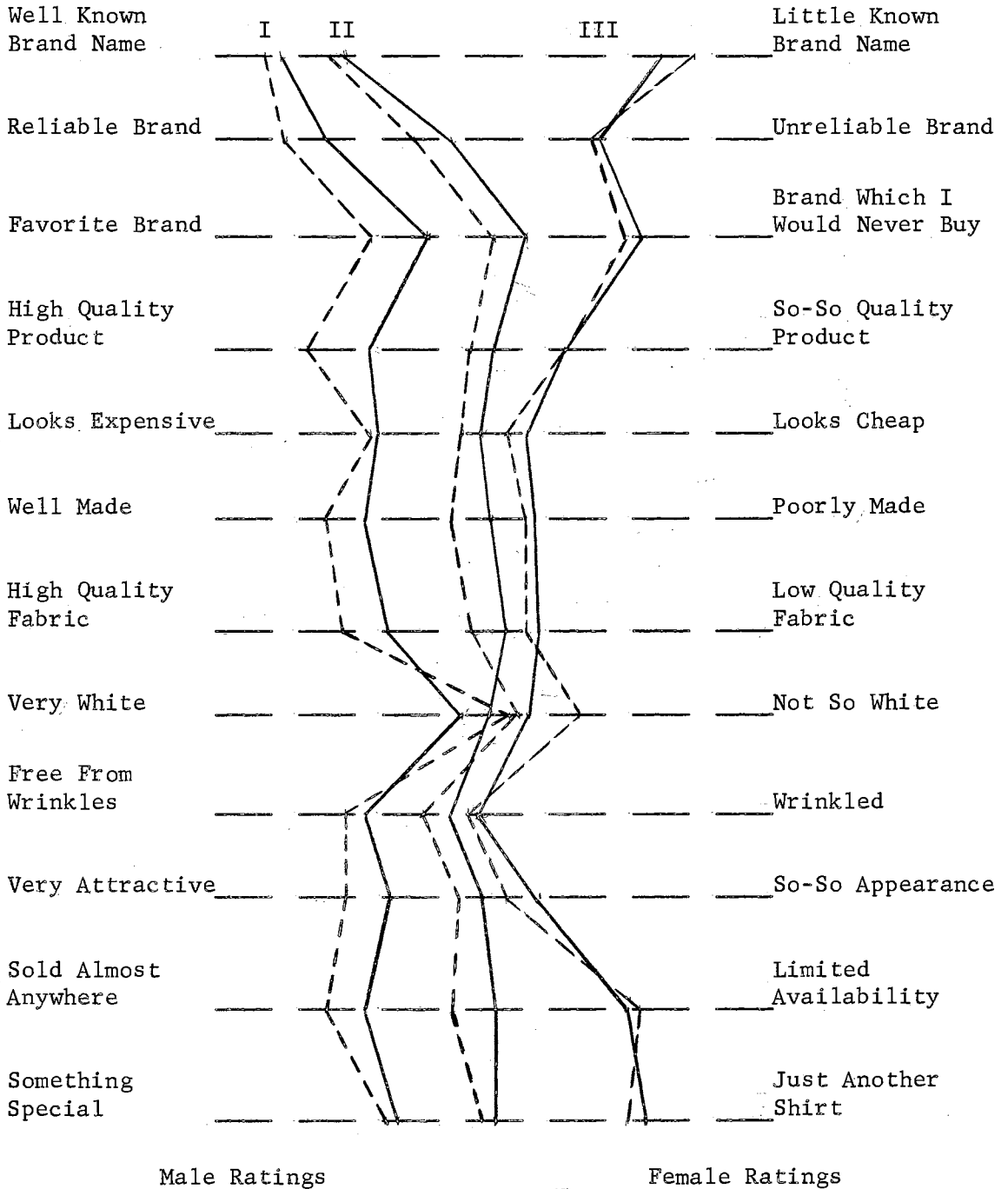
PROFILE RATINGS OF EXPENSIVE SHIRT WITH THREE BRAND NAMES BY 51 FEMALES AND 49 MALES



Male Ratings	Female Ratings
I ——— Arrow Brand Name	I - - - - Arrow Brand Name
II ——— Penney's Brand Name	II - - - - Penney's Brand Name
III ——— Medalist Brand Name	III - - - - Medalist Brand Name

APPENDIX B-5

PROFILE RATINGS OF INEXPENSIVE SHIRT WITH THREE BRAND NAMES BY 51 FEMALES AND 49 MALES

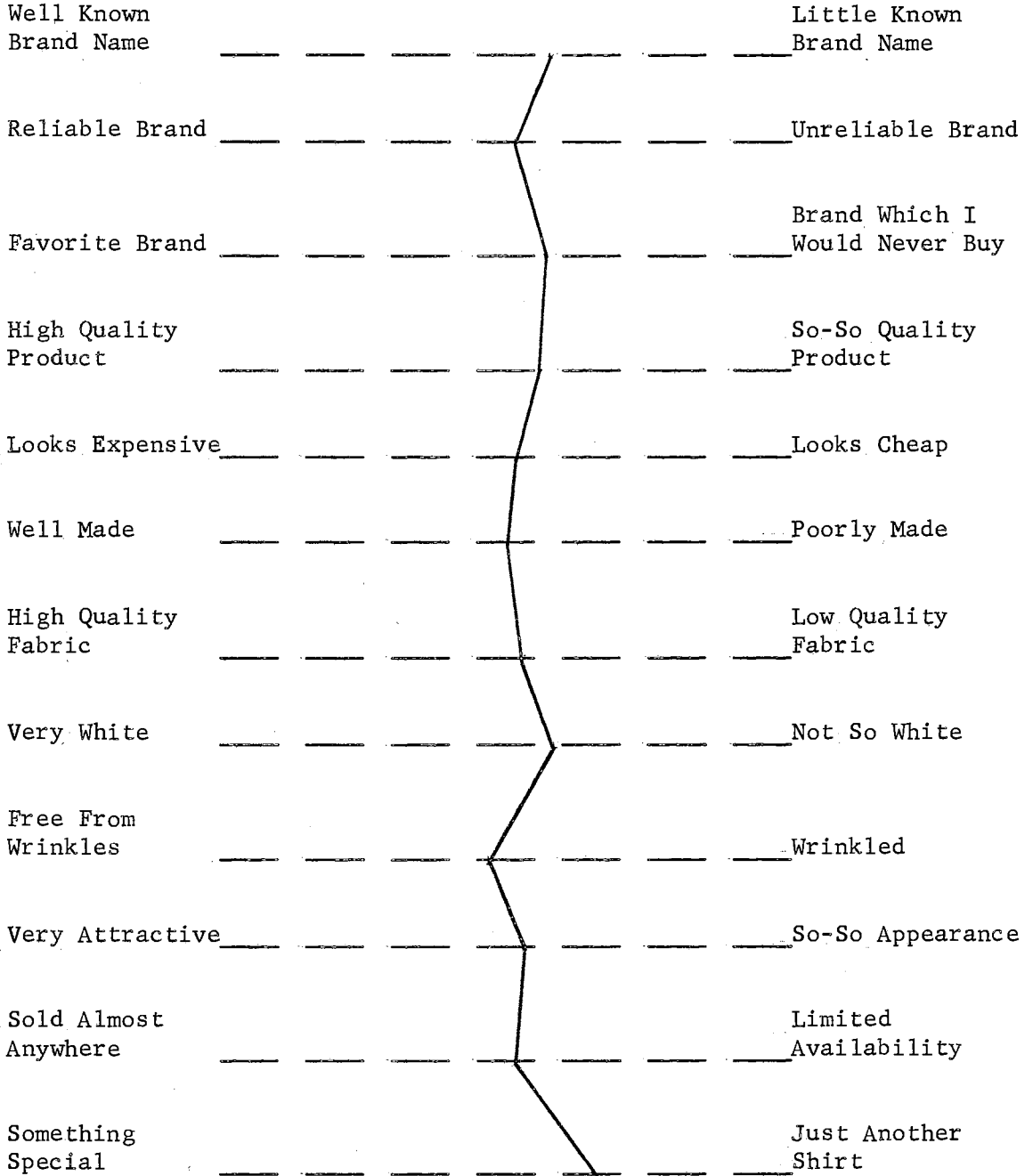


Male Ratings
 I ——— Arrow Brand Name
 II ——— Penney's Brand Name
 III ——— Medalist Brand Name

Female Ratings
 I - - - - Arrow Brand Name
 II - - - - Penney's Brand Name
 III - - - - Medalist Brand Name

APPENDIX B-6

PROFILE RATINGS OF EXPENSIVE SHIRT WITH NO
 BRAND NAME (CONTROL) BY ENTIRE SAMPLE
 OF 51 FEMALES AND 49 MALES



VITA ^v

Jerry James Eccher

Candidate for the Degree of
Master of Science

Thesis: THE INFLUENCE OF BRAND NAME ON THE PERCEPTION OF PRODUCT VALUE

Major Field: Clothing, Textiles, and Merchandising

Biographical:

Personal Data: Born in Litchfield, Illinois, December 8, 1946,
the son of Mr. and Mrs. John Eccher.

Education: Attended high school in Staunton, Illinois; received
the degree of Bachelor of Science in Interior Design from
Southern Illinois University in June, 1968; completed the
requirements for the Master of Science Degree in May, 1970.

Professional Experience: Field experience in the display depart-
ment at Famous-Barr Company, St. Louis, Missouri, summers
1967 and 1968. Graduate Teaching Assistant in Clothing,
Textiles, and Merchandising, Oklahoma State University,
Fall 1968.