

A STUDY OF MARKET SEGMENTATION
OF URBAN IN-HOME SHOPPERS BY
SOCIOECONOMIC AND
SOCIOPSYCHOLOGICAL CHARACTERISTICS

Thesis for the Degree of Ph. D.
MICHIGAN STATE UNIVERSITY
ISABELLA CLARA MANTOVANI CUNNINGHAM
1972

THESIS



L



This is to certify that the

thesis entitled

A STUDY OF MARKET SEGMENTATION OF URBAN
IN-HOME SHOPPERS BY SOCIOECONOMIC AND
SOCIOPSYCHOLOGICAL CHARACTERISTICS

presented by

Isabella Clara Mantovani Cunningham

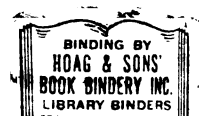
has been accepted towards fulfillment
of the requirements for

Ph.D. degree in Marketing and
Transportation
Administration

Donald J. Boueisy
Major professor

Date 4-9-72

O-7639



~~249~~

~~296~~

~~93~~

~~243~~

~~309~~

~~912~~

108 A209

Special Permission
NO renewal
SEP 3 0 1994

ABSTRACT

A STUDY OF MARKET SEGMENTATION OF URBAN IN-HOME SHOPPERS BY SOCIOECONOMIC AND SOCIOPSYCHOLOGICAL CHARACTERISTICS

By

Isabella Clara Mantovani Cunningham

Retailers in the United States have demonstrated their creativity by the introduction of innovative marketing techniques. Market segmentation is among the more popular marketing tools utilized by businessmen. The present study examines the delineation of market segments through measurement of socioeconomic and sociopsychological variables. The research is limited to an investigation of individuals who shop at home utilizing mail and/or telephone.

A disproportionate stratified sample of one thousand residents of Lansing and East Lansing, Michigan, was used in the study. Each individual in the sample was mailed a questionnaire. Five hundred and nineteen responses were received and analyzed. Linear discriminant and canonical analysis were used to test the results of the study.

Two sets of dependent variables were used in the research. The first set was used to test differences between people who shop at home and those who do not. The *dependent* variables used for this purpose were:

- active in-home shoppers
- inactive in-home shoppers
- very active in-home shoppers
- very inactive in-home shoppers.

The classification was based on the frequency of purchase by the respondents. The second set of *dependent* variables was used to verify the existence of market segments within the in-home shopping market. The variables were:

- large catalogue and department stores
- club-of-the-month type of organizations
- novelty retailers
- specialty in-home retailers
- credit card organizations
- newspaper and magazine advertisements.

The *independent* variables used in the research were the following:

1. Social Class
 - A. Total family income
 - B. Occupation of the head of the household
 - C. Level of education of the head of the household
2. Family Life-Cycle
 - A. Marital status of the homemaker
 - B. Employment status of the homemaker
 - C. Age of the head of the household
 - D. Age and number of children living at home
3. Adventurousomeness
4. Cosmopolitanism
5. Trust in People
6. Tendency to Impulse Buying
7. Attitude Toward Credit
8. Conservatism.

The thesis major findings are indicated below:

1. From the socioeconomic variables, and using discriminant analysis it was found that individuals who shop at home by mail and/or by telephone appeared to come from a higher social class than those individuals in the sample classified as not in-home shoppers. The variable family

life-cycle was not useful in differentiating in-home shoppers from not in-home shoppers.

2. Linear discriminant analysis also showed that with respect to the sociopsychological characteristics, the respondents classified as in-home shoppers appeared to be more cosmopolitan, less conservative, and had a more favorable attitude toward credit than did the not in-home shoppers.

3. The canonical analysis distinguished three market segments within the in-home shopping market. The first segment shops from large catalogue outlets, club-of-the-month outlets, and specialty outlets. These respondents come from a relatively high income, educational, occupational, and social class level, and they display adventuresome attitudes. The second segment shops at novelty outlets and does not shop at specialty outlets. These individuals tend not to trust people, have local orientation, and are in the early stages of the family life-cycle. The third segment shops by mail and/or by telephone from specialty and credit card outlets. These respondents have the same characteristics as the respondents in the first segment, except they are less adventuresome.

It is significant to note that some of the variables that were of little use in the study for differentiating in-home shoppers from those respondents who did not shop at home, were useful in distinguishing submarket

segments, thus, a combination of variables is required to measure the degree of in-home shopping and potential market segments.

The results of the present study cannot be generalized beyond the sample and its related geographical location. However, it is concluded that, at least for the sample analyzed, market segmentation can be achieved by using a combination of socioeconomic and sociopsychological variables. Perhaps future research will provide the practitioner and the marketing scholar with supporting data to generalization of the results. When this occurs, retailers in the in-home shopping market will consider both socioeconomic and sociopsychological variables in making decisions about their marketing strategies.

A STUDY OF MARKET SEGMENTATION OF URBAN
IN-HOME SHOPPERS BY SOCIOECONOMIC AND
SOCIOPSYCHOLOGICAL CHARACTERISTICS

By

Isabella Clara Mantovani Cunningham

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Marketing and Transportation
Administration

1972

Copyright by
ISABELLA C. M. CUNNINGHAM

1972

ACKNOWLEDGMENTS

The completion of a doctoral dissertation represents the combination of years of collective and individual efforts. The author's work alone is by no means the only factor responsible for this accomplishment. This offers, therefore, an opportunity to acknowledge the author's recognition to the many individuals who were instrumental in the successful completion of the doctoral degree.

Dr. Donal J. Bowersox, Professor of Marketing and Transportation Administration, Michigan State University, as chairman of the research committee and academic advisor contributed substantially with his close guidance and advice throughout the author's doctoral work. Dr. Bowersox's example, time and effort will always be remembered and sincerely appreciated.

Dr. Donald A. Taylor, Professor and Chairman of the Department of Marketing and Transportation Administration, Michigan State University, has always given generous assistance to the author. As a member of the research committee Dr. Taylor was very helpful in the development of the study. His assistance and advices have provided incentives to successfully accomplish the doctoral program.

Dr. Stanley C. Hollander, Professor of Marketing and Transportation Administration, Michigan State University, as a member of the research committee, and as professor of the author in various doctoral courses has given continuous and valuable assistance to the study. Dr. Hollander's example of professional and scholar development will always be a stimulus for the author's future career.

Dr. James F. Rainey, Assistant Dean, College of Business and Associate Professor of Business Law, with his friendship and encouragement has significantly influenced and helped the author's work throughout the doctoral program. Dr. Rainey's help is greatly appreciated.

Dr. William H. Cunningham, Assistant Professor of Marketing, University of Texas at Austin, my husband, has been a constant source of encouragement during all the doctoral program. His help and understanding has been of great value for the completion of the research. Without him, the program would not have been completed.

To all the colleagues and friends, too numerous to individually recognize, who have generously offered their time, effort, and friendship to the author, which helped her in correcting her errors, and successfully accomplishing the tasks of this long and laborious journey to the doctoral degree, the author wishes to offer her sentiments of thanks and appreciation.

TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS	iii
LIST OF TABLES	viii
 Chapter	
I. PROBLEM DELINEATION	1
A Brief Historical Perspective of In-Home Shopping	1
Nature of the Problem	6
Purpose of the Study	8
Statement of the Problem	11
Hypotheses and Subhypotheses	13
Methodology	18
Limitations of the Study	20
Contributions of the Study to Marketing Theory	22
Contributions of the Study to Marketing Practice	23
Organization	24
II. LITERATURE REVIEW	25
Mail Order and In-Home Shopping	25
The Origin and Development of Mail Order Sales	25
A Literature of "How to Make a Fortune"	35
General In-Home Shopping Literature	38
Social Class and Consumption Behavior	44
The Reputational Method	47
The Sociometric Method	50
The Occupational Method	51
The Multiple Index Method	52
The Application of Social Classes to Marketing	54
Family Life-Cycle and Consumption Behavior	58

Chapter	Page
Techniques of Classification of Family Life-Cycle	61
Consumption and Family Life-Cycle . . .	64
✓ Personality Variables	65
Segmentation of the In-Home Shopping Market by Socioeconomic and Socio- psychological Variables	68
III.. RESEARCH DESIGN	70
Research Design Framework	70
Identification of Variables	70
Independent Variables	71
Dependent Variables	74
Sample Selection	77
Data Analysis	80
Linear Discriminant Analysis	80
Canonical Analysis	84
Summary	87
IV. PRESENTATION OF FINDINGS	88
Active vs. Inactive In-Home Shoppers . . .	88
Socioeconomic and Demographic Variables	88
Sociopsychological Variables	101
Linear Discriminant Analysis	104
Very Active vs. Very Inactive In-Home Shoppers	111
Socioeconomic and Demographic Variables	111
Sociopsychological Variables	123
Discriminant Analysis	123
Canonical Analysis	128
Conclusion	133
V. EVALUATION OF THE RESEARCH HYPOTHESES	134
Evaluation of the Selection of the Independent Variables	134
Evaluation of the Research Hypotheses . . .	137
Evaluation of the Second Set of Hypotheses	148
First Group	148
Second Group	154
Third Group	159

Chapter	Page
Analysis of the Research Findings in View of the Research Objectives	164
Summary	165
VI. SUMMARY AND CONCLUSIONS	166
Summary of the Research	166
Conclusions from the Findings	169
Implications of the Research for Marketing Theory	171
Implications of the Research for Marketing Management	175
Suggested Areas for Further Research	178
BIBLIOGRAPHY	180
Appendix	
A. Letter of Introduction	188
B. Follow-Up Card	189
C. Questionnaire	190

LIST OF TABLES

Table		Page
1.	Growth of Manufacturing in the United States from 1860 to 1900	28
2.	United States Population and Income-- 1879-1910	30
3.	Yearly Sales of Leading Mail Order Concerns, 1912-1928	34
4.	Socioeconomic Characteristics of Active and Inactive In-Home Shoppers	89
5.	Demographic Characteristics of Active and Inactive In-Home Shoppers	90
6.	Occupation of the Head of the Household of Active and Inactive In-Home Shoppers	92
7.	Income Levels of Active and Inactive In-Home Shoppers	93
8.	Education of the Head of the Household of Active and Inactive In-Home Shoppers	94
9.	Social Class of Active and Inactive In-Home Shoppers	96
10.	Employment of the Homemaker of Active and Inactive In-Home Shoppers	97
11.	Marital Status of Active and Inactive In-Home Shoppers	98
12.	Number of Years Married of Active and Inactive In-Home Shoppers	99
13.	Age of the Head of the Household of Active and Inactive In-Home Shoppers	100
14.	Family Life-Cycle of Active and Inactive In-Home Shoppers	102

Table		Page
15.	Sociopsychological Variables of Active and Inactive In-Home Shoppers	103
16.	Correlation Coefficients with the Discriminant Score and F-Test for the Difference in Group Means for Active and Inactive In-Home Shoppers	105
17.	Discriminant Classification Matrix for Active and Inactive In-Home Shoppers	107
18.	Wilks' Lambda Test and Chi Square Test for Statistically Significant Differences Achieved by the Four Independent Cross Validated Runs on the Active and Inactive In-Home Shoppers	108
19.	Correlation Coefficients with the Discriminant Score and F-Test for 60 Percent of the Active and Inactive In-Home Shoppers for Four Independent Cross Validated Samples	110
20.	Demographic Characteristics of Very Active In-Home Shoppers and Very Inactive In-Home Shoppers	112
21.	Socioeconomic Characteristics of Very Active In-Home Shoppers and Very Inactive In-Home Shoppers	113
22.	Occupation of the Head of the Household of Very Active and Very Inactive In-Home Shoppers	114
23.	Income Levels of Very Active and Very Inactive In-Home Shoppers	115
24.	Education of the Head of the Household of Very Active and Very Inactive In-Home Shoppers	116
25.	Social Class of Very Active and Very Inactive In-Home Shoppers	117
26.	Employment of the Homemaker of Very Active and Very Inactive In-Home Shoppers	118

Table		Page
27.	Marital Status of Very Active and Very Inactive In-Home Shoppers	119
28.	Number of Years Married of Very Active and Very Inactive In-Home Shoppers	120
29.	Age of the Head of the Household of Very Active and Very Inactive In-Home Shoppers . .	121
30.	Family Life Cycle of Very Active and Very Inactive In-Home Shoppers	122
31.	Discriminant Classification Matrix for Very Active and Very Inactive In-Home Shoppers . .	124
32.	Correlation Coefficients with the Discriminant Score and F-Test for the Differences in Group Means for Very Active and Very Inactive In-Home Shoppers	125
33.	Wilk's Lambda and Chi Square Test for Statistically Significant Differences Achieved by the Three Independent Cross Validated Runs on the Very Active and Very Inactive In-Home Shoppers	126
34.	Correlation Coefficients with the Discriminant Score and F-Test for 60 Percent of the Very Active and Very Inactive In-Home Shoppers for Three Independent Cross Validated Random Samples	127
35.	Results of the Canonical Analysis for Active In-Home Shoppers	129
36.	Results of the Canonical Analysis for the Very Active In-Home Shoppers	132

CHAPTER I

PROBLEM DELINEATION

A Brief Historical Perspective of In-Home Shopping

When analyzing the structure of retailing in the western world, it is interesting to note the many different types of institutions that exist. These include: super-markets, department stores, catalogue stores, discount stores, and specialty stores, among others.

The development of such varied types of retailing institutions has accompanied the evolution of the physical production of goods and services. These institutions have resulted from changes in consumption patterns. Retailing serves a continuing function as a link between producers and consumers, aiding the removal of the discrepancies which invariably exist between them.¹

The in-home shopping segment of retailing has expanded dramatically since the end of World War II.²

¹A. C. R. Dreesman, "Patterns of Evolution in Retailing," *Journal of Retailing*, XLIV, No. 1 (Spring, 1968), 64-67.

²Jerome E. McCarthy, *Basic Marketing* (Revised ed.; Homewood, Ill.: Richard D. Irwin, Inc., 1964), p. 499.

In the ten-year period from 1961 to 1970, in-home shopping sales grew from 1.9 to 3.8 billion dollars.¹ This near doubling of magnitude is particularly impressive in that aggregate retail sales during the same decade experienced a comparative increase of 66 percent.² In addition, the future growth potential of in-home shopping has been singled out by several as one of the high potential areas for revolutionary changes in marketing practices during the remainder of the twentieth century.³

The development of the mail order business on a large scale during the 1870's was one of the most remarkable commercial events in the evolution of the existing retail structure. It was customary during American colonial times for wealthy individuals to order many types of goods from European countries. This practice continued until the Revolutionary War. After that war, impoverished conditions existent in the United States resulted in a considerable decrease in the overseas purchasing practices.

¹U.S. Department of Commerce, "Mail Order Sales of Department Store Merchandise by Mail Order Companies or Mail Divisions," *Survey of Current Business*, LI, No. 9 (September 1970), 5-11.

²*Ibid.*

³"Tele-Purchasing--Major Trend in Retailing?" *Forbes*, October 15, 1967, pp. 56-59; and Alton F. Doody and William R. Davidson, "Next Revolution in Retailing," *Harvard Business Review*, May-June, 1967, pp. 4-20.

In the early part of the nineteenth century, American retail trade developed and expanded rapidly. Retail stores sold primarily imported products, and later, as they became available, domestically manufactured merchandise. Settlers in the western frontier areas frequently ordered goods by mail for transport over wagon routes and later for transport by canal and railroads from the retail stores of the large eastern centers. It appears that retail stores handled this early mail order entirely as a sideline, and as a convenience to former customers and others who had moved to distant parts of the country.¹

Paul H. Nystrom in *The Economics of Retailing*, states that the earliest intensive, wide-scale effort to secure business exclusively by mail was made by E. C. Allen of Augusta, Maine, who initiated national advertising of specialty products in 1870.² His efforts were imitated when several mail order periodicals began publication. In 1872, Montgomery Ward established the first general merchandise mail order house in Chicago, followed by Sears and Roebuck Company and Spiegel Company.

Mail order distribution continued to expand during the 1880's and 1890's. Department stores attempted to enter

¹Paul H. Nystrom, *The Economics of Retailing* (3rd. ed.; New York: The Ronald Press Co., 1930), Vol. I, Ch. III, pp. 58-68.

²*Ibid.*, Vol. I, p. 175.

this business by establishing mail order departments. Until approximately the beginning of World War II, it was the customary practice of these department stores to print customer mail order catalogues. In this same period, specialty houses began to utilize mail order techniques to distribute their products. Among the initial commodities sold by mail were books, magazines, garden products, cosmetics, and novelties.¹

The retailing literature shows a general consensus concerning the major factors which contributed to the early growth of mail order retailing. These factors include: (1) the existence of a high literacy rate, (2) the inefficiency of some local merchants, (3) the increased earning power of the people, and (4) the growth of industrialization leading to the intensive distribution of goods.²

In the early 1900's the nation experienced a significant migration of people from rural to urban areas. Urban concentration provided the opportunity for the development of department stores which would compete directly with the mail order houses. As the use of the automobile increased, downtown stores became more accessible to urban and suburban shoppers alike. At the same time, the telephone proved its

¹*Ibid.*, Vol. I, pp. 180-205.

²See: *Ibid.*, Vol. I; Paul Tuey, *Elements of Retail Salesmanship* (New York: The McMillan Co., 1925); and Boris Emmet and John Jeuck, *Catalogues and Counters* (Chicago: The University of Chicago Press, 1950).

utility as a convenient substitute for in-home shopping by mail.

In spite of the dramatic social and economic changes that have occurred in the United States since the beginning of the twentieth century, the volume of in-home shopping has not declined. Rather, catalogue mail order houses have experienced continued growth in their in-home sales. In view of the very large migration from rural areas, it seems logical to conclude that this increase in sales must be attributable to customers living in urban and suburban areas. As a consequence, some large mail order houses have located many of their new catalogue stores in small towns, and the suburban regions of metropolitan areas.

Increasing consumer affluence has created new markets for products that can be sold competitively by direct mail firms. The use of computers has simplified in-home retailing operations and has decreased the time required to complete a mail order sale. The adoption of credit cards has simplified activities of ordering and billing by mail.

In the last few years, several in-home sales organizations have modified their system to offer the consumer more convenience in in-home shopping. Some firms have adopted computerized order forms to decrease the lead time between ordering and delivery. Other improvements have been the use of credit cards for billing purposes, and special services such as gift wrapping, and others. All of these

variables have contributed to the important position of the in-home shopping market within the retail activities in the United States.

Nature of the Problem

Trade practices in America have undergone substantial changes since the days of the first European settlements. Steven C. Brandt¹ has described the evolution of the United States distribution system as a three step process. First, the "open market" developed where producers were operating within economic and geographical constraints that dictated the use of "natural" segments as a means for allocating their efforts. Second, the "mass market" evolved where producers could reach larger segments of the population because of improvements in transportation and increased levels of disposable income of consumers. More sophisticated segmentation was then employed, based on such variables as age, family size and ethnic background. Third, the "fragmented market" developed where the mass market disappears and a more fragmented market starts to grow, along with a need for more sophisticated methods of segmentation, such as the use of sociopsychological variables.²

¹Steven C. Brandt, "Dissecting the Segmentation Syndrome," *Journal of Marketing*, XXX (October, 1966), 22.

²*Ibid.*

Since the advent of mass production, early in the 1900's, the strategy of market segmentation has been a managerial practice. Understanding that a market is composed of a set of individuals, none of which have identical desires, needs or motives is today common knowledge among businessmen. The desire of bringing together heterogeneous markets and the economic requirements of standardized production of goods by manufacturers has caused the development of strategies with the main objective of grouping sub markets with more or less homogeneous characteristics. This, in turn, permits manufacturers to design their products for relatively distinct market segments.

Empirical observation alone is sufficient to notice the fruits of market segmentation as it is practiced by major national manufacturers of consumer goods. For example, the cigarette market is substantially changed since World War II. Previous to the war, four brands of cigarettes dominated the market, all of which were packed without filters and non-mentholated. The enormous variety of cigarettes now existing in the same market shows the large extent to which the market has been segmented by the manufacturers.

Management's widespread adoption of market segmentation--made obvious by the postwar boom of new brands and sales outlets--must be recognized as a marketing strategy that takes account of more than just simple economic and

demographic changes. Motivations and attitudes, as well as personality characteristics have been used as criteria for segmenting markets.¹

The heterogeneity in age, sex, income, social class, personality characteristics, motivation, attitudes, needs and desires exists among in-home shoppers as well as all other consumers of the American market. With this understanding, it seems natural to assume that it would be possible to segment the in-home shoppers into smaller and homogeneous groups. In order to accomplish such a task, variables such as socioeconomic characteristics, education, income level, as well as sociopsychological traits should be observed, considered and analyzed.

Market segmentation is considered a valuable tool by businessmen and scholars. The in-home shopping market in the United States is large and has no geographical boundaries. These factors suggest that a detailed investigation of applications of market segmentation in the in-home shopping market may lead to an improved match of market offerings to various in-home customers market segments.

Purpose of the Study

Within the framework of the foregoing discussion, the purpose of the proposed study is to analyze the

¹Philip Kotler, *Marketing Management--Analysis, Planning and Control* (Englewood Cliffs, N.J.: Prentice-Hall, 1967), pp. 47-53.

existence of segments in the in-home shopping market. The study will also attempt to describe the characteristics of these segments taking into account not only socioeconomic and demographic variables, but also sociopsychological variables.¹

According to Wendell Smith, "segmentation is based upon developments on the demand side of the market and represents a rational and more precise adjustment of product and marketing effort to consumer or user requirements."² The idea that markets can be profitably segmented has received widespread acceptance. The problem confronted by marketers is that of deciding which of the virtually limitless alternatives is likely to be the most productive

Kotler suggests several bases for segmenting buyers.³

(1) socioeconomic variables such as age, sex, family size, income, occupation, family life-cycle, religion, race, nationality and social class; (2) geographical variables, such as region, county size, city size, density and climate; (3) personality variables such as compulsiveness, gregariousness, autonomy, conservatism, authoritarianism, leadership, ambitiousness, etc., (4) buyer behavior variables

¹Ed Burnett, "How to Select Lists that Reach People with Ability to Buy," *The Reporter of Direct Mail Advertising*, April, 1969, p. 34.

²Wendell R. Smith, "Product Differentiation and Market Segmentation as Alternative Product Strategies," *Journal of Marketing*, XXI (July, 1956), 3-8.

³Kotler, *op. cit.*, pp. 47-53.

which describe aspects of the buyers' relation to a specific product. Examples of buyer behavior variables are: usage rate, buyer motive, brand loyalty, buyer class, end use, channel loyalty, price sensitivity, advertising sensitivity, etc.

Russell I. Haley describes a new approach to market segmentation: "benefit segmentation."¹ Benefit segmentation is based on the assumption that the benefits that people are seeking in consuming a given product are the basic reasons for the existence of market segments.

An application of combined segmentation criteria should provide more homogeneity within segments than if only socioeconomic variables were utilized. Psychological and attitudinal variables may be useful tools in discriminating among subjects classified in the same age group, the same social class, and the same educational level. Although the most recent developments in the study and use of mailing lists have shown a tendency toward segmentation strategy, no reference has been found as to the use of psychological and attitudinal variables in delineating the in-home shopping market.² The success achieved through the utilization of psychological variables to determine and define submarkets for consumer goods suggests that motivational, attitudinal

¹Russel I. Haley, "Benefit Segmentation: A Decision-Oriented Research Tool," *Journal of Marketing*, XXXII (July, 1968), 30-35.

²Burnett, *op. cit.*, p. 34.

and personality characteristics may prove to be of considerable importance in segmenting in-home shoppers.

Statement of the Problem

The in-home shopping market consists of those individuals who purchase merchandise without going to a retail outlet. This definition encompasses catalogue purchasers, mail order purchasers, telephone purchasers, and all types of direct mail purchasers. More specifically, in-home shoppers include all those individuals who buy without making any physical inspection of the goods, or without any face to face contact with a salesman or a representative of the firm which is selling the product. It is essential to this definition that the customer not have any contact with the goods before the actual purchase; the consumer's decision must be based primarily on a written description, drawing and/or photograph of the product. Once the purchase is made, it is irrelevant whether the goods are delivered to the customer, or whether he must pick them up at the local store or general delivery outlet. Excluded from this definition of in-home shoppers are those who purchase products from door-to-door salesmen.

While the usefulness of segmentation strategies in marketing is generally recognized, little research has been devoted to characterizing the in-home shopper as a distinct group among the American consumers. Also, little research

has been made to verify the existence of segments within the in-home shopping market. The objectives of this research are, therefore, the following:

1. To determine whether significant differences exist between individuals who shop at home by telephone and/or mail, and those who do not.
2. To verify the existence of market segments within the in-home shopping market.
3. To suggest a method for establishing segmentation criteria for firms in the in-home shopping market in order to facilitate their selling strategies.

The independent variables chosen to verify potential differences between in-home shoppers and people who do not shop at home, as well as to indicate the existence of segments within the in-home shopping market are: social class, family life-cycle, attitude toward risk, adventuresomeness, cosmopolitanism, trust in people, conservatism, attitude toward credit and tendency for impulse buying.

Social class is selected as an independent variable because previous market segmentation studies have shown its usefulness as an instrument of differentiation between market segments. One of the most well known studies utilizing social class to segment consumers was the Chicago study by Martineau.¹ In the same manner, family life-cycle has been

¹Pierre Martineau, "Social Class and Spending Behavior," *Journal of Marketing*, XXIII (October, 1958), 123-125.

used in the past as a predictor variable of consumption behavior.¹ For this reason, they are selected as an independent variable for the present research.

The sociopsychological variables: attitude toward risk, adventuresomeness, cosmopolitanism, trust in people, conservatism, attitude toward credit and tendency for impulse buying are selected inferentially by the researcher. To the researcher's knowledge, these variables have not been previously used in in-home shopping studies. Four of these variables: adventuresomeness, conservatism, trust in people, and cosmopolitanism have been utilized in sociological studies pertaining to behavioral patterns. It is felt that the sociopsychological variables might be able to discriminate between in-home shoppers and people who do not shop at home, as well as indicate the existence of segments within the in-home shopping market.

Hypotheses and Subhypotheses

The research tests the validity of two major sets of hypotheses. The first set of hypotheses refers to the existence of differences between in-home shoppers and those individuals who do not shop at home. The second set of hypotheses refers to the existence of distinct submarket

¹Lincoln Clark, ed., *Consumer Behavior II: The Life Cycle and Consumer Behavior* (New York: New York University Press, 1955).

segments within the total in-home shopping market. Both sets of hypotheses are written in the null form in order to facilitate testing.

I. In-Home Shoppers vs. All Other Consumers

1. Social Class: *Ceteris paribus*, among all respondents there is no significant difference between people who shop at home and people who do not shop at home, when classified by their respective social classes.
 - A. Occupation: *Ceteris paribus*, among all respondents, in-home shoppers cannot be differentiated from people who do not shop at home, when classified by their respective occupation.
 - B. Income Level: *Ceteris paribus*, among all respondents, there is no significant difference between in-home shoppers and people who do not shop at home, when classified by their respective income level.
 - C. Educational Level: *Ceteris paribus*, among all respondents there is no significant difference between in-home shoppers and people who do not shop at home, when classified by their respective educational level.
2. Family Life Cycle: *Ceteris paribus*, among all respondents there is no significant difference

between people who shop at home and people who do not, when classified by their stage in the family cycle.

- A. Marital Status: *Ceteris paribus*, among all respondents, there is no significant difference between in-home shoppers and those who do not shop at home, when classified by their respective marital status.
 - B. Age of the Household Head: *Ceteris paribus*, among all respondents, there is no significant difference between in-home shoppers and people who do not shop at home, when classified by the age of the household head.
 - C. Employment Status of the Homemaker: *Ceteris paribus*, among all respondents there is no significant difference between in-home shoppers and people who do not shop at home, when classified by the employment status of the homemaker.
 - D. Number of Years Married: *Ceteris paribus*, among all respondents, there is no significant differences between in-home shoppers and people who do not shop at home, when classified by the number of years they were married.
3. Adventuresomeness: *Ceteris paribus*, among all respondents there is no significant difference between in-home shoppers and people who do not

shop at home, when classified by their respective adventuresomeness.

4. Cosmopolitanism: *Ceteris paribus*, among all respondents there is no significant difference between people who shop at home and people who do not shop at home, when classified by their respective degree of cosmopolitanism.
5. Trust in People: *Ceteris paribus*, among all respondents there is no significant difference between people who shop at home and people who do not shop at home, when classified by their respective trust in people.
6. Conservatism: *Ceteris paribus*, among all respondents there is no significant difference between people who shop at home and people who do not shop at home, when classified by their respective conservative-liberal attitudes.
7. Attitude Toward Credit: *Ceteris paribus*, among all respondents, there is no significant differences between people who shop at home and people who do not shop at home, when classified by their respective attitude toward credit.
8. Tendency for Impulse Buying: *Ceteris paribus*, among all respondents, there is no significant difference between people who shop at home and people who do not shop at home, when classified by their respective tendency for impulse buying.

II. Comparison Between Segments of In-Home Shoppers.

1. Social Class: *Ceteris paribus*, among all in-home shoppers, there is no significant difference when classified by their respective social class.
 - A. Occupation: *Ceteris paribus*, among all in-home shoppers there is no significant difference when classified by their respective occupation.
 - B. Income Level: *Ceteris paribus*, among all in-home shoppers, there is no significant difference when classified by their respective income level.
 - C. Educational Level: *Ceteris paribus*, among all in-home shoppers, there is no significant differences, when classified by their respective educational level.
2. Family Life Cycle: *Ceteris paribus*, among all in-home shoppers, there is no significant difference, when classified by their stage in the family cycle.
3. Adventuresomeness: *Ceteris paribus*, among all in-home shoppers, there is no significant difference when classified by their respective adventuresomeness.
4. Cosmopolitanism: *Ceteris paribus*, among all in-home shoppers, there is no significant difference when classified by their respective cosmopolitan attitudes.

5. Trust in People: *Ceteris paribus*, among all in-home shoppers there is no significant difference when classified by their respective trust in people.
6. Conservatism: *Ceteris paribus*, among all in-home shoppers there is no significant difference when classified by their respective conservative-liberal attitudes.
7. Attitude Toward Credit: *Ceteris paribus*, among all in-home shoppers there is no significant difference when classified by their respective attitude toward credit.
8. Tendency for Impulse Buying: *Ceteris paribus*, among all in-home shoppers, there is no significant difference when classified by their respective tendency for impulse buying.

Methodology

The study was made in the State of Michigan. Data were collected in June and July, 1970, in the cities of Lansing and East Lansing. The location was chosen because it was felt that Lansing and East Lansing represent a representative spectrum of American society and, therefore, the results of the research could be generalized on a limited basis to a broader population than merely the research area. The Lansing and East Lansing area was divided into five income tracts. Two hundred families were randomly selected from each tract to participate in the research.

The data were first tested with linear discriminant analysis to determine whether there were significant differences between subjects who shopped at home and those who did not. The linear discriminant analysis test was applied in two steps. First *active* in-home shoppers were compared to *inactive* in-home shoppers. For purposes of the analysis defined as active in-home shoppers were all individuals who indicated in question 7, Section I of the questionnaire that they either purchased goods by mail or telephone "regularly" or "occasionally" in the previous two years. Inactive in-home shoppers were classified as being the individuals who indicated on question 7, Section I of the questionnaire that they "very rarely" or "never" bought goods by mail or by telephone during the previous two years.

The second step of the linear discriminant analysis was to compare the very active and the very inactive in-home shoppers. For purposes of the analysis defined as *very active* in-home shoppers were those subjects who indicated on question 7, Section I of the questionnaire that they "regularly" purchased goods by mail or telephone during the previous two years. *Very inactive* in-home shoppers were classified as the subjects who indicated in question 7, Section I of the questionnaire that they "never" purchased goods by mail or telephone during the previous years.

Canonical analysis was used to examine whether market segments exist within the in-home shopping market.

The subjects were asked to indicate from which of the following in-home retailers they had purchased merchandise in the past by mail or by telephone: (1) large catalogue stores, (2) specialty mail order houses, (3) club-of-the-month type of organization, (4) novelty mail order houses, (5) credit card type of organization, and (6) newspaper and magazine advertisements. The active in-home shoppers were analyzed with canonical analysis to determine if there were strong relationships among the subjects who indicated that they purchased goods from the same six types of retail outlets. That is, if it could be demonstrated that the respondents who preferred the same in-home shopping outlets were strongly correlated with each other by similar characteristics, then they would probably represent a market segment. The very active in-home shoppers were also examined through canonical analysis, in order to verify the existence of market segments among them.

Both discriminant analysis and canonical analysis are discussed in further detail in Chapter III.

Limitations of the Study

Generalizations derived from the proposed research are limited for the following reasons:

1. The data utilized in the research were collected at one point in time, instead of over a period of time. This means that consistency of shopping

habits of the sample is assumed, which may not have been correct if the data were collected in a longitudinal manner.

2. The independent variables selected as predictors of in-home shoppers behavioral patterns were chosen following an inferencial criterion, rather than an experimental criterion. Accordingly, there may be several other demographic, attitudinal, motivational, and sociopsychological variables which would be better predictors of in-home shopping behavior, and consequently were not examined in the research. The non-inclusive list of variables, along with the purchasing patterns of individuals in the United States, implies that careful consideration must be made before extrapolating the findings of the research across geographical regions or to specific markets.
3. The sample studied was 1,000 families and was confined to urban areas of 50,000 and 150,000 people, approximately. Because of this reason, and the fact that there are considerable differences of shopping habits among people living in different urban and suburban shopping areas, the accuracy with which regional purchasing patterns may be drawn from the findings of the study are limited to the degree to which discrepancies exist between the normalized values obtained through the sample and local characteristics.

Contributions of the Study
to Marketing Theory

The contribution of the research to marketing theory rests on its contribution to the description of purchasing patterns of consumers, within the emerging body of marketing thought. Contributions to theoretical development may be classified into three major types: generation of new hypotheses and theories, prediction of future occurrences and description of existing phenomena. Therefore, an addition to the description of consumer behavior patterns, as to what concerns the in-home shoppers is a first contribution to the theoretical body of knowledge. Secondly, a detailed description constitutes the first prerequisite for future predictions of variations in the behavioral patterns of in-home shoppers. The foundations for such prediction are a possible outcome of the present research. Lastly, a more important contribution is the characterization of in-home shoppers in terms of social class, family life-cycle and the sociopsychological variables: attitude toward risk, adventuresomeness, tendency toward impulse buying, attitude toward credit, cosmopolitanism, conservatism and trust in people, which is vital for establishing the background from which new theories of a particular form of consumer behavior might be generated. Accordingly, the characterization of in-home shoppers according to socioeconomic and sociopsychological variables is a necessary prerequisite to the

generation of testable hypotheses concerning determinants of their purchasing patterns and behavior.

Contributions of the Study
to Marketing Practice

It is expected that the research will reveal differences between people who shop at home and those who do not; and will locate relatively distinct submarkets within the in-home shopping market. It is hypothesized that the psychological scales will play a significant role in differentiating these markets. Therefore, the first contribution of the study will be to indicate the feasibility of utilizing sociopsychological variables to segment the in-home shopping market composed of those people who purchase goods at home by mail and/or by telephone.

The second contribution of the study is to increase the existing knowledge of consumer purchasing patterns. The research attempts to describe the in-home buyers' behavior. It also attempts to predict the reactions of future in-home buyers to provide a greater adaptability to their needs and wants by the retailer, through segmentation.

A third contribution would be to try to add reasons why this modality of retailing should be given greater attention by middlemen interested in future developments of the United States market. The research will attempt to determine opportunities for market entry by delineating the specific characteristics of market segments.

Finally, the results of the research might help marketing practitioners in selecting their marketing policies. The allocation of the marketing effort depends on the relative opportunities existing in the market. Therefore, a more detailed description of consumers' attitudes and motivations, as well as their social class and family life-cycle, will provide a basis for a more appropriate determination of prices, promotion and distribution by in-home sellers.

Organization

The remainder of the study is divided into five chapters. Chapter II presents a review of literature relevant to the research. In Chapter III the research design used to analyze the data of the study is described. Chapter IV is a description of the research findings. Chapter V relates the research findings to their respective hypotheses. Chapter VI contains the summary and conclusions of the study, as well as suggestions for future research.

CHAPTER II

LITERATURE REVIEW

The objective of Chapter II is to provide a theoretical background for the research. The chapter is divided into five sections: Mail Order and In-Home Shopping, Social Class and Consumption Behavior, Stage in the Family Life Cycle and Consumption Behavior, Personality Variables, and Segmentation of the In-Home Shopping Market by Socio-economic and Sociopsychological Variables.

Mail Order and In-Home Shopping

The Origin and Development of Mail Order Sales

The origin and development of the first mail order and catalogue organizations at the end of the nineteenth century was a social and economic phenomenon which has been largely accounted for by historians and scholars. Because of the importance which institutions such as Sears and Roebuck, and Montgomery Ward have had in the retailing evolution of the United States, special attention is given in this part of the study to the development of mail order and catalogue sales. An attempt is also made to situate the mail order houses within the total evolution of retailing.

Paul H. Nystrom describes the path of development of retailing in America and the various factors which accompanied the appearance and development of the mail order houses.¹

He defines five separate stages in the development of retail trade in America:

1. Prehistoric Indian Trade
2. The trading post period
3. The general merchandise store era
4. The period of rise and development of single-line independent merchandise stores
5. The modern period of growth of large-scale retailing involving extensive capital in such institutions as department stores, mail order houses, and chain stores.²

The nineteenth century witnessed the appearance of large-scale retailing institutions. Among them, the first mail order houses. Nystrom explains how this new type of distribution began:

Shortly after the middle of the nineteenth century there were simultaneous beginning of several new types of retail institutions which in our time have come to occupy a very important place in the retail distribution of goods. Among these were the department stores, the mail order houses, and the chain stores.³

The large scale methods of retailing constituted a revolutionary change in the type of distribution system which existed in the United States prior to the nineteenth

¹Paul H. Nystrom, *The Economics of Retailing* (3rd ed.; New York: The Ronald Press Company, 1930), Vol. I, Ch. IV.

²*Ibid.*, Vol. I, p. 70.

³*Ibid.*, Vol. I, pp. 84-86.

century. A careful examination of some social and economic changes which took place during the same period might provide a tentative explanation of the reasons why the first mail catalogue stores were successful in their operation.

One of the most important factors which contributed to the flourishing of new retail institutions was the economic prosperity of the United States during the years of 1860 to 1920, approximately. Some of the symptoms of our nation's economic growth are the improvements achieved in the transportation, agriculture and manufacturing industries.

During the second half of the nineteenth century, transportation was dramatically improved in the United States. The decade of 1860-70 was the most prosperous period ever known for the railroads.¹ Also, a new agricultural era started, the United States farming products began to be exported, especially cereals, increasing the economic opportunities of people engaged in the farming activity. The most significant feature of the economy during that period, however, was the rise of manufacturing. Its growth is better described by Table 1.

One of the immediate consequences of the combined effects of these three economic occurrences was the fact that products of equal or better quality to those imported

¹*Ibid.*, Vol. I, pp. 84-86.

Table 1

GROWTH OF MANUFACTURING IN THE UNITED STATES FROM 1860 TO 1900^a

Census Years	Capital Invested (dollars)	Wage-Earners Employed	Value of Products (dollars)
1860	1,009,855,715	1,311,246	1,885,861,676
1870	2,188,208,769	2,053,996	4,232,325,442
1880	2,790,272,606	2,732,595	5,369,579,191
1890	6,525,156,486	4,251,613	9,372,437,283
1900	9,817,434,799	5,308,406	13,004,400,143

^aRalph K. Wadsworth, *Handbook of Mail Order Selling and Merchandising* (Chicago: The Dartnell Corporation, 1918), p. 23.

from European countries were at that time produced internally, and made available to the great majority of the American population. Because of their greater income, and also thanks to the existence of transportation facilities, the farmers of the midwest could consider the purchase of commodities previously available only to the high, prosperous class. As industrial technology grew and was perfected, consumer goods began to be manufactured in greater quantities. Creative marketing innovations emerged as a consequence of more intense competition, and the producer's market was substituted by a new, more dynamic, consumer market.¹

¹William Greenlaf, *American Economic Growth Since 1860* (Columbia, S.C.: University of South Carolina Press, 1968), p. 265.

A second important factor for the development of the mail order retailing in the United States is the concentration of population mainly in rural areas. The farmers' communities were also wealthy insofar as they represented a large proportion of the United States national income. Table 2 will better illustrate the distribution of population and income in the United States during the period from 1879 to 1910.

From Table 2 we can see that the bulk of population, as well as a great portion of American wealth was still concentrated until 1910, in small rural communities. The American farmer, therefore, in spite of having considerable purchasing power, was limited as to the product that he could buy locally, unless he had the willingness and the physical means to travel to the central city to shop for his goods.

The mail order business closed this spatial gap. Distant rural markets were reached with goods not normally carried by the general merchandise stores by utilizing railroads to transport the products for local delivery by the postal service.¹

The early mail order literature is a documentary of the legendary ways by which the first mail order businesses started their trade. Most authors agree that the

¹Paul H. Nystrom, *op. cit.*, Vol. I, p. 174.

Table 2

UNITED STATES POPULATION AND INCOME--1879-1910^a

Year	Population		Agriculture Income (000,000)	National Income (000,000)
	Rural	Urban		
1879	---	---	1,371	7,227
1880	36,026,048	14,129,735	---	---
1889	---	---	1,517	10,701
1890	40,841,449	22,106,265	---	---
1899	---	---	2,933	15,364
1900	45,834,654	30,159,921	3,034	16,158
1905	---	---	3,678	21,428
1906	---	---	4,029	23,165
1907	---	---	4,214	24,403
1908	---	---	4,621	23,458
1909	---	---	5,311	28,700
1910	49,973,334	41,998,932	---	---

^aBoris Emmet and John E. Jeuck, *Catalogues and Counters*
(Chicago: University of Chicago Press, 1950), p. 12.

original idea was first developed in the United States by E. C. Allen.

The earliest intensive wide-scale efforts to secure business by mail seems to have been made by E. C. Allen of Augusta, Maine, who started national advertising on specialties such as recipes for washing powder, engravings, chromos and novelties, as early as 1870. Allen's success led to rapid imitation close at hand. Augusta, Maine, became for many years and continued to be the most important mail order center in the United States. Several so-called "mail order periodicals" were established, such as the household magazine, *Comfort*, and a list of periodicals published by Vickery and Hill, carrying mail order advertising, and sent to patrons of mail order concerns all over the country. During the 1870's, a rapid growth of mail order selling paralleled a similar growth of canvassing and peddling activity that grew up during the same time.¹

Montgomery Ward was very successful in his trade. Having had previous retailing experience, he decided to start an independent mail order business in Chicago in 1872. Ward took advantage of the "Granger" movement which started in the United States approximately at the same time. Its basic objective was to improve the economic conditions of the agricultural classes.

Soon after he [Montgomery Ward] reached Chicago, the "Granger" movement began to spread rapidly throughout the Middle West. The chief purpose of the Order of the Patrons of Husbandry, which had but recently come into existence, was to improve economic conditions of the agricultural classes. Among the methods urged were consumers' cooperative stores and the distribution of goods directly from producers to consumers. The attention called to the farmer's problems by the spread of this new movement,

¹Nystrom, *op. cit.*, p. 176.

linked with his experience in farm trade while in St. Joseph, probably aided Montgomery Ward in perfecting his plans for mail order retailing.

The first storeroom occupied by Ward in 1872 was a hayloft over a stable on East Kinzie Street. His entire capital was about \$2,000, partly borrowed. A one-page handbill naming of various items of good and their prices was sent out by mail. In the years from 1872 to 1874, Ward issued ten of such one-page handbills. The first catalog, a small pamphlet of only eight pages, size 3" by 5", was issued in 1874. By 1876 the catalog was increased in size to 150 pages and pictures if the merchandise were issued for the first time. The sales for that year amounted to \$300,000. By 1880, the sales had increased to \$410,000. Ten years later, in 1890, the sales amounted to \$2,411,000 and in 1900 to \$8,886,000. By 1906, its sales volume had reached \$18,000,000 and by 1913 it had risen to \$40,000,000.¹

The beginning of Mr. Sears business was also more a result of an opportunity which was brought up by chance than a long term detailed business plan. Nystrom tells the circumstances that made Mr. Richard W. Sears the founder of one of the most successful retail businesses of the United States.

In 1884, he received a package from a mail order concern to be delivered C.O.D. to a customer in this little Minnesota town. (North Redwood, Minnesota, where Richard W. Sears was employed as a railroad station agent.) The customer could not be found and Mr. Sears notified the company. Their reply was to urge him to sell the watch to someone else at a profit of \$2, and he did so. This venture led him to order more watches and sell them at a similar profit. The prospects of this business proved so attractive that in 1886 he left the employ of the railroad company and started a mail order watch and jewelry concern in Minneapolis. Early in 1887, he employed A. C. Roebuck as watch

¹*Ibid.*, p. 178.

adjuster and in 1889 he made Roebuck his partner. Somewhat later this concern was moved to Chicago, and in 1890, when Mr. Sears was twenty seven years of age, he sold this concern for \$100,000. As a condition of the sale he agreed not to establish another mail order concern in the city of Chicago under his own name for five years.¹

However, Sears went back to Minneapolis and started another organization, which, after several name and location changes, became the gigantic retail structure that is at this time, known internationally.²

Nystrom proceeds in the description of the birth and development of several other mail order organizations. It is interesting to note the growth that the three major retail firms of that time reached in a few years. This can be viewed summarized in Table 3.

The first literature which appeared about mail order businesses was primarily concerned in relating the history of the most prosperous mail order retailers. Several factors were listed as being favorable to the development of mail order selling. None of the articles and books examined explored theoretical or institutional approaches to the in-home shopping phenomenon of the early 1900's.

¹*Ibid.*, pp. 180-182.

²*Ibid.*, p. 182.

Table 3

YEARLY SALES OF LEADING MAIL ORDER CONCERNS, 1912-1928^a

Year	Sears, Roebuck & Co.	Montgomery Ward & Co.	National Bellas Hess & Co.
1912	77,116,859	35,000,000	10,911,866
1913	91,357,276	39,725,713	13,276,259
1914	96,024,754	41,042,486	15,164,727
1915	106,228,421	49,308,587	17,371,650
1916	137,200,802	62,044,336	21,554,230
1917	165,807,600	73,512,645	27,649,537
1918	181,655,829	76,166,848	33,485,015
1919	233,982,584	99,336,053	39,449,985
1920	233,856,872	101,745,270	47,704,428
1921	159,034,518	68,523,244	37,481,210
1922	160,648,152	84,738,826	45,357,566
1923	191,324,146	123,702,043	52,399,783
1924	199,545,862	150,045,065	49,225,804
1925	234,421,930	170,592,642	46,685,376
1926	248,550,341	183,800,865	42,872,399
1927	268,731,794	186,683,340	44,665,419
1928	319,773,787	214,350,446	44,649,102

^aPaul H. Nystrom, *The Economics of Retailing* (3rd ed.; New York: The Ronald Press Company, 1930), Vol. I, p. 179.

A Literature of "How to Make a Fortune"

As soon as the extent of the success of firms like Sears and Montgomery Ward became apparent, a number of publications began to emphasize the advantages of owning and managing a mail order concern. Some of those stressed the fact that "almost no capital" was required in order to sell by mail; others were enthusiastic about the "newness" of the idea in itself. Several pages covered with advices and information about prices, costs, railroad fees and schedules, how to advertise, how to write letters, how to use mail as a substitute for salesmen, types of products which could be sold by mail, and many other typical instructions characterized the "how to" literature.¹ Ralph Bartolomew gives a good example of the type of message this literature was trying to transmit when he calls the mail order business: "the hidden empire."²

Some of the appeal used concentrated on the idea of eliminating the middlemen profits and offerings, therefore offering products at a more reasonable price than those sold by the local retailers. A clear example of this approach can be seen in the following:

¹Ralph Bartolomew, *A Short Course in Direct Mail* (New York: Direct Mail Division, Publishers Printing Company, 1928), pp. 62-63.

²*Ibid.*, p. 54.

Deeply implanted in the instincts and thoughts of a large number of persons is the desire to buy goods at the source of supply, or as near to it as it is possible to get. The phrase "shop at the factory" gathers up what a large number of members of the public understand by this method of commerce.¹

Another reason was added to strengthen the idea: the fact that, as mail order houses were able to reach a larger market because their location did not limit their ability to sell at a greater distance, they would sell larger quantities, have faster turnover of products and, consequently, would be able to maintain their costs at a lower level than the local general merchandise or specialty store.²

Attractive characteristics of the mail order business were the low capital requirements, the fact that it could be started on a very small scale, and that it could be commenced as a spare time occupation. However, it was claimed that a person "had to be fitted for the business" by temperament, by habit and by nature. A very vague definition of these prerequisites is generally given by the literature. For some authors, a little business experience was a very valuable asset, as we can see by the following statement:

¹Albert E. Bull, *Mail Order and Instalment Trading* (London: Sir Isaac Pitman and Sons, 1926), Ch. I, p. 2.

²W. M. Leonard Berkwitz, *The Encyclopedia of Mail Order Business* (New York: Leonard Berkwitz, 1900), Ch. II.

. . . Any person who thinks of entering business on his own account, whether in this or any line, should endeavor to get some experience in trading in another way, before embarking on the undertaking or speculating much capital.¹

Some of the counseling and advice in this portion of the literature are interesting and colorful.

. . . Be a merchant before you are a manufacturer, is a wise advice. It is always well not only to find a market before you make for it, but also to be sure that the demand obtained is regular and will be likely continued.²

During the early 1900's many small mail order businesses on a home scale appeared in the United States. Those businesses used mail advertising or newspaper space to sell their products. "Postal bargains" made daily appearance in the newspapers. In order to avoid suspicion by the potential clients, "money back" guarantees were added to the offers.³

The proliferation of "how to" literature is a testimony of the popularity that the mail order trade had at the beginning of the twentieth century. A variation of this approach is the elaboration of textbooks on selling and advertising by mail. Detailed instructions covering the

¹Bull, *op. cit.*, Ch. I, p. 7.

²*Ibid.*, p. 9.

³*Ibid.*, p. 11.

various aspects of mail order trade are found in several books of the mail order literature.¹

More recently, attention has been given to the in-home retailing practices. The advent of technological innovations has pointed out manners in which such advancements could be used in marketing. The literature has been enriched by various articles on the subject in the last ten or five years. Mail order and in-home retailing experts try to transmit their past experience by providing thorough and complete manuals of instructions to the beginner in mail order business ventures.²

General In-Home Shopping Literature

Along with the literature which describes the history of mail order selling as a part of the United States retailing system, and also with the literature concerned in providing rules and principles about how to operate and manage a mail order concern, studies and publications can be found about major topics closely related to the problems of in-home retailing. It is necessary to underline once

¹Homer J. Buckley, G. D. Crain, Jr., and Maxwell Droke, *Mail Order and Trade Paper Advertising* (New York: International Textbooks Co., Bluebooks, 1937); and Frank Egner and L. Rohe Walter, *Direct Mail Advertising and Selling* (New York: Harper and Bros., 1940).

²Robert F. Stone, *Successful Direct Mail Advertising and Selling* (New York: Prentice-Hall, 1960); and James Everett Howard, *How to Use Mail Order for Profit* (New York: Grosset and Dunlap, 1963).

more than in-home retailing, as studied in this research, excludes all door-to-door sales, considering solely sales by mail, by telephone, or any other type of sales in which no direct contact existed between the buyer and the product, or a sales representative of the retailing firm.

One of the major preoccupations of authors who have studied in-home shopping practices has been that of exploring different ways of selling by mail and by telephone, as well as the attempt to predict possible future changes in the technique of selling goods at home. This concern reflects the popularity that the in-home sales still enjoy among retailing practitioners and scholars.

In-home shopping has been considered the fastest growing form of retailing by some authors.¹ In other instances, in-home shopping has been regarded as a real retail revolution, something which would be enacted with the aid of sophisticated technology in the next ten to twenty years. The motive behind the retail revolution would be the effort to give more convenience to the customers.² Many colorful ways of accomplishing this goal have been described, such as the use of house computer consoles to order products to a retailer who would be operating with

¹Maxwell Sroge, "The Distribution Revolution . . . Anatomy of Direct Marketing," *The Reporter of Direct Mail Advertising*, July, 1970, pp. 18-20.

²Lester Wundermann, "Mail Order, The Coming Revolution in Marketing," *The Reporter of Direct Mail Advertising, Editor's Choice*, Summer, 1968, pp. 32-34.

only one distribution center. Some reasons for this "inevitable" revolution are mentioned.¹

Many housewives of the 1970's will have grown up with color television, push-button telephones, and computerized banking services. Indeed, these and other products of a highly sophisticated technology are already commonplace. The young matron of the 1970's probably will have a college education and have greater variety of interests and activities than her mother did. And she will enjoy greater economic security and comfort than did the woman of her mother's generation. All these things add up to the certainty that she will demand more and different services, and new marketing institutions will have to be developed to meet these demands.²

One new way of purchasing products has been called "tele-purchasing." It is defined as: ". . . Telepurchasing, or long distance buying in which the goods are again brought to the customer instead of the customer to the goods."³

The two major reasons listed which justify the arousal of in-home shopping as a more frequent activity than the current shopping patterns are: offering added convenience to the customer, so that he will use his leisure time in other activities of greater interest for him,⁴ and the fact that, by eliminating middlemen through this type of

¹Alton F. Doody and William R. Davidson, "Next Revolution in Retailing," *Harvard Business Review*, May-June, 1967, pp. 4ff.

²*Ibid.*, p. 16.

³"Tele-Purchasing, Major Trend in Retailing?" *Forbes*, October 15, 1967, pp. 56-64ff.

⁴Pat Terry, "More Customer 'Services' for Jordan March in 70's," *Women's Wear Daily*, March 26, 1970, p. 29.

distribution, the firm's profits would be larger because lower and more competitive prices could be afforded.¹

Empirical evidence points out that the concern with segmenting markets existed for a long time within mail order merchants and scholars. Historically, one of the most popular tools for attempting such strategy was the use of the so-called "mailing lists." A mailing list is a tentative measure to isolate a mail order merchant's core market. Mailing lists were compiled even at the earlier stages of the mail order business.²

More recently, authors have directed their attention to providing somewhat sophisticated techniques to segment the mail order market. Different systems have been described in the literature which attempt to select lists according to variables such as sex, income level, type of occupation, and many others, indicating that emphasis is given to possible submarket segments.³ Following the same

¹Stanley Fenvesy, "The Dynamic Wholesale Mail Order Business: Evolution or Revolution?" *The Reporter of Direct Mail Advertising*, October, 1960, pp. 51-53; and "More Firms Selling Directly to the Consumer," *Home Furnishing Daily*, May 1, 1970, p. 7.

²Frank W. Sparth, "Classifying Direct Mail Lists," *The Journal of Retailing*, II (October, 1928), 13-17.

³Randall P. McIntyre, "Mail Marketing in Three Dimensions," *The Reporter of Direct Mail Advertising*, October, 1965, pp. 72-77.

rationale, retailers are invited to be "selective" as to the lists they use.¹

List segmentation is at times approached in a more systematic manner. A good example is the ramification of several types of lists:

. . . in direct mail there are three main sources of names, *stratified lists*, *mail order lists*, and *compiled lists*. In case of *stratified lists* the entire country is divided into micro-units, and households located in each unit are characterized by census data. *Mail order lists* consist of people who have bought something by mail; and *compiled data* are those which are prepared on the basis of one or two characteristics--generally from professional directories--e.g., lists of doctors, dentists, lawyers, school teachers, and executives.²

Ways of selecting customers according to their frequency of purchase,³ or according to break-even indexes per groups of customers⁴ are only two of the many examples of the preoccupation with segmenting in-home markets. The variables which are most commonly suggested as segmentation tools are primarily socioeconomic groups or combinations of them used as "indexes."

¹Roy M. Green, "Think Creatively About the Lists You Use and The Markets You Sell," *The Reporter of Direct Mail Advertising*, June, 1967, pp. 16-17.

²C. L Jain and A. Migliaro, "The Fundamentals of List Segmentation," *The Reporter of Direct Mail Advertising*, June, 1967, p. 29.

³Jerome B. Osherow, "How to Clean a Mailing List," *The Reporter of Direct Mail Advertising*, October, 1960, pp. 39-40.

⁴Milton S. Stevens, "How Market Research Can Improve List Results," *The Reporter of Direct Mail Advertising, Editor's Choice*, Summer, 1964, pp. 27-29.

Ed Burnett, who is an active writer on mail order and direct mail suggests that the economic variables are the most relevant variables for segmenting the in-home shopping markets. ". . . Direct mail insofar as merchandising of goods and services to consumers is concerned, can be described as a search for discretionary money."¹

Attitudinal and psychological variables are not covered as extensively in the literature as segmentation tools for the in-home market. Seldom mention has been found of attempts to segment the mail order and telephone market by a combination of socioeconomic and sociopsychological variables. Also, it is very infrequent to find in the literature clear differentiation between markets for different types of in-home retailers.

The list segmentation and the list selection procedures described, therefore, don't show great concern with more sophisticated systematics than methods of stratifying samples by social or economic variables within geographic areas.

Two other major subjects can be found discussed in the literature. A series of methods which teach the practitioner how to apply "mail order mathematics."²

¹Ed Burnett, "How to Select Lists That Reach People With Ability to Buy," *The Reporter of Direct Mail Advertising*, April, 1969, p. 34.

²Ray Snyder, "The Mathematics of Mail Order," *The Reporter of Direct Mail Advertising*, February, 1968, pp. 19-22.

Most of these are detailed applications of calculus like the "break-even analysis," or the development of linear equations¹ with the objective of maximizing profits or minimizing costs. Such articles are very similar, in their approach, to the initial "how to" literature in the early mail order retailing.

Another type of information that can be found in the literature is the description of successful cases of mail order concerns. Applications of these retailing techniques to several different types of products are discussed in detail.² References of this kind have merely historical value and do not report information relevant to marketing problems related to the in-home shopping activity.

Social Class and Consumption Behavior

Social class or socioeconomic status has been frequently accepted as a factor influencing the purchasing behavior for a large number of consumer's goods. Several researchers have attempted to establish a relationship between some social class classification and the consumption

¹C. L. Jain, "The Cost and Value of Customers--How to Figure It for Yourself," *The Reporter of Direct Mail Advertising*, December, 1968, pp. 44-45.

²"The Diners Club Story," *The Reporter of Direct Mail Advertising, Editor's Choice*, Summer, 1967, pp. 18-22.

behavior.¹ It cannot be denied that there are perceivable differences among strata of our population. It is also clear that such differences may be roughly evaluated such as to fit some scale measurement of values.

A hierarchy of values and roles of individuals within society can be established leading to a social differentiation and classification; or in other words, to social classes. Engel, Kollat and Blackwell have defined social classes to be: "a relatively permanent and homogeneous division in society into which individuals or families can be categorized where being compared with other individuals or families in the society."²

According to Howard, social stratification is attained by the roles that individuals play within society. He defines social stratification as: ". . . a structure of regularized inequality in which men are ranked higher and lower according to the value accorded their various social roles and activities."³

While individuals, because of their occupational activities and roles pertain to different social classes,

¹John A. Howard, *Marketing Theory* (Boston: Allyn & Bacon, Inc., 1965), pp. 166ff; and Bernard Barber, *Social Stratification* (New York: Harcourt, Brace & World, Inc., 1957), p. 2.

²James F. Engel, David T. Kollat and Roger D. Blackwell, *Consumer Behavior* (New York: Holt, Rinehart & Winston, 1968), p. 264.

³John A. Howard, *op. cit.*, pp. 166-167.

other variables as education, family background and cultural diversions or even religious and economic behavior interact to form common patterns which perpetuate and strengthen societal hierarchy:

Social classes are the vehicles through which the totality of culture is made specific for a family and ultimately an individual. Social classes define the expectations of society for groups of people and for families within the groups. The family then transmits these cultural expectations to the individual.

Social classes create different patternings of behavior specific to groups of people but drawn from a common and pervasive group of elements in the core culture. The variations among classes in cultural manifestations may be subtle or they may be obvious, and the marketer seeks to understand what these differences are.¹

There are many studies in the literature which attempt to measure the effects of social classes on the purchasing behavior of individuals or groups of individuals. The researcher will try to examine in part what has been done in this field.

The first problem posed to the scholars has been to define and somehow measure social classes in order to classify individuals according to them. Several independent variables have been indicated as determining social classes. Joseph A. Kahl indicated that social classes have six major parameters: (1) social interaction, (2) occupation,

¹Engel, Kollat and Blackwell, *op. cit.*, p. 267.

(3) personal prestige, (4) possessions, (5) class consciousness, and (6) value orientations.¹

Other dimensions of social classes have been added. Among the most frequently mentioned by the authors are:

(1) authority, (2) power, (3) ownership of property, (4) consumption patterns, (5) education, (6) morality, (7) kinship and ancestry, (8) associational ties, and (9) ethnic status.²

The amount of interest devoted to this area of marketing has produced a large number of studies about social class. Several of the methods which attempt to measure an individual's social status are listed below.

The Reputational Method

The reputational method consists of ranking individuals by other individuals who are familiar with these, on a continuum of social scales.³ The smaller the community and the more knowledge people have about each other's characteristics and habits, the easier it becomes to obtain such classification.

¹Joseph A. Kahl, *The American Class Structure* (New York: Holt, Rinehart and Winston, Inc., 1957), pp. 8-10.

²Edward A. Shils, "Class" in the *Encyclopedia Britannica*, Vol. V, 1960, pp. 766-768.

³Engel, Kollat and Blackwell, *op. cit.*, p. 264.

The reputational method can be divided into the *subjective* and the *objective* techniques. With the subjective technique respondents are asked to classify themselves into a social class. The results of this method depend on the relative class awareness of each individual. Research on this topic was made by John L. Haer in Tallahassee, Florida.¹ Results showed that, in three different samples between 35.5 and 53 percent of the respondents either could not place themselves in a social class group or did so in an incorrect manner. This suggests, according to the author, that the "latent" class orientation simply may not exist for large portions of the population.²

The objective technique involves observing individual behavior to determine their respective social class. Several indexes were developed for classifying individuals according to their socioeconomic status.

W. Lloyd Warner was responsible for the development of six reputational techniques to measure social class. These techniques are: rating by matched agreements, rating by symbolic placement, rating by status reputation, rating by comparison, rating by simple assignment to a class, and rating by institutional membership. In these techniques the analyst devises rating mechanisms which will translate the

¹John L. Haer, "An Empirical Study of Social Class Awareness," *Social Forces*, XXXVI (December, 1957), 117-121.

²*Ibid.*, p. 120.

criteria and judgments of the informants into explicit results which will correspond with the class realities of the community.¹ Warner's approach has not been widely adopted by marketing researchers, primarily because of its complexity.²

Hollingshead developed an objective method for classification of socioeconomic status. In his study he used weighted combinations of three variables: residence, occupation and income. His reasoning for using three variables was that the family's mode of living is "mirrored in its home," and that occupational level reflects the skills and social power of an individual, as well as the formal education reflects an individual's tastes.³ With this method, Hollingshead established five major social classes:

1. "Old families," top business management and professional occupations, high income, highly educated, expensive homes, the social elite.
2. Business managers, lesser professionals, often college graduates, socially sensitive, "on the way up."

¹W. Lloyd Warner, Marcia Meeker and Kenneth Eells, *Social Class in America* (New York: Harper Torch Books, Inc., 1960), pp. 37-38.

²Engel, Kollat and Blackwell, *op. cit.*, p. 276.

³A. B. Hollingshead and F. C. Redlich, *Social Class and Mental Illness* (New York: John Wiley and Sons, Inc., 1958).

3. Employees in various salaried administrative pursuits, small business owners, average incomes, high school graduates, modest homes in "good" areas.
4. Semiskilled and skilled manual employees, below average incomes, many are homeowners but live in multiple units, many had some high school but did not graduate, often members of minority ethnic groups.
5. Unskilled and semiskilled, low incomes, live in old tenement areas, most did not finish grade school, "live today, let tomorrow take care of itself."¹

The Sociometric Method

The sociometric method measures social classes by inquiring from an individual the references about his close associates, and successively through observation of the individual's activities as well as those of his acquaintances.² This method is complex, expensive and time consuming. As an example, a research made by Hollingshead using this technique required that he, his wife and a fellow researcher live for nineteen months in the city where the study was made.³

¹*Ibid.*, p. 211.

²Engel, Kollat and Blackwell, *op. cit.*, p. 216.

³A. B. Hollingshead, *Elmtown's Youth* (New York: John Wiley and Sons, Inc., 1949).

The Occupational Method

The occupation of an individual has been widely studied as a variable directly related with his social status. William L. Hurst began segmenting occupations into classes as early as 1897.¹ However, occupation as a measure of social class was accepted completely only in 1917 when Alba M. Edwards introduced what he called "social economic grouping."²

Edwards' scale is still widely used. However, as it has shown to correlate only slightly with average levels of income and education, it should be adopted only where a very rough indicator of social class is needed.³

Two other scales of occupation have been developed with a more specific and clear approach than that used by Edwards: the Duncan scale which ranks 425 occupations,⁴ and the scale prepared by the National Research Center with 90 occupations.⁵

¹U.S. Bureau of the Census, *Methodology and Scores of Socioeconomic Status*, 1960, p. 1.

²*Ibid.*, p. 1.

³*Ibid.*, p. 2.

⁴Albert J. Reiss, Jr., Otis Dudley Duncan, Paul K. Hatt, and Cecil C. North, *Occupations and Social Status* (New York: The Free Press, 1961).

⁵Robert W. Hodge, Paul M. Siegel, and Peter H. Rossi, "Occupational Prestige in the United States," in *Class, Status and Power*, ed. by Reinhard Bendix and Seymour Martin Lipset (2nd ed.; New York: The Free Press, 1966), pp. 322-334.

The Multiple Index Method

The Multiple Index method consists of constructing social class measures taking into account more than one determining variable. The objective of this method is to avoid errors or distortions that could occur where only one variable is utilized.

Lloyd Warner's Index of Status Characteristics is one of the most popular multiple indexes used to determine social class. Warner uses four variables to compose his index: occupation, source of income, house type and dwelling area. Each one of these variables is weighted and the weighted total indicates the social class affiliation of the individual on the scale.¹ The weights for the factors were obtained by regression analysis and indicate the relative importance of each factor. Warner states that three of the factors may be used to measure social class, however he recommends that, whenever possible, all four factors are used.

Another very well known multiple index for rating individuals according to their social classes, is that developed by the U.S. Bureau of the Census.² The variables used to compare the index are: occupation of the head of the household, formal education of the head of the household, and total family income. The weight of each variable

¹Warner, Meeker and Eells, *op. cit.*, pp. 37-38.

²U.S. Bureau of the Census, 1960, *op. cit.*

in this index is the same. Scores are given to 494 job classifications, to all possible combinations of years of school completed and to categories of family income. The scores for each of the three variables are added and divided by three. The income score is the individual's socioeconomic status score.

A comparison was made by various indexes of socioeconomic status in a study developed by Joseph Kahl and James Davis.¹ The purpose of the study was to verify if there was a relationship among various indexes of socioeconomic status. If this occurred, then it would be an indication of the validity of a measure like "social class." The authors underline that:

The research man . . . can tentatively conclude that "socioeconomic status" is an accurate though clumsy term: there is a composite of social and economic attributes that tend to cluster together, and we can measure the composite fairly well. For many purposes it is practical to treat this composite as one dimension--the general factor. The best single index of it is an occupational scale. (Warner's has a higher loading, but the Census Bureau gives details that make coding more reliable.) Some improvements in measurement can be had by combining occupation and one of the variables from the second common factor, such as Census tract, with a heavier weight given to the former, to add more variable to a composite index."²

¹Joseph A. Kahl and James A. Davis, "A Comparison of Indexes of Socio-Economic Status." *Social Forces*, May, 1960.

²*Ibid.*, p. 321.

Kahl and Davis used factor analysis to list 19 stratification indexes for 219 men. Results showed that the indexes were highly correlated because all measured, roughly, the same underlying dimensions. A conclusion can be drawn from the study:

The battery of indexes showed two common factors. The first was composed of the various measures of occupation, plus certain variables closely related to occupation, such as education self-identification, and the interviewer's rating of the subject. The second factor was composed of ecological measures plus those of the status of the parents of the subject and his wife.

The two common factors accounted for most of the mutual variances of the original indexes. The little that remained was studied in a cluster analysis. It revealed certain sub-groupings of variables that were highly related to each other after their mutual relationships to the common factors were controlled. These turned out to be mainly clusters of indexes that were replicating measures of the same variable, a further indication of the fact that the two common factors "explained" most of the important relationships among the 19 indexes.¹

The Application of Social Classes to Marketing

Researchers have studied the relationships which exist between the fact that an individual being is classified as belonging to a social class and his purchase patterns or habits.

Pierre Martineau is responsible for exercising a strong influence in focusing the marketer's attention on social classes as an important variable to explain consumers' behavior.

¹*Ibid.*, p. 325.

In his article "Social Classes and Spending Behavior" Martineau reports findings of a study undertaken by W. Lloyd Warner and himself for the *Chicago Tribune*.¹ The study objectives were:

to determine if such a social class system did exist in metropolitan Chicago, if the dimensions and the relationships were at all similar to the smaller cities which were studied before the far-reaching social changes of the past fifteen years. The studies were undertaken to see if there were any class significances in the individual family's spending-saving patterns, retail store loyalties, and his expression of taste in typical areas such as automobiles, apparel, furniture and house types.²

Martineau and Warner's study was made with a sample of about 4,000 households in the metropolitan area of Chicago. The researchers used an Index of Status Characteristics which enables them to divide the sample into five distinct social classes similar to Warner's classification. The findings were significant as to the variables studied. They revealed a close relationship between choice of store, patterns of spending and class membership.

People are very realistic in the way they match their values and expectations with the status of the store. The woman shopper has a considerable range of ideas about department stores; but these generally become organized on a scale ranking from very high social status to the lowest status and prestige. The social status of a department store becomes the primary basis for its definitions by the shopper. This is also

¹Pierre Martineau, "Social Classes and Spending Behavior," *Journal of Marketing*, October, 1958, pp. 121-130.

²*Ibid.*, p. 122.

true of men's and women's apparel stores, and furniture stores, on the basis of customer profits. The shopper is not going to take a chance feeling out of place by going to a store where she might not fit.¹

The communication ability also showed a relation with social classes. Lower status individuals prefer simple, unsophisticated messages to the subtle humor of advertising which is carried by such magazines as the *New Yorker* and *Esquire*. The type of communication they are used to employ differs substantially from the symbols which are commonplace among high class individuals.

Here again, style of advertising helps the individual to make class identification. Most of the really big local television success stories in Chicago have been achieved by personalities who radiate to the mass that this is where they belong. The self-made businessmen who do the announcing for their own shows communicate wonderfully well with the mass audience. While many listeners switch off their lengthy and personal commercials, these same mannerisms tell the lower status individual that there is someone just like himself, who understands him.²

Social class status was also found to influence the spending and saving patterns of individuals. The higher status individuals showed more savings aspirations than the lower status ones. Also, the manner by which savings would be employed was more specifically defined by higher status people.

¹*Ibid.*, p. 126.

²*Ibid.*, p. 128.

Intangible forms of investment like stock and insurance are very clearly distinguished as upper status investments. Nearly four times as many upper middles select insurance as would be expected by chance, whereas only one-fifth of the lower-lowers select it as would be expected by chance. By contrast, lower status people have far greater preference for tangible investments, specifically ownership of real estate, a farm or a business.¹

Warner and Martineau's research showed that consumption habits can be a status symbol which indicates or defines class affiliation. They conclude that class membership is a more significant determinant of economic behavior than income. The research proved the relevance of the social class concept for marketing problems relating to the purchasing behavior of individuals.

Coleman makes a second contribution in the area of social class and consumption behavior. He conceptualizes as overprivileged those individuals whose income is higher than average for their class; he calls underprivileged those individuals whose income is below the average income for their class. Coleman states that the purchasing behavior of underprivileged and overprivileged individuals did not match that of the individuals whose income was typical of their social class.²

¹*Ibid.*, p. 128.

²Richard P. Coleman, "The Significance of Social Stratification in Selling," in *Proceedings of the 43rd National Conference of the American Marketing Association*, ed. by Martin L. Bell, December, 1960, pp. 171-184.

Social class variations are variations in life-style. Although social class groups are not sharply distinguished by their behavior in most studies, they do show behavior that can be viewed as ranging along a continuum or as different patternings using common elements drawn from the same global culture. To many marketers those differences are important and useful. One of the most important advantages of socioeconomic status classification is the fact that it enables segmentation of the market.

In the research, social class will be used as an independent variable in differentiating the total retail market into in-home shoppers and not in-home shoppers. Also it will be used to segment the various submarkets within the in-home shopping market.

Family Life-Cycle and Consumption Behavior

It has been observed that families behave in different ways according to their stages in life. These differences in behavior have been shown to be of great interest also for economists and marketers. The study of family life-cycle began as a consequence of the urban migration. Rural sociologists, interested in verifying the differences between rural and urban cultures, were the first to study the phenomenon.¹

¹Pitirin A. Sorokin, Carl C. Zimmerman and Charles J. Galpin, *A Systematic Source Book in Rural Sociology* (Minneapolis: University of Minnesota Press, 1931), Vol. II, pp. 3-32; and Charles P. Loomis, "The Study of the Life Cycle of Families," *Rural Sociology*, June, 1936, pp. 180-199.

A series of articles appeared during the early 1930's,¹ which analyzed family life-cycle of rural communities. These studies used a four stage family life cycle based either on the criterion of expanding and contracting family size or on the age of children.

It was only in 1947 that the first analysis of U.S. Census material was published.² In this study family life-cycle was divided into seven stages based upon a statistical analysis of median values. Also during this period appeared the first studies which attempted to indicate the importance of family life-cycle for some economic characteristics.³

In 1948 a report by Duvall and Hill at the National Conference on Family Life held in Washington, D.C.,⁴ analyzed family life-cycle with specific reference to

¹C. E. Lively, "The Growth Cycle of the Farm Family" (mimeographed bulletin No. 51; Wooster: Ohio Agricultural Experiment Station, 1932); C. P. Loomis, "The Growth of the Farm Family in Relation to Its Activities" (Raleigh: North Carolina State College, Agricultural Experiment Station, 1934); and E. L. Kirkpatrick, Mary Cowles and Roselyn Tough, "The Life Cycle of the Farm Family" (Research Bulletin 121; Madison: University of Wisconsin, Agricultural Experiment Station, 1934).

²Paul C. Glick, "The Family Cycle," *American Sociological Review*, XIV (April, 1947), 164-174.

³Howard F. Bigelow, "Financing the Marriage," in *Family, Marriage and Parenthood*, ed. by Howard Becker and Reuben Hill (Boston: D. C. Heath, 1948), pp. 393-418.

⁴Evelyn M. Duvall and Reuben Hill, Co-Chairmen, *Report of the Committee on the Dynamics of Family Interaction* (Washington, D.C.: National Conference on Family Life Cycle, February, 1948), mimeographed.

interactive processes. In this report, a seven stage cycle was described analyzing the processes of interaction which appeared in the family at various periods.

In 1957 Glick published *American Families*,¹ where he made a detailed study of the United States population comparing data from 1890 and the 1950 censuses. The study is primarily a description of the social changes which occurred in the family composition within the period considered.

Also in a 1957 study on the economic behavior of families was published by Lansing and Kish.² The conclusion of their research was that the stages of the family life-cycle were a very significant explanation of the age classes of the head of the household. Lansing and Kish tested family life-cycle relationship with variables such as ownership, indebtedness, employment of wife, income level, purchase of an automobile, and purchase of a television set. They found that those variables were related to the family life-cycle.

More recent additions to the study of family life-cycle are two books edited by Foote and others.³ In *Housing*

¹Paul C. Glick, *American Families* (New York: John Wiley and Sons, 1957).

²John B. Lansing and Leslie Kish, "Family Life Cycle as an Independent Variable," *American Sociological Review*, XXII (October, 1957), 512-519.

³Nelson N. Foote *et al.*, eds., *Housing Choices and Housing Constraints* (New York: McGraw-Hill, 1960); and Nelson N. Foote, ed., *Consumer Behavior: Models of Household Decision Making* (New York: New York University Press, 1961).

Choices and Housing Constraints, we find a study of the relationship between type of housing and stages in the family life cycle, while *Consumer Behavior: Models of Household Decision Making*, applies the developmental theory to various issues of the decision-making process by the family. Those two books, as well as some of the preceding studies do not develop theories about family life-cycle, they merely use it as an independent variable in order to explain other phenomena, setting a trend in the current literature.

Techniques of Classification of Family Life-Cycle

Besides the generalistic attempts to classify stages in the family development and which limited themselves primarily to a description of stages of contraction and stages of expansion, specific efforts were made to obtain narrower and more specific classifications. The study by Glick, in 1947,¹ was one of the pioneering tentatives of classification. Glick developed seven steps examining variables such as: family size, dissolution of the family, children living at home, adult relatives in the home, residential shifts, home ownership, family income, and employment of the husband and wife.

¹Glick, *American Families*, *op. cit.*

Evelyn Duvall is responsible for another study designed to develop a classification for family life-cycle.¹ The criteria that Duvall used to determine the definitions of life cycle categories are: (1) plurality patterns, (2) age of oldest child, (3) school placement of oldest child and (4) functions and statuses of families before children came and after they leave. With these criteria, the outlines are eight stage family life cycles defined as follows:

- Stage I. --Beginning families (married couple without children).
- Stage II. --Childbearing families (oldest child, birth to 30 months).
- Stage III. --Families with preschool children (oldest child 2-1/2 to 6 years).
- Stage IV. --Families with school children (oldest child 6 to 12 years).
- Stage V. --Families with teenagers (oldest child 13 to 20 years).
- Stage VI. --Families at launching centers (first child gone to last child's leaving home).
- Stage VII. --Families in the middle years (empty nest to retirement).
- Stage VIII. --Aging families (retirement to detach of one or both spouses).²

Duvall, however, underlines the problem of existence of overlapping stages in her classification.

In defining stages in terms of oldest child, the presence of other children in the family is not explicitly recognized. A clear-cut sequence of stages of family life cycle such as that outlined above seems to occur only

¹Evelyn M. Duvall, *Family Development* (New York: J. B. Lippincott Company, 1947).

²*Ibid.*, p. 8.

in the one-child family. In families of more than one child, there are several years of overlap at various stages.¹

A little further, Duvall attempts a solution of the problem:

There is no simple solution to the conceptual problem of overlap of stages of family life cycle in families of more than one child. Since our thesis is that families grow and develop as their children do, our answer to the question of overlapping of stages is that a family grows through a given stage with its oldest child, and in a sense "repeats" as subsequent children come along.

In order to correct the problem of overlapping stages, Roy H. Rodgers suggested a third type of classification:

1. Childless couple.
2. All children less than 36 months.
3. Pre-school family with (a) oldest 3 to 6 and youngest under 3, (b) all children 3 to 6 years.
4. School-age family with (a) infants, (b) pre-schoolers, (c) all children 6 to 13 years.
5. Teenage family with (a) infants, (b) pre-schoolers, (c) school ages, (d) all children 13 to 20 years.
6. Young adult family with (a) infants, (b) pre-schoolers, (c) school ages, (d) all children 13 to 20.
7. Launching family with (a) infants, (b) pre-schoolers, (c) school ages, (d) teenagers, (e) youngest child over 20.
8. Where all children have been launched until retirement.
9. Retirement until death of one spouse.
10. Death of first spouse to death of survivor.²

¹*Ibid.*, p. 9.

²Roy H. Rodgers, "Improvements in the Construction and Analysis of Family Life Cycle Categories" (unpublished Ph.D. dissertation, Western Michigan University, Kalamazoo, 1962).

Rodger's approach is more objective and definite. It seems to have avoided as much as possible the problems of overlapping stages.

Consumption and Family Life-Cycle

The concept of family life-cycle was used as an independent determining variable in several studies which attempted to predict consumer behavior patterns through the analysis of his stage in the family life cycle. Of such nature are studies by Kirk and Reid.¹ In 1958, a study by Braid related family life cycle with such variables as interdependence of the family status, personal income and size of the consuming unit.² Lansing and Morgon published a very complete study which attempts to relate consumer behavior with family life cycle.³ They found very relevant data which explain some of the consumption phenomena related to the stage in the family life-cycle.

Wilton Thomas Anderson, Jr. in his Ph.D. dissertation summarizes all attempts that have been made to link family life cycle and consumption:

¹Hazel Kirk, *A Theory of Consumption* (Boston: Houghton Mifflin Company, 1923); Hazel Kirk, *Economic Problems of the Family* (New York: Harper and Row, Publishers, 1933); and Margaret Reid, *Consumers and the Markets* (New York: Appleton-Century-Crofts, 1938).

²Dorothy Braid, "Individual Incomes and the Structure of Consumer Units," *A.I.A. Papers and Proceedings*, May, 1958.

³John B. Lansing and James N. Morgon, "Consumer Finances Over The Life-Cycle," in *Consumer Behavior II: The Life-Cycle and Consumer Behavior*, ed. by Lincoln H. Clark (New York: New York University Press, 1955).

The interpretation of attempts to characterize specific dimensions of the family consumption quotient erects an economic conceptual framework grounded in three basic concepts.

1. Standard of living and their dependence upon custom, habit, emulation, tastes, and the means for financing consumption: income and occupation.
2. Socioeconomic status and its numerous indices of rank: occupation, source of income, education, housing, and material goods and services, that is, the products of consumption.
3. Consumer behavior and the motivating forces behind consumption: wants and needs, utility and value.¹

Personality Variables

The focus of this thesis is to determine whether the in-home shopping market can be segmented considering personality variables as well as socioeconomic status and family life-cycle. As has been stated earlier in this chapter, the great majority of list segmentation studies have been concerned with socioeconomic variables. No studies have been found which use personality variables to differentiate in-home shoppers, or to distinguish among different types of in-home shoppers.

The merits of personality measures as a tool for market segmentation have been expressed by several behaviorists. Engel, Kollat and Blackwell explain that

¹Wilton Thomas Anderson, Jr., "An Analysis of the Correlates of Convenience Orientated Consumer Behavior: With Special Emphasis on Selected Convenience Foods and Durable Goods" (unpublished Ph.D. dissertation, Michigan State University, 1969), p. 86.

personality may be more useful for segmentation when used along with other variables:

Personality is useful in a different way if the market is first segmented by some other subjective mean. The subgroups isolated are then analyzed to detect any differences in psychological attributes. In other words, personality is no longer the independent variable used to segment the market; rather, it is used along with other measures to determine differences between members of segments isolated by other means.¹

Another recent study developed by Myers and Alpert is concerned with attitudes as determinants of buying behavior.² The authors define as "determinant attitudes": "the attitudes toward features which are most closely related to preference or to actual purchase decisions."³ They agree that marketing strategy must be built around the determinant attitudes. This study proposes methods of evaluating such attitudes and contributes to enlarge and specify the differences between personality characteristics and attitudes as influencing variables of the buying process.

¹James F. Engel, David T. Kollat and Roger D. Blackwell, "Personality Measures and Market Segmentation--Evidence Favors Interaction Views," *Business Horizons*, June, 1969, pp. 61-69.

²James H. Myers and Mark I. Alpert, "Detrimental Buying Attitudes: Meaning and Measurement," *Journal of Marketing*, XXXII (October, 1968), 13-20.

³*Ibid.*, p. 13.

Another study of the relationship between consumers' attitudes and their buying behavior was developed by Udell.¹ He investigated the influence of attitudes on the activity of buying from retailers who had given trading stamps. Udell found that there was a relationship between a favorable attitude towards trading stamps and the fact that they were saved by those interviewed.

Frederick E. May summarizes in an article published in 1965 a great part of the results achieved through empirical research on buying behavior of household customers.² Although May's list is not complete, it gives a very significant overview of the importance in marketing of investigating variables related to the consumer personality characteristics as well as social influences which might determine or define his buying patterns.

The choice of the personality and attitudinal variables used in this segmentation study were a result of personal meditation about the specific problem. Consideration was given to the "total product" and the possible reasons for its purchase, to the type of distribution along with other variables which might interact to provoke the purchase. It is reasonable to expect that other variables

¹John G. Udell, "Can Attitude Measurement Predict Consumer Behavior?" *Journal of Marketing*, XXIX (October, 1965), 46-50.

²Frederick E. May, "Buying Behavior: Home Research Findings," *The Journal of Business*, XXXVIII (October, 1965), 379-396.

not considered in this research might be as significant or even more significant than the ones included in the study. The investigation of buyer behavior is far from being complete. Only further tentatives will prove the extent and validity of personality variables as a tool for segmentation of the in-home shopping market.

Segmentation of the In-Home Shopping Market by Socioeconomic and Sociopsychological Variables

As it was indicated in Chapter I and previous segments of Chapter II, there is clear evidence of growth of the in-home shopping market. The importance of this activity has been shown by the existence of extensive literature on the subject.

As a market grows larger and more important, greater attention is given to its components and there is generally a proliferation of competitive efforts to gain the preference of consumers. As it was mentioned in Chapter I, such marketing efforts have been translated into various strategies, one of the most important of which is the strategy of market segmentation.

Several criteria have been used in the past by marketing practitioners and scholars in order to segment markets. The researcher has shown how, in the literature, studies of segmentation have been reported which have used separate variables such as: social class, stage in the family cycle and personality characteristics.

No trace has been found, however, of a research study which analyzes in-home shopping market segments by investigating these three characteristics of shoppers combined: their social class, along with their stage in the family life-cycle and their personality characteristics. Since the relevance and importance of each one of these variables for marketing is accepted by the past literature, it seemed natural that a combined study of these would add valuable information to marketing knowledge and practice.

The conceptual parameters within which the present research has been planned are expressed by the inter-relationships which are assumed to exist between in-home shopping activities and trends; and the socioeconomic and sociopsychological characteristics of in-home shoppers. This study attempts to synthesize previous efforts of segmentation in order to recognize with more detail the existence of submarkets within the total in-home shopping market. The methodology utilized in the research is explained in detail in Chapter III.

CHAPTER III

RESEARCH DESIGN

Chapter III is concerned with the research design of the study. In the first portion of the chapter the dependent and independent variables are presented. Following is a discussion of sample design and procedures used to collect and analyze the data. A complete copy of the questionnaire used in the research is attached as Appendix C.

Research Design Framework

Identification of Variables

The methodology used in the study reflects the objectives of determining socioeconomic and sociopsychological characteristics of in-home shoppers.¹ The respondents' answers as to the frequency of their in-home purchases served as a criterion to differentiate between those individuals who do and do not shop at home. Their answer as to what type of in-home retailing outlets they used to purchase

¹In-home shoppers are defined as individuals who purchase products either by mail, or by telephone, or both. People who purchase products from door-to-door salesmen are not considered to be in-home shoppers in the present research.

their products served as a classification instrument to determine the different segments of the sampled in-home shopper's market.

The research design was limited to the delineation of different patterns of behavior of in-home shoppers and individuals who do not shop at home. Socioeconomic and sociopsychological characteristics of respondents were identified as independent variables. Patterns of in-home shopping and frequency of in-home purchases were identified as dependent variables.

Independent Variables

Two sets of independent variables were examined in the study. The first set consisted of socioeconomic and demographic variables. The purposes of using these variables were to measure the respondents' social class,¹ and their stage in the family life-cycle.² Specifically, the variables concerning social class and life cycle characteristics of the respondents in the research were the following: (1) marital status of the housewife, (2) employment status of the housewife, (3) age of the head of the household, (4) number and ages of children living at home, (5) occupation

¹U.S. Bureau of the Census, *U.S. Census of Population, 1960, Subjects Report Socioeconomic Status*, Final Report PL(2)-5c (Washington, D.C.: Government Printing Office, 1967).

²William H. Cunningham and W. J. E. Crissy, "Market Segmentation by Motivation and Attitude," *Journal of Marketing Research*, IX (February, 1972), 100-102.

of the head of the household, (6) total family income and (7) level of education of the head of the household.

The second set of independent variables consists of six sociopsychological scales. These scales attempt to measure the respondents' following personality and attitudinal characteristics: (1) trust in people, (2) cosmopolitanism, (3) attitude toward credit, (4) tendency to impulse buying, (5) adventuresomeness, and (6) conservatism. Each of the six scales are discussed below.

Trust in people.--The trust in people scale consists of questions 29-33 in Section I of the Questionnaire (see Appendix C). The first three items were developed by the Survey Research Center at the University of Michigan,¹ while the remaining two items came from a study by Rosenberg.² The five items were scored in the Likert manner. The Likert scoring technique involves summing the numerical scores of each item in a particular scale. This sum then represents the respondent's score on the respective variable.

Cosmopolitanism.--The cosmopolitanism scale is made up of the first six items in Section II of the Questionnaire.

¹John P. Robinson and Phillip R. Shaver, *Measures of Psychological Attitudes*, Survey Research Center, Institute for Social Research, University of Michigan, Ann Arbor, Michigan, 1961, pp. 529-532.

²M. Rosenberg, *Occupations and Values* (Glencoe, Illinois: The Free Press, 1957), pp. 25-35.

The scale was developed by Campbell in 1966 and was first reported as an unpublished working paper of the Department of Psychology, Northwestern University.¹ This variable was also scored in a Likert manner.

Attitude toward credit.--The researcher was unable to locate a test that did an adequate job of measuring individuals' attitude toward credit. As a result, items seven to twelve in Section II of the Questionnaire were designed specifically for the present study to measure this particular variable. Although only a limited amount of pre-testing was done, it is felt that the six item Likert test does give at least a general indication of the respondents' attitudes toward credit.

The pretesting of the attitude towards credit scale consisted of first asking a panel of five doctoral students at Michigan State University to answer the questions and to examine them from the perspective of their own feelings toward credit. The second step in the pretesting process involved asking 25 randomly selected individuals from the greater Lansing community to complete the entire questionnaire and then to comment on its readability and clarity. The same pretesting procedure was used for the tendency for impulse buying and adventuresomeness scales as well.

¹Robinson *et al.*, *op. cit.*, p. 648.

Tendency for impulse buying.--Questions thirteen to eighteen in Section II of the Questionnaire were developed for the study in an attempt to elicit the respondents' attitudes toward impulse buying. Limited pretesting of the scale was done, in the same manner as for the attitude toward credit scale. It is felt that the five Likert items give an indication of the respondents' attitudes toward impulse buying.

Adventuresomeness.--The adventuresomeness scale was developed for the research project; it consisted of questions nineteen to twenty-four in Section II of the Questionnaire. The six items were scored in a Likert manner.

Conservatism.--The conservatism scale was developed by McClosky and was first reported in the *American Political Science Review*.¹ The scale was designed to measure general conservative attitudes rather than just political attitudes. The test consists of the last ten items in Section II of the Questionnaire, and was scored in a Likert manner.

Dependent Variables

The first two objectives of the research, as stated in Chapter I of the study are: (1) to determine if there are significant differences among people who shop at home,

¹Herbert McClosky, "Conservatism and Personality," *American Political Science Review*, 1958, No. 52, pp. 27-45.

and (2) to determine whether relatively distinct market segments can be identified within the in-home shopping market. The first eleven questions in Section I of the Questionnaire are designed to obtain information concerning the respondents' shopping patterns. Each subject is initially classified as purchasing products at home either regularly, occasionally, very rarely or not at all.¹

In order to determine if the subjects who shopped at home by mail or by telephone could be differentiated from those who did not, the respondents who indicated that they regularly or occasionally shopped at home were grouped together as were the individuals who stated that very rarely or never purchased goods at home.² The first respondent group is referred to as active in-home shoppers and the second group as inactive in-home shoppers. It was felt that, by contrasting the active and the inactive in-home shoppers, it would be possible to draw certain conclusions which would be generalized to the sample as a whole.

It was also felt that it would be important to determine whether the subjects who indicated they were

¹Question #7, Section I of the Questionnaire.

²Precedents for dichotomizing the respondents in this manner can be found in J. Hawey, "What Makes a Better Seller," in *Motivation and Market Behavior*, ed. by R. Ferber and H. G. Wales (Homewood, Ill: Richard D. Irwin, Inc., 1958), pp. 361-381; and W. T. Tucker and John J. Painter, "Personality and Product Use," *Journal of Applied Psychology*, No. 45, October, 1961, pp. 325-329.

regular in-home shoppers could be differentiated from those who stated they never shopped at home. Therefore, the regular in-home shoppers and those who never shopped at home were separated from the remainder of the sample and were analyzed to determine if significant differences existed between them.

In order to define the existence of segments within the in-home shopping market, the respondents were asked to indicate from what type of in-home shopping outlet they purchased the goods.¹ As no detailed classification of in-home sellers was found in the literature, for purposes of facilitating their answers as to where they purchased their products, in Section I of the Questionnaire, a tentative enumeration of possible alternatives, was included. The criteria used to establish this enumeration was empirical observation of differences among in-home retail organizations as to the type of products sold and the conditions of sale offered to the consumer. The six major categories of in-home retailers which appear in the Questionnaire are: (1) large catalogue and department stores, (2) "Club-of-the-Month" organizations, (3) novelty catalogue organizations, (4) specialty houses, (5) newspaper and magazine advertisements, and (6) credit card organizations.

¹See questions 8 and 10, Section I of the Questionnaire.

Sample Selection

The data were collected in June and July, 1970, in the cities of Lansing and East Lansing, Michigan. The cities were divided into the following five income tracts: (1) \$6,000-\$8,000, (2) \$8,001-\$10,000, (3) \$10,001-\$12,000, (4) \$12,001-\$14,000, (5) \$14,001-\$16,000. Two hundred families were randomly selected from each income tract to participate in the research. This was done in an attempt to insure that a cross section of the population in the urban test area would be included in the sample.

Ed Burnett, in an article on potential buyers of mail order retailers states that:

Discretionary purchasing power--the dollars most of us, as consumers, can spend as we please, after meeting truly basic needs, is a major factor in the success of direct mail. And probably from the day some unsung genius recognized that letters, sent in quantity, could sell, the direct mail marketer has attempted to reach so-called 'people of means.'¹

This statement indicates that income is considered an important variable as far as influencing in-home purchases. The sample was then, stratified, taking into account this particular factor.

As Ferber, Blankertz and Hollander explain in their text on marketing research, a stratified sample is: "a

¹Ed Burnett, "How to Select Lists that Reach People with Ability to Buy," *The Reporter of Direct Mail Advertising*, April, 1969, pp. 34-42.

weighted aggregate of unrestricted samples."¹ The authors proceed in indicating what are the conditions which have to exist in order to use a stratified sample:

1. Certain relevant characteristics which influence strongly the subject under study must be known.
2. Division of the population by the relevant characteristics must be practicable.
3. The relative division of the population by these characteristics must be known with a fairly high degree of accuracy.²

Accordingly, as it was assumed by the researcher that income level of individuals was a relevant characteristic which influenced in-home shopping, the first requirement was satisfied. On the same line, the sample was stratified by income level by Census Tracts, which indicated the practicability of the second requirement and also the existence of the third requirement.

As the number of individuals selected from each income tract was not proportional to the relative size of the stratum of the population, the sample used is defined as a *disproportionate stratified sample*.³ It was decided to use the disproportionate sample because the various strata were not homogeneous with respect to the characteristic under study.

¹Robert Ferber, Donald F. Blankertz and Sidney Hollander, Jr., *Marketing Research* (New York: The Ronald Press Company, 1964), p. 205.

²*Ibid.*, pp. 205-206.

³*Ibid.*, p. 206.

The stratified sample, when all the conditions for its use are present, has some advantages over the unrestricted random sample. As Ferber, Blankertz and Hollander indicate:

The sampling error of a stratified sample may be considerably below that of an unrestricted sample of the same size. This is because the stratified design makes use of the additional information regarding the breakdown of the population by the relevant characteristic(s) error.¹

It is important to add that the questionnaire used in the research was anonymous, therefore, it is impossible to tell the number of questionnaires which were returned from each income tract. This fact does not alter the use of a stratified sample.²

The families were sent a set of materials which included a letter, a questionnaire and a pre-addressed stamped envelope. The letter indicated that the family had been selected to participate in a study sponsored by Michigan State University and that their cooperation would be greatly appreciated (see Appendix A). The families were urged to complete the questionnaire at their earliest convenience. Two weeks after the first set of materials had been mailed, all the families in the sample were sent a post-card containing further requests to answer the questionnaire and send it back to the researcher (see Appendix B).

¹*Ibid.*, p. 206.

²*Ibid.*

Six hundred questionnaires were returned, 81 of which had to be eliminated from the survey because they were improperly completed.

The questionnaire was divided into three sections. The objective of the first section was to determine the respondents' in-home shopping habits, social class and stage in the family life-cycle. The second section was designed to test the respondents' personality and attitudinal characteristics. The third section inquired as to the type of products the respondents purchased by mail or by telephone, and the respondents' activities during their leisure time.

Data Analysis

The data were analyzed in two steps. First, linear discriminant analysis was used to test whether there were any significant differences between people who shopped at home and those who did not. Second, canonical analysis was utilized to determine if there were significant differences among individuals who purchased products through different types of in-home shopping outlets.

Linear Discriminant Analysis

Linear discriminant analysis permits the analyst to examine a set of independent variables to determine which, if any, are able to distinguish between two or more pre-determined dependent variables or classification boundaries. Statistically, the linear discriminant function maximizes

the independent variables.¹ The discriminant function takes the following form:

$$Y = aX_1 + bX_2 + cX_3$$

The letters a, b and c represent the discriminant weights or coefficients, while X_1 , X_2 , X_3 represent the numeric value which the respondents had on the respective variable. Y is the discriminant score which is computed for each respondent in the sample.

There are two common techniques used to test whether the discriminant function significantly differentiated the respondent groups. The first test consists of classifying the subjects as belonging to one of the two respondent categories based upon their discriminant scores and the discriminant classification boundary. It is calculated by dividing the distance between the discriminant centroids in the two sample cases. The discriminant centroids are developed by substituting the group means for each independent variable in the discriminant function and then solving for the Y value.² That is, if the discriminant function was effective in distinguishing between the groups, it would be expected that a large percentage of the individuals in

¹Franklin B. Evans, "Psychological and Objective Factors in the Prediction of Brand Choice," *Journal of Business*, No. 32, October, 1959, pp. 340-369.

²William W. Cooley and Paul L. Lahnes, *Multivariate Procedures for the Behavioral Sciences* (John Wiley and Sons, Inc., 1962), p. 7.

Group I would have discriminant scores that would place them closer to the Group I centroid than to the Group II centroid; and a large percentage of the Group II respondents' discriminant scores would place them closer to the Group II centroid than to the Group I centroid. The first technique can be tested for statistical significance by using a chi square test to determine whether the percent correctly classified was greater than would be expected by chance.

The second test of the power of the discriminant function is the Wilks' lambda criterion, which was developed by Rau in 1952,¹ and determines the probability level for rejecting the null hypothesis incorrectly (Type I error).² The results of both tests are reported in Chapter IV.

The discriminant program³ used to test the data prints out three items which are not normally found in discriminant programs: (1) correlation of the independent variables with the discriminant scores, (2) the group means of the independent variables, and (3) an F-test of the differences between the group means. By examining these items it is possible to estimate which of the independent

¹*Ibid.*, p. 7.

²Statistically, Wilks' takes the following form:

$$= w/T$$

where w is the pooled within-group deviations score cross products and T is the total deviation score cross-products matrix. Taken from Cooley and Lahnes, *op. cit.*, p. 61.

³Donald J. Veldman, *Fortran Programming for the Behavioral Sciences* (New York: Holt, Rinehart and Winston, 1967), pp. 268-280.

variables are responsible for the effectiveness of the discriminant function in differentiating the two groups. That is, if a variable correlates highly (either positively or negatively) with the discriminant scores, then it can be assumed that this particular variable plays an important role in the discriminant function. In the same manner, if an independent variable's group means are not statistically significant from each other, then it can be assumed that the variables did not play an important role in the power of the discriminant function.

Several statisticians have stated that an upward bias develops in the predictive power of the discriminant function if the discriminant coefficients from a sample are used to compute the discriminant scores from the same sample.¹ This problem can be attenuated by cross validating the data. To cross validate the data, the samples were divided in half. The discriminant program derives the discriminant coefficients from the first half. These coefficients are then used to compute the discriminant scores and the discriminant centroids from the second half of the sample.

In the research, the data was analyzed without cross-validating the data, and then the data was cross-validated

¹J. W. Sheth, "Multivariate Analysis in Marketing," *Journal of Advertising Research*, February, 1970, pp. 24-39; and Ronald E. Frank, William F. Massy and Donald B. Morrison, "Bias in Multiple Discriminant Analysis," *Journal of Marketing Research*, August, 1965, pp. 250-258.

to illustrate the differences in the two procedures. Also, any conclusions to be drawn from the data will be conservative in nature. The results of both the discriminant analysis and the cross-validated discriminant analysis will be explained in Chapter IV.

Canonical Analysis

A second objective of the study was to determine if relatively distinct market segments could be located within the in-home market. Since in the research it was possible that a respondent purchase goods from any combination of several types of in-home shopping outlets, canonical analysis was selected to test the data. Discriminant analysis could not be used to examine the second objective of the study, because of the underlying assumption of multiple discriminant analysis that the dependent variables be independent of each other. That is, a subject may only belong to one respondent group. As an example, with discriminant analysis, an individual would be classified as a department store in-home shopper rather than as a department store in-home shopper and a specialty house in-home shopper.

The respondents were asked, in questions #8 and #10 of Section I of the Questionnaire (see Appendix C), to indicate whether they purchased goods by mail or by telephone from large catalogue stores, novelty catalogue stores, club-of-the-month type of organization, specialty mail order houses, credit card organizations, or if they purchased

goods responding to advertisements in magazines and newspapers. The choice of these types of in-home selling organizations as a classification for the purposes of segmenting the in-home selling market, was based on observation of the existing mail order and telephone market.

The respondent could indicate that he purchased goods by mail or by telephone from one, from more than one, or from all the types of retailers listed in questions #8 and #10 of Section I of the Questionnaire. In order to verify if statistically significant groups of shoppers related to one or more groups of retail outlets could be obtained, canonical analysis was used.

Mathematically, the objective of canonical analysis is to obtain a set of weights for each of the sets of variables, such that the correlations between the weighted linear composites in each set are maximized.¹ Whereas discriminant analysis maximizes the differences between two or more independent groups, canonical analysis maximizes the correlation between the criterion (or dependent) set of variables and the predictor (or independent) set of variables.

The interpretation of canonical analysis can be quite difficult. The common procedure is to examine each canonical root as an independent entity. The procedure

¹Mark I. Alpert and Robert A. Peterson, "On the Interpretation of Canonical Analysis" (unpublished working paper 71-45, The University of Texas at Austin), 1971.

begins by examining the criterion and the predictor variables to determine which of the variables have high correlations with the respective roots.¹ No magic correlation is considered to be high, rather, the analyst should begin with the highest correlation and proceed until the variables selected no longer "make sense."² The researcher must be careful not to let his previously stated hypothesis influence the decisions.

The canonical program develops as many roots as there are criterion variables. Generally, though, only those roots which have levels of significance below some predetermined level, such as .05, are examined.

It was thought that by examining the data with two different statistical techniques, and by dividing the data in a manner which would yield a core market and a broader market, it might be possible to learn more about the kinds of people who shop at home, those who do not, and the types of people who shop at various forms of in-home outlets.

¹David L. Sparks and W. T. Tucker, "A Multivariate Analysis of Personality and Product Use," *Journal of Marketing Research*, February, 1971, p. 69.

²Alpert and Peterson, *op. cit.*

Summary

In summary, Chapter III has presented the dependent and independent variables used in the research and the sample design. Also, the two multivariate statistical techniques used to determine if there are significant differences between those individuals who do and do not shop at home, and to test if market segments could be located among the in-home shoppers were presented.

 CHAPTER IV

PRESENTATION OF FINDINGS

The objective of Chapter IV is to present the findings of the research. The chapter is divided into three segments. The first segment examines the difference between the active and the inactive in-home shoppers; the second segment examines the very active and the very inactive in-home shoppers. The third section reports the findings of the canonical analysis which was used to determine if distinct market segments exist within the in-home shopping market.

Active vs. Inactive In-Home ShoppersSocioeconomic and Demographic Variables

The first two research hypotheses dealt with socioeconomic and demographic variables, and with the in-home shopping patterns of the subjects. This portion of Chapter IV will examine these nine independent variables and their effects on in-home shopping behavior. Table 4 summarizes the socioeconomic characteristics, while Table 5 summarizes the demographic characteristics.

Table 4

SOCIOECONOMIC CHARACTERISTICS OF ACTIVE AND INACTIVE IN-HOME SHOPPERS

Characteristic	Active In-Home Shoppers	Inactive In-Home Shoppers	Level of Significance
Occupation of the head of the household	Professional, technical managers and officials	Distributed throughout professional, managers, clerical, and service workers	.002
Total family income	21.3% earned over \$25,000	13.4% earned over \$25,000	.05
Educational level of the head of the household	Heavy concentration in post graduate education	Distributed throughout educational spectrum	.04
Social class of the family	Upper middle class	Middle class	.001

Table 5

DEMOGRAPHIC CHARACTERISTICS OF ACTIVE AND INACTIVE IN-HOME SHOPPERS

Characteristic	Active In-Home Shoppers	Inactive In-Home Shoppers	Level of Statistical Significance
Employment of the homemaker	34.4% employed full-time	29.9 employed full-time	.05
Marital status	No distinct pattern	No distinct pattern	Not significant
Number of years married	No distinct pattern	No distinct pattern	Not significant
Age of the head of the household	No distinct pattern	No distinct pattern	Not significant
Family life cycle	No distinct pattern	No distinct pattern	Not significant

in-

top

off

shot

the

that

the

that

two

are

the

story

would

to

and

to

the

In

eye

at

sta

are

1. Occupation.--As Table 6 illustrates, the active in-home shoppers in the sample are found primarily in the top job status categories: professionals and managers--officials. More than 67 percent of the active in-home shoppers are in these two categories, while 52 percent of the inactive in-home shoppers fall in the same two categories. Inactive in-home shoppers appear to be more heavily distributed in the categories of clerical sales and service workers than do the active in-home shoppers. The differences in the two groups were significant with a two-tailed F-test of the difference in group means at the .002 level.¹ This indicates that the differences between the respondent groups were strong enough that only two times out of 1,000 random draws would they be found by chance.

✓ 2. Total family income.--The respondents were asked to indicate their total family income for 1969 as Table 7 indicates. The active in-home shoppers in the sample tended to have higher income levels than did the inactive shoppers. This was particularly evident in the over \$25,000 category. In the remaining five categories the respondents were rather evenly distributed. The group differences were significant at the .05 level, using a two-tailed F-test.

¹All two-tailed tests that measure the level of statistical significance between the two respondent groups are F-tests of the difference in group means.

Table 6

OCCUPATION OF THE HEAD OF THE HOUSEHOLD OF THE
ACTIVE AND INACTIVE IN-HOME SHOPPER

Occupations	Active In-Home Shoppers		Inactive In-Home Shoppers	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Professional, technical and kindred workers (91-100)	109	37.5	74	26.5
Managers, officials, and proprietors except farm (81-90)	87	29.9	71	25.4
Clerical, sales and kindred workers (71-80)	30	10.3	54	19.4
Craftsman, foreman, and kindred workers (61-70)	20	6.9	14	5.0
Operative and kindred workers (51-60)	3	1.0	3	1.0
Semiskilled labor (41-50)	10	3.4	13	4.7
Service workers (31-40)	30	10.3	47	16.8
Unskilled labor (less than 30)	<u>2</u>	<u>0.7</u>	<u>3</u>	<u>1.0</u>
Total	291	100.0	279	99.8

Table 7

✓ INCOME LEVELS OF THE ACTIVE AND INACTIVE IN-HOME SHOPPERS

Income	Active In-Home Shoppers		Inactive In-Home Shoppers	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Less than \$5,000	10	3.4	14	5.0
\$5,000-\$7,999	17	5.8	27	9.7
\$8,000-\$9,999	27	9.3	31	11.2
\$10,000-\$14,999	88	30.2	72	25.9
\$15,000-\$24,999	87	29.9	96	34.7
Over \$25,000	<u>62</u>	<u>21.3</u>	<u>37</u>	<u>13.4</u>
Total	291	99.9	277	99.9

3. Education of the head of the household.--The respondents were asked to indicate how much formal education they had attained. As Table 8 indicates, those respondents classified as active in-home shoppers were most heavily concentrated in the category "Graduate School"; 38.4 percent of the subjects fell in this category, while 24.8 percent of the respondents classified as inactive in-home shoppers had attended graduate school.

Table 8

EDUCATION OF THE HEAD OF THE HOUSEHOLD OF ACTIVE
AND INACTIVE IN-HOME SHOPPERS

Education	Active In-Home Shoppers		Inactive In-Home Shoppers	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
<u>Elementary:</u>				
one and two years	--	--	--	--
three and four years	1	0.3	--	--
five and six years	--	--	1	0.3
seven years	--	--	--	--
eight years	5	1.7	8	2.8
<u>High School:</u>				
one year	4	1.4	5	1.8
two years	9	3.1	5	1.8
three years	2	0.6	6	2.2
four years	47	16.2	67	24.1
<u>College:</u>				
one year	11	3.8	18	6.5
two years	30	10.3	23	8.3
three years	11	3.8	8	2.9
four years	59	20.3	68	24.5
<u>Graduate School:</u>	<u>112</u>	<u>38.4</u>	<u>69</u>	<u>24.8</u>
Total	291	99.9	278	100.1

The inactive in-home shoppers seem to be more evenly distributed throughout the levels of education than the active in-home shoppers. The differences are significant at the .04 level, with a two-tailed F-test.

4. Social class.--It was hypothesized that there would be significant differences between the social classes of the active and inactive in-home shoppers. This was tested by utilizing a technique developed by the United States Bureau of the Census which places each respondent on a social class continuum ranging from 01 to 100.¹ Although this approach does not permit the researcher to state that a subject is a member of a particular social class, it does allow conclusions as to differences in the various respondent groups. It was found that active in-home shoppers tended to be in higher social classes than inactive in-home shoppers. Table 9 shows that 56.4 percent of the active in-home shoppers had a social class score of 91 or greater, while only 41.7 percent of the inactive in-home shoppers scored in the 91 or above category.

In the combined social class gradations of 30 or less through 71-80 were found 40.7 percent of the inactive in-home shoppers and 25.8 percent of the active in-home shoppers. The differences were significant at the .001 level with a two-tailed F-test.

¹U.S. Bureau of the Census, *op. cit.*

Table 9

SOCIAL CLASS OF ACTIVE AND INACTIVE IN-HOME SHOPPERS

Gradations	Active In-Home Shoppers		Inactive In-Home Shoppers	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
91-100	164	56.4	116	41.7
81-90	49	16.8	49	17.6
71-80	42	14.4	58	20.9
61-70	21	7.2	27	9.7
51-60	7	2.4	16	5.8
41-50	5	1.7	7	2.5
31-40	3	1.0	4	1.4
30 or less	<u>--</u>	<u>--</u>	<u>1</u>	<u>0.4</u>
Total	291	99.9	278	100.0

5. Employment of the homemaker.--Table 10 shows that, within the sample, 34.4 percent of the active in-home shoppers were employed full time and 29.9 percent of the inactive in-home shoppers were employed full time. It was felt that the housewife who was employed full time would be a more active in-home shopper. Although this seemed to be the result of the findings, the differences were not strong enough to be significant at the .05 level.

Table 10

EMPLOYMENT OF THE HOMEMAKER OF ACTIVE AND
INACTIVE IN-HOME SHOPPERS

Employment Status	Active In-Home Shoppers		Inactive In-Home Shoppers	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Unemployed	155	53.3	160	57.8
Part-time	33	11.3	34	12.3
Full-time	<u>100</u>	<u>34.4</u>	<u>83</u>	<u>29.9</u>
Total	288	99.9	277	100.0

6. Marital status.--Table 11 reports the findings of the variable marital status. Approximately 85 percent of both the active and inactive in-home shoppers were married. No statistically significant differences were found in the marital status variable.

Table 11

MARITAL STATUS OF ACTIVE AND INACTIVE IN-HOME SHOPPERS

Marital Status	Active In-Home Shoppers		Inactive In-Home Shoppers	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Married	252	86.6	237	84.9
Single	<u>39</u>	<u>13.4</u>	<u>42</u>	<u>15.1</u>
Total	291	100.0	279	100.0

7. Number of years married.--Table 12 reports the number of years that the active and inactive in-home shoppers have been married. No distinct patterns were found, and the data was not statistically significant.

Table 12

NUMBER OF YEARS MARRIED OF ACTIVE AND
INACTIVE IN-HOME SHOPPERS

Years Married	Active In-Home Shoppers		Inactive In-Home Shoppers	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Less than 3 years	8	3.1	4	1.7
4-7 years	20	7.8	23	9.5
8-12 years	32	12.4	15	6.2
13-20 years	51	19.8	43	17.8
More than 20 years	<u>147</u>	<u>56.8</u>	<u>156</u>	<u>64.7</u>
Total	258	99.9	241	99.9

✓ 8. Age of the head of the household.--No significant differences were found in the respective ages of the heads of the households in the two respondent groups. The data was not statistically significant; it is reported in Table 13.

Table 13

AGE OF THE HEAD OF THE HOUSEHOLD OF ACTIVE AND
INACTIVE IN-HOME SHOPPERS

Chronological Age	Active In-Home Shoppers		Inactive In-Home Shoppers	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
18-20	1	0.1	--	--
21-24	1	0.1	4	1.4
25-29	11	3.9	17	6.1
30-34	28	9.8	18	6.5
35-39	32	11.0	16	5.8
40-44	36	12.4	39	14.0
45-49	36	12.4	38	13.7
50-54	47	16.2	30	10.8
55-59	39	13.4	29	10.4
60-64	39	13.4	58	20.8
65 and over	<u>20</u>	<u>6.9</u>	<u>29</u>	<u>10.4</u>
Total	290	99.5	278	99.9

9. Family life-cycle.--Table 14 indicates that, among the respondents, the active in-home shoppers tend to be slightly "older" in their stage in the family life-cycle than inactive in-home shoppers. However, the differences were not significant at the .05 level, and therefore are not statistically significant.

Sociopsychological Variables

Six sociopsychological variables were used in the research to differentiate between active and inactive in-home shoppers; Table 15 summarizes the results. The variables "trust in people," "attitude toward impulse buying," and "adventuresomeness" did not significantly differentiate between the two respondent groups. In contrast, "cosmopolitanism," "attitude toward credit," and "conservatism" were able to differentiate significantly between active and inactive in-home shoppers; the former group tends to be more cosmopolitan, more positive in their attitude toward the use of credit, and more liberal in their orientation than are the members of the group of inactive in-home shoppers. The differences were significant at the .01, .02, and .03 levels, respectively, with a two-tailed test.

Table 14

FAMILY LIFE-CYCLE OF ACTIVE AND
INACTIVE IN-HOME SHOPPERS

Stage in the Family Life-Cycle	Active In-Home Shoppers		Inactive In-Home Shoppers	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Single	24	8.0	29	10.0
Couple without children	81	28.0	90	32.0
Oldest child three years old or younger	9	3.0	17	6.0
Oldest child four to five years of age	9	3.0	4	1.0
Oldest child six to thirteen years of age	51	18.0	32	11.0
Oldest child fourteen to nineteen years of age	76	26.0	70	25.0
Oldest child over twenty years of age with brothers or sisters younger than twenty	25	9.0	20	7.0
Youngest child over twenty years of age	<u>16</u>	<u>5.0</u>	<u>16</u>	<u>6.0</u>
Total	291	100.0	278	98.0

Table 15

SOCIOPSYCHOLOGICAL VARIABLES OF ACTIVE AND
INACTIVE IN-HOME SHOPPERS

Sociopsychological Variables	Active In-Home Shoppers	Inactive In-Home Shoppers	Level of Statistical Significance
Trust in people	No distinct patterns	No distinct patterns	Not significant
Cosmopolitanism	Tend to have cosmopolitan orientation	Tend to have local orientation	.01
Attitude toward credit	Tend to have positive attitude toward credit	Tend to have negative attitude toward credit	.02
Attitude toward impulse buying	No distinct pattern	No distinct pattern	Not significant
Adventuresomeness	No distinct pattern	No distinct pattern	Not significant
Conservatism	Tend to be liberal	Tend to be conservative	.03

Linear Discriminant Analysis

Nine independent variables were selected to determine whether discriminant analysis could be used to differentiate between the active and the inactive in-home shoppers. The variables consisted of: (1) "family life-cycle," (2) "occupation of the head of the household," (3) "total family income for 1969," (4) "educational level of the head of the household," (5) "the family's social class," (6) "trust in people," (7) "cosmopolitan attitude," (8) "attitude toward credit," (9) "attitude toward impulse buying," (10) "adventuresomeness," and (11) "conservatism." The data were analyzed first without cross validating the subjects, and secondly, by cross validating the data. Both procedures will be reported below.

The use of the first procedure (without cross validating the data) was successful in differentiating the active from the inactive in-home buyers. The discriminant analysis computed Wilk's lambda value of 0.956 which was significant at the .008 level. This indicated that the discriminant function found strong enough differences between the two groups so that such differences would be found by chance only 8 times in 1,000 random draws.¹

Table 16 lists the correlation coefficients for the respective independent variables with the discriminant

¹Cooley and Lahnes, *op. cit.*

Table 16

CORRELATION COEFFICIENTS WITH THE DISCRIMINANT SCORE AND
F-TEST FOR THE DIFFERENCE IN GROUP MEANS FOR
ACTIVE AND INACTIVE IN-HOME SHOPPERS

Variable	Correlation Coefficients	F-Ratio
Family life-cycle	0.34	2.85 ^a
Occupation of the head of the household	0.63	10.13 ^d
Total family income	0.40	4.09 ^b
Educational level of the head of the household	0.40	4.15 ^b
Social class	0.69	12.34 ^d
Trust in people	0.02	0.01
Cosmopolitanism	0.50	6.50 ^d
Attitude toward credit	0.47	5.64 ^c
Attitude toward impulse buying	0.12	0.36
Adventuresomeness	0.23	1.28
Conservatism	-0.44	4.96 ^b

^aSignificant at .10 level.

^bSignificant at .05 level.

^cSignificant at .02 level.

^dSignificant at .01 level.

scores, and an F-test for the differences in group means for the independent variables. Examination of Table 16 indicates that "occupation of the head of the household," "social class," and "cosmopolitanism" played the largest roles in differentiating the two groups; they had correlations of 0.63, 0.69 and 0.50 with the discriminant scores, and their group means were significantly different at the .01 level.

Four of the remaining eight variables also seem to have played important roles in the ability of the discriminant function to differentiate the two groups. Total family income, educational level of the head of the household, attitude toward credit and conservatism all had correlations with the discriminant scores of 0.40. Also, each had group means that were significantly different at the .05 level. The classification matrix in Table 17 gives a second indication of the effectiveness of the discriminant function in distinguishing between the two groups. This matrix is developed by finding the differences between the group centroids, and then examining each respondent's discriminant score to determine if the subject lies closer to the first or second group centroid.

In the category "inactive in-home shoppers," 152 respondents were classified correctly and 127 were classified incorrectly. In the category "active in-home shoppers,"

190 subjects were classified correctly and 101 were classified incorrectly. A chi square test was used to determine if the number of respondents correctly classified were greater than what would be expected by chance. The chi square value was 21.0 with one degree of freedom; this is statistically significant at the .0001 level.

Table 17

DISCRIMINANT CLASSIFICATION MATRIX FOR ACTIVE
AND INACTIVE IN-HOME SHOPPERS

	Inactive In-Home Shoppers	Active In-Home Shoppers
Inactive in-home shoppers	152	127
Active in-home shoppers	101	190

The cross validation procedure consisted of drawing 60 percent of the active and 60 percent of the inactive in-home shoppers from the original data. These respondents were analyzed with discriminant analysis. The discriminant weights calculated from the subsample of 60 percent were then used to determine the discriminant scores of the remaining 40 percent of the sample. This entire procedure was repeated four times to reduce the possibility that only a "good" random sample would be drawn.

Table 18 lists the Wilk's lambda values for the four independent cross validated runs. As the table indicates, only the first run had a Wilk's lambda level low enough to be statistically significant at the .05 level. This factor, together with the result that only two of the chi square tests for the four classification matrixes were significant at the .10 level, indicates that when the data were cross validated it became difficult to effectively differentiate between the two respondent groups.

Table 18

WILKS' LAMBDA TEST AND CHI SQUARE TEST FOR STATISTICALLY SIGNIFICANT DIFFERENCES ACHIEVED BY THE FOUR INDEPENDENT CROSS VALIDATED RUNS ON THE ACTIVE AND INACTIVE IN-HOME SHOPPERS

Run	Wilks Lambda	Chi Square
1	0.940 ^c	1.85 ^a
2	0.957 ^a	1.43
3	0.971	3.22 ^b
4	0.960	8.04 ^d

^aSignificant at the .20 level.

^bSignificant at the .10 level.

^cSignificant at the .05 level.

^dSignificant at the .01 level.

Table 19 lists the correlation coefficients for the four cross validated runs with their respective discriminant scores, group means, and the level of statistical significances. The correlations and the level of statistical significances follow the same general pattern as exist when all the respondents were utilized in the discriminant test.

The results of the cross validated runs in no way detract from the previously reported non-cross validated results. The levels of statistical significance reported initially on its univariate group mean tests were strong and significant at the .05 level for seven of eleven variables. Therefore, it can be stated that the tests were able to differentiate between active and inactive in-home shoppers. The non-cross validated test results were strong. The Wilk's lambda value was significant at the .001 level, and the chi square test of the classification matrix was also significant at the .001 level. However, the last conservative step of cross validating the data shows that the data are not as strong as they first appear.

Table 19

CORRELATION COEFFICIENTS WITH THE DISCRIMINANT SCORE AND F-TEST FOR 60 PERCENT OF THE ACTIVE AND
INACTIVE IN-HOME SHOPPERS FOR FOUR INDEPENDENT CROSS VALIDATED SAMPLES

Variables	Run I			Run II			Run III			Run IV		
	Correlation Coefficient	F- Ratio		Correlation Coefficient	F- Ratio		Correlation Coefficient	F- Ratio		Correlation Coefficient	F- Ratio	
Family life cycle	0.17	0.57		0.08	0.10		0.22	0.45		0.51	3.54 ^a	
Occupation of the head of the household	0.64	8.60 ^d		0.48	3.35 ^a		0.40	1.58		0.54	3.93 ^b	
Total family income	0.28	1.65		0.42	2.55		0.63	4.06 ^b		0.26	0.91	
Educational level of the head of the household	0.22	1.03		0.49	3.53 ^a		0.17	0.29		0.29	1.14	
Social class	0.67	9.37 ^d		0.58	5.08 ^b		0.59	3.46 ^a		0.65	5.78 ^c	
Trust in people	0.16	0.50		0.20	0.56		-0.29	0.83		-0.05	0.02	
Cosmopolitanism	0.52	5.48 ^c		0.41	2.41		0.20	0.41		0.30	1.26	
Attitude toward credit	0.30	1.91		0.49	3.54 ^a		0.19	0.40		0.31	1.36	
Attitude toward impulse buying	0.09	0.16		0.19	0.53		0.11	0.13		0.24	0.77	
Adventuresomeness	0.15	0.47		0.16	0.38		0.06	0.03		0.14	0.27	
Conservatism	-0.49	4.86 ^b		-0.51	3.89 ^b		-0.55	3.05 ^a		-0.14	2.37	

^a Significant at .10 level.^b Significant at .05 level.^c Significant at .02 level.^d Significant at .01 level.

Very Active vs. Very Inactive
In-Home Shoppers

Socioeconomic and Demographic
Variables

The findings for the very active and the very inactive in-home shoppers will be reported in the same manner as the test results which were reported for the active and the inactive in-home shoppers. The findings begin with the socioeconomic and demographic variables which are summarized in Tables 20 and 21.

1. Occupation of the head of the household.--The very active in-home shoppers appear to have significantly higher status jobs than do the very inactive in-home shoppers. As Table 22 indicates, 42 percent of the "very active in-home shoppers" in the sample, have "professional," or "technical" positions, while 21.6 percent of the very inactive shoppers fall in this category. A second category which exemplifies the differences in the two groups is the "service workers." In that category are 5.7 percent of the very active and 18.2 percent of the very inactive in-home shoppers. The differences are statistically significant at the .001 level with a two-tailed test.

Table 20
DEMOGRAPHIC CHARACTERISTICS OF VERY ACTIVE IN-HOME SHOPPERS
AND VERY INACTIVE IN-HOME SHOPPERS

Characteristic	Very Active In-Home Shoppers	Very Inactive In-Home Shoppers	Level of Statistical Significance
Employment of the homemaker	37.5% employed full time	31.8% employed full time	Not significant
Marital status	Primarily married respondents	Primarily married respondents	Not significant
Number of years married	50.6% were married for over 20 years	71.4% were married for over 20 years	Not significant
Age of the head of the household	13.7% 60 years of age or older	38.6% 60 years of age or older	.01
Family life-cycle	No distinct pattern	No distinct pattern	Not significant

Table 21

SOCIOECONOMIC CHARACTERISTICS OF VERY ACTIVE IN-HOME SHOPPERS
AND VERY INACTIVE IN-HOME SHOPPERS

Characteristic	Very Active In-Home Shoppers	Very Inactive In-Home Shoppers	Level of Statistical Significance
Occupation	Professional and technical workers	Fairly even distribution throughout the job categories	.001
Income	25% over \$25,000	11.4% over \$25,000	.03
Education	College and graduate school graduates	College and high school graduates	Not significant
Social class	High middle class	Middle class	.001

Table 22

OCCUPATION OF THE HEAD OF THE HOUSEHOLD OF VERY ACTIVE
AND VERY INACTIVE IN-HOME SHOPPERS

Occupations	Very Active In-Home Shoppers		Very Inactive In-Home Shoppers	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Professional, technical and kindred workers (91-100)	37	42.0	19	21.6
Managers, officials, and proprietors except farm (81-90)	26	29.5	25	28.4
Clerical, sales, and kindred workers (71-80)	9	10.2	15	17.0
Craftsman, foreman, and kindred workers (61-70)	8	9.1	6	6.8
Operatives and kindred workers (51-60)	--	--	2	2.3
Semiskilled labor (41-50)	3	3.4	5	5.7
Service workers (31-40)	5	5.7	16	18.2
Unskilled labor (21-30)	--	--	--	--
Babysitters (less than 20)	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>
Total	88	99.9	88	100.0

✓ 2. Total family income.--Table 23 shows that there is an indication that the very inactive in-home shoppers tend to have higher total family income levels than do the very inactive in-home shoppers. Twenty-five percent of the very active in-home shoppers in the sample had family incomes in excess of \$25,000, while 11.5 percent of the very inactive in-home shoppers had income levels of over \$25,000. The differences in income levels were significant at the .03 level with a two-tailed test.

Table 23

INCOME LEVELS OF VERY ACTIVE AND
VERY INACTIVE IN-HOME SHOPPERS

Income	Very Active In-Home Shoppers		Very Inactive In-Home Shoppers	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Less than \$5,000	3	3.4	4	4.6
\$5,000-\$7,999	4	4.5	11	12.6
\$8,000-\$9,999	9	10.2	13	14.9
\$10,000-\$14,999	25	28.4	23	26.4
\$15,000-\$24,999	25	28.4	26	29.8
\$25,000 and over	<u>22</u>	<u>25.0</u>	<u>10</u>	<u>11.5</u>
Total	88	99.9	87	99.8

3. Level of education of the head of the household.--

The heads of the households in the very active in-home shopper categories appear to have a higher level of education than do heads of the households in the very inactive in-home shopper families. However, as Table 24 indicates the differences were not strong and the data were not statistically significant.

Table 24

EDUCATION OF THE HEAD OF THE HOUSEHOLD OF VERY ACTIVE AND VERY INACTIVE IN-HOME SHOPPERS

Education	Very Active In-Home Shoppers		Very Inactive In-Home Shoppers	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
<u>Elementary</u>				
one and two years	--	--	--	--
three and four years	--	--	--	--
five and six years	--	--	--	--
seven years	--	--	--	--
eight years	--	--	4	4.6
<u>High School</u>				
one year	1	1.1	3	3.4
two years	4	4.5	2	2.3
three years	--	--	1	1.1
four years	15	17.0	26	29.9
<u>College</u>				
one year	4	4.5	5	5.7
two years	8	9.1	7	8.0
three years	3	3.4	2	2.3
four years	21	23.9	22	25.3
<u>Graduate School</u>	<u>32</u>	<u>36.4</u>	<u>15</u>	<u>17.2</u>
Total	88	99.9	87	99.8

4. Social class.--The very active in-home shoppers appeared to belong to a significantly higher social class than did the very inactive in-home shoppers. Table 25 shows that 80.7 percent of the very active in-home shoppers and 48.9 percent of the very inactive in-home shoppers in the sample, scored between 81-100 on the social class index. In contrast, 39.7 percent of the very inactive in-home shoppers and 14.8 percent of the very active in-home shoppers scored between 61-80 on the social class index. The differences were statistically significant at the .001 level.

Table 25

SOCIAL CLASS OF VERY ACTIVE AND VERY INACTIVE IN-HOME SHOPPERS

Gradations	Very Active In-Home Shoppers		Very Inactive In-Home Shoppers	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
91-100	49	55.7	32	36.4
81-90	22	25.0	11	12.5
71-80	8	9.1	23	26.1
61-70	5	5.7	12	13.6
51-60	2	2.3	6	6.8
41-50	1	1.1	2	2.3
31-40	1	1.1	2	2.3
Less than 30	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>
Total	88	100.0	88	100.0

5. Employment of the homemaker.--Table 26 shows that 37.5 percent of the very inactive in-home shoppers in the sample were employed full time; and 31.8 percent of the very inactive in-home shoppers were employed full time; 52.3 percent of the former group and 56.8 percent of the latter group were unemployed. The differences in the data were not statistically significant.

Table 26

EMPLOYMENT OF THE HOMEMAKER OF VERY ACTIVE
AND VERY INACTIVE IN-HOME SHOPPERS

Employment Status	Very Active In-Home Shoppers		Very Inactive In-Home Shoppers	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Unemployed	46	52.3	50	56.8
Part-time	9	10.2	10	11.4
Full-time	<u>33</u>	<u>37.5</u>	<u>28</u>	<u>31.8</u>
Total	88	100.0	88	100.0

6. Marital status.--More than 85 percent of both respondent groups were married. There were no statistically significant differences between the two in-home shopping groups. The data are reported in Table 27.

Table 27

MARITAL STATUS OF VERY ACTIVE AND
VERY INACTIVE IN-HOME SHOPPERS

Marital Status	Very Active In-Home Shoppers		Very Inactive In-Home Shoppers	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Married	75	85.2	77	87.5
Single	<u>13</u>	<u>14.7</u>	<u>11</u>	<u>12.5</u>
Total	88	99.9	88	100.0

✓ 7. Number of years married.--The very inactive in-home shoppers tended to be married for a longer time than did the very active in-home shoppers. As Table 28 indicates, 13 percent of the very active group and 5.2 percent of the very inactive group had been married for less than 8 years. Also, 50.6 percent of the very active in-home shoppers and 71.4 percent of the very inactive in-home shoppers have been married for over 20 years. The differences were not statistically significant.

Table 28

NUMBER OF YEARS MARRIED OF VERY ACTIVE AND
VERY INACTIVE IN-HOME SHOPPERS

Years Married	Very Active In-Home Shoppers		Very Inactive In-Home Shoppers	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Less than 3 years	4	5.2	--	--
4-7 years	6	7.8	4	5.2
8-12 years	14	18.2	5	6.5
13-20 years	14	18.2	13	16.9
Over 20 years	<u>39</u>	<u>50.6</u>	<u>55</u>	<u>71.4</u>
Total	77	100.0	77	100.0

✓ 8. Age of the head of the household.--The heads of the households in the very inactive in-home shopper categories appeared to be older than the heads of the household in the very active in-home shopper categories. Table 29 shows that 13.7 percent of the very active category and 28.69 percent of the very inactive group had heads of the households who were 60 years of age or older. In contrast, 16.1 percent of heads of the households of the very active in-home shoppers were younger than 35 years of age compared to 10.2 percent for the very inactive in-home shoppers. The differences were statistically significant at the .01 level for a two tailed test.

Table 29

AGE OF THE HEAD OF THE HOUSEHOLD OF VERY ACTIVE AND
VERY INACTIVE IN-HOME SHOPPERS

Chronological Age	Very Active In-Home Shoppers		Very Inactive In-Home Shoppers	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
18-20	1	1.2	--	--
21-24	--	--	--	--
25-29	4	4.6	5	5.7
30-34	9	10.3	4	4.5
35-39	14	16.1	6	6.8
40-44	11	12.6	8	9.1
45-49	12	13.8	13	14.8
50-54	15	17.2	10	11.3
55-59	9	10.3	8	9.1
60-64	9	10.3	19	21.6
70 and over	<u>3</u>	<u>3.4</u>	<u>15</u>	<u>17.0</u>
Total	87	99.8	88	99.9

9. Family life-cycle.--No distinct patterns were found between the two respondent groups for the variable family life-cycle. The data are presented in Table 30 and were not statistically significant.

Table 30

FAMILY LIFE-CYCLE OF VERY ACTIVE AND
VERY INACTIVE IN-HOME SHOPPERS

Stage in the Family Life-Cycle	Very Active In-Home Shoppers		Very Inactive In-Home Shoppers	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Single	8	9.1	8	9.1
Couple without children	20	22.7	34	38.6
Oldest child three years old or younger	2	2.3	1	1.1
Oldest child four to five years of age	5	5.7	2	2.3
Oldest child six to thirteen years of age	17	19.3	10	11.3
Oldest child fourteen to nineteen years of age	26	29.5	21	23.9
Oldest child over twenty years of age with brother or sisters younger than twenty	8	9.1	6	6.8
Youngest child over twenty years of age	<u>2</u>	<u>2.3</u>	<u>6</u>	<u>6.8</u>
Total	88	100.0	88	99.9

Sociopsychological Variables

Of the six sociopsychological variables used in the research only "cosmopolitanism" and "conservatism" differentiated significantly between the very active and the very inactive in-home shoppers analyzed in the sample. The former group appeared to be more liberal and more cosmopolitan than the latter group. The differences were significant at the .03 and .01 levels, respectively.

Discriminant Analysis

The same eleven variables which were used to differentiate active and inactive in-home shoppers were used to differentiate very active from very inactive shoppers. The data were analyzed first without cross validation and then with cross validation. The results of both procedures are reported below.

The Wilk's lambda test of the non-cross validated data indicates that the discriminant function was able to significantly differentiate between the two respondent groups; Wilk's lambda had a value of 0.835 which is statistically significant at the .002 level.

The discriminant classification matrix which is reported in Table 31 also indicates that the two respondent groups are significantly different from each other; 51 very inactive in-home shoppers were classified correctly and 37 were classified incorrectly. Sixty-five very active in-home

Table 31

DISCRIMINANT CLASSIFICATION MATRIX FOR VERY ACTIVE AND
VERY INACTIVE IN-HOME SHOPPERS

	Very Inactive In-Home Shoppers	Very Active In-Home Shoppers
Very inactive in-home shoppers	51	37
Very active in-home shoppers	23	65

shoppers were classified correctly and twenty-three were classified incorrectly. The chi square test of statistical significance of the two groups had a value of 16.99 which is significant at the .001 level.

Table 32 lists the correlation coefficients and the F-tests for the differences in group means for the two respondent groups. It is interesting to note that the variables which had high correlations with the discriminant scores and significantly different group means for the active and inactive in-home shoppers also tended to have high correlations and significantly different group means.

As in the case with the active and inactive in-home shoppers, a cross validation of the data reduced the significance of the findings. Table 33 shows that Wilks' lambda value was significant at the .05 level for only the first run, while the chi square test of significance of the

Table 32

CORRELATION COEFFICIENTS WITH THE DISCRIMINANT SCORE AND F-TEST
FOR THE DIFFERENCES IN GROUP MEANS FOR VERY ACTIVE
AND VERY INACTIVE IN-HOME SHOPPERS

Variable	Correlation Coefficients	F-Ratio
Family life cycle	0.22	1.40
Occupation of the head of the household	0.64	12.65 ^b
Total family income	0.41	4.96 ^a
Educational level of the head of the household	0.28	2.21
Social class	0.69	14.97 ^b
Trust in people	-0.13	0.51
Cosmopolitanism	0.50	7.57 ^b
Attitude toward credit	0.21	1.29
Attitude toward impulse buying	-0.06	0.09
Adventuresomeness	0.23	1.64
Conservatism	-0.39	4.59 ^a

^aSignificant at .05 level.

^bSignificant at .01 level.

Table 33

WILK'S LAMBDA AND CHI SQUARE TEST FOR STATISTICALLY SIGNIFICANT
DIFFERENCES ACHIEVED BY THE THREE INDEPENDENT CROSS
VALIDATED RUNS ON THE VERY ACTIVE AND
VERY INACTIVE IN-HOME SHOPPERS

Run	Wilk's Lambda	Chi Square
1	0.816 ^c	Not significant
2	0.756 ^d	Not significant
3	0.855 ^a	Not significant

^aSignificant at the .20 level.

^bSignificant at the .10 level.

^cSignificant at the .05 level.

^dSignificant at the .01 level.

discriminant classification matrices was not significant at the .05 level for any of the three runs. The correlation coefficients with the discriminant scores and the F-test for the differences in group means for the very active and very inactive in-home shoppers are located in Table 34.

Table 34

CORRELATION COEFFICIENTS WITH THE DISCRIMINANT SCORE AND F-TEST FOR 60 PERCENT OF
THE VERY ACTIVE AND VERY INACTIVE IN-HOME SHOPPERS FOR THREE INDEPENDENT
CROSS VALIDATED RANDOM SAMPLES

Variables	Run I		Run II		Run III	
	Correlation Coefficient	F-Ratio	Correlation Coefficient	F-Ratio	Correlation Coefficient	F-Ratio
Family life cycle	0.21	0.86	0.19	0.98	0.20	0.61
Occupation of the head of the household	0.51	5.29 ^b	0.29	2.21	0.58	5.40 ^c
Total family income	0.18	0.67	-0.11	0.33	0.47	3.48 ^a
Educational level of the head of the household	0.08	0.12	0.14	0.48	0.19	0.54
Social class	0.45	4.04 ^b	0.12	0.36	0.66	7.02 ^d
Trust in people	-0.54	5.84 ^c	-0.60	10.24 ^d	-0.28	1.23
Cosmopolitanism	0.46	4.21 ^b	0.46	5.54 ^c	0.40	2.47
Attitude toward credit	0.33	2.22	0.34	3.13 ^a	0.05	0.03
Attitude toward impulse buying	0.10	0.21	0.22	1.27	-0.03	0.02
Adventuresomeness	0.09	0.17	0.22	1.28	-0.08	0.10
Conservatism	-0.20	0.80	0.07	0.16	-0.49	3.75 ^a

^aSignificant at .10 level.

^bSignificant at .05 level.

^cSignificant at .02 level.

^dSignificant at .01 level.

Canonical Analysis

Canonical analysis was used to analyze the active in-home shoppers and the very active in-home shoppers. It was felt that this particular multivariate statistical technique might be successful in locating market segments within the in-home shopping market. Table 35 shows the results of the canonical analysis of the active in-home shoppers. Since it is difficult to interpret the findings of canonical analysis beyond the significant roots, only the first three roots are presented in this table.

In general, with canonical analysis, if there are P predictor variables and C criterion variables, and $P > C$, there will be C pairs of canonical functions calculated. The functions are independent from each other except for their pairmates in the remaining set of variables to which they are maximally correlated. The functions are calculated in descending order from the residual variance of the previous functions. The roots, or squared canonical coefficients are analogous to the index of determination in regression analysis and represent the amount of shared variance explained by the variables in each function.¹

The first three roots had canonical R of 0.402, 0.348, and 0.324 which were significant at the 0.004, 0.032 and 0.039 levels, respectively. The fourth root had a

¹Alpert and Peterson, *op. cit.*, p. 3.

Table 35

RESULTS OF THE CANONICAL ANALYSIS FOR ACTIVE IN-HOME SHOPPERS

Variables	Canonical Coefficients		
	1	2	3
<u>Predictor Set</u>			
Family life-cycle	-0.2187	-0.5361	-0.1406
Occupation of the head of the household	0.5503	-0.0024	0.4254
Total family income	0.3504	0.1064	0.5502
Education level of the head of the household	0.6502	-0.2880	0.2426
Social class	0.6214	-0.0505	0.4845
Trust in people	-0.0669	-0.4400	0.2410
Cosmopolitan attitudes	0.2656	-0.4260	0.0853
Attitude toward credit	-0.0276	0.1406	0.2958
Attitude toward impulse buying	0.2761	0.0448	0.1319
Adventuresomeness	0.4687	-0.1360	-0.4359
Conservatism	-0.2537	0.1694	-0.2779
<u>Criterion Set</u>			
Large catalogue outlets	0.5400	0.1049	0.0231
Novelty outlets	0.3337	0.7615	0.2442
Club of the month	0.4035	0.0287	0.0218
Specialty outlets	0.6135	-0.3511	0.4749
Credit card sales	-0.3147	0.2057	0.7028
Magazine purchases	0.2285	-0.1014	0.0616
Other direct mail	0.2262	-0.0590	-0.1319
Roots	0.1614	0.1210	0.1054
Canonical R	0.402	0.348	0.324
χ^2	36.693	26.665	23.327
D.F.	17.0	15.0	13.0
Probability	0.0044	0.0329	0.0392

canonical R of 0.278 and was not statistically significant (0.113 level). The above levels of significance of the first three roots indicate there clearly are significant relationships between the criterion and the predictor set of variables.

The first root is associated with large catalogue shoppers, club-of-the-month shoppers and specialty shoppers. These individuals can be best described as having high status occupations, high income levels, high levels of education, high social class and adventuresome attitudes. It appears that individuals who are of relatively high social class and are somewhat adventuresome tend to shop at the fairly well established in-home shopping outlets of large catalogue stores, club-of-the-month organizations and specialty houses.

The second root is associated with individuals who utilize novelty in-home shopping outlets and who do not use specialty organizations. These two groups tend to be in the early stages of the family life cycle, tend not to trust people and are not very cosmopolitan in their orientation.

The third root is associated with individuals who shop via specialty and credit card in-home shopping outlets. The predictor set of variables which is related to the two groups are high status occupations, high total family income, high social class and non-adventuresome attitudes.

The predictor set in the third root is similar to the predictor set in the first root, except that the adventuresomeness variable is reversed. Since the criterion set of variables are substantially different between the first and the third root, then it can be assumed that the key predictor variable which is distinguishing between the first and the third root is the adventuresomeness.

The results of the canonical analysis on the very active in-home shoppers was not as clear as it was on the active in-home shoppers. Only the first root was statistically significant; it had a canonical R of 0.567 and significance level of 0.015. As Table 36 shows this factor was associated with individuals who do not shop at large catalogue outlets or specialty outlets, but who do shop via credit card promotion and other direct mail sources. The predictor set which related with these four groups were: early stages in the family life cycle, low income levels, low social status, and conservative attitudes. Since only one root was significant, there is no way that these results can be generalized.

Table 36

RESULTS OF THE CANONICAL ANALYSIS FOR THE
VERY ACTIVE IN-HOME SHOPPERS

<u>Variables</u>	<u>Canonical Coefficients</u>
	<u>1</u>
<u>Predictor Set</u>	
Family life cycle	-0.4020
Occupation of the head of the household	-0.2391
Total family income	-0.3867
Educational level of the head of the household	-0.0524
Social class	-0.3430
Trust in people	-0.2034
Cosmopolitan attitudes	-0.1552
Attitude toward credit	0.2925
Attitude toward impulse buying	0.1349
Adventuresomeness	-0.1570
Conservatism	0.3644
<u>Criterion Set</u>	
Large catalogue outlets	-0.4090
Novelty outlets	0.1181
Club of the month	0.2731
Specialty outlets	-0.5172
Credit card sales	0.5158
Magazine purchases	-0.1691
Other direct mail	
Roots	0.3391
Canonical R	0.567
χ^2	32.1020
D.F.	17.0
Probability	0.0157

Conclusion

Chapter IV has presented the findings of the study. Although the result of most empirical studies are never as clear cut as the researcher would like, it should be apparent that through the use of discriminant analysis distinctions have been located between both in-home shoppers and individuals who do not shop at home, and between the various types of in-home shoppers. Chapter V will evaluate the research hypotheses in view of the findings. Major conclusions will be drawn also in that chapter, from the research findings in view of its objectives.

CHAPTER V

EVALUATION OF THE RESEARCH HYPOTHESES

The objective of Chapter V is to compare the findings of the research with the research hypotheses. The chapter is divided into three sections. In the first section an evaluation is made of the selection of the independent variables to measure the validity of the research hypotheses and in relation to the research objectives. The second section evaluates the research hypotheses based on the findings presented in Chapter IV. The last section analyzes the major conclusions that can be drawn from the research findings in view of its objectives.

Evaluation of the Selection of the Independent Variables

The major problem found by the researcher, when attempting to design a study that would provide answers to the first objective of the research, i.e., to determine whether or not people who shop at home can be differentiated from those who do not, was that of selecting the independent variables. It was necessary to determine which characteristics should be analyzed in order to provide a meaningful

profile of the in-home shopper. It seemed necessary to start with socioeconomic and demographic variables in that these have proven in part to be effective tools in market segmentation.

The choice of the sociopsychological variables was made by personal judgment, based upon opinions of writers as to what might cause people to purchase goods by mail or by telephone. Indications were found in the literature which suggested that the colorful pages of mail order catalogues create a desire to buy.¹ A conclusion could be drawn from such a statement as to the attitudinal characteristics of in-home shoppers; it was assumed that in-home shoppers would have a stronger *tendency to impulse buying* than individuals who do not shop at home.

Other references in the literature are made to the fact that the customer of in-home retailers would purchase from them partially because of the fact that the items sold by retailers are not available from local stores.² This statement suggests the possibility that in-home shoppers might be more cosmopolitan than people who do not shop at home. Therefore, a measure of *cosmopolitanism* was

¹"More Firms Seen Selling Direct to the Consumer," *Home Furnishing Daily*, May 1, 1970, p. 7.

²Charles F. Higgins, "The Booming In-Home Market," *The Reporter of Direct Mail Advertising, Editor's Choice*, Summer, 1967, pp. 48-49.

introduced as an independent variable to be tested in the research.

The use of credit cards as well as other forms of credit has been mentioned in the literature as one of the possible causes for the growth of several forms of in-home retailing.¹ Therefore, one of the independent variables introduced in the research related to the subjects *attitude toward credit*.

In an effort to segment customers, reference in the literature was found to the fact that those who could be classified as "creative consumers" were considered to be more adventurous in their choice of products and less conservative in their purchases and investments.² It was felt that both variables, *adventuresomeness* and *conservatism* might be valuable instruments in differentiating in-home shoppers from people who do not purchase at home, therefore, they were included in the study.

Consumers' perception of risk has been analyzed in relation to their purchasing behavior and especially with reference to mail order sales.³ A parallel was assumed to

¹Lester Wundermann, "Mail Order, The Coming Revolution in Marketing," *Advertising Age*, July 24, 1967.

²Emanuel Demby and Louis Cohen, "Consumer Life Style More Vital to Marketing Than Income Level," *The Reporter of Direct Mail Advertising*, June, 1969.

³Maxwell Sroge, "The Distribution Revolution . . . Anatomy of Direct Marketing," *The Reporter of Direct Mail Advertising*, July, 1970, pp. 18-19.

exist between individuals' perception of risk and their trust in people. In order to verify if respondents' *trust in people* could differentiate in-home shoppers from not in-home shoppers, a measure of such attitude was introduced in the research as an independent variable.

Evaluation of the Research Hypotheses

The primary scope of the evaluation of the research hypotheses is to allow the research to draw broader implications from the analysis by integrating the findings with the objectives of the study. The hypotheses and subhypotheses, enumerated in Chapter I of the study, are presented along with the most significant conclusions which can be drawn from the research findings.

Social Class

- I. *Ceteris Paribus*, among all respondents there will be no significant differences between people who shop at home and people who do not shop at home, when classified by their respective social classes.

On the basis of the results presented in Tables 9 and 25, there seem to be significant differences between people who shop at home and people who do not shop at home, when classified according to their social class. Table 25 particularly indicates that very active in-home shoppers when compared with very inactive in-home shoppers scored

significantly higher in social class. The results, therefore would tend to indicate that the alternative hypothesis should be accepted.

Occupation

I. A. *Ceteris paribus*, among all respondents, there will be no significant differences between in-home shoppers and people who do not shop at home, when classified by their members' respective occupation.

On the basis of the findings presented in Tables 6 and 22, the in-home shoppers analyzed in the sample were found to be primarily in the two top job categories. Table 22 shows a comparison between the very active and the very inactive in-home shoppers in terms of the occupation of the head of the household. The difference between these two groups appears to be even greater than that existing between active and inactive in-home shoppers. Families headed by professionals or technical workers are more likely to be concentrated in the very active in-home shoppers group, while families headed by service workers are probably concentrated in the very inactive in-home shoppers group. On the basis of the findings, therefore, there seem to be significant differences between in-home shoppers and people who do not shop at home, when classified by the occupation of the head of the household.

Income Level

- ✓ I. B. *Ceteris paribus, among all respondents, there will be no significant difference between in-home shoppers and people who do not shop at home, when classified by their respective income level.*

The results presented in Tables 7 and 23 illustrate the relationship between the in-home shopping activity and the income level of the respondents. The results appear to indicate that in-home shoppers can be differentiated from people who do not shop at home, when classified by their respective income level. When active in-home shoppers were compared to inactive in-home shoppers, the active in-home shoppers appeared to concentrate more in the over \$25,000 category, as shown in Table 7.

The difference between very active in-home shoppers and very inactive in-home shoppers seemed to be even greater. While 25 percent of the very active in-home shoppers classified in the over \$25,000 category, only 11-1/2 percent of the very inactive in-home shoppers were found to be in the same category as shown by Table 23.

Educational Level of the Head of the Household

- I. C. *Ceteris paribus, among all respondents, there will be no significant difference between in-home shoppers and people who do not shop at home, when classified by their members' respective level of education.*

As indicated by the results in Tables 8 and 24, the in-home shoppers could probably be differentiated from people who do not shop at home, by the level of education of the head of the household. Table 8 indicated that families headed by individuals who attended graduate school tended to be more heavily concentrated with the active in-home shoppers. Similar results were found when the very active in-home shoppers were compared to the very inactive in-home shoppers. Table 24 indicates that heads of the households of the very active in-home shoppers category are more likely to have a higher level of education than heads of the households in the very inactive in-home shoppers category.

Family Life-Cycle

II. Ceteris paribus, among all respondents, there will be no significant difference between people who shop at home and people who do not, when classified by their stage in the family life-cycle.

On the basis of the data presented in Tables 14 and 30, this hypothesis must be accepted, i.e., the research data appears not to support the conclusion that a relationship exists between stage in the family life-cycle and the in-home shopping patterns of individuals. Although the analysis of research results presented in Table 14 shows that the active in-home shoppers tend to be slightly "older"

in their stage in the family life-cycle, than inactive in-home shoppers, such a difference was not found between the very active and the very inactive in-home shoppers. Therefore, no difference is likely to exist between in-home shoppers and not in-home shoppers when classified by their stage in the family life-cycle.

Marital Status

II. A. Ceteris paribus, among all respondents, there will be no significant difference between in-home shoppers and people who do not shop at home, when classified by their respective marital status.

On the basis of the results presented in Table 11, no statistically significant difference was found between the active and the inactive in-home shoppers in the sample when compared as to their marital status. Similar results were obtained when the same variable was used to compare the very active and the very inactive in-home shoppers (Table 27). It seems unlikely, therefore, that in-home shoppers can be differentiated from not in-home shoppers as to their marital status.

✓ *Age of the Head of the Household*

II. B. Ceteris paribus, among all respondents, there will be no significant difference between in-home shoppers and people who do not shop at home, when classified by the age of the head of the household.

A comparison of the active and inactive in-home shoppers based on the age of the household head is shown in Table 13. No significant difference appeared to exist between active and inactive in-home shoppers as to the age of the household head.

Table 29, however, presents different results. A comparison made between the very active and the very inactive in-home shoppers as to the age of their household head showed that in the very active in-home shoppers' category, the household heads were younger than those of the very inactive in-home shoppers category.

There seems to be some correlation, therefore, between the frequency of in-home shopping activities and the age of the household head. The evidence, however, is not sufficient to reject the above hypothesis.

Employment Status of the Homemaker

II. C. Ceteris paribus, among all respondents, there will be no significant difference between in-home shoppers and people who do not shop at home, when classified by the employment status of the homemaker.

Tables 10 and 25 show that there appears to exist a relationship between the employment status of the homemaker and the in-home shopping activity. A greater percentage of the active in-home shoppers were employed full time, as compared to the inactive in-home shoppers. The results,

however, were not statistically significant. It seems unlikely, therefore, that in-home shoppers can be differentiated from not in-home shoppers, based on the employment status of the homemaker.

Number of Years Married

II. D. *Ceteris paribus*, among all respondents, there will be no significant difference between in-home shoppers and people who do not shop at home, when classified by the number of years they were married.

On the basis of the findings presented in Tables 12 and 28, the above hypothesis appears to be validated with respect to the relationship between the number of years the respondents were married and their in-home shopping activities. The difference found between the very active and the very inactive in-home shoppers in the sample as to the number of years married was not significant, although it seemed that the very inactive in-home shoppers tended to be married for a longer time.

Adventuresomeness

III. *Ceteris paribus*, among all respondents, there will be no significant difference between people who shop at home and people who do not shop at home, when classified by their respective adventuresomeness.

On the basis of data presented in Tables 15 and 32, the above hypothesis seems to be validated. When active and inactive in-home shoppers were compared as to their adventuresomeness, no distinct pattern was found which differentiated among them. The same results were obtained when a comparison was made between the very active and the very inactive in-home shoppers. Therefore, there seems to be no relationship between the respondents' attitude toward adventuresomeness and their in-home shopping habits.

Cosmopolitanism

IV. *Ceteris paribus, among all respondents, there will be no significant difference between people who do shop at home and people who do not shop at home, when classified by their respective degree of cosmopolitanism.*

As Table 15 shows, when active and inactive in-home shoppers' cosmopolitan attitudes were compared, the active in-home shoppers tended to display a more cosmopolitan orientation than did the inactive in-home shoppers. Similar results were obtained through a comparison of very active and very inactive in-home shoppers, as to their attitudes toward cosmopolitanism.

As the results of this test were statistically significant both times, the above hypothesis should probably be rejected. That is, people who shop at home probably can

be differentiated from those who do not, when compared as to their cosmopolitan attitudes.

Trust in People

V. *Ceteris paribus, among all respondents, there will be no significant difference between people who shop at home and people who do not shop at home, when classified by their respective trust in people.*

The results shown by Tables 15 and 32 indicate that no relationship appeared to exist between in-home shopping habits of the respondents and their trust in people. When active and inactive in-home shoppers were compared as to their trust in people, no distinct pattern was found that could indicate differentiation between the two groups. Similar results appeared when the very active and the very inactive in-home shoppers' trust in people was measured; no strong relationship seemed to exist between the above attitude and the respondents in-home shopping activities. The above hypothesis, therefore, is likely to be validated in that there seem to be a relationship between trust in people and the in-home shopping patterns of the sample.

Conservatism

VI. *Ceteris paribus, among all respondents, there will be no significant difference between people who shop at home and people who do not shop at home,*

when classified by their respective conservative-liberal attitudes.

Table 15 shows that when active and inactive in-home shoppers were compared as to their conservative-liberal attitudes, the active in-home shoppers showed that they tended to be more liberal than the inactive in-home shoppers. Table 32 shows similar results for the comparison made between very active and very inactive in-home shoppers.

The results were statistically significant for both groups. It appears, therefore, that in-home shoppers can be differentiated from people who do not shop at home, when compared as to their conservative-liberal attitudes.

Attitude Toward Credit

VII. Ceteris paribus, among all respondents, there will be no significant difference between people who shop at home and people who do not shop at home, when classified by their respective attitude toward credit.

Tables 15 and 32 show that the in-home shoppers in the sample tended to have a more favorable attitude toward credit than people who did not shop at home. Both comparison of active and inactive in-home shoppers, as that of the very active and inactive in-home shoppers indicate that there is evidence contrary to the above hypothesis. It appears, from the results, that in-home shoppers can be

differentiated from people who do not shop at home by their attitude toward credit.

Tendency for Impulse Buying

VIII. Ceteris paribus, among all respondents, there will be no significant difference between people who shop at home and people who do not shop at home, when classified by their respective tendency for impulse buying.

As appears in Tables 15 and 32, when the active and inactive in-home shoppers in the sample were compared as to their tendency for impulse buying, no distinct pattern was found, and therefore, no differentiation could be made on the basis of this particular variable. The same results were attained when very active and very inactive in-home shoppers were compared. No strong relationship was found between the respondents' tendency to impulse buying, and their in-home shopping habits. In view of these results, the above hypothesis should probably be accepted as to the relationship between in-home shopping, and people's attitude toward impulse buying

Evaluation of the Second Set of Hypotheses

The second set of hypotheses stated in Chapter I relates to the comparison between different segments of in-home shoppers. A summary of the hypotheses, as well as of the findings related to them will be explained below.

Three groups of in-home shoppers, or three sub-markets, resulted from the analysis of the second set of hypotheses. In the first group were classified those in-home shoppers who purchased goods from large catalogue stores, from club-of-the-month type of organizations, and from specialty in-home retailers. The second group was formed by in-home shoppers who purchase goods from novelty in-home retailers, and who *do not* purchase from specialty organizations. The third group is made up of those individuals who shop at home from specialty retailers, and from credit-card in-home outlets. Each of these groups will be compared as to the validity of the hypotheses regarding market segmentation within the in-home shopping market.

First Group

This group consists of in-home shoppers who purchase from large catalogue stores, club-of-the-month organizations, and in-home retailers.

Social Class

- I. Ceteris paribus, among all in-home shoppers, there will be no significant difference, when classified by their respective social class.*

As can be seen from the results in Table 35, the in-home shoppers classified in the first group were found to appear to have high social class. It seems, therefore, that in-home shoppers who purchase their goods from large catalog stores, club-of-the-month organizations, and specialty retailers, can be differentiated from all other in-home shoppers, when classified by their respective social class.

Occupation

- I. A. Ceteris paribus, among all in-home shoppers, there will be no significant difference, when classified by their respective occupation.*

When the in-home shoppers classified in the first group were compared to all other in-home shoppers in the sample, it was found that they tended to have a higher status occupation than the latter. For this reason, the alternative hypothesis can probably be accepted, i.e., in-home shoppers who purchase their products from large catalogue stores, club-of-the-month organizations, and specialty retailers, can be differentiated from all other in-home shoppers, when classified as to their occupation.

Income Level

- I. B. *Ceteris paribus, among all in-home shoppers, there will be no significant difference, when classified by their respective income level.*

The results shown in Table 35 indicate that in-home shoppers pertaining to the first group tend to have a higher income level than all other in-home shoppers. That is, income level appears to be useful in differentiating among segments of in-home shoppers.

Educational Level

- I. C. *Ceteris paribus, among all in-home shoppers, there will be no significant difference when classified by their respective educational level.*

This hypothesis, as those previously considered, was rejected in terms of the findings shown in Table 35. In fact, when in-home shoppers who purchase their goods from large catalogue stores, club-of-the-month organizations and specialty retailers were compared to all other in-home shoppers, they indicated to have a higher educational level than the latter. Therefore, educational level is a variable which can be used to discriminate among in-home shoppers.

Family Life-Cycle

- II. *Ceteris paribus, among all in-home shoppers, there will be no significant differences when classified by their respective stage in the family life-cycle.*

The results in Table 35 indicate that this hypothesis is valid with respect to in-home shoppers pertaining to the first group. In fact, no difference was found among in-home shoppers who purchase products from large catalogue stores, club-of-the-month organizations and from specialty retailers, and all other in-home shoppers, when classified by their stage in the family life-cycle.

Adventuresomeness

III. Ceteris paribus, among all in-home shoppers, there will be no significant difference when classified by their respective adventuresomeness.

Table 35 shows that the first group on in-home shoppers in the sample tend to be more adventuresome than all other in-home shoppers. Therefore, the above hypothesis does not appear to be validated by the data obtained from the sample, i.e., in-home shoppers who purchase from large catalogue stores, club-of-the-month organizations, and specialty retailers can probably be differentiated from all other in-home shoppers, when classified by their adventuresomeness.

Cosmopolitanism

IV. Ceteris paribus, among all in-home shoppers, there will be no difference, when classified by their respective cosmopolitanism.

The above hypothesis appears to be validated, as a result of the analysis of data on in-home shoppers. In fact, no differentiation was found in the sample between the first group on in-home shoppers and all other in-home shoppers, when classified by their cosmopolitanism.

Trust in People

- V. *Ceteris paribus, among all in-home shoppers, there will be no significant difference when classified by their respective trust in people.*

Table 36 shows that the above hypothesis appears to be validated. The analysis of data on in-home shoppers, seem to indicate that no significant difference was found between the first group of in-home shoppers and all other in-home shoppers.

Conservatism

- VI. *Ceteris paribus, among all in-home shoppers, there will be no significant difference when classified by their respective conservatism.*

The results of comparison between in-home shoppers who purchase goods from large catalogue stores, club-of-the-month organizations and from specialty stores, and all other in-home shoppers seem to indicate that no difference could be found between them, as to their conservative-liberal attitudes. The above hypothesis, therefore, appears to be validated by the analysis of data from the sample.

Attitudes Toward Credit

VII. *Ceteris paribus, among all in-home shoppers, there will be no significant difference, when classified as to their respective attitude toward credit.*

The results of analysis showed that this hypothesis should probably be accepted. In fact, a comparison between the in-home shoppers classified in the first group, and all other in-home shoppers in the sample, indicated that no difference was found between them in terms of their respective attitude toward credit.

Tendency for Impulse Buying

VIII. *Ceteris paribus, among all in-home shoppers there will be no significant difference when classified by their respective tendency for impulse buying.*

This hypothesis appears to be validated, as is shown in Table 35. A comparison of in-home shoppers who purchase goods from large catalogue stores, club-of-the-month organizations, and specialty retailers and all other in-home shoppers in the sample showed that no difference could be found between the two groups as to their respective attitude toward impulse buying.

Second Group

This group consists of in-home shoppers who purchase from novelty in-home shopping outlets, and who do not shop from specialty organizations.

Social Class

- I. Ceteris paribus, among all in-home shoppers there will be no significant difference when classified by their respective social class.*

Table 35 shows that the above hypothesis seems to be validated by the results of the research. When the second group of in-home shoppers was compared to all other in-home shoppers in the sample, it was found that no significant differences existed between them, when classified by their respective social class.

Occupation

- I. A. Ceteris paribus, among all in-home shoppers, there will be no significant difference, when classified by their respective occupation.*

As for the above hypothesis, the analysis of data shows that it should probably be accepted, with respect to the second group of in-home shoppers. In fact, no difference was found between the in-home shoppers classified in the second group and all other in-home shoppers in the sample, when compared as to their respective occupation.

Income Level

- I. B. *Ceteris paribus*, among all in-home shoppers there will be no significant difference when classified as to their respective income level.

The results of Table 35 shows that the above hypothesis appears to be validated. No difference was found between in-home shoppers of the second group, and all other in-home shoppers, when compared as to their respective income level.

Educational Level

- I. C. *Ceteris paribus*, among all in-home shoppers, there will be no difference when classified by their respective educational level.

A comparison between in-home shoppers classified as belonging to the second group and all other in-home shoppers in the sample, indicates that no differentiation was likely to be made by their respective educational level. The above hypothesis, therefore, seems to be validated.

Family Life-Cycle

- II. *Ceteris paribus*, among all in-home shoppers, there will be no significant difference when classified by their respective stage in the family life-cycle.

A comparison made between all in-home shoppers in the sample, and those in-home shoppers classified in the second group, indicates that the latter tend to be in the

early stages of their family life-cycle, while the same is not true for all other in-home shoppers. The above hypothesis, therefore, should probably be rejected, and the alternative hypothesis accepted, i.e., it is likely that in-home shoppers can be differentiated from people who purchase goods at home from novelty retailers and who do not purchase from specialty outlets, as to their respective stage in the family life cycle.

Adventuresomeness

III. Ceteris paribus, among all in-home shoppers there will be no significant difference when classified by their respective adventuresomeness.

Table 35 appears to indicate that no difference was found between in-home shoppers classified in the second group and all other in-home shoppers in the sample, when compared as to their respective adventuresomeness. The above hypothesis, therefore, seems to be validated with regard to the second group of in-home shoppers.

Cosmopolitanism

IV. Ceteris paribus, among all in-home shoppers, there will be no significant difference when classified by their respective cosmopolitanism.

Results of comparisons made between in-home shoppers classified as belonging to the second group and all other in-home shoppers, seem to indicate that the former are of

less cosmopolitan orientation than all other in-home shoppers. This analysis points out that the above hypothesis appears not to have been validated, i.e., it seems possible to be able to differentiate among in-home shoppers, when comparing them as to their cosmopolitan attitudes.

Trust in People

- V. *Ceteris paribus, among all in-home shoppers, there will be no significant difference when classified by their respective trust in people.*

As it can be seen in Table 35, in-home shoppers classified in the second group appear to have less trust in people than all other in-home shoppers. This tends to indicate that the above hypothesis should probably be rejected, i.e., the data analyzed seems to point out that it is possible to differentiate among in-home shoppers when comparing their respective trust in people.

Conservatism

- VI. *Ceteris paribus, among all in-home shoppers, there will be no significant difference when classified by their respective conservatism.*

The above hypothesis appears to be validated by the results of the analysis. In fact, when all in-home shoppers in the sample were compared to in-home shoppers classified in the second group, no difference was found between them

as to their conservative-liberal attitudes. The above hypothesis, therefore, should probably be accepted.

Attitude Toward Credit

VII. *Ceteris paribus, among all in-home shoppers, there will be no significant difference when classified by their respective attitude toward credit.*

Table 35 indicates that the above hypothesis is likely to be accepted. A comparison between the second group of in-home shoppers and all other in-home shoppers in the sample shows that no difference was found between them, as to their respective attitude toward credit.

Tendency for Impulse Buying

VIII. *Ceteris paribus, among all in-home shoppers, there will be no significant difference when classified by their respective attitude toward impulse buying.*

This last hypothesis is also to be accepted. The analysis revealed that no difference was found between people who buy from novelty in-home outlets, and do not purchase from specialty retailers, and all other in-home shoppers in the sample, when compared as to their respective attitude toward impulse-buying. This hypothesis, therefore, appears to be validated.

Third Group

This group consists of the in-home shoppers who purchase products from specialty and credit card in-home outlets.

Social Class

- I. Ceteris paribus, among all in-home shoppers, there will be no significant difference when classified as to their respective social class.*

Table 35 indicates that in-home shoppers classified in the third group were likely to have higher social class than all other in-home shoppers in the sample. These results appear to invalidate the above hypothesis, so that the alternative hypothesis should probably be accepted, i.e., there seem to be no differences among in-home shoppers, when classified by their respective social class.

Occupation

- I. A. Ceteris paribus, among all in-home shoppers, there will be no significant difference when classified by their respective occupation.*

Individuals who shop at home from specialty and credit card type of outlets were found to tend to have higher status occupations than all other in-home shoppers in the sample. These findings appear to indicate that the above hypothesis was not validated by the analysis of the data, i.e., there appear to be significant differences among

in-home shoppers, when classified by their respective occupations.

Income Level

I. B. *Ceteris paribus*, among all in-home shoppers, there will be no significant difference when classified by their respective income level.

Table 35 indicates that there appear to be significant differences between in-home shoppers pertaining to the third group and all other in-home shoppers in the sample, when they are compared by their respective income level. In fact, individuals who shop at home from specialty and credit card outlets are likely to have a higher income level than all other in-home shoppers. This indicates that the above hypothesis should probably be rejected, i.e., there seem to be differences among in-home shoppers when classified by their respective income level.

Educational Level

I. C. *Ceteris paribus*, among all in-home shoppers, there will be no significant difference when classified by their respective educational level.

A comparison between the third group of in-home shoppers and all other in-home shoppers in the sample indicated that no difference is likely to exist between them as to their educational level. The above hypothesis, therefore, appears to be validated.

Family Life-Cycle

II. *Ceteris paribus, among all in-home shoppers, there will be no significant difference when classified as to their stage in the family life-cycle.*

Table 35 indicates that the above hypothesis is probably validated by the findings. The comparison between the third group of in-home shoppers and all other in-home shoppers indicates that they could not be differentiated as to their stage in the family life-cycle.

Adventuresomeness

III. *Ceteris paribus, among all in-home shoppers, there will be no significant difference when classified by their respective adventuresome attitudes.*

The in-home shoppers who purchase goods from specialty and credit card outlets were compared to all other in-home shoppers in the sample, as to their adventuresome attitudes. It was found that the former tend to be less adventuresome than all other in-home shoppers. This appears to indicate that the above hypothesis should be rejected, i.e., that there seem to be differences among in-home shoppers when classified by their respective adventuresome attitudes.

Cosmopolitanism

- IV. *Ceteris paribus, among all in-home shoppers, there will be no significant difference when classified by their respective cosmopolitanism.*

Table 35 indicates that no differentiation appears to be found between in-home shoppers of the third group and all other in-home shoppers, when compared as to their cosmopolitan attitudes. The above hypothesis seemed validated by the analysis of the findings.

Trust in People

- V. *Ceteris paribus, among all in-home shoppers, there will be no significant difference when classified as to their respective trust in people.*

No difference appeared to exist between in-home shoppers of group three and all other in-home shoppers in the sample, as to their trust in people. The above hypothesis, therefore, seems to be validated by the research findings.

Conservatism

- VI. *Ceteris paribus, among all in-home shoppers, there will be no significant difference when classified by their respective conservatism.*

In-home shoppers who purchase goods from specialty outlets and credit card in-home retailers, were found not to be significantly different from all other in-home shoppers

in the sample as to their conservative-liberal attitudes. The above hypothesis is likely to be validated.

Attitude Toward Credit

VII. *Ceteris paribus, among all in-home shoppers, there will be no significant difference when classified by their respective attitude toward credit.*

Table 35 indicates that the above hypothesis should probably be accepted. In fact, an analysis of the third group of in-home shoppers as compared to all other in-home shoppers in the sample shows that no significant differences appear to exist between them when classified by their respective attitude toward credit.

Tendency for Impulse Buying

VIII. *Ceteris paribus, among all in-home shoppers, there will be no significant difference when classified by their respective tendency for impulse buying.*

When in-home shoppers who purchase products from specialty stores and from credit card type of organizations were compared to all other in-home shoppers in the sample, no significant difference seemed to be found between them as to their tendency for impulse buying. The above hypothesis, therefore, is probably validated as to the research findings.

Analysis of the Research Findings in
View of the Research Objectives

The objectives of the study are threefold. The first objective is to determine whether significant differences exist between in-home shoppers and individuals who do not shop at home. The second objective is to verify the existence of market segments within the in-home shopping market. The third objective is to suggest methods for establishing segmentation criteria for firms in the in-home shopping market in order to facilitate their selling operations.

It is the opinion of the researcher that the objectives of the study were accomplished in terms of the analysis of the findings. Accordingly, it was shown that:

1. There appear to be significant differences between individuals who shop at home and those who do not.
2. Market segments can be delineated within the total in-home shopping market, with the aid of socio-economic and sociopsychological variables.
3. The results of the research permit to suggest tentative methods of market planning for firms in the in-home shopping market, focused on the fact that segmentation is possible, and with the purpose of facilitating their marketing strategies. This aspect of the research will be explained in more

detail in Chapter VI, when the contributions of the study to marketing practice will be analyzed.

Although not all hypotheses were validated by the results of data analysis, there is a clear indication that coupling socioeconomic characteristics with sociopsychological variables will accomplish a better delineation of the existing market segments.

Summary

Chapter V has presented an evaluation of the independent variables used in the research, as well as an evaluation of the research hypotheses. The last part of Chapter V provides a comparison of the research findings in view of the research objectives.

The following chapter will provide a summary of the study, along with conclusions concerning its main contributions to marketing theory and marketing practice. Additional opportunity for future research will also be explored in the last chapter.

CHAPTER VI

SUMMARY AND CONCLUSIONS

This chapter will attempt to summarize briefly the study, as well as indicate the main contributions of this research to the areas of marketing theory and marketing management. Areas suitable for further research in this field will also be explored, in order to indicate future opportunities for more exact and detailed information on the subject.

Summary of the Research

The objectives of the study were to determine if individuals who shop at home, by mail or by telephone, could be differentiated from those who choose not to do so, and to determine if market segments exist within the in-home shopping market. The data was collected in the twin cities of Lansing and East Lansing, Michigan. A sample of one thousand subjects was sent the questionnaire and five hundred and nineteen answers were used in the analysis. Thus, within the limitation of sample size and location, several results were attained.

In contrasting in-home shoppers with not in-home shoppers, it was found that:

1. Social Class: people who shop by mail and/or by telephone appeared to have higher social status, higher occupation and educational levels, and higher total family income, than those who do not shop at home.
2. Family Life-Cycle: in-home shoppers could not be differentiated from individuals who do not shop at home by their stage in the family life-cycle. The marital status of in-home shoppers, the age of the head of the household, and the number of years married also did not significantly differentiate people who shop at home by mail or by telephone from those who do not.
3. Sociopsychological Characteristics: the results of the study indicated that in-home shoppers appeared to be significantly more cosmopolitan, less conservative, and having a more favorable attitude toward credit than did individuals who did not shop at home. The variables, adventuresomeness, trust in people, and attitude toward impulse buying did not significantly differentiate the two respondents' groups.

A second analysis of the data was made with the objective of discerning possible segments within the in-home shopping market. Three distinct submarkets were identified:

the first group was composed of those individuals who shop by mail and by telephone from large catalogue stores, club-of-the-month type of organizations, and from specialty in-home retail outlets. Those individuals were found to have high status occupation of the head of the household, high total family income, high educational level of the head of the household, high social class, and adventuresome attitudes.

The second segment included respondent who stated that they utilized novelty in-home retailers, and who did not shop at specialty retailers. The consumers in this group were found to be in the early stages of the family life cycle, to tend not to trust people, and not to be very cosmopolitan in their orientation.

The third segment was composed of all those in-home shoppers who purchase their products from specialty and credit card type of organizations. The results indicated that the individuals in this group tended to have a high status occupation of the head of the household, high total family income, high educational level of the head of the household, and belonged to high social classes. They also seemed to display non-adventuresome attitudes.

It is interesting to note that the main difference between the first and the third market segments is indicated by their adventuresome attitudes. Individuals of the first market segment appeared to be more adventuresome, while

those comprised in the third market segment appeared to have non-adventuresome attitudes.

Conclusions from the Findings

An interesting conclusion that can be drawn from the findings is the fact that some of the variables that have proven to be of little use in differentiating in-home shoppers from those who do not shop at home, were useful in distinguishing market segments within the in-home shopping market. Such variables as family life-cycle, adventuresomeness, and trust in people played important roles in delineating submarkets within the in-home shopping market. This indicates that it may be important to include for in-home shoppers market segmentation even those variables which cannot be used to characterize in-home shoppers as a homogeneous group, or to differentiate them from not in-home shoppers.

The income level of consumers was shown to be a strong influencer of the subjects' tendency to shop at home, as well as was their cosmopolitan attitude. Along with those variables, an important discriminator appeared to be the social class of the individuals. This appears to indicate, within the limitations of the sample, that the more educated and wealthier consumer is more prone to experiment with different purchasing practices than is the less educated, less wealthy consumer.

At the same time, the respondents who tended not to accept local limitations and influences, seemed to be more prone to purchase from distant retailers, by mail or by telephone. The existence of less conservative attitudes in the in-home shoppers group may be related to their cosmopolitan orientation, to a certain extent. The tendency to accept different opinions and orientations, as well as different products, indicates absence of conservative, traditional attitudes, and at the same time appears to show the lack of geographical bounds.

The reasons for the differences between the various market segments within the in-home shopping market may perhaps be found in the type of products offered by different outlets. Several variables such as store's image, the type of catalogues featured, and so many others could be responsible for differences in customers' characteristics.

The objective pursued, however, was to prove that it is possible to determine the existence of segments within the market of in-home shoppers who purchase their products by mail and by telephone. This purpose was accomplished within the limitations of the sample used in the research.

✓ Implications of the Research for
Marketing Theory

The fundamental contribution of the present study in the development of consumer behavior theory is primarily descriptive. The consumer characteristics which resulted from the analysis of the data collected in the research yield significant contributions to the dimensions of different segments within the in-home shopping market.

The fact that the present research has descriptive qualities and appears to be an efficient discriminating tool among types of consumers, mainly those who purchase goods at home by mail or by telephone, is a necessary condition to determine any predictive quality of it for the body of marketing theory. The ever increasing variety of consumer motivational forces affecting their behavior makes the job of defining and predicting behavior of market segments an ever more difficult one. Among the various qualities that are required to exist in marketing theory to justify its meaningfulness, are currency of data on which the predictions are based. In-home shopping is not a recent development of marketing, however, urban in-home shopping is a very updated version of the phenomenon which started in the late 1800's. More recently, marketing theorists have been preoccupied with in-home shoppers, and attempts have been made to describe this particular type of customer.

Previous to this research, two studies in particular have attempted to establish differences between in-home shoppers and people who do not shop at home. The first study, by Peter L. Gillett, compared in-home shoppers with not in-home shoppers.¹ Gillett examined demographic and socioeconomic variables, the influence of the fact that the consumer might be "locked in" the house, as a determinant of his in-home shopping activities, and, finally, whether or not in-home shoppers are more convenience oriented than those individuals who do not shop at home. Gillett found that the in-home shopper tended to have a better education, the head of the household had a higher status job, and the family's total income was greater than that of the not in-home shopper. He also found that in-home shopping was not a consequence of the difficulty of getting out to the store. The third conclusion reached by Gillett was that the in-home shopper was more convenience oriented and flexible in his choice of alternatives than the not in-home shopper.

Gillett concludes that:

Urban in-home shoppers perhaps may be described as "modern" shoppers; they are seldom bound by shopping traditions and perceive less-than-average risk in buying by mail or phone. In-home shoppers are more affluent and better educated than other shoppers, but differ little on other major demographic characteristics.²

¹Peter L. Gillett, "A Profile of Urban In-Home Shoppers," *Journal of Marketing*, XXXIV (July, 1970), 40-45.

²*Ibid.*, p. 45.

The second study, by Peters and Ford,¹ also attempts to describe in-home shoppers. The major difference between these two studies is the fact that Gillett excluded from his research people who purchased from door-to-door salesmen, while Peters and Ford's study examines socioeconomic and personality characteristics of women who buy cosmetics from door-to-door sales representatives, and compares them with individuals who do not do so.

The results of the second study furnished the following profile of the in-home customer:

Relative to the woman who buys over half of her cosmetics in a retail store, the in-home buyer:

1. Has less access to a car for daytime shopping;
2. Tends to be less educated;
3. Is likely to have more children living at home;
4. Is more likely to have a family income under \$15,000 annually; and
5. The chances are greater that the head of the household will be a blue collar worker, clerical employee, or a salesman, rather than a professional.²

Peters and Ford were unable to find significant differences between personality characteristics of in-home shoppers and individuals who do not shop at home.

The present study should help clarify some of the differences that exist between Gillett and Peters and Ford

¹William H. Peters and Neil M. Ford, "A Profile of Urban In-Home Shoppers: The Other Half," *Journal of Marketing*, XXXVI (January, 1972), 62-64.

²*Ibid.*, p. 64.

studies. The research was designed to determine if significant differences exist between individuals who shop at home and those people who do not, and determine if market segments can be located within the in-home shopping market.

The findings of the study with respect to socioeconomic variables seem to substantiate those of Gillett, and contrast those of Peters and Ford. The active in-home shopper examined in the study, appears to tend to come from a higher social class, to have a higher family income level, and the head of the household to have a better educational level and occupation than those individuals who were classified as inactive in-home shoppers in the study.

The attitudinal test revealed that there was indication that the active in-home shoppers were more liberal, had a more positive attitude toward credit, and were more cosmopolitan than the inactive in-home shoppers analyzed in the sample. Although these variables were not examined by either Gillett or Peters and Ford both previous studies try to distinguish attitudinal differences between the two groups. Gillett had only limited success and Peters and Ford's study found no significant differences.

The canonical analysis was able to distinguish market segments within the in-home shopping market. This may imply that the findings of the Gillett and the Peters and Ford's study may actually not be in conflict with each other. While Gillett examined individuals who shopped at

home versus those people who choose not to do so, the Peters and Ford's study looked only at that segment of the market which purchased goods from door-to-door salesmen. Although the present study did not analyze door-to-door sales, it did conclude that distinct market segments do exist within the in-home shopping market. In this context, the main theoretical contribution of the research will be found.

Implications of the Research for Marketing Management

The research has shown, within the sample limitations, that the in-home shopping market can be segmented into groups with specific differentiating characteristics which include personality factors and emotional attitudes.

The in-home shopper has traditionally been classified by mailing lists which are compiled either considering the individuals' socioeconomic and demographic variables, or the subjects' past purchasing behavior with respect to mail and telephone purchases. The present study has chosen to examine the in-home shopping market from the perspective of combining socioeconomic characteristics with the individuals' emotional and psychological attitudes. If replications of the study, with different samples, indicate that persons with the same sociopsychological characteristics have similar behavior with respect to their purchase of products by mail or by telephone, then retailers should take into careful consideration this fact when making marketing decisions.

Although in-home retailing has been growing in importance for a long time, it is likely that promotional appeals which are aimed directly at the target markets would boost the growth of the industry.

It is necessary here to stress the fact that the research findings are limited to the sample considered, and to the time in which the study was realized. It is possible, therefore, that major variations exist as to the type of sociopsychological variables which may differentiate in-home shoppers from individuals who do not shop at home. Replications of the study would be necessary in order to verify the existence of such variations perhaps with the addition of other attitudinal variables to those considered in this study.

The practitioner, therefore, should consider his own specific market, without generalizing to it the results of this research. A better measure of segmentation would be to test his market for socioeconomic and sociopsychological differences since elements of time and space have not been accounted for in this particular study.

Evidence presented in Chapter II shows that the in-home shopping market presents currently a substantial and expanding market opportunity. The urban shopper patronizes in-home sales for various reasons, as shown in Chapter V, among which are his own attitudes and motives.

This indicates that there are opportunities for innovations within the in-home shopping market. Customizing products and services to consumers' demand is not new in marketing strategy. The size and heterogeneity of the in-home shopping market suggests that such a policy may be successful in isolating segments which properly designed marketing strategies will help reach more effectively.

The same evidence, in turn, may indicate with a fair degree of accuracy how the in-home retailers should allocate their marketing efforts. The delineation of relatively homogeneous market segments with respect to relevant demographic, socioeconomic and sociopsychological variables derived by the research, enables to assume that, when such characteristics are described with respect to a specific in-home market, marketing efforts could be more efficiently allocated on the basis of the relative opportunities which exist in each submarket segment. The size of each segment along with the historical value of individuals' in-home purchases, might provide an initial indication of the apportionment of the marketing effort as a proportion of the market share represented by each submarket.

Finally, one of the contributions of this research to marketing management will be that of providing some criteria for the selection of marketing policies. If the marketing manager can clearly delineate the characteristics of each of his market segments, this will provide him with

an indication of the appropriateness of differing pricing, promotion, and distribution policies. The sociopsychological characteristics of consumers within each market segment could prove to be a valuable tool in providing an indication of the appeals to be used in further analysis to obtain answers regarding the allocation of marketing expenditures.

In general, the dynamic marketer could continually use research to investigate the determinants of demand for his own present and potential in-home market offerings in order to maintain marketing effectiveness, improve his competitive position, or even increase the size of his market.

Suggested Areas for Further Research

The study has not answered all the questions. It has primarily increased the number of inquiries that pervade the marketing universe. The analysis of in-home retailing has revealed that, once more, whenever human behavior is examined, no single solution or specific answer can be attained. The research has attempted to analyze a small number of variables which compose human behavior in order to determine which of these variables would play a relevant role in explaining the individual's purchasing behavior.

Several topics for future research in this field can be noted. First, a similar study could be applied to

a larger sample in a different or several different geographical areas. It would be very relevant to verify whether the present findings would hold if the research were made on a national basis.

Second, other studies could be made on specific in-home retailers. Observations about the behavior of a large sample of catalogue store customers, for instance, might reveal the existence of influencing factors which were not included in this study hypotheses.

Third, a longitudinal study of in-home shoppers could be done. Their behavior along the time would then be analyzed, revealing perhaps periodical changes in the purchase influence factors.

Fourth, other emotional, personality, and motivational attitudes could be tested. The list of sociopsychological variables analyzed by the present study is far from exhaustive, and several more variables of this kind might increase the possibilities of segmentation within the in-home shopping market. New scales of attitudinal variables could also be tested, perhaps relating products to customers.

The value of this study will be greater if it can be proved that sociopsychological variables can, in fact, lead to a more accurate segmentation of markets than that obtained through the application of only socioeconomic and demographic variables.

BIBLIOGRAPHY

BIBLIOGRAPHY

- Alpert, Mark I., and Robert A. Peterson. "On the Interpretation of Canonical Analysis." Unpublished Working Paper 71-45. The University of Texas at Austin, Austin, Texas, 1971.
- Anderson, Wilton T., Jr. "An Analysis of the Correlates of Convenience Oriented Consumer Behavior: With Special Emphasis on Selected Convenience Foods and Durable Goods." Unpublished Ph.D. dissertation, Michigan State University, East Lansing, Michigan, 1969.
- Barber, Bernard. *Social Stratification*. New York: Harcourt, Brace, and World, Inc., 1957.
- Bartolomew, Ralph. *A Short Course in Direct Mail*. New York: Direct Mail Division, Publishers Printing Co., 1928.
- Berkwitz, Leonard W. M. *The Encyclopedia of Mail Order Business*. New York: Leonard Berkwitz, 1900.
- Bigelow, Howard F. "Financing the Marriage." *Family, Marriage and Parenthood*. Edited by Howard Becker and Reuben Hill. Boston: D. C. Heath, 1948.
- Braid, Dorothy, "Individual Incomes and the Structure of Consumer Units." *A.I.A. Papers Proceedings*, May, 1958.
- Brandt, Steven C. "Dissecting the Segmentation Syndrome." *Journal of Marketing*, XXX (October, 1966), 22.
- Buckley, Homer J., G. D. Crain, and Maxwell Droke. *Mail Order and Trade Paper Advertising*. New York: International Textbooks Company, Bluebooks, 1937.
- Bull, Albert E. *Mail Order and Instalment Trading*. London: Sir Isaac Pitman and Sons, 1926.
- Burnett, Ed. "How to Select Lists that Reach People with Ability to Buy." *The Reporter of Direct Mail Advertising*, April, 1969, p. 34.

- Clark, Lincoln, ed. *Consumer Behavior II: The Life Cycle and Consumer Behavior*. New York: New York University Press, 1955.
- Coleman, Richard P. "The Significance of Social Stratification in Selling." *Proceedings of the 43rd National Conference of The American Marketing Association*. Edited by Martin L. Bell, December, 1960, pp. 171-184.
- Cooley, William W., and Paul L. Lahnes. *Multivariate Procedures for the Behavioral Sciences*. New York: John Wiley and Sons, Inc., 1962
- Cunningham, William H., and W. J. E. Crissy. "Market Segmentation by Motivation and Attitudes." *Journal of Marketing Research*, IX (February, 1972), 100-102.
- Demby, Emanuel, and Louis Cohen. "Consumer Life Style More Vital to Marketing than Income Level." *The Reporter of Direct Mail Advertising*, June, 1969, p. 36.
- Dreesmann, A. C. R. "Patterns of Evolution in Retailing." *Journal of Retailing*, XLIV, No. 1 (Spring, 1968) 64-67.
- Doody, Alton F., and William R. Davidson. "Next Revolution in Retailing." *Harvard Business Review*, May-June, 1967, pp. 4-20.
- Duvall, Evelyn M. *Family Development*. New York: J. B. Lippincott Company, 1947.
- Duvall, Evelyn M., and Reuben Hill, co-chairmen. *Report of the Committee on the Dynamics of Family Interaction*. Washington, D.C.: National Conference on Family Life Cycle, February, 1948. Mimeographed.
- Egner, Frank, and L. Rohe Walter. *Direct Mail Advertising and Selling*. New York: Harper and Bros., 1940.
- Emmet, Boris, and John Jeuck. *Catalogues and Counters*. Chicago: The University of Chicago Press, 1950.
- Engel, James F., David T. Kollat, and Roger D. Blackwell. *Consumer Behavior*. New York: Holt, Rinehart, and Winston, Inc., 1968.
- Engel, James F., David T. Kollat, and Roger D. Blackwell. "Personality Measures and Market Segmentation--Evidence Favors Interaction Views." *Business Horizons*, June, 1969, pp. 61-69.

- Evans, Franklin B. "Psychological and Objective Factors in the Prediction of Brand Choice." *Journal of Business*, No. 32, October, 1959, pp. 340-369.
- Fenvessy, Stanley. "The Dynamic Wholesale Mail Order Business: Evolution or Revolution?" *The Reporter of Direct Mail Advertising*, October, 1960, pp. 51-53.
- Ferber, Robert, Donald F. Blankertz, and Sydney Hollander, Jr. *Marketing Research*. New York: The Ronald Press Company, 1964.
- Foote, Nelson N., ed. *Consumer Behavior: Models of Household Decision Making*. New York: New York University Press, 1961.
- Foote, Nelson N., et al., eds. *Housing Choices and Housing Constraints*. New York: McGraw-Hill Company, 1960.
- Frank, Ronald E., William F. Massy, and Donald B. Morrison. "Bias in Multiple Discriminant Analysis." *Journal of Marketing Research*, August, 1965, pp. 250-258.
- Gillett, Peter L. "A Profile of Urban In-Home Shoppers." *Journal of Marketing*. XXXIV (July, 1970), 40-45.
- Glick, Paul C. *American Families*. New York: John Wiley and Sons, Inc., 1957.
- Glick, Paul C. "The Family Cycle." *American Sociological Review*, No. 14, April, 1947, pp. 164-174.
- Green, Roy M. "Think Creatively About the Lists You Use and the Markets You Sell." *The Reporter of Direct Mail Advertising*, June, 1967, pp. 16-17.
- Greenlaf, William. *American Economic Growth Since 1860*. Columbia, S.C.: University of South Carolina Press, 1968.
- Haer, John L. "An Empirical Study of Social Class Awareness." *Social Forces*, No. 36, December, 1957, pp. 117-121.
- Haley, Russel I. "Benefit Segmentation: A Decision-Oriented Research Tool." *Journal of Marketing*, XXXII (July, 1968), 30-35.
- Hawey, J. "What Makes a Better Seller." *Motivation and Market Behavior*. Edited by R. Ferber and H. G. Wales. Homewood, Ill.: Richard D. Irwin, Inc., 1958.

- Higgins, Charles F. "The Booming In-Home Market." *The Reporter of Direct Mail Advertising. Editor's Choice*, Summer, 1967, pp. 48-49.
- Hodge, Robert W., Paul M. Siegel, and Peter H. Rossi. "Occupational Prestige in the United States." *Class, Status and Power*. Edited by Reinhard Bendix and Seymour Martin Lipset. 2nd ed. New York: The Free Press, 1966.
- Hollingshead, A. B. *Elmtown's Youth*. New York: John Wiley and Sons, Inc., 1949.
- Hollingshead, A. B., and F. C. Redlich. *Social Class and Mental Illness*. New York: John Wiley and Sons, Inc., 1958.
- Howard, James E. *How to Use Mail Order for Profit*. New York: Grosset and Dunlap, 1963.
- Howard, John A. *Marketing Theory*. Boston: Allyn and Bacon, Inc., 1965.
- Jain, C. L. "The Cost and Value of Customers--How to Figure It for Yourself." *The Reporter of Direct Mail Advertising*, December, 1968, pp. 44-45.
- Jain, C. L., and A. Migliaro. "The Fundamentals of List Segmentation." *The Reporter of Direct Mail Advertising*, June, 1967, p. 29.
- Kahl, Joseph A. *The American Class Structure*. New York: Holt, Rinehart, and Winston, Inc., 1957.
- Kahl, Joseph A., and James A. David. "A Comparison of Indexes of Socioeconomic Status." *Social Forces*, May, 1960.
- Kirk, Hazel. *Economic Problems of the Family*. New York: Harper and Row, Publishers, 1933.
- Kirk, Hazel. *A Theory of Consumption*. Boston: Houghton Mifflin Company, 1923.
- Kirkpatrick, E. L., Mary Cowles, and Roselyn Tough. "The Life Cycle of the Farm Family." *Research Bulletin No. 121*. Madison: Agricultural Experiment Station, University of Wisconsin, 1934.

- Kotler, Philip. *Marketing Management--Analysis, Planning, and Control*. Englewood Cliffs, N.J.: Prentice-Hall, 1967.
- Lansing, John B., and Leslie Kish. "Family Life Cycle as an Independent Variable." *American Sociological Review*. No. 22, October, 1957, pp. 512-519.
- Lansing, John B., and James N. Morgon. "Consumer Finances Over the Life Cycle." *Consumer Behavior II: The Life Cycle and Consumer Behavior*. Edited by Lincoln H. Clark. New York: New York University Press, 1955.
- Lively, C. E. "The Growth Cycle of the Farm Family." Mimeographed Bulletin No. 51. Wooster, O.: Agricultural Experiment Station, 1932.
- Loomis, C. P. "The Growth of the Farm Family in Relation to Its Activities." Raleigh, N.C.: Agricultural Experiment Station, North Carolina State College, 1934.
- Loomis, Charles P. "The Study of the Life Cycle of Families." *Rural Sociology*, June, 1936, pp. 180-199.
- Martineau, Pierre. "Social Class and Spending Behavior." *Journal of Marketing*, XXIII (October, 1958), 123-125.
- May, Frederick E. "Buying Behavior: Home Research Findings." *The Journal of Business*, XXXVIII (October, 1965), 379-396.
- McCarthy, Jerome E. *Basic Marketing*. Rev. ed. Homewood, Ill.: Richard D. Irwin, Inc., 1964.
- McClosky, Herbert. "Conservatism and Personality." *American Political Science Review*, No. 52, 1958, pp. 27-45.
- McIntyre, Randall P. "Mail Marketing in Three Dimensions." *The Reporter of Direct Mail Advertising*, October, 1965, pp. 72-77.
- "More Firms Seen Selling Direct to the Consumer." *Home Furnishing Daily*, May 1, 1970, p. 7.
- Myers, James H., and Mark I. Alpert. "Detrimental Buying Attitudes: Meaning and Measurement." *Journal of Marketing*, XXXII (October, 1968), 13-20.

- Nystrom, Paul H. *The Economics of Retailing*. 3rd. ed. New York: The Ronald Press Co., 1930.
- Osherow, Jerome B. "How to Clean a Mailing List." *The Reporter of Direct Mail Advertising*, October, 1960, pp. 39-40.
- Peters, William H., and Neil M. Ford. "A Profile of Urban In-Home Shoppers: The Other Half." *Journal of Marketing*, XXXVI (January, 1972), 62-64.
- Reid, Margaret. *Consumers and the Markets*. New York: Appleton-Century-Crofts, 1938.
- Reiss, Albert J., Jr., Otis Dudley Duncan, Paul K. Halt, and Cecil C. North. *Occupations and Social Status*. New York: The Free Press, 1961.
- Robinson, John P., and Phillip R. Shaver. *Measures of Psychological Attitudes*. Ann Arbor: Survey Research Center, Institute for Social Research, University of Michigan, 1961.
- Rodgers, Roy H. "Improvements in the Construction and Analysis of Family Life Cycle Categories." Unpublished Ph.D. dissertation, Western Michigan University, Kalamazoo, Michigan, 1962.
- Rosenberg, M. *Occupations and Values*. Glencoe, Illinois: The Free Press, 1957.
- Sheth, J. W. "Multivariate Analysis in Marketing." *Journal of Advertising Research*, February, 1970, pp. 24-39.
- Shils, Edward A. "Class." *Encyclopedia Britannica*, Vol. V (1960), 766-768.
- Smith, Wendell R. "Product Differentiation and Market Segmentation as Alternative Marketing Strategies." *Journal of Marketing*, XXI (July, 1956), 3-8.
- Snyder, Ray. "The Mathematics of Mail Order." *The Reporter of Direct Mail Advertising*, February, 1968, pp. 19-22.
- Sorokin, Pitirim A., Carl C. Zimmerman, and Charles J. Galpin. *A Systematic Source Book in Rural Sociology*. Minneapolis: University of Minnesota Press, 1931.
- Sparks, David L., and W. T. Tucker. "A Multivariate Analysis of Personality and Product Use." *Journal of Marketing Research*, February, 1971, p. 69.

- Sparth, Frank W. "Classifying Direct Mail Lists." *The Journal of Retailing*, No. 2, October, 1928, pp. 13-17.
- Sroge, Maxwell. "The Distribution Revolution . . . Anatomy of Direct Marketing." *The Reporter of Direct Mail Advertising*, July, 1970, pp. 18-20.
- Stevens, Milton S. "How Market Research Can Improve List Results." *The Reporter of Direct Mail Advertising. Editor's Choice*, Summer, 1964, pp. 27-29.
- Stone, Robert F. *Successful Direct Mail Advertising and Selling*. New York: Prentice-Hall, 1960.
- "Tele-Purchasing--Major Trend in Retailing?" *Forbes*, October 15, 1967, pp. 56-69.
- Terry, Pat. "More Customer 'Services' for Jordan March in 70's." *Women's Wear Daily*, March 26, 1970, p. 29.
- "The Diners Club Story." *The Reporter of Direct Mail Advertising. Editor's Choice*, Summer, 1967, pp. 18-22.
- Tucker, W. T., and John J. Painter. "Personality and Product Use." *Journal of Applied Psychology*, No. 45, October, 1961, pp. 325-329.
- Tuey, Paul. *Elements of Retail Salesmanship*. New York: The McMillan Co., 1925.
- Udell, John G. "Can Attitude Measurement Predict Consumer Behavior?" *Journal of Marketing*, XXIX (October, 1965), 46-50.
- U.S. Bureau of the Census. *Methodology and Scores on Socioeconomic Status*, 1960, p. 1.
- U.S. Bureau of the Census. *U.S. Census of Population, 1960. Subjects Report Socioeconomic Status. Final Report*, PL(2)-5c. Washington, D.C.: Government Printing Office, 1967.
- U.S. Department of Commerce. "Mail Order Sales of Department Store Merchandise by Mail Order Companies or Mail Divisions." *Survey of Current Business*, February, 1962, pp. 5-11.
- U.S. Department of Commerce. "Mail Order Sales of Department Store Merchandise by Mail Order Companies or Mail Divisions." *Survey of Current Business*, LI, No. 9 (September, 1970), 5-11.

Veldman, Donald J. *Fortran Programming for the Behavioral Sciences*. New York: Holt, Rinehart, and Winston, 1967.

Wadsworth, Ralph K. *Handbook of Mail Order Selling and Merchandising*. Chicago: The Dartnell Corporation, 1918.

Warner, W. Lloyd, Marcia Meeker, and Kenneth Eells. *Social Class in America*. New York: Harper Torch Books, Inc., 1960.

Wundermann, Lester. "Mail Order, The Coming Revolution in Marketing." *Advertising Age*, July 24, 1967, p. 7.

Wundermann, Lester. "Mail Order, The Coming Revolution in Marketing." *The Reporter of Direct Mail Advertising. Editor's Choice*, Summer, 1968, pp. 32-34.

APPENDICES

APPENDIX A

LETTER OF INTRODUCTION

GRADUATE SCHOOL OF BUSINESS ADMINISTRATION

DEPARTMENT OF MARKETING AND TRANSPORTATION ADMINISTRATION • EPPLEY CENTER

July 5, 1970

Mr. Bruce T. Allen
1876 Linden Street
East Lansing, Mich. 48823

Dear Mr. Allen:

I am a graduate student at Michigan State University working on a Ph.D. degree in Marketing. One of the requirements of this degree is to complete a research project for my Ph.D. thesis. Enclosed in this envelope is a questionnaire which I am using as the basis for my research project. The project is designed to verify the existence of submarket segments among people who purchase goods by mail or by telephone. To do this, I am asking a small sample of persons from a large cross-section of individuals to answer my questions. You are a member of my sample, and I need your help.

Please assist me by completing the questionnaire enclosed with this letter. The questionnaire is relatively short and easy to answer. It is not identified in any way, so that it will not be possible to trace your answers back to you. I have supplied a stamped, addressed, return envelope to make it easier for you to mail the questionnaire to me when you have completed it.

Your response is vital to my ability to complete a meaningful research project and I hope you'll take the time to complete this questionnaire and return it to me.

I greatly appreciate your time and effort.

Yours very truly,

Isabella C. Mantovani
Ph.D. Candidate

APPENDIX B

FOLLOW-UP CARD

APPENDIX B

FOLLOW-UP CARD

A short time ago I mailed to you a questionnaire about in-home shopping. Since that time many of the questionnaires have been returned. If you have already completed yours I thank you for your cooperation.

But if you have not yet responded, could you please do so at your earliest convenience? Your answers are vital to the results of my research. I realize that you are busy, but I still hope to have your cooperation.

If you have any questions or comments, please feel free to call me. My telephone is: 355-5116.

I greatly appreciate your help.

Sincerely yours,

Isabella C. Mantovani, Ph.D. Candidate

APPENDIX C

QUESTIONNAIRE

A SURVEY OF IN-HOME SHOPPERS

DEPARTMENT OF MARKETING
GRADUATE SCHOOL OF BUSINESS ADMINISTRATION
MICHIGAN STATE UNIVERSITY
EAST LANSING, MICHIGAN

INSTRUCTIONS FOR COMPLETING THE QUESTIONNAIRE

All the inquiries recorded in this questionnaire may be answered by placing an "X" beside the response which you think affords the best reply to the question at hand (in certain exceptional instances you are asked to list items connected with the response).

There are no inappropriate answers to any of the questions in this survey. For this reason, you should feel free to choose any response which you believe does the best job of depicting the answer most suitable to you.

In order to provide the basis for a complete portrayal of the in-home shopper, I have found it necessary to ask you for background information that you may view as being personal. Rest assured that your answers will be regarded as confidential. Furthermore, there will be no way in which your individual responses can be identified, or traced back to you.

I appreciate your taking time to complete this questionnaire for me.

1. How many times do you go to stores to shop? (Don't consider grocery shopping.)

☐ once every day	☐ one to three times per month
☐ three times per week	☐ less than one time per month
☐ once or twice per week	
2. When you go shopping, who accompanies you?

☐ I usually prefer to go alone
☐ I usually go with my family
☐ I usually go with a friend or a relative
3. Did you ever purchase goods by mail or by telephone?

☐ yes	☐ no
------------------------------	-----------------------------
4. Have you or any members of your family ever requested or ordered any of the following items by mail?

☐ membership in book clubs	☐ travel information
☐ membership in record clubs	☐ merchandise catalogs
☐ magazine subscriptions	☐ gift fruit/cheese or special food products
☐ household kitchen appliances	☐ clothing
☐ trees, plants, shrubs, bulbs, flower/vegetable seeds	☐ film processing
5. Which of this year's general merchandise catalogs do you have in your home?

☐ Sears	☐ Montgomery Ward
☐ Spiegel	☐ J. C. Penney
☐ Alden's	
☐ others, specify: _____ , _____ , _____	
6. Do you have any current gift or specialty catalogs in your home such as Spencer's, Sunset House, etc.?

☐ yes	☐ no
------------------------------	-----------------------------

If yes, please write the name of the catalogs:
_____ , _____ , _____
7. During the last two years, do you recall having purchased goods by mail or phone?

☐ yes, I have bought goods by mail or telephone <u>regularly</u> during the last two years.
☐ yes, I have bought goods by mail or by telephone <u>occasionally</u> during the last two years.
☐ yes, I have bought goods <u>very rarely</u> by mail and/or telephone during the last two years.

- () no, I have not bought any goods by mail or telephone during the last two years.
8. Do you purchase goods by mail or by telephone from large catalog or department stores like Sears and Roebuck, Montgomery Ward, J. C. Penney, Knapp's and others?
- () yes, I buy regularly by mail and/or by telephone from those stores.
- () yes, I buy occasionally by mail and/or by telephone from those stores.
- () yes, I buy very rarely by mail and/or telephone from those stores.
- () no, I have not bought any goods by mail or telephone during the last two years from those stores.
9. During the last two years how many times have you bought products by mail and/or by telephone from large catalog or department stores?
- () more than twice a month () once every three-four months
- () once or twice a month () once every five-seven months
- () once every two months () less than 2-3 times/year
- () no, I haven't bought at all
10. Excluding large catalog and department stores, have you, during the last two years, purchased goods by mail or by telephone from any other organization?
- () yes, I purchased goods from novelty catalog stores such as Spencer Gifts, Walter Drake, etc.
- () yes, I purchased goods from "Club-of-the-month" type of organizations (Doubleday Book Club, Columbia Record Club, Book-of-the-month, etc.)
- () yes, I purchased goods from specialty Mail Order Houses (Creative Playthings, Fredericks of Hollywood, etc.)
- () yes, I purchased goods from credit card organizations (Oil Companies, Bank Credit cards, other credit cards)
- () yes, I purchased goods from other types of Direct Mail offers (magazine subscriptions, insurance, etc.)
- () yes, I purchased goods which were advertised in magazines and newspapers, by using coupons or by telephone.
- () yes, I purchased goods by mail or by telephone from other types of operations. Explain _____
- () no, I did not.
- If yes:
11. During the last two years how many times have you bought products by mail and/or by telephone from organizations other than large department and catalog stores?
- () more than twice/month () once every three-four months
- () once or twice/month () once every five-seven months
- () once every two months () less than 2-3 times/year

Please indicate the name of the organization(s) from which you purchase _____

12. What is your marital status?

- ☐ married ☐ single ☐ divorced
☐ widowed ☐ separated

13. If married, how long have you been married?

_____ years. (Please indicate the total number of years you have been married.)

14. Is the homemaker employed?

- ☐ full time (at least 35 hours/week)
☐ part time (less than 35 hours/week)
☐ not employed

15. The head of the household is:

- | | |
|---|---|
| ☐ 18-20 years of age | ☐ 45-49 years of age |
| ☐ 20-24 years of age | ☐ 50-54 years of age |
| ☐ 25-29 years of age | ☐ 55-59 years of age |
| ☐ 30-34 years of age | ☐ 60-69 years of age |
| ☐ 35-39 years of age | ☐ 70 years of age or older |
| ☐ 40-44 years of age | |

16. Do you have any children living at home? (Include only children presently living at home.)

- ☐ yes ☐ no

If yes,

How many 3 years old or younger	0	1	2	3	4	5
How many 4-5 years of age	0	1	2	3	4	5
How many 6-12 years of age	0	1	2	3	4	5
How many 13-15 years of age	0	1	2	3	4	5
How many 16-19 years of age	0	1	2	3	4	5
How many over 20 years of age	0	1	2	3	4	5

17. Do you have a TV set?

- ☐ yes, one ☐ yes, 2 or more ☐ no, I don't have a TV set

18. Do you or anyone in your family have any hotel, restaurant, gasoline or other credit cards? (Indicate only the most used ones.)

- ☐ yes ☐ no

If yes, please name the credit cards:

Yourself: _____

Other members of the family: _____

19. Do you or anyone else in your family have charge accounts in department or apparel stores?
☐ yes ☐ no

If yes, please name the stores: (indicate only the most frequently used.)

Yourself: _____

Other family members: _____

20. Do you or other family members subscribe to any magazine?
☐ yes ☐ no

If yes, please indicate only the name of the magazines which you have subscribed most often.

21. Which, if any, of the following appliances are used in your household?
☐ automatic washing machine ☐ refrigerator
☐ automatic clothes dryer ☐ window air conditioner
☐ automatic dishwasher ☐ central air conditioner
☐ home freezer unit ☐ none of these
22. Do you have a telephone in the house? (Do not include extension phones.)
☐ yes, one ☐ yes, more than one ☐ no, I don't have telephone
23. How many automobiles are owned or used regularly by members of your household? (Count company cars kept at home.)
☐ none ☐ 2 automobiles
☐ 1 automobile ☐ 3 automobiles
24. Who is the chief wage-earner in the family?
☐ husband ☐ wife ☐ others (please specify) _____
25. What is his (her) occupation at the present time? (Please describe the type of job held.)

26. What income-group best describes your total family income for 1960?
☐ under \$5,000 ☐ \$10,000 to \$14,999
☐ \$5,000 to \$7,999 ☐ \$15,000 to \$24,999
☐ \$8,000 to \$9,999 ☐ \$25,000 and over
27. What is the highest level of education attained by the head of the household?
- | | | |
|--------------------------------|----------------------------|------------------------------------|
| Elementary | High School | College |
| ☐ 1 & 2 | ☐ 1 | ☐ 1 |
| ☐ 3 & 4 | ☐ 2 | ☐ 2 |
| ☐ 5 & 6 | ☐ 3 | ☐ 3 |
| ☐ 7 | ☐ 4 | ☐ 4 |
| ☐ 8 | | ☐ 5 or more |

28. What has been the average total income per year of your household for the last three years?
- | | |
|---|---|
| ☐ under \$5,000 | ☐ \$10,000 to \$14,999 |
| ☐ \$5,000 to \$7,999 | ☐ \$15,000 to \$24,999 |
| ☐ \$8,000 to \$9,999 | ☐ \$25,000 and over |
29. Some people say that most people can be trusted. Others say you can't be too careful in your dealings with people. How do you feel about it?
- ☐ Most people can be trusted.
- ☐ You can't be too careful.
30. Would you say that most people are more inclined to help others, or more inclined to look out for themselves?
- ☐ To help others.
- ☐ To look out for themselves.
31. If you don't watch yourself, people will take advantage of you.
- ☐ Agree ☐ Disagree ☐ Undecided
32. No one is going to care much what happens to you, when you get right down to it.
- ☐ Agree ☐ Disagree ☐ Undecided
33. Human nature is fundamentally cooperative.
- ☐ Agree ☐ Disagree ☐ Undecided

SECTION II

- A. Please indicate, by checking the appropriate box, whether you strongly agree, agree, disagree, or strongly disagree with each of the following statements:

	<u>Strongly</u> <u>Agree</u>	<u>Agree</u>	<u>Disagree</u>	<u>Strongly</u> <u>Disagree</u>
1. It's best to join clubs where there are people mostly like yourself.	()	()	()	()
2. When it comes to what I do in my spare time I don't pay much attention to what people might think.	()	()	()	()
3. In order to better himself and his family, a man sometimes has to give up some of his friends.	()	()	()	()
4. If given a choice between an American item and a foreign one I would select the American product even if the foreign one was cheaper.	()	()	()	()
5. People ought to pay more attention to new ideas, even if they seem to go against the American way of life.	()	()	()	()
6. If a person gets tired of people he's known for years, he should stop seeing them.	()	()	()	()
7. Charge accounts facilitate the shopping activity and avoid the nuisance of continually writing checks or carrying large amounts of cash.	()	()	()	()
8. Charge accounts are only a nuisance and stimulate unnecessary buying.	()	()	()	()
9. Without installment credit we wouldn't be able to purchase many necessary items.	()	()	()	()
10. People generally pay interest rates on installment credit.	()	()	()	()

	<u>Strongly</u> <u>Agree</u>	<u>Agree</u>	<u>Disagree</u>	<u>Strongly</u> <u>Disagree</u>
11. Credit cards organizations charge abusive interest rates on the purchase of goods they offer in installments.	()	()	()	()
12. Credit cards are very convenient and don't cost anymore than cash.	()	()	()	()
13. Advertisements in magazines and newspapers remind people of things they may need to buy.	()	()	()	()
14. When you go shopping, you always end up buying something you hadn't planned to.	()	()	()	()
15. It's not the little things we buy every now and then for pleasure that hurt our budget.	()	()	()	()
16. If you go shopping with friends you end up buying unnecessary things just to be sociable.	()	()	()	()
17. Life would be very dull if we only bought necessary things.	()	()	()	()
18. The worst way to go shopping is to buy only the items of which you made a list before leaving home.	()	()	()	()
19. I like to buy new products advertised on TV.	()	()	()	()
20. I love unusual food and I frequently try new recipes.	()	()	()	()
21. It is preferable to take some risk and be the first one to buy a new product.	()	()	()	()
22. It is really better to wait for some reliable feedback before you enter any new venture.	()	()	()	()
23. I approve of people who don't fear social criticisms for experimenting with new ideas	()	()	()	()
24. We buy new products before most of our neighbors do.	()	()	()	()

SECTION III

- A. This question is concerned with the type of products that you and your family usually buy by mail or by telephone.

Below is a list of the kinds of products which you can buy from various retailers who sell through mail or telephone. They are alphabetically coded. We would like you to choose from that list of products, three of them and indicate:

- 1--which type you buy the most frequently
- 2--which type you buy less frequently
- 3--which type you buy even less frequently

THE QUESTIONS TO THIS SECTION ARE AT THE BOTTOM OF THE PAGE.

<u>Alphabetical</u>	<u>Product</u>	<u>Alphabetical</u>	<u>Product</u>
<u>Code</u>	<u>Types</u>	<u>Code</u>	<u>Types</u>
A	Auto Supplies	O	Musical Goods
B	Household Goods	P	Office Needs
C	Clothing Goods	Q	Paints, Supplies
D	Baby Goods	R	Sporting Goods
E	Appliances	S	Novelty Goods
F	Electrical goods	T	Toys
G	Farm Supplies	U	Food Products
H	Floor Coverings	V	Books, Magazines
I	Gifts	W	Records, LP's, Tapes and Cartridges
J	Health-Beauty Aids	X	Furniture
K	Jewelry	Y	Shoes
L	Lingerie	Z	Others (specify)
M	Luggage		
N	Notions		

- I. Indicate below the types of goods you buy from retailers by mail or by telephone, in order of frequency of purchase: (use alphabetic code)
- 1. _____
 - 2. _____
 - 3. _____
- II. The goods you usually purchase from retailers by mail or by telephone:
- A. Are goods which you could easily find in most retail outlets located near your home.
 - B. Are goods which only a few retailers in this town have in their stocks.
 - C. Are goods which are carried only by a small number of very specialized retailers or by other retailers who sell by mail or by telephone.

- III. The major reason for which you buy from retailers who sell by mail or by telephone is:
- A. The price of the goods.
 - B. The convenience of buying without having to leave the house.
 - C. The credit and/or charge facilities.
 - D. The type of products offered.
 - E. Others (specify)
-

- B. This question has the purpose of verifying how most people spend their leisure time. Below is a list of activities people perform during their leisure time.

Alphabetical

<u>Code</u>	<u>Description</u>
A	Watch television, listen to records or radio.
B	Visit with friends or relatives.
C	Work at special hobbies, or around the house or garden, weather permitting.
D	Read books or magazines for pleasure.
E	Go on short pleasure drives, window shopping, or picnicking, weather permitting.
F	Go to meetings or other organizational activities.
G	Go bowling, play pool, golf or tennis, swim, ski, or participate in other sports, weather permitting.
H	Go out to eat at a restaurant or snack bar.
I	Play cards, chess, checkers, or similar games.
J	Spend time at a bar, drug store, or similar place.
K	Go to see football, baseball, or basketball games, or other sports events.
L	Go to movies or drive-in movies.
M	Go to dances or parties.
N	Go to concerts, plays, adult school, museums, lectures, operas, or similar activities.
O	Go hunting, fishing, or camping, weather permitting.
P	Travel by plane, train, boat, or automobile.
R	Relax with my family, play with my children.
S	Go shopping with friends.
T	Others (please specify).

We are interested in knowing how do you employ your leisure time:

On weekday evenings	On Saturday evenings
On Saturday afternoons	During eventual vacations

PLEASE LIST IN THE QUESTIONS BELOW, IN ORDER OF YOUR PREFERENCE,
THE ACTIVITIES YOU USUALLY PERFORM DURING THOSE SPECIFIC PERIODS
OF TIMES. LIST WHERE:

- I. The activities at which the most time is spent in each of the four primary leisure time periods.
- II. The activities at which the second most time is spent in each of the four primary time periods.
- III. The activities at which the third most time is spent in each of the four primary time periods. (Use the alphabetical code to identify the activities.)

On weekday evenings, I:

I _____
II _____
III _____

On Saturday evenings, I:

I _____
II _____
III _____

On Saturday afternoons, I:

I _____
II _____
III _____

During vacations, I:

I _____
II _____
III _____

