A PROFILE OF ELDERLY IN-HOME SHOPPERS

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ABSTRACT

The growth of both in-home shopping and the elderly market have recently sparked the interest of practitioners and academicians. Based on a national probability sample, this study provides some insights into the characteristics of older in-home shoppers. The results indicate that elderly users of in-home shopping have relatively distinct profiles that can be of value in the development of market segmentation strategies. Directions for future research are provided.

INTRODUCTION

There are increasing indications that non-store retailing generally and in-home retailing specifically will provide the next revolution in retailing. Non-store retailers are appearing in new forms, proliferating in numbers, and gaining market share from store-based retailers (Rosenberg and Hirschman 1980; Lumpkin and Hawes 1985). Annual non-store sales have expanded three to five times faster than those of traditional retail stores (Davidson and Rodgers 1970). Direct mail alone accounted for \$44.4 billion in sales in 1983 (Klokis 1985) and continued growth is expected.

Increased interest in non-store retailing has been paralleled by a heightened interest in the elderly consumer. The older consumer market has recently been recognized as one of considerable size and economic potential (Schewe 1985; Petre 1986). The U.S. Bureau of the Census (1984) estimated the 60 and older population to have been 39.6 million in 1985 and has projected this number to increase to 45.4 million by the year 2000, and to 71.2 million - or one out of every four Americans by the year 2020. Furthermore, it has been reported that less than 20 percent of this age group live below the poverty level and their discretionary buying power per dollar of income averages more than that of persons under 50 years old (French and Fox 1985).

The size, growth, and purchasing power of the elderly population should continue to attract the attention of both store and non-store retailers. Based on data from primarily urban samples, it has been estimated that 20 to 25 percent of the 60 years and older market engages in mail order and/or telephone in-home shopping (Gillett 1970; Mason and Smith 1974; Barnes and Peters 1982). For 1985, this percentage represents eight to ten million elderly in-home shoppers. Given this market's considerable size, a more complete understanding of this group is warranted for market segmentation purposes. This study seeks to gain insights into this market by developing a profile of elderly users and nonusers of in-home shopping.

BACKGROUND

Research interest on in-home shopping has ebbed and flowed during the past twenty-five years. Most studies have been typologies of in-home shoppers focusing primarily on non-elderly female consumers from one community or one state (Gillett 1970, 1976; Cunningham and Cunningham 1973; Reynolds 1974; Peters and Ford 1972). Berkowitz, Walton, and Walker (1979), Barnes and Peters (1982), and Lumpkin and Hawes (1985) extended the scope of their studies to include men as well as women. A review of this literature

suggests that in-home shoppers tend to be above average in socioeconomic status as measured by household income level, education, and occupation. In addition, the typical in-home shoppers tended to be younger. However, the more recent works of Barnes and Peters (1982) and Lumpkin and Hawes (1985) suggest that older persons are receptive to in-home shopping.

Demographic Characteristics

Studies of in-home shoppers have consistently shown that frequent in-home shoppers have significantly higher family incomes and educational levels than do other shoppers. Interviews with 210 female shoppers in a mid-eastern city revealed that in-home shoppers were both more affluent and better educated than other shoppers, but were not significantly different on any other major demographic characteristic such as age or family size (Gillett 1970). Similar income and education differences were reported in a study that profiled three in-home shopper types: shoppers from catalog outlets, direct mail shoppers, and novelty outlet shoppers (Cunningham and Cunningham 1973). The first two types had higher income levels and the third segment was younger and lower in socioeconomic status. Results of a study of 302 residents of a small southern city were consistent in their income and education findings, but also found frequent catalog buyers (i.e., 12 or more orders in the last year) to be significantly younger than were infrequent catalog buyers (Reynolds 1974).

In an overview of the development of the in-home shopper concept, Gillett (1976) provided a demographic profile of the in-home shopper. He concluded: "With few exceptions, in-home shoppers are described as above-average in socioeconomic status as measured by household income level, social class, education, and occupation of household head."

The findings of at least one study are in direct contrast with the Gillett profile. A study of 249 cosmetics users from a large midwestern city indicated that when compared to heavy in-store cosmetics purchasers, heavy in-home cosmetics buyers tend to be less educated, lower income, blue collar workers (Peters and Ford 1972). Urbany and Talarzyk (1983) suggest that the finding that consumers purchasing from door-to-door salespeople tend to be from a lower socioeconomic status group may be explained by the greater susceptibility of lower socioeconomic status consumers to the sales pitches of door-to-door salespeople.

More recent empirical studies have seemed to uphold and advance the Gillett profile. A study of users of an in-home grocery service found demographic and socioeconomic characteristics that were consistent with the prior observations (Berkowitz, Walton, and Walker 1979). However, a study of nonusers, infrequent users, and frequent users of catalog purchasing from a southwestern state revealed the most distinctive demographic profile to date. Eight of 13 demographic variables were found to be statistically related to in-home shopping (Lumpkin and Hawes 1985). Heavier catalog usage was associated with respondents that were older married women who owned homes, had more children at home, were more educated, had higher incomes, and were employed outside the home.

Attitudinal Characteristics

Gillett (1976), after reviewing the literature on in-home shoppers, stated that "certainly the conclusions illustrate the complexity of in-home shopping behavior and motivation, and suggest that these shoppers may be classified by personality and attitudinal type." Although research findings have been somewhat inconsistent, some generalizations are warranted. The average in-home shopper has been recognized as being more self-assured, venturesome,

and cosmopolitan in outlook and in shopping behavior.

Gillett's conclusions were based, in part, on the Cunningham and Cunningham (1973) study that found the active in-home shopper to be more cosmopolitan and on the Reynolds (1974) study that showed catalog shoppers to be more venturesome and self-confident than non-catalog shoppers. More recently, Berkowitz, Walton, and Walker (1979) found innovators of an in-home grocery service to be more flexible and venturesome (i.e., more willing to try new things and to take risks) and to be less concerned about winning social approval of their friends.

Elderly In-Home Shoppers

A limited number of studies have investigated the non-store shopping behavior of elderly consumers. Mason and Smith (1974) and Mason and Bearden (1978), using samples drawn from single communities, found that the elderly did not tend to use either mail or telephone shopping any more or less than other age groups. Lumpkin and Hawes (1985), using data gathered from one southwestern state, found that older consumers reported more frequent shopping by catalog than their younger counterparts. Unfortunately, no profiles of the elderly in-home shoppers were provided in these studies.

Only one exploratory study has specifically researched the in-home shopping behavior of the elderly (Barnes and Peters 1982). Using a sample drawn from one northeastern state, Barnes and Peters found that elderly in-store shoppers are more likely to buy from catalogs than from door-to-door salespeople or telephone solicitors. The in-home elderly shopper tended to be more educated and to have been employed in more professional occupations than those who did not shop at home. Although the Barnes and Peters study has partially filled a gap in the literature, the ability to draw generali-

zations that provide guidelines for the development of marketing strategies may be reduced for at least three reasons. First, the profiling variables consisted primarily of demographic characteristics. Cunningham and Cunningham (1973), Reynolds (1974), Berkowitz, Walton, and Walker (1979), Lumpkin and Greenberg (1982), Lumpkin (1985) and others have demonstrated the value of supplementing demographic profiles with psychographic and shopping orientation variables to achieve a deeper understanding of market segments for strategy development. Second, the data for Barnes and Peter's study were gathered by an unspecified sampling procedure from a single "small northeastern state." Given this sampling approach, their findings may or may not be generalizable beyond that - or a similar - state. Third, the elderly were aggregated into a single group of 65 and older persons, rather than being divided into age segments. There are likely to be considerable generational and attitudinal differences between a 65 and an 80 year old that could affect in-home shopping (Gelb 1982).

RESEARCH OBJECTIVE

The purpose of this study is to identify differences between elderly shoppers that are frequent users versus those that are nonusers of in-home shopping methods. Of particular interest will be how closely the factors that differentiate between the elderly shoppers parallel those that have been previously recognized as being associated with differences in the general population. In the conduct of the study, attempts were made to overcome certain methodological shortcomings of earlier works by including demographic, behavioral, and shopping orientation dimensions, using a national sample which includes males as well as females, and incorporates both the young-old (60-74 years) and the old-old (75 years and older) in the analysis for comparison purposes.

METHODOLOGY

Sample

The data for this study were part of a national survey conducted in Fall 1985. A total of 5,000 questionnaires were mailed to heads of households on a nationwide basis. The sample, purchased from a commercial mailing list supplier, was randomly selected from a data base of 72 million names. The data base was developed from local telephone directories and was supplemented in 35 states by automobile registrations. The mailing list supplier estimated that 93 percent of addresses supplied were deliverable. As a result, a sample of approximately 4,650 households received questionnaires in this study.

A total of 1,517 responses were received for a response rate of 32.6 percent. Households in which at least one of the male/female heads were 60 years old or older totaled 450. Of these "elderly" households, 43 indicated the absence of the use of in-home shopping methods, while 64 households reported heavy in-home shopping use (in excess of 12 times per year). It is these 107 respondents which were of interest for this study.

Age Categories

In the present study the "elderly" were broken down into two age categories in order to recognize potential differences among persons in the later stages of the life course. Although differences in lifestyle are probably more important than chronological age, persons in the later maturity stage typically range in age from the late 50s to about 75 years (Atchley 1980). This group, labeled the young-old, has emerged because of increasing longevity and the trend toward early retirement (Neugarten 1975). The old-old are in the final stages of the life course and tend to experience more health-related problems. The majority of persons in this

stage continue to live at home but may need supportive services. Because of individual differences in health and activity, it is difficult to designate a chronological age at which this stage begins. Nevertheless, social gerontologists have often selected 75 years and over to identify the old-old (Neugarten 1975; Atchley 1980). Thus, in this study, the elderly are operationally defined to consist of the young-old (60-74 years) and the old-old (75 years and older).

The resulting sample was comprised of 85 households (79.4 percent) with the male and/or the female aged between 60 and 74 years and 22 households (20.6 percent) with the male and/or female aged 75 years or older. When compared to the national population, there was a slight over-representation (9.1 percent) of the young-old group. Thus, the findings related to the old-old age category should be interpreted with caution.

Questionnaire

A self-administered mail questionnaire was used to gather the data. A mail questionnaire approach was deemed appropriate given the national scope of the population of interest and because the mail survey technique has been found to be a viable substitute for personal interviews when gathering data from the elderly (Leinbach 1982; Hoinville 1983).

Respondents were asked to indicate the frequency with which they purchased merchandise either by mail or by telephone during the preceding 12 months. A four-point scale, ranging from "none"(1) to "more than 12 times"(4), was employed to determine purchase frequency. To highlight the possible differences between users and nonusers of in-home shopping, only those respondents displaying heavy usage of in-home shopping were categorized as "users." This was done because there is a lack of unanimity in

the literature on the number of purchasers that should differentiate between a frequent user and an infrequent user and because it was believed that practitioners would be more likely to be interested in the heavy user group. The frequency of usage approach was utilized because of the difficulty of measuring total purchases or expenditures (Gillett 1970, 1976), and because it is the most common procedure (Cunningham and Cunningham 1973; Reynolds 1974).

The questionnaire contained 36 attitudinal and shopping orientation items measured on a six-point scale ranging from "strongly agree"(1) to "strongly disagree"(6). The constructs selected have been successfully used in previous studies of consumer behavior (Jain and Etgar 1977; Reynolds 1974; Rokeach 1960; Wells and Tigert 1971) and included self-designated opinion leadership, high readership, isolationism, venturesomeness, dogmatism, defeatism, cosmopolitaness, and a careful shopper orientation. Various types of demographic data including marital status, residence type and location, household income, education and age of male head of household (or husband), female head of household (or wife), distance from the nearest shopping center of 30 or more stores, and distance from the nearest supermarket were gathered. Any nominal scaled responses were converted into dummy codes prior to the data analysis.

FINDINGS

In order to develop a profile of users and nonusers of in-home shopping with respect to behavioral and shopping orientation and demographic differences, stepwise two-group discriminant analysis was used. This technique was selected because it permits an overall test for significant differences between the two groups and the relative importance of each independent variable in discriminating between the groups and thus is a useful technique for developing con-

sumer profiles. Statistically, the linear discriminant function maximizes the differences between two groups by optimally weighting the independent variables (Dillon and Goldstein 1984). Here, the discriminant function exhibited a chi-square of 29.45 with eight degrees of freedom and was significant at the 0.0003 level, indicating that the discriminant model was able to significantly differentiate the users from the nonusers of in-home shopping.

The standardized coefficients for the discriminant function are presented in Table 1. As these coefficients indicate, the variables which discriminate most significantly between users and nonusers of in-home shopping are (1) location of residence, (2) high readership of magazines and books, (3) leisure shopping, and (4) male education.

An examination of the differences between the group means for users and nonusers of in-home shopping on each independent variable can provide further insights into the characteristics which differentiate members of the two groups. As indicated in Table 2, six demographic variables were found to be significantly ($p = .10$) associated with in-home shopping among the elderly.

The age and education of the male head of the household were related to the usage of in-home shopping. The young-old, aged 60-74, with higher levels of formal education were likely to be users of in-home shopping.

The remaining demographic variables found to be statistically associated with in-home shopping relate to residential location and distance from the nearest shopping center and supermarket. The users of in-home shopping are located in non-urban areas and are more distant from the nearest supermarket and shopping center (of 30 or more stores) than are their counterparts who do not utilize in-home shopping methods.

Regarding shopping orientation, lei-

TABLE 1
STANDARDIZED DISCRIMINANT FUNCTION
COEFFICIENTS

Location of residence	.639
High readership	.530
Leisure shopper	-.513
Male education	.480
Household income	.330
Marital status	.324
Defeatist	-.322
Dogmatic	.241

sure shopping was statistically associated with in-home shopping. Elderly in-home shoppers enjoy shopping and walking through malls and are not particularly interested in completing shopping trips quickly.

DISCUSSION

The results of this research indicate that elderly users and nonusers of in-home shopping have relatively distinct profiles. An important finding was the significant association between location of residence and distance from shopping centers. This suggests that the generalizability of past studies that have focused primarily on urban communities may be limited, at least for older consumers. Further research is needed to compare the shopping behavior of consumers from more divergent residential locations. From a managerial perspective, location may be useful as a segmentation variable. Its value could be realized by identifying the elderly who are prone to in-home shopping.

Most of the attitudinal characteristics were not useful in discriminating

between users and nonusers of in-home shopping. This finding was consistent with the Lumpkin and Hawes (1985) study of catalog shoppers. The only attitudinal variable found to be statistically associated with in-home shopping was leisure shopping behavior. The elderly in-home shoppers seem to enjoy shopping and walking through malls and are not particularly interested in completing shopping quickly. This finding tends to support the Gillett (1970) finding that in-home shoppers are also in-store shoppers who seem no less inclined to consider store shopping as difficult or unpleasant. In addition, the finding at least partially supports Reynold's (1974) call for the inclusion of attitudinal or psychographic analysis when profiling in-home shoppers.

The demographic characteristics proved to be very useful in discriminating between those elderly households that do not use in-home shopping versus those that are heavy users. The young-old (60-74) with higher levels of formal education were likely to be in-home shoppers. These findings are consistent with the literature on in-

TABLE 2
CHARACTERISTICS DIFFERENTIATING ELDERLY USERS OF
IN-HOME SHOPPING FROM NONUSERS: TEST OF GROUP MEANS

Variables	Univariate F	Significance Level	Group Means	
			Nonusers of In-Home Shopping	Users of In-Home Shopping
Leisure Shoppers(1)	4.277	.042	7.22	6.10
Male Age(2)	3.187	.078	1.22	1.08
Male Education(3)	8.821	.004	13.15	15.28
Location of Residence(4)	7.139	.009	1.70	2.16
Distance from Shopping Ctr.(5)	2.651	.100	2.07	2.34
Distance from Supermarket(5)	2.851	.096	1.44	1.74

(1) Measured on a six-point scale ranging from 1 = "strongly agree" to 6 = "strongly disagree."

(2) Divided into two categories and coded dichotomously. Categories were (1) 60-74 years and (2) 75 years and older.

(3) Measured in years

(4) Where 0 = urban, 1 = nonurban

(5) Measured in miles

home shoppers within the general population (Cunningham and Cunningham 1973; Berkowitz, Walton, and Walker 1979; Lumpkin and Hawes 1985), and with the Barnes and Peters (1982) study of shoppers aged 65 and older. The old-old (75 and older) seem less prone to in-store shopping, possibly because of greater perceived risk and the desire to rely on physical inspection of products as a means of reducing this risk (Mason and Smith 1974).

MANAGERIAL IMPLICATIONS

The resulting profile of elderly

in-home shoppers provides some useful information for the development of a market segmentation strategy for catalog retailers. It appears that in-home shoppers - elderly and non-elderly - share certain demographic and attitudinal characteristics. In-home shoppers, regardless of age, tend to be better educated people - seeing themselves as leisure shoppers who enjoy in-store shopping. Whereas past studies have focused on urban residents, this study has found that elderly in-home shoppers tend to be located outside of urban areas and at greater distances from shopping centers than shoppers that do

not use in-home shopping methods.

The results of this study indicate that there may be value in identifying households with elderly members among the total list of potential customers for retailers that rely on the use of in-home shopping methods. Operational variables are apparently present among elderly shoppers from which practitioners can differentiate between nonusers and heavy users of in-home shopping. Application of these findings could provide retailers with potentially sizable cost savings.

In the case of catalog distribution, for example, retailers face not only high printing costs, but also large handling and distribution expenditures. The costs associated with putting a catalog in a household that does not use in-home shopping results in increased expenses without any increase in revenue. The ability to refine a catalog mailing list to minimize mailing to the elderly non-catalog user would have a positive effect on a firm's profitability.

From the discriminant function in the present study, the two leading discriminators between heavy users and nonusers seem to provide identifiable characteristics that might better classify the elderly in-home shopper. As indicated, elderly shoppers in a non-urban setting are more likely to be heavy users of in-home shopping methods than are elderly urban shoppers. A catalog retailer, utilizing zip codes, could quickly eliminate the urban elderly from a prospect list. However some might find this method too restrictive, leading to a higher than desired level of Type I error (the elimination of heavy users). If this is the case, then a more refined model would be required.

The second discriminator, high readership, provides an additional opportunity to qualify the elderly in-home shopper. The frequent elderly reader

might be identified through the purchase of subscriber lists from various magazines and/or book-of-the-month clubs. These elderly magazine/book subscribers could then be cross-tabulated by location of residence to yield a group of potential customers that would likely produce a higher customer-to-prospect ratio than would have been the case with the total of the elderly prospects.

While the findings of this study shed some light on the nature of the elderly in-home shopper, some questions still remain unanswered. To address these questions, several areas of future research are recommended.

First, it is likely that in-home shopping behavior may be product-specific (Lumpkin, Hawes, and Darden 1986; Barnes and Peters 1982). It would be useful for catalog firms, and store retailers who use catalogs to supplement their store sales, to see what categories of merchandise are more likely to be purchased in the home rather than in the store. Second, research is needed to confirm this study's finding that elderly in-home shoppers tend to live in non-urban areas. Third, attitudinal and psychographic characteristics of the older shopper should continue to be investigated since earlier studies have found their data to be useful in developing in-home shopper typologies. Fourth, the technology-related aspects on in-home shopping should be investigated on elderly and other populations since shop-at-home programs such as QVC Network, Inc., Home Shopping Network, Inc., and Cable Value Network, Inc. are expanding rapidly. Study in this area is of particular importance since there is some evidence that elderly consumers are willing to adopt new technologies if they see them as satisfying a need (Gilly and Zeithaml 1985). Finally, additional attempts should be made to understand why the old-old are not prone to in-home shopping, since this mode of retailing would seem to offer

additional convenience for this growing demographic segment - especially those who are unable to get to the store (Gillett 1970; Barnes and Peters 1982).

REFERENCES

Atchley, Robert C. (1980), *The Social Forces in Later Life*, 3rd ed. Belmont, CA: Wadsworth.

Barnes, Nora Ganim and Michael P. Peters (1982), "Modes of Retail Distribution: Views of the Elderly," *Akron Business and Economic Review*, 13 (Fall), 26-31.

Berkowitz, Eric N., John R. Walton, and Orville C. Walker (1979), "In-home Shoppers: The Market for Innovative Distribution Systems," *Journal of Retailing*, 55 (Summer), 15-33.

Cunningham, Isabella C. and William H. Cunningham (1973), "The Urban In-home Shopper: Socioeconomic and Attitudinal Characteristics," *Journal of Retailing*, 49 (Fall), 42-50.

Davidson, William R. and Alice Rodgers (1979), "Nonstore Retailing: Its Importance and Impact on Merchandising," in *The Growth of Nonstore Retailing*, New York University, Institute of Retail Management.

Dillon, William R. and Matthew Goldstein (1984), *Multivariate Analysis*, New York: John Wiley and Sons, Inc.

French, Warren A. and Richard Fox (1985), "Segmenting the Senior Citizen Market," *The Journal of Consumer Marketing*, 2 (Winter), 61-74.

Gelb, Betsy D. (1982), "Discovering the 65+ Consumer," *Business Horizons*, 25 (May-June), 42-46.

Gillett, Peter L. (1970), "A Profile of Urban In-home Shoppers," *Journal of Marketing*, 34 (July), 40-45.

_____ (1976), "In-home Shoppers - An Overview," *Journal of Marketing*, 40 (October), 81-88.

Gilly, Mary C. and Valarie A. Zeithaml (1985), "The Elderly and Adoption of Technologies," *Journal of Consumer Research*, 12 (December), 353-57.

Hoinville, Gerald (1983), "Carrying Out Surveys Among the Elderly," *Journal of the Market Research Society*, 25 (July), 223-37.

Jain, Arun K. and Michael Etgar (1977), "Overlap in Retail Outlet and Product Innovator Characteristics," *Journal of Retailing*, 53 (Summer), 63-74.

Klokis, Holly (1985), "Catalog Options: Mail-Order or Store Traffic," *Chain Store Age Executive*, 61 (May), 31-33.

Leinbach, Raymond M. (1982), "Alternatives to the Face-to-Face Interview for Collecting Gerontological Needs Assessment Data," *The Gerontologist*, 22, 78-82.

Lumpkin, James R. (1985), "Shopping Orientation Segmentation of the Elderly

Consumer," *Journal of the Academy of Marketing Science*, 13 (Spring), 272-89.

_____ and Barnett A. Greenberg (1982), "Apparel-Shopping Patterns of the Elderly Consumer," *Journal of Retailing*, 58 (Winter), 68-89.

_____ and Jon M. Hawes (1985), "Retailing Without Stores: An Examination of Catalog Shoppers," *Journal of Business Research*, 13 (April), 139--51.

_____, _____, and William R. Darden (1986), "Shopping Patterns of the Rural Consumer: Exploring the Relationship Between Shopping Orientations and Outshopping," *Journal of Business Research*, 14 (February), 63-81.

Mason, J. Barry and William O. Bearden (1978), "Profiling the Shopping Behavior of Elderly Consumers," *The Gerontologist*, 18, 454-61.

_____ and Brooks E. Smith (1974), "An Exploratory Note on the Shopping Behavior of the Low Income Consumer," *Journal of Consumer Affairs*, 8 (Winter), 204-209.

Neugarten, Bernice L. (1975), "The Future and the Young-Old," *The Gerontologist*, 15 (February), Part II, 4-9.

Peters, William H. and Neil M. Ford (1972), "A Profile of Urban In-home Shoppers: The Other Half," *Journal of Marketing*, 36 (January), 62-64.

Petre, Peter (1986), "Marketers Mine for Gold in the Old," *Fortune*, (March 31), 70-78.

Reynolds, Fred D. (1974), "An Analysis of Catalog Buying Behavior," *Journal of Marketing*, 38 (July), 47-51.

Rokeach, Milton (1960), *The Open and Closed Mind*, New York: Basic Books, Inc.

Rosenberg, Leon J. and Elizabeth C. Hirschman (1980), "Retailing Without Stores," *Harvard Business Review*, 58 (July-August), 103-112.

Schewe, Charles D. (1985), "Gray America Goes to Market," *Business*, 35, (April--June), 3-9.

Urbany, Joel E. and W. Wayne Talarzyk (1983), "Videotex: Implications for Retailing," *Journal of Retailing*, 59 (Fall), 76-92.

U.S. Bureau of the Census (1984), Current Population Reports, Series P-25, No. 952, *Projections of the Population of the United States, by Age, Sex, and Race: 1983 to 2080*. Washington, D.C.: U.S. Government Printing Office, 43-44, 81-82.

Wells, William D. and Douglas J. Tigert (1971), "Activities, Interests, and Opinions," *Journal of Advertising Research*, 11 (August), 27-35.