A COMPARISON OF ELDERLY SEGMENTS ON
PREPURCHASE INFORMATION SOURCES

DISSERTATION

Presented to the Graduate Council of the
North Texas State University in Partial
Fulfillment of the Requirements

For the Degree of

DOCTOR OF PHILOSOPHY

By

Richard Lee Utecht
Denton, Texas
August, 1987
The size and magnitude of the elderly segment warrants research, yet relatively little has been done. There is a particular void in the literature concerning external search and information source use among the elderly. Compounding this problem is that most previous work that has a tangential focus in this area has treated the elderly as a unified, homogeneous group. Evidence suggests the elderly are anything but homogeneous; as people age they become less alike.

Information source usage is determined by a Likert scale with sixteen information sources across three product categories. The information sources are broken down into three classes: informal, formal, and neutral. While the three product categories are Medicare supplements, over-the-counter drugs and automobiles.

Many studies in the past have compared the elderly to the young. This study, in an attempt to recognize the heterogeneity of the elderly, has compared two elderly segments. The purpose of this research was to determine if differences exist between the young/old (55-74) and the old/old (75+) regarding external search behavior and the importance of information sources. First, this study confirms that the elderly are not a homogeneous group by
detecting differences between the two elderly segments regarding external search. Based on this finding alone, the elderly should not be treated as a monolithic whole. The second major finding from this study indicates that the propensity to engage in external search decreases with age. The reliance of the old/old upon internal memory is not surprising. The decline in the old/old's likelihood of engaging in external search may stem from the costs and determinants of search.

The elderly have always been a part of our society, but never before with such imposing numbers and affluence. However, as compelling as the figures are, the elderly consumer is virtually ignored by the marketing community. Therefore, this research is important in that it could impact the selection of information sources and media vehicles used by a promotional planner.
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CHAPTER I

INTRODUCTION

The elderly market is a significant consumer segment in our society. Over 26 percent of people in the United States are 50 years old and older, 11.9 percent are 65 years old and older, and the growth rates of these groups are almost twice that of the rest of the population (1,8). Each day 3000 people in the over 65 age group die, but they are replaced by 4000 new members (4). In addition, concentration on improving health habits combined with advancing medical technology has created a longer retirement and a greater life-expectancy.

The elderly population is more affluent than is commonly known. Moreover, the group's economic impact is vastly underestimated by marketers. Those at age 50 and beyond account for a total market of about $800 billion. The 50 and over age group also accounts for half of all discretionary spending power, while those under 35 control a relatively meager one-fifth of the total (7).

The elderly have always been a part of our society, but never before with such imposing numbers and
affluence. However, as compelling as these figures are, the elderly consumer is virtually ignored by the marketing community. There may be several reasons why marketers have not focused on the elderly market. A major probable reason is lack of knowledge and understanding of the elderly consumer. This circumstance may be due, in part, to a lack of research on the demographics and consumption behavior of aged consumers. The magnitude of the elderly segment justifies research, yet relatively little has been done. Therefore, it seems necessary to investigate behavioral characteristics specific to this age group. Significant findings would be of value not only to marketers but society in general.

There is a particular void in the literature concerning external search and information source use among the elderly. Compounding this problem is that most of the previous work that has a tangential focus in this area has treated the elderly as a unified, homogeneous group. Evidence suggests the elderly are anything but homogeneous. As people age they become less alike (9). Several potential areas of difference deserve investigation including lifestyle analysis, postpurchase outcomes, information processing, and prepurchase information acquisition. This dissertation seeks to explore one of these areas.
Purpose of the Study

The purpose of this study is to compare two elderly segments (55-74 and 75+) and determine if differences exist with respect to external search behavior and types and importance of information sources used for different product classes.

This research is important in that it could impact the selection of information sources and media vehicles a promotional planner may choose for the products under consideration in this study. In addition, continuing to treat the elderly as homogeneous will lead to reaffirmation of existing stereotypes and ultimately result in further neglect of their rights as consumers.

Research Approach

A commonly used research approach to prepurchase information examination is retrospective questioning. This study utilizes this type of an approach with a self-administered questionnaire. The approach and questionnaire are discussed in chapter three. The sample consists of 212 people 55 years old and over from a Dallas-based elderly organization called "Live Long and Like It." This organization is composed of elderly people bound together with the common interest in attaining a better quality of life as they age.
Information source usage is determined by a Likert scale with sixteen information sources across three product categories. The information sources are broken down into three classes: informal, formal, and neutral. The three product categories are Medicare supplements, over-the-counter drugs and automobiles.

Definitions of Terms

A lack of uniformity of definitions is a common research problem in the marketing discipline. In this section, definitions and concepts utilized in designing and conducting this study are defined.

What Age Constitutes Elderly?

It has been customary to refer to old age as being somewhere in the seventh decade of life; however, many studies and action programs focus on age 65 (10). The government defines 65 and beyond as "senior citizens" while the medical profession generally considers 75 and over as elderly (7). However, it has been suggested that the real turning point for aging may come much earlier than these two age thresholds. Select research has identified three stages of advanced adulthood: middle age, later maturity and old age(11, 12). Researchers in the marketing community view age 50 as the beginning of midlife (7). By the year 2020 almost one-third of the United States population will be age
55 (5). According to Bernice Neugarten (9), age 55 has become a meaningful determinant in the life cycle because of the lowering age of retirement. By the year 2000 people will begin what she calls a "first retirement" at about age 55 rather than the age of 65 today. Due to the anticipated increase in life expectancy, the post retirement life span will be approximately 25 to 28 years as compared to 13 years today. Therefore, Neugarten says that there exists a significant division between what she calls the young-old (55 to 74) and the old-old (75+). Even though it is lifestyle rather than chronological age that truly impacts behavior, it is important to make classificational age distinctions.

"While a systematic or developmental approach in defining the stages of later life is preferable to a chronological approach, we are forced to use chronological age as the operational definition of these stages because no one has developed a satisfactory method of systematically identifying older people" (2, 10). For the purposes of this study, age 55 will act as the primordium of the elderly market.

Borrowing from Bernice Neugarten (9), this research will use the age ranges 55 to 74 and 75+ to identify the two groups being studied. The following terms are defined for use in this study:

External search--motivated exposure leading to attention or a completely voluntary decision to seek new outside (informal, formal, neutral) information (3).
Information Sources

**Formal sources**—all marketer controlled information sources including the advertising media, salespeople and sales promotion (7).

**Informal sources**—interpersonal sources except for salespeople (i.e., family, friends, co-workers) (7).

**Neutral sources**—general media (news reports), and authoritative sources (i.e., medical doctors and lawyers) (7).

**Internal search**—memory scan of past experiences or information (3).

**Old-old**—this segment includes those persons aged 75+ (9).

**Prepurchase information acquisition**—the mental or physical obtaining of internal, informal, formal or neutral information, not including information processing.

**Projects**

**Automobiles**—new or used cars.

**Medicare supplements**—insurance plans that cover what Medicare does not.

**Over-the-counter drugs**—any nonprescription drug or medication that can be purchased in a drugstore (i.e., from cold remedies to ointments).

**Search**—mental as well as physical information-seeking activity one engages in to facilitate purchase decision making (3, 7).

**Young-old**—this segment includes those persons aged 55 to 74 (9).
Limitations

The major limitation of this study is that it is exploratory and therefore utilizes a nonprobability quota sample. Nonprobability samples are not representative and thus hinder validity, reliability and overall generalizability of the data. However, this study does have merit because the sample exhibits the characteristics of interest to the study (see page 57).

The study is cross-sectional in nature. In cross-sectional studies dealing with the aged, there exists the danger of misinterpreting the data and inferring that differences among age categories in society are due to the aging process of individuals. The aging process is a biological one which does impact behavior. However, age should not be relied upon as the sole determinant of behavior. It must be recognized that the aging process is one of several mitigating factors that impact behavior.

Another validity question arises with the use of the retrospective questioning technique: "It may not be possible [for the consumer] to retrieve much of what was searched and learned from long-term memory, with the result that there will always be gaps. Nonetheless, it still should be possible to isolate major influences" (3, p. 336).
Overview

Chapter One--This chapter identifies the elderly as a misunderstood group in need of research. Chapter one indicates that the major purpose of this study is to investigate the differences that might exist in prepurchase information source use across two elderly age categories.

Chapter Two--This chapter reviews the relevant literature for this study. The chapter is divided into two areas of interest. The first area considers the nature of search, specifically external search as derived from the consumer behavior literature. The second area deals with the elderly, misconceptions about the elderly and existing findings on the elderly's shopping behavior and prepurchase information use.

Chapter Three--This chapter presents the research methodology utilized in this study.

Chapter Four--Chapter four provides a detailed description of the analyses and findings of this study.

Chapter Five--This chapter summarizes the study and presents relevant conclusions, suggestions, and implications of the results. In addition, this chapter will identify areas for further research.
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CHAPTER II

LITERATURE REVIEW

This chapter is divided into two areas: the first area deals with the topic of search as derived from the consumer behavior literature, while the latter portion of the chapter spotlights the elderly per se. Before conducting research on external search and information source use, it is imperative to have a fundamental understanding of the process of search, the mitigating variables that impact search, and the targets of search. At the same time, it is also important to understand the group to be studied, especially, as in this case, if the group in question is misunderstood. Therefore, the second part of this chapter unravels common myths about the elderly and then focuses on their shopping behavior and information use.

Search:

Search is defined as "motivated exposure to information with regard to a given alternative" (32, p. 321). Another definition refers to search as the "mental as well as physical information seeking and processing activities which one engages in to facilitate decision making regarding some"
goal-object in the marketplace" (70, p. 459). Search may be active (visiting stores for price, brand or quality comparisons), or passive (reading the advertisements in printed materials or viewing television advertisements without a particular goal in mind). Merely thinking about a product and its features could be considered search (70).

The fifth revision of the Engel, Blackwell and Miniard (EBM, formerly the Engel, Kollat and Blackwell model) high involvement consumer behavior model provides a suitable framework to understand where search fits into the consumer's purchase decision making process. The EBM model centers around the five stage purchase decision process (problem recognition, search, alternative evaluation, purchase, and outcome). The model depicts how this decision process may be affected by information processing and various other consumer behavior variables. Search occupies the second stage in the purchase decision process and is theorized to be affected by memory, beliefs, attitudes and intentions while affecting alternative evaluation and choice.
The two components of search are internal and external. Internal search is considered to be a "memory scan" of past experiences or existing knowledge of the problem (13). The consumer engages in a mental process of recapitulating stored information that may relate to the purchase situation. Internal search is the first stage to occur after problem recognition (70).

If the information provided by internal search is sufficient, then the consumer may go directly to intention and purchase (routine decision). Otherwise, the consumer may
engage in external search unless some environmental constraint, such as deficient financial ability, terminates the process (95). Internal search is usually measured through the use of protocol analysis. Here, the consumer is normally in some sort of laboratory situation and is asked to think out loud while in the process of shopping (14).

External search occurs when the consumer feels that he/she lacks knowledge or stored knowledge is deemed inadequate. Knowledge is secured from external sources in addition to what can be recalled from memory. External sources include formal (marketer dominated), informal (interpersonal), or neutral (third party). Engel, Blackwell and Miniard (32, p. 68) define external search as "a motivated and completely voluntary decision to seek new information." It is important to include exposure as part of the definition of external search. Otherwise, it would be difficult to interpret someone seeking out broadcast media; however, active exposure leading to attention would facilitate measurement enabling the use of Likert scaling techniques.

Costs of Search

The decision to engage in and the extent of external search is contingent upon the value versus the costs involved in obtaining the information (17). Costs may
include time, travel, parking, psychological and opportunity (8). Additional costs include decision delay and information overload (32).

Psychological costs may subsume frustration, stress, and aggravation due in part to driving in traffic, waiting in lines, or dealing with inept clerks (29). Psychological disenchantment may be increased by the unpleasantness of the decision process itself. Some consumers enter a state of panic when the point of decision is near. Buyers may shorten their deliberations and precipitate the purchase in order to escape the frustration of predecision (32, 34). The delay incurred for search only intensifies this situation and forestalls the buyer's satisfaction from use of the product. Therefore, the likelihood of search could be a function of the degree of perceived negative consequences in delay (65).

Information Overload

Information overload suggests that there are limits to the amount of information consumers can process. Too much information may prove dysfunctional (85). The literature on information overload is somewhat mixed, but basically there is agreement that it exists (52, 53, 55, 73, 74, 122). However, controversy does surround the early work done by Jacoby and his colleagues. Jacoby et al. (52) stated:
It would appear that increasing package information load tends to produce: (1) dysfunctional consequences in terms of the consumer's ability to select that brand which was best for him, and (2) beneficial effects upon the consumer's degree of satisfactions, certainty, and confusion regarding his selection. In other words, our subjects felt better with more information but actually made poor purchase decisions (52, p. 67).

Wilkie, Summers and Malhotra (73, 74, 115, 122), while not disputing the information overload premise, did question the Jacoby (52) findings and methodology. Malhotra (74) said that consumers can be overloaded, but the early studies by Jacoby's (52) group did not demonstrate this idea. In a reanalysis utilizing new methodology, Malhotra (73) failed to support the conclusion that more information results in poorer purchase decisions.

In a succeeding study by the Jacoby (52) group, they confirmed their previous hypothesis that finite limits exist on the amount of information consumers can effectively use. It was also found that increased information per brand resulted in better decisions. In addition, Jacoby (55, p. 35) contends that "consumers stop far short of overloading themselves."

What all of this implies is that in coping with information overload, consumers tend to under utilize consumer information programs (70). In addition to that, one cannot assume unlimited information processing capacity on the part of the individual (32).
Determinants of Search

Considering the costs involved with search, it seems necessary to investigate what leads to search in the first place. The determinants of search include (1) the nature of the product, (2) whether it is high or low involvement, (3) the amount and quality of existing information, (4) recognition or intensity of the need, (5) perceived risk, and (6) pleasure derived from the shopping experience (25, 32, 70).

Nature of the Product

The nature of the product reflects consumers' perceptions of products and resulting shopping patterns. Although oversimplified, the traditional product classification of convenience, shopping, and specialty goods reflect consumer perceptions and shopping behavior (22). Convenience goods tend to be purchased routinely and are characterized by frequency, immediacy and minimum effort with respect to comparison and purchase. Shopping goods are those that consumers tend to spend time comparing suitability, quality, price and style, whereas specialty goods are those for which consumers are willing to expend special purchasing effort to obtain unique characteristics and/or brand identifications (70). Howard and Sheth (13) have suggested that prepurchase behavior be classified into three categories:
[1]. **Routinized Response Behavior**--the buyer is not only very familiar with the product class but with all brands in his evoked set so that the only information that he needs has to do with the values of the inhibitors that constitute his purchasing plan which underlies his Intention. The buyer has a definite preference for one brand over other brands in his evoked set.

[2]. **Limited Problem Solving**--the buyer has well-formed Choice Criteria, hence, a well-defined product class concept. His Attitude, though positive toward brands in his evoked set, is not strongly favorable to any one brand because his information to judge one of them is inadequate.

[3]. **Extensive Problem Solving**--the buyer does not have well-formed Choice Criteria and does not have a product class concept. He needs information to provide the basis for forming his Choice Criteria, and correspondingly he has very limited preference (Attitude) for any one brand (13, p. 418).

Some researchers believe that a discrete classificational scheme is inappropriate. These individuals suggest a more accurate portrayal of behavior through the use of a continuum (18, 27, 77). Nevertheless, for the sake of simplicity this study will refer to goods by utilizing the basic convenience, shopping and specialty taxonomy.

The nature and amount of search undertaken are a function of consumers' perceptions of their classification. The probable gain from identifying a number of alternatives and comparing price, quality and other product attributes is significant enough that consumers engage in search for shopping goods and less search for convenience goods (48).
In addition, several other studies confirm that for more expensive products, consumers tend to engage in more search (18, 27, 57, 121).

Involvement

The discussion above leads to the concept of involvement. High involvement is defined as "the activation of extended problem-solving behavior when the act of purchase or consumption is seen by the decision maker as having high personal importance or relevance" (32, p. 24; 94, 95). Extended problem solving involves active search and use of information as depicted in the EBM high involvement model on page 12. High involvement can happen when the product is perceived as reflective of one's self image (42, 65), when the product is expensive and the risk of wrong decision is high (42, 101), or when there is strong reference group pressure or normative compliance.

However, the vast majority of products are not sufficiently important to justify high involvement processing activity (32). Occupying the other end of the spectrum is low involvement. Here, the consumer probably does not care enough about the product class to have an opinion about the brands in it (42). In low involvement, "... behavior tends to precede attitudes" (42, p. 137).
As a consequence of this, the low involvement purchase decision process does not have a search stage (32, 42):

EXHIBIT 2

Source: (32, p. 38)

The consumer will form attitudes about products after choice (32, 42). The costs of search activity probably outweigh the benefits, and internal search suffices.

Whether a product is high or low involvement is a function of the consumer. What may be high involvement for some could be low involvement for others. "It is important for marketers to recognize that involvement is an individual phenomenon; a particular product category can engender many levels of involvement" (42, p. 137).
Amount and Quality of Existing Information

The amount and quality of existing information has a direct bearing on a person's propensity to search. Generally, the more that a person knows, the less the degree of search activity. In addition, the consumer's past experience will affect the extent of search (49). Research shows that search declines with the increased frequency of purchase over time or when the consumer has had other means of collecting prior information (10, 59, 90, 123). When the purchase becomes routine—with the consumption experience remaining pleasurable—the behavior is reinforced and the consumer is likely to perceive no need for search activity (70). Furthermore, the more brands of the generic product that have been consumed, the lower the likelihood of search (59, 90). Generally, the length and breadth of experience will determine the amount of stored information, and this will vary inversely with the occurrence and extent of search activity (40, 50). However, Bettman and Park (14) found that consumers with little previous knowledge did not appear to search as the task may have appeared to be too overwhelming.

The quality or appropriateness of stored information depends upon several factors. First of all, satisfaction with past purchases will have an influence on search
activity; the greater the satisfaction from earlier consumption, the lower the likelihood of search upon problem recognition (10, 89, 115).

Quality is also determined by the perceived similarity between past and present problem situations. If a past solution was satisfactory, and the consumer feels the current problem to be congruent, then he may rely upon the earlier alternative for the present situation. These circumstances are sometimes called programmed decisions, and external search is less likely to occur (59, 80, 116).

Katona (59) suggests that the amount of interpurchase time can impact external search. The greater the elapsed time between purchases, compounded by the effects of nonuse and memory impairment, the higher the probability of external search.

Lastly, changes in the alternatives available on the market can affect the quality of stored information. The extent to which new styles, retail outlets, and product introductions occur can increase the likelihood of external search in order for the consumer to remain contemporary (58).

Recognition of Need

In many cases, consumers do not have a clear picture of their product needs prior to shopping. The retail outlet
then becomes an environment that facilitates search activity. Through the shopping process, more information is gathered and needs become more clearly defined. Therefore, if need recognition does not occur prior to shopping, the propensity to search will be greater (18). If the need has a sense of urgency attached to it, then search activity will probably be lessened to accommodate time utility (57). However, the greater the consumer's intensity of need for a specific product (e.g., a specialty good), the more likely the consumer is to engage in extensive search activity (70).

Perceived Risk

Perceived risk pertains to the uneasiness or consequences from the uncertainty involved in making a purchase decision. "It is important to recognize that risk is subjective. That is, the risk involved in a purchase decision is perceived by the consumer and may or may not bear a strong relationship to what actually exists" (70, p. 466).

There are several types of risk that may impact search. There may be monetary risks at stake. The higher the price, the greater the financial consequences, especially if the product does not perform well, is costly to maintain, and/or requires a lengthy time commitment to use (28, 57, 99). Physical risks may convince one to seek information if
undesirable side effects or harm to one's health are involved (32). Social risk may involve potential ostracism from particular reference groups (59). In addition, some products require multiple decisions with respect to brand, color, size and features. This may entail some degree of self confidence in evaluating brand and product attributes (9, 23, 28, 69). Generally speaking, engagement into external search is more likely with low self confidence in decision making ability (32). Thus, in order to minimize perceived consequences, consumers may reduce risk through information acquisition or search activity (27, 109).

Pleasure Derived from Shopping

Another benefit of search is the sheer pleasure of the shopping experience for many consumers. Most people like to buy new things, and thus shopping and buying become an excellent way to get out of a rut. Many consumers find shopping to be an enjoyable activity, one of the pleasurable parts of their day, and sometimes an escape mechanism from their cares. Thus, search is more likely to be undertaken when viewed as a pleasurable activity (70, p. 464; 25).

Information Sources

It is important to note that consumers rarely rely on one information source. The various sources are complementary rather than competitive, and search tends to be a cumulative process (57). In terms of exposure, marketer dominated sources subjugate other sources. However,
Informal Sources

Informal sources are interpersonal sources of information that are not under the direct control of the marketer (70). Communications with family members, friends, neighbors and co-workers are frequently referred to as word-of-mouth. There is substantial evidence indicating favorable word-of-mouth as being very influential prior to a purchase. However, unfavorable word-of-mouth can be equally damaging (3, 26, 57, 70). The reasons that word-of-mouth communication is so strong appears to be that (1) it is viewed as a credible source; (2) personal contacts can provide social support and give a stamp of approval unlike the mass media; and (3) information is often backed up by reference group pressure (3, 70).

Consumers tend to rely more heavily on informal sources at the evaluation stages of the decision process and in high perceived risk situations (32, 70). It has been shown that as financial risk increases, the use of personal sources also increases (32). In addition, the more conspicuous the product and the more social risk attached to the product, the more the reliance on informal information sources (92). As a product matures, the need for formal information
sources declines while the need for informal information sources increases (32).

Formal Sources

Formal sources refer to marketer controlled or marketer dominated sources of information. "This source of information is under the direct control of the marketer and includes such means of communication as the product itself, packaging, pricing, advertising, sales promotion, personal selling, displays, and distribution channels" (70, p. 469).

Evidence shows that formal sources are relied upon by consumers when searching for information on the availability of alternatives (70). Additionally, formal sources are sought when seeking information on product attributes—especially those sources that allow the product to be viewed visually. Otherwise, informal sources become a dominant consideration (24, 32, 70).

Consumers use television advertisements for information on style and design (32). However, newspapers have been shown to be the most reliable information source in general and particularly with style and fashion (46, 114).

Product package labeling has a definite impact on search and the effects can be decisive at times (81, 104). Nutritional labeling tends to lend credibility to the product (4). However, growing evidence indicates that labels are also misperceived and even disregarded (54, 125).
Under high involvement, print media may play a more influential role in purchase decision making than does broadcast media (101). This is possibly because extended problem solving behavior centers more in the left hemisphere of the brain where reading and speaking functions are prevalent (111).

Neutral Sources

Neutral sources, sometimes referred to as the general media

... include such means as newspaper and magazine articles, government reports, research agencies, and publications by testing groups such as Consumers Union (publisher of Consumer Reports). These groups provide product information but are supposedly not directly influenced by either the marketer or consumer. The perceived advantages of using neutral sources are the following: (1) the source is perceived as competent and trustworthy and (2) information is perceived as factual and unbiased (70, p. 469).

Some drawbacks associated with neutral sources include incomplete testing of brands, time consumption in securing the information source, difficulty in interpreting technical reports, and disagreement with the evaluative criteria (70).

Neutral sources tend to play a significant role with product ratings, especially if they are unfavorable (32). However, Engledow, Anderson and Becker (31) did find that Consumer Reports was not as highly regarded in 1976 as it was in 1970, as perceived by a sample of subscribers.
In addition, when physical risk is high, the importance of neutral sources as an information source increases; as the severity of a disease increases so does the need for authoritative information (99).

Summarization on Search

The search process can be summarized with the following model:

EXHIBIT 3

This model ties together the relevant components of search. If the discrepancy between actual and desired state of problem recognition is large enough, search may ensue.
First, the consumer activates internal search which can be an instantaneous scan of the memory. If the consumer's stored information is deemed sufficient, then he/she may proceed to alternative evaluation or directly to choice. If existing information is deemed insufficient, then the consumer may engage in external search; however, there are also several other determinants at this point. The nature of the product, the degree of involvement, perceived risk and pleasure derived from shopping can all be determining factors influencing external search. In addition, search may be postponed or deleted altogether due to costs incurred by the search process. Not only that, some studies have shown dysfunctional consequences of search by the concept known as "information overload."

However, if the consumer does engage in external search then he will likely use one or more of the sixteen information sources depicted on the right side of the model. Certain information sources may be relied upon more than others, while some may have differing influences. For example, formal sources may stimulate awareness and interest, as well as provide persuasive information on form, time, place and possession utilities. Informal sources may be considered more credible than formal since they are not sponsored by the manufacturer. Additionally, informal sources may represent a social influence resulting in
reference pressure or ultimately in normative compliance, whereas neutral sources may most likely be considered the most credible while providing accurate information for discerning between brands.

Search can be a simple and quick or complex and involved process. The complexity and speed of search will depend upon the individual and the situation.

The Elderly

Recent work depicts the elderly segment as viable yet also lacking research. The research which does exist is somewhat inconclusive (11, 72, 105). As to why many marketers are reluctant to pursue the elderly may be twofold: (1) a lack of interest; and, (2) a lack of familiarity (19, 30, 36).

Many firms may not be interested in tracking the mature market because a young image for their products seems desirable (30, 36, 98). These people feel that products associated with youth can be identified with by both the young and the old, especially older people who want to remain young. In addition, a product that is perceived as youthful will appeal to young people who have more years to use it, as well as young people not yet set in brand preference (98). John S. Prescott, the president of the magazine division of the parent company that publishes
50 Plus, says that advertisers are as adverse to risk as bankers. They tend to stay with youth on the premise that older people can relate to younger images but the reverse does not always hold true (19).

The media buying industry has not fully realized the existence of the elderly market; they are simply unaware and terminate their markets at age 49 (30, 107). Some marketers consider the elderly market, but are hesitant to abandon the time-tested youth market that they have courted for so long (19). Another consideration is that the average media buyer is around 29 years old and really does not identify with the maturity market (30). Many marketers operate under a set of myths about the elderly which have prevailed despite evidence that dispels them.

**Income**

People tend to think that most old people are poor (45). The stereotypic image that is portrayed and promulgated by the media is that of the needy aged (36, 86). Older people are more affluent now than at any previous time in American history (2, 5, 16, 36, 72, 118, 124). Indigence does exist among the aged with about 12 percent of persons 65 and over below the poverty level and another 15 percent near poverty (2, 79). However, even these figures are tempered by double tax exemptions and Medicare (107,
Many of today's needy old were yesterday's needy young. A substantial number were poor immigrants without education, skills or pension plans (86).

While it is true that post-retirement income generally declines (as much as 50 percent in certain situations), this is not necessarily the case for purchasing power. For the elderly consumer, income is a conservative measure of buying behavior. The amount of income may be less than before retirement, but there are also fewer demands on the income (16, 36, 37). In some cases, retirement means collecting a pension, changing careers, or beginning part time work (36).

In addition to media portrayal, the myth of aged poverty persists, in part, because marketers tend to view household income data and not per capita income (1, 5, 36). The elderly age segment has the highest accumulation of assets. Of people over age 65, roughly 70 percent are homeowners and approximately 80 percent of this particular group have paid off the mortgage (56, 108, 118). The elderly have amassed considerable worth by selling their vastly appreciated homes and taking the one-time capital gains tax exemption for those 55 and over (107). These people then move into smaller dwellings since their children are grown, and a large home is no longer necessary (36). In addition, their children's educational expenses have been rendered, thereby alleviating a major monetary commitment (36, 107).
What is most attractive to marketers is that this segment not only has the largest discretionary income (30 cents per dollar for those 50 and over versus 15 cents per dollar for those under 50), but they also have a propensity to spend, or what Atchley (5) refers to as "dis-saving" (15, 36, 67). Even though the elderly tend to "dis-save," they account for 68 percent of all money-market funds and about 80 percent of all money in savings and loans institutions (15).

**Living Conditions**

There exists another myth that most elderly people either live with their children or in an institutional/rest home environment. This is far from the truth. Between 10 and 12 percent of people over 65 actually live with their children, and approximately 5 percent of people over 65 live within an institution (2, 36, 45, 60). The vast majority of older people maintain their own households within a community and make their own consumer purchase decisions (45, 56, 103). People tend to grow old in place. Many do not even change homes, but those who do usually opt for a smaller residence in the same community (16, 20, 38, 56, 86). Only a small proportion (5 to 10 percent) of retirees make moves for climate or recreation (20, 86). Many of the people in institutions or nursing homes never had children,
have no living children, have children who are too old to provide care, have no extended family, or are immigrants (many Oriental men came to this country alone and never married). In other cases, the institutionalization of a family member usually comes as a last resort after the family has exhausted all alternatives for caring for the individual (45, 86).

The Elderly Are Not A Homogeneous Segment

Another prevailing myth is that many people assume all older people are alike. According to several studies, the elderly segment is not homogeneous and its diversity must be recognized by marketers (1, 15, 21, 36, 82, 86, 87, 91, 117, 120). Neugarten (86) points out that people age differently, similar to the spreading of a fan. "The longer people live, the greater the difference between them. A group of 18-year-olds is more alike than a group of 60-year-olds. To say a man is 60 years old tells you nothing about him except that he has lived for sixty years" (86, p. 78). Neugarten also indicates that the United States is becoming an age-irrelevant society, and she is supported by others when saying that after age 20, chronological age is a poor predictor of behavior. It tells nothing of the health, lifestyle, financial and marital status of an individual (86, 88, 96). Quality of life, mental age, and physical age
are all more meaningful indicators of behavior than chronological years. Older people are less likely to assume that they must live a more restrictive lifestyle. There is no internal clock to tell them how to behave (36, 47, 72, 105, 117). Neugarten (88) discusses a phenomena she calls "age-ism" in industrialized countries where there is not yet a tradition of valuing older people:

From the perspective of social role patterns for older individuals, the future will probably bring increased social permissiveness, increasing diversity of life styles, and increased freedom to develop idiosyncratic patterns that provide for higher levels of life satisfaction. In the long run, we may come to diminish the importance of chronological age as a major distinguishing feature between individuals, and instead of speaking of social roles for the aged, come to speak of the social roles of individuals who happen to be young, middle-aged, or old, but more important who happen to have different tastes, different goals, and different ways of enhancing the quality of their lives (88, p. 23).

Since there is no monolithic way to age (45), this study will be comparing two elderly groups.

Other General Stereotypes

Many people hold a myopic view of the elderly as sick, uneducated and declining intellectually. To describe older people as sick and frail is to misconstrue fact (15, 68, 87, 124). Health is poorer, but only 15 percent of those over 65 need special health or social services (36, 86). John Keane (60), the Director of the United States Bureau of the
Census, reports that eight out of ten persons over 65 describe their health as good or excellent.

With respect to education, today's elderly are far more educated than in the past (103, 124). The post-World War II years put a premium on mid-level managers, and many veterans took advantage of GI bill provisions to go to school (124). However, it is also true that for many elderly, their formal education was completed years ago. What was relevant then is no longer relevant as today's formal educational level rises (103). In addition, there is a tendency (especially among women from 45 to 55) to return to school (124).

Despite the disadvantage of a dated formal education or no formal education, older people do not suffer from intellectual decline (36, 45, 51, 86, 96, 112). Hess (45) notes that studies which report declines in intelligence are usually marked in cross-sectional, not longitudinal, data. Stephens and Warrens (112) found no significant learning differences between young people and old people even though they were expecting some. An older person's ability to learn may be hampered by sensory deterioration which may affect the pace of the learning (36, 96). The ability of the elderly to learn does not deteriorate if they are allowed to control the pace (96). Hulicka and Wheeler (51) found that more time is required for information processing with advanced age. This is especially true for registration
of an association and/or its transfer from primary to secondary memory—in which case self pacing improves performance. Neugarten (86) reports that the average 70-year-old often surpasses a younger person on "power tests" where unlimited time is given to complete an intelligence test of increasing difficulty.

Other Myths

The elderly are too emotional (45).

The elderly are stubborn, resistant to change and unwilling to try new things (31, 103).

The elderly are unproductive workers (45).

The elderly are inactive and withdrawn (45, 103).

The elderly are unconcerned with current events (41).

The elderly are sheltered and conservative (103).

When thinking about older persons, most people rely on the preadolescent image that they had of their grandparents (31). In many instances, grandparents are the only exposure these people have had to the elderly. Therefore, it becomes easier to understand why stereotypes can arrive so readily. Once again, the overriding factor that augments stereotypes is the media's inaccurate portrayal of the elderly which has been handed down from the earlier days of audience study (103).
Shopping Behavior of the Elderly

Generally, the shopping behavior of older people is not distinctly different from that of younger people (71). Older people tend to shop less frequently than younger people, and they tend to patronize department and specialty stores more than discount stores (47, 72). Shopping is a major part of the elderly lifestyle and most of them tend to enjoy it (72, 76, 79). However, some studies show that shopping is enjoyed less as one ages and particularly for clothing (47, 75). Most elderly people like to shop in the mornings at smaller stores where they are known (37, 72, 79). Older people tend to be loyal to their store, especially to supermarkets that cater to seniors, and they are usually reluctant to try new stores (56, 72, 79). Shopping is seen by some as an opportunity for exercise, recreation and socializing (66, 71, 76, 79). Most studies indicate that an older person's relationship with store personnel is important. The older shoppers enjoy talking to employees whether or not they rely on them for purchase information (36, 63, 72). The elderly want courteous service, warranties, carryout, delivery, smaller servings, and products that meet dietary needs—low in sodium and cholesterol (47, 63, 71). In a specific study on supermarkets, Johnson (56) found that older people want
small easier opening packages, functional grocery carts, rest areas, clean restrooms, cash lines, and products stacked lower with ample space around them. In addition, the elderly were found to be conspicuous consumers who consider store reputation to be important (36, 72, 120).

Some contradictory findings were presented regarding price, credit, satisfaction, mobility and self confidence. Mason and Bearden (76, 79) found the elderly to shop for the best price, while Lumpkin and Greenberg (72) did not. Lambert (63) found older people seeking discounts, while Hite and Bellizzi (47) did not. Gelb (37) seemed to summarize by describing the elderly as economically conscious, but not to the extent of exhibiting cost cutting behavior. Lumpkin and Greenberg (72) and Hite and Bellizzi (47) found that older people did not use credit. In other studies, Lumpkin, Greenberg and Goldstucker (71), and Hawes, Talarzyk and Blackwell (43) found that they did.

Levels of satisfaction with purchases appeared to be higher for older people (47, 71). However, dissatisfaction was found regarding food, particularly with respect to dietary needs (7, 56). According to Mason and Bearden (7, 78), complaint behavior of older people appeared less than that for younger people, while in another study they found it to be the same. Bernhardt and Kinnear (12) found older people to complain less, but they qualified their findings
due to the number of purchases older people had versus the
rest of the population. Meanwhile, Johnson (56) found older
people complained less to avoid being identified as an "old
crank."

Mobility and store location were not found to be factors
in shopping (72, 76). Other studies, however, did find that
limited mobility impeded shopping and that these people
desired to have stores located closer to home or to have some
sort of general transportation (36, 37, 45, 63, 76, 91).

Lastly, Lumpkin and Greenberg (72), and Reid, Teel and
Vanden Burgh (97) found elderly consumers to lack self
confidence. However, in another study, Lumpkin, Greenberg
and Goldstucker (71) found some elderly consumers to be
overconfident.

**Information Sources of the Elderly**

Information sources are divided into four categories:
internal, informal, formal and neutral.

Internal information sources refer to past experiences
or information stored in memory. The overall information
seeking behavior of the elderly was found to decrease with
age, thereby putting more reliance on past experience than on
other sources (97, 102). In addition, as the level of risk
increases, a person's experience becomes the favored
information source (69). Reid, Teel and Vanden Burgh (97)
found that elderly women perceived risk when shopping, but preferred to rely on general shopping experience rather than seek additional information.

Informal information sources include the immediate family, the extended family, friends, neighbors and co-workers. Informal sources of information were found to be important in the purchase decision making process of the elderly (62, 72, 79, 84, 96). Mason and Bearden (79) found that the elderly relied heavily upon friends, relatives and other interpersonal sources in acquiring new product information. Michman, Hocking and Harris (83, 84) found that 92 percent of the elderly subjects that they studied preferred to wait and hear word-of-mouth information before they would try a new cold remedy. They also found a high incidence of communication for cold remedies from the neutral source of a pharmacist. Word-of-mouth information appeared to be more prevalent with younger people. With advancing age there also appeared to be a shift from reference groups to family (72, 96). However, reference group salience seemed to vary with the context of the problem (100). Schiffman (102) found that word-of-mouth was not a very strong influence for a new salt substitute product.

Klippell and Sweeney (62) found formal information sources to be important to elderly people when seeking
information prior to a purchase. In comparison with young people, however, the elderly placed information sources lower in importance (72, 97). Many studies have shown that the elderly are influenced by advertising (2, 35, 36, 83, 112, 119). Furthermore, Michman, Hocking and Harris (83), and Tongren (119) contended that the elderly are influenced by advertising, but not by the conventional advertising that influences younger people.

Older people are prodigious consumers of the mass media, and it is their primary source of new product information (79). In addition, 45 percent of the elderly's leisure time is spent with the mass media (79, 96, 103). Lumpkin and Greenberg's (72) findings did not support the premise of greater use of the mass media by older people while other studies support it (6, 39, 45, 75, 96). "The media of mass communication are a valuable and socially acceptable resource to the aging individual because they can be used anonymously, inexpensively, and more or less at will" (39, p. 89). Other research has indicated that the mass media serves as a surrogate to a populated world and in turn helps to combat disengagement from society (45, 93, 96, 103).

Phillips and Sternthal (96) have noted that with retirement and advancing age come a reduction in the number and variety of roles with a loss of intensity for these roles. This change in turn leads to a "constriction of life
space" where there is a reduction in the number of interpersonal sources. Reliance on the mass media, extended family and friends increases for the elderly person.

"[B]ecause the media have a large and loyal audience among old people, they are in a position to maintain for these people alone to the larger society, and thus to combat the loneliness and progressive disengagement that may come with time" (103, p. 353).

Research shows that older people are heavy users of television and that television is the most frequent and popular leisure time activity (6, 36, 47, 79, 93, 96, 103, 113). News, public affairs and educational programs are viewed the most with the primary objective to obtain information (47, 93). Many studies show that older people are more interested in obtaining information than entertainment from the mass media (5, 6, 93, 96, 103).

Forty-three percent of elderly subjects in Mason and Bearden's (79) study said that television was their primary source of new product information. Further research shows that as people age, they do not recall television advertisements as well as before, especially for unfamiliar products (113).

For the elderly, newspapers are the most dominant of the media, with a special emphasis put on the financial section (6, 47, 72, 75, 79). Radio is less dominant for
older people than it is for younger people, but the medium is nevertheless heavily used by the elderly (47, 72, 96, 103). Radio is especially used for news, sports, talk shows and soft, classical music (6). Radio is sometimes referred to as the medium the elderly grew up with, and today 92.8 percent of men and 87 percent of women over 50 regularly listen to radio (44). The elderly are heavy users of specialty magazines, especially those related to travel, health, business, news, home and community (6, 47). Direct mail, specialty catalogs and point-of-purchase displays have been used to successfully reach the elderly consumer (15, 71). With respect to salespeople, Martin (75) indicated that older people rely on them as an information source when shopping. Lumpkin, Greenberg and Goldstucker (71) found that older people like to be known by salespeople in addition to obtaining information from them. However, Lumpkin and Greenberg (72) found salespersons to be rated unimportant when shopping for apparel.

While all of the variables discussed above have an effect on the search behavior of the elderly, perhaps no information source is more dominant than physical observation through the shopping process itself (72, 76). Therefore, the role of the package is important in communicating. Research shows that older people have difficulty reading and locating prices, and that small print is inconvenient (47, 56, 63,
Older people seem concerned with dietary ingredients and the correctness of nutritional labels (47, 56). However, Bearden and Mason (7) found that the elderly were less familiar with nutritional labeling, open code dating and unit pricing.
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CHAPTER III

METHODOLOGY

This chapter details the methodology utilized in the study. The discussion includes a (1) description of the major research method selected for measuring information source use; (2) description of the techniques used in sample selection and data collection; (3) description of the instrument replete with a discussion of its measurement scales, validity, and reliability; and (4) a presentation of the hypotheses and the measurement methods that were employed.

Research Method

Retrospective questioning was chosen for this study for a variety of reasons. First, retrospective questioning allows the researcher to utilize a cross-sectional design to obtain information on consumer search processes. Surveying people after a decision has been made is the most common method used in studying prepurchase information acquisition (12). Retrospective questioning also enables the researcher to gather more data on information source use than does
observations. Finally, retrospective questioning allows the use of Likert scaling techniques that can provide input on the impact of each information source.

Selection of the Sample and Data Collection

Data for the study were obtained from a self-administered survey of a sample of 212 members of a Dallas-based organization of elderly people called "Live Long and Like It." In addition to time and cost considerations, this organization was selected for study based on the following criteria:

1. This sample was an active group. This characteristic is important because older persons are mistakenly stereotyped as sick and frail (6, 20, 26, 36). In addition, the elderly are recreation oriented (15, 16, 21, 22, 31).

2. This sample was an optimistic group concerned with a better quality of life as they age. The literature consistently indicates that the elderly harbor an untold optimism (15, 26, 31, 36). The elderly have a "can do" spirit; they grew up during the depression and they never expected their lives to turn out so good (11, 15, 26, 31, 36).

3. This sample had discretionary income. It is widely documented in recent literature that the elderly are not poor, but, to the contrary, they enjoy almost 50 percent of the discretionary income in the United States (2, 3, 7, 13, 21, 33, 36).

4. This sample possessed the necessary age characteristics. The population for this research is persons 55 years of age and older. Age 55 was determined to be the cutoff point based upon the work done by Gilman (14), Linden (19), and Neugarten (27). (See Chapter One, p. 3).
5. This sample was not randomly selected. However, this research is an exploratory pilot study. Therefore, a nonprobability quota sample was selected for use.

6. This sample was not comprised of persons who reside in nursing homes or other institutions. It is particularly important that this group not be associated with an institution because only five percent of persons over 65 are institutionalized (2, 32, 15, 17).

7. This sample was accessible and willing to participate.

Measurement

The most common way to express the importance of a given information source is in terms of exposure and attraction of attention (12). However, exposure and attention do not necessarily indicate the impact an information source has on the decision process. There can be a difference between exposure and effectiveness or the actual use of the information provided.

In this research, the Likert scaling technique was used to measure the importance of particular information sources on purchase decisions. A Likert scale consists of a series of statements to which subjects are asked to react. Instead of just checking categories of agreement or disagreement, respondents are asked to indicate the degree of agreement or disagreement with each of the statements: (1) strongly disagree; (2) disagree; (3) undecided; (4) agree; (5) strongly agree (8).
The Likert scale was selected primarily because it suits the needs of this research by providing attitude measurement responses that can be compared. This instrument is a flexible summated scale that is also economical. With one set of instructions, the scale can serve many items, and once the respondents understand the procedure, they can finish quickly and easily (1). The instrument may be found in the appendix on page 154.

Dependent Variables

Twenty information sources were measured through the use of the Likert scale for three product classes: (1) over-the-counter drugs; (2) Medicare supplements; and (3) automobiles.

To measure the importance of informal information source use for each product class, the following three items were used:

- immediate family
- extended family
- friends, neighbors and co-workers

The range of scores were from 0 to 5 on each item. The index for informal sources had a possible range from 0 to 15, (4).

To measure the importance of formal information source use for each product class, the following items were used:
The range of scores were from 0 to 5 on each item. The index for formal sources had a possible range from 0 to 55.

To measure the importance of neutral information source use for over-the-counter drugs, the following items were used:

--consumer reports
--printed news reports
--broadcast news reports
--a medical doctor
--a pharmacist

The range of scores were from 0 to 5 on each item. The index for neutral sources for over-the-counter drugs will had possible range from 0 to 25.

To measure the importance of neutral information source use for Medicare supplements, the following items were used:

--consumer reports
--printed news reports
--broadcast news reports
--a medical doctor
--a lawyer
The range of scores were from 0 to 5 on each item. The index for neutral information sources for Medicare supplements had a possible range from 0 to 25.

To measure the importance of neutral information source use for automobiles, the following four items were used:

- consumer reports
- printed news reports
- broadcast news reports
- a mechanic

The range of scores were from 0 to 5 on each item. The index for neutral information sources for automobiles had a possible range from 0 to 20.

Independent Variables

The independent variables were age and income. Age was broken into two categories: the Y/O (55-74), and the O/O (75+). Income was broken into two categories: low income ($15,000 and under) and high income ($15,001 and over).
This research utilized a 2 by 3 factorial design:

EXHIBIT 4

Model

Control variables: Product categories
--Over-the-Counter drugs
--Medicare supplements
--Automobiles

Independent variables

<table>
<thead>
<tr>
<th>age</th>
<th>importance of information</th>
</tr>
</thead>
<tbody>
<tr>
<td>income</td>
<td>source</td>
</tr>
</tbody>
</table>

Dependent variables

--informal sources
--formal sources
--neutral sources

Validity and Reliability

One of the primary concerns of research is the validity of the survey instrument. Generally, an instrument is valid if it measures what it is intended to measure.

Predictive validity enables one to use the research findings to predict future behaviors. However, since a quota sample was employed and the study was exploratory in nature, the requirements of predictive validity are not met.

Content validity deals with sensible instrument construction, and rests on appeals to reason (30). Basically, the content validity of this instrument is supported in the literature where past studies of this nature have used similar product classifications. Several studies have used automobiles (7, 19, 27, 28). Burton and
Hennnon (9) used medical services in their study as did Mason and Bearden (23). Research on over-the-counter drugs has also been used successfully by Michman, Hocking and Harris (24, 25). These studies were similar in how they looked at information source use, but none of them explored this information source use with a segmented elderly population.

Another primary concern of research is to determine if the instrument is reliable. Reliability pertains to freedom from random error and the extent to which measurements are repeatable. Reliability is a necessary but insufficient condition for validity (30). The test for reliability was made by using Cronbach's reliability coefficient (10).

Hypotheses

Research hypotheses

1. Age and income will affect the importance of informal information sources for over-the-counter drugs.

   a. For the Y/O informal information sources will be more important for over-the-counter drugs than for the O/O.

   b. People with higher incomes will rely on informal information sources more for over-the-counter drugs than people with lower incomes.
2. Age and income will affect the importance of formal information sources for over-the-counter drugs.
   a. For the O/O formal information sources will be more important for over-the-counter drugs than for the Y/O.
   b. People with lower incomes will rely on formal information sources more for over-the-counter drugs than people with higher incomes.

3. Age and income will affect the importance of neutral information sources for over-the-counter drugs.
   a. For the Y/O neutral information sources will be more important for over-the-counter drugs than for the O/O.
   b. People with higher incomes will rely on neutral information sources more for over-the-counter drugs than people with lower incomes.

4. Age and income will affect the importance of informal information sources for automobiles.
   a. For the Y/O informal information sources will be more important for automobiles than for the O/O.
   b. People with higher incomes will rely on informal information sources more for automobiles than people with lower incomes.

5. Age and income will affect the importance of formal information sources for automobiles.
   a. For the O/O formal information sources will be more important for automobiles than for the Y/O.
   b. People with lower incomes will rely on formal information sources more for automobiles than people with higher incomes.
6. Age and income will affect the importance of neutral information sources for automobiles.

   a. For the Y/0 neutral information sources will be more important for automobiles than for the 0/0.

   b. People with higher incomes will rely on neutral information sources more for automobiles than people with lower incomes.

7. Age and income will affect the importance of informal information sources for Medicare supplements.

   a. For the Y/0 informal information sources will be more important for Medicare supplements than for the 0/0.

   b. People with higher incomes will rely on informal information sources more for Medicare supplements than people with lower incomes.

8. Age and income will affect the importance of formal information sources for Medicare supplements.

   a. For the 0/0 formal information sources will be more important for Medicare supplements than for the Y/0.

   b. People with lower incomes will rely on formal information sources more for Medicare supplements than people with higher incomes.

9. Age and income will affect the importance of neutral information sources for Medicare supplements.

   a. For the Y/0 neutral information sources will be more important for Medicare supplements than for the 0/0.

   b. People with higher incomes will rely on neutral information sources more for Medicare supplements than people with lower incomes.
Analysis

Analyses of the hypotheses was done by one-way and two-way analyses of variance (ANOVA). ANOVA is a statistical technique frequently used for comparison purposes. It was chosen to test these hypotheses because it enables one to determine if the differences between means of two or more samples is small enough to be attributable (at least partially) to the factors under study (34). Essentially, the use of ANOVA was intended to help separate the effects of different variables.
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CHAPTER IV

ANALYSIS

The purpose of this chapter is to report the results of testing the hypotheses presented in Chapter Three. The statistical package used to analyze the data was SPSSX (Statistical Package for the Social Sciences, version X).

Testing the Hypotheses

The major research objective was to investigate the effect of age and income on prepurchase information behavior.

**Hypothesis One**

Age and income will affect the importance of informal information sources for over-the-counter drugs.

The results indicate that sufficient evidence exists to support hypothesis one. This hypothesis was tested by a two-way analysis of variance:
TABLE I

ANOVA RESULTS FOR HYPOTHESIS ONE

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Effects</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>1</td>
<td>175.552</td>
<td>7.515</td>
<td>.007</td>
</tr>
<tr>
<td>Income</td>
<td>1</td>
<td>97.848</td>
<td>4.189</td>
<td>.042</td>
</tr>
</tbody>
</table>

The mean for age was 1.72, and for income it was 1.8.

Subhypothesis One A

For the young/old informal information sources will be more important for over-the-counter drugs than for the old/old.

This subhypothesis is supported. An approach involving one-way analysis of variance, followed by calculating mean scores from crosstabulations of age to informal information sources for the young/old and old/old to determine direction was utilized. Subhypothesis One A was tested by a one-way analysis of variance:

TABLE II

ANOVA RESULTS FOR SUBHYPOTHESIS ONE A

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Probability of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>216.436</td>
<td>9.423</td>
<td>.0024</td>
</tr>
</tbody>
</table>
The mean score for the young/old was 5.969, and for the old/old it was 3.87.

**Subhypothesis One B**

People with higher incomes will rely on informal information sources more for over-the-counter drugs than people with lower incomes.

Subhypothesis One B is supported. The same analytical method used above, consisting of crosstabulations of income to informal information sources, with a one-way analysis of variance was utilized for this hypothesis.

**TABLE III**

ANOVA RESULTS FOR SUBHYPOTHESIS ONE B

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Probability of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>136.851</td>
<td>5.667</td>
<td>.0184</td>
</tr>
</tbody>
</table>

The mean score for lower income was 4.65, and for the higher income it was 6.43.

**Hypothesis Two**

Age and income will affect the importance of formal information sources for over-the-counter drugs.

The results indicate that sufficient evidence exists to partially support (age) hypothesis two. This hypothesis was tested by a two-way analysis of variance:
TABLE IV
ANOVA RESULTS FOR HYPOTHESIS TWO

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main effects</td>
<td>2</td>
<td>770.020</td>
<td>4.935</td>
<td>.008</td>
</tr>
<tr>
<td>Age</td>
<td>1</td>
<td>1292.939</td>
<td>8.287</td>
<td>.005</td>
</tr>
<tr>
<td>Income</td>
<td>1</td>
<td>119.917</td>
<td>.769</td>
<td>.382</td>
</tr>
</tbody>
</table>

The mean for age was 1.13, and it was 1.15 for income.

Subhypothesis Two A

For the old/old formal information sources will be more important for over-the-counter drugs than for the young/old.

This subhypothesis is found to have significant differences when applying a one-way analysis of variance. However, in the use of the test of direction, the mean score was higher for the young/old. Therefore, the evidence suggests that for the young/old formal information sources are more important for over-the-counter drugs than for the old/old. The one-way analysis of variance for subhypothesis Two A:
TABLE V
ANOVA RESULTS FOR SUBHYPOTHESIS TWO A

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Probability of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>1387.296</td>
<td>9.128</td>
<td>.0028</td>
</tr>
</tbody>
</table>

The mean score for the young/old was 13.59, and for the old/old it was 8.28.

Subhypothesis Two B

People with lower incomes will rely on formal information sources more for over-the-counter drugs than people with higher incomes.

The results indicate no significant differences exist for subhypothesis Two B. The two-way analysis of variance in table IV is supported by the one-way analysis of variance:

TABLE VI
ANOVA RESULTS FOR SUBHYPOTHESIS TWO B

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Probability of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>247.102</td>
<td>1.527</td>
<td>.2182</td>
</tr>
</tbody>
</table>

The mean score for the lower income was 12.14, and for the higher income it was 14.08.
Hypothesis Three

Age and income will affect the importance of neutral information sources for over-the-counter drugs.

The results indicate that sufficient evidence exists to support hypothesis three. This hypothesis was tested by a two-way analysis of variance:

TABLE VII

ANOVA RESULTS FOR HYPOTHESIS THREE

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Effects</td>
<td>2</td>
<td>556.501</td>
<td>15.671</td>
<td>.000</td>
</tr>
<tr>
<td>Age</td>
<td>1</td>
<td>536.509</td>
<td>15.108</td>
<td>.000</td>
</tr>
<tr>
<td>Income</td>
<td>1</td>
<td>433.573</td>
<td>12.209</td>
<td>.001</td>
</tr>
</tbody>
</table>

The mean for age was 1.51, and for income it was 1.7.

Subhypothesis Three A

For the young/old neutral information sources will be more important for over-the-counter drugs than for the old/old.

The subhypothesis is supported. A one-way analysis of variance, followed by calculation of mean scores from crosstabulations of age to neutral information sources for the young/old and old/old were utilized to determine direction. Subhypothesis Three A was tested by a one-way analysis of variance:
TABLE VIII
ANOVA RESULTS FOR SUBHYPOTHESIS THREE A

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Probability of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>832.888</td>
<td>21.806</td>
<td>.000</td>
</tr>
</tbody>
</table>

The mean score for the young/old was 10.53, and for the old/old it was 6.78.

Subhypothesis Three B

People with higher incomes will rely on neutral information sources more for over-the-counter drugs than people with lower incomes.

Subhypothesis Three B is supported. A similar method to that used above, from crosstabulations of income to neutral information sources, with a one-way analysis of variance was utilized.

TABLE IX
ANOVA RESULTS FOR SUBHYPOTHESIS THREE B

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Probability of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>576.494</td>
<td>15.087</td>
<td>.0001</td>
</tr>
</tbody>
</table>

The mean score for lower income was 7.96, and for the higher income it was 11.46.
Hypothesis Four

Age and income will affect the importance of informal information sources for automobiles.

The results indicate that sufficient evidence exists to partially support (age) hypothesis four. This hypothesis was tested by a two-way analysis of variance:

TABLE X
ANOVA RESULTS FOR HYPOTHESIS FOUR

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Effects</td>
<td>2</td>
<td>49.630</td>
<td>3.229</td>
<td>.042</td>
</tr>
<tr>
<td>Age</td>
<td>1</td>
<td>73.793</td>
<td>4.800</td>
<td>.030</td>
</tr>
<tr>
<td>Income</td>
<td>1</td>
<td>15.183</td>
<td>.988</td>
<td>.322</td>
</tr>
</tbody>
</table>

The mean for age was 1.76, and for income it was 1.83.

Subhypothesis Four A

For the young/old informal information sources will be more important for automobiles than for the old/old.

This subhypothesis is supported. A one-way analysis of variance, followed by calculating mean scores from crosstabulations of age to informal information sources for the young/old and old/old to determine direction was utilized. Subhypothesis Four A was tested by a one-way analysis of variance:
TABLE XI
ANOVA RESULTS FOR SUBHYPOTHESIS FOUR A

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Probability of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>148.875</td>
<td>10.031</td>
<td>.0018</td>
</tr>
</tbody>
</table>

The mean score for the young/old was 5.37, and for the old/old it was 5.05.

Subhypothesis Four B

People with higher incomes will rely on informal information sources more for automobiles than people with lower incomes.

The results indicate no significant difference for subhypothesis Four B. The two-way analysis of variance in table XI is supported by the one-way analysis of variance:

TABLE XII
ANOVA RESULTS FOR SUBHYPOTHESIS FOUR B

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Probability of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>25.468</td>
<td>1.628</td>
<td>.2037</td>
</tr>
</tbody>
</table>

The mean score for lower income was 7.36, and for higher income it was 6.16.
Hypothesis Five

Age and income will affect the importance of formal information sources for automobiles.

The results indicate that sufficient evidence exists to partially support (age) hypothesis five. This hypothesis was tested by a two-way analysis of variance:

**TABLE XIII**

ANOVA RESULTS FOR HYPOTHESIS FIVE

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Effects</td>
<td>2</td>
<td>1091.502</td>
<td>7.231</td>
<td>.001</td>
</tr>
<tr>
<td>Age</td>
<td>1</td>
<td>1686.141</td>
<td>11.171</td>
<td>.001</td>
</tr>
<tr>
<td>Income</td>
<td>1</td>
<td>282.519</td>
<td>1.872</td>
<td>.173</td>
</tr>
</tbody>
</table>

The mean for age was 1.26, and for income it was 1.19.

Subhypothesis Five A

For the old/old formal information sources will be more important for automobiles than for the young/old.

This subhypothesis is found to have significant differences when applying a one-way analysis of variance. However, in the test of direction the mean score was higher for the young/old. Therefore, the evidence suggests that for the young/old formal information sources are more important for automobiles than for the old/old. The one-way analysis of variance for subhypothesis Five A:
TABLE XIV

ANOVA RESULTS FOR SUBHYPOTHESIS FIVE A

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Probability of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>2667.229</td>
<td>18.3071</td>
<td>.000</td>
</tr>
</tbody>
</table>

The mean score for the young/old was 14.60, and for the old/old it was 7.24.

Subhypothesis Five B

People with lower incomes will rely on formal information sources more for automobiles than people with higher incomes.

The results indicate no significant difference for subhypothesis Five B. The two-way analysis of variance in table XIV is supported by the one-way analysis of variance:

TABLE XV

ANOVA RESULTS FOR SUBHYPOTHESIS FIVE B

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Probability of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>496.863</td>
<td>3.123</td>
<td>.0789</td>
</tr>
</tbody>
</table>

The mean score for lower income was 11.31, and for higher income it was 13.5.
Hypothesis Six

Age and income will affect the importance of neutral information sources for automobiles.

The results indicate that sufficient evidence exists to support hypothesis three. This hypothesis was tested by a two-way analysis of variance:

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Effects</td>
<td>2</td>
<td>260.741</td>
<td>10.691</td>
<td>.000</td>
</tr>
<tr>
<td>Age</td>
<td>1</td>
<td>221.068</td>
<td>9.065</td>
<td>.003</td>
</tr>
<tr>
<td>Income</td>
<td>1</td>
<td>223.176</td>
<td>9.561</td>
<td>.002</td>
</tr>
</tbody>
</table>

The mean for age was 1.09, and for income it was 1.09.

Subhypothesis Six A

For the young/old neutral information sources will be more important for automobiles than for the old/old.

This subhypothesis is supported. A one-way analysis of variance, followed by calculation of mean scores from crosstabulations of age to neutral information sources for the young/old and old/old to determine direction was utilized. Subhypothesis Six A was tested by a one-way analysis of variance:
TABLE XVII

ANOVA RESULTS FOR SUBHYPOTHESIS SIX A

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Probability of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>336.455</td>
<td>13.878</td>
<td>.0003</td>
</tr>
</tbody>
</table>

The mean score for the young/old was 5.23, and for the old/old it was 2.61.

Subhypothesis Six B

People with higher incomes will rely on neutral information sources more for automobiles than people with lower incomes.

This subhypothesis is supported. A one-way analysis of variance, followed by calculating mean scores from crosstabulations of age to neutral information sources for the young/old and old/old to determine direction was utilized. Subhypothesis Six B was tested by a one-way analysis of variance:

TABLE XVIII

ANOVA RESULTS FOR SUBHYPOTHESIS SIX B

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Probability of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>300.414</td>
<td>11.827</td>
<td>.0007</td>
</tr>
</tbody>
</table>

The mean score for lower income was 3.38, and for higher income it was 6.02.
Hypothesis Seven

Age and income will affect the importance of informal information sources for Medicare supplements.

The results indicate there was not sufficient evidence to support this hypothesis. The two-way analysis of variance shows no significant differences:

TABLE XIX
ANOVA RESULTS FOR HYPOTHESIS SEVEN

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Significance of Main Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Effects</td>
<td>2</td>
<td>39.911</td>
<td>1.949</td>
<td>.146</td>
</tr>
<tr>
<td>Age</td>
<td>1</td>
<td>1.645</td>
<td>.080</td>
<td>.777</td>
</tr>
<tr>
<td>Income</td>
<td>1</td>
<td>74.003</td>
<td>3.614</td>
<td>.059</td>
</tr>
</tbody>
</table>

The mean for age was 1.1, and for income it was 1.1.

Subhypothesis Seven A

For the young/old informal information sources will be more important for Medicare supplements than for the old/old.

The results indicate no significant difference for subhypothesis Seven A. The two-way analysis of variance in table XIX is supported by the one-way analysis of variance:
TABLE XX

ANOVA RESULTS FOR SUBHYPOTHESIS SEVEN A

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Probability of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>.626</td>
<td>.032</td>
<td>.8582</td>
</tr>
</tbody>
</table>

The mean score for the young/old was 3.33, and for the old/old it was 3.21.

Subhypothesis Seven B

People with higher incomes will rely on informal information sources more for Medicare supplements than people with lower incomes.

The results indicate no significant difference for subhypothesis Seven B. However, the p-value for income was close at 0.0510 at a significance level of .05:

TABLE XXI

ANOVA RESULTS FOR SUBHYPOTHESIS SEVEN B

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Probability of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>78.177</td>
<td>3.861</td>
<td>.0510</td>
</tr>
</tbody>
</table>

The mean score for the lower income was 4.12, and for the higher income it was 2.78.
Hypothesis Eight

Age and income will affect the importance of formal information sources for Medicare supplements.

The results indicate insufficient evidence to support hypothesis eight. This hypothesis was tested by a two-way analysis of variance:

TABLE XXII
ANOVA RESULTS FOR HYPOTHESIS EIGHT

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Effects</td>
<td>2</td>
<td>48.184</td>
<td>.438</td>
<td>.647</td>
</tr>
<tr>
<td>Age</td>
<td>1</td>
<td>95.103</td>
<td>.864</td>
<td>.356</td>
</tr>
<tr>
<td>Income</td>
<td>1</td>
<td>3.204</td>
<td>.029</td>
<td>.865</td>
</tr>
</tbody>
</table>

The mean for age was .63, and for income it was .61.

Subhypothesis Eight A

For the old/old formal information sources will be more important for Medicare supplements than for the young/old.

The results indicate no significant difference for subhypothesis Eight A. The two-way analysis in table XXII is supported by the one-way analysis of variance:
TABLE XXIII
ANOVA RESULTS FOR SUBHYPOTHESIS EIGHT A

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Probability of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>47.857</td>
<td>.422</td>
<td>.5169</td>
</tr>
</tbody>
</table>

The mean score for the young/old was 6.69, and for the old/old it was 5.23.

Subhypothesis Eight B

People with lower incomes will rely on formal information sources more for Medicare supplements than people with higher incomes.

The results indicate no significant difference for subhypothesis Eight B. The two-way analysis of variance in table XXII is supported by the one-way analysis of variance:

TABLE XXIV
ANOVA RESULTS FOR SUBHYPOTHESIS EIGHT B

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Probability of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>79.923</td>
<td>.664</td>
<td>.4165</td>
</tr>
</tbody>
</table>

The mean score for the lower income was 7.73, and for the higher income it was 6.37.
Hypothesis Nine

Age and income will affect the importance of neutral information sources for Medicare supplements.

The results indicated insufficient evidence to support hypothesis nine. This hypothesis was tested by a two-way analysis of variance:

TABLE XXV

ANOVA RESULTS FOR HYPOTHESIS NINE

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Significance of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Effects</td>
<td>2</td>
<td>39.105</td>
<td>1.218</td>
<td>.299</td>
</tr>
<tr>
<td>Age</td>
<td>1</td>
<td>55.404</td>
<td>1.725</td>
<td>.191</td>
</tr>
<tr>
<td>Income</td>
<td>1</td>
<td>14.255</td>
<td>.444</td>
<td>.506</td>
</tr>
</tbody>
</table>

The mean for age was .67, and for income it was .65.

Subhypothesis Nine A

For the young/old neutral information sources will be more important for Medicare supplements than for the old/old.

The results indicate no significant difference for subhypothesis Nine A. The two-way analysis of variance in table XXV is supported by the one-way analysis of variance:
### TABLE XXVI

ANOVA RESULTS FOR SUBHYPOTHESIS NINE A

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Probability of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>84.238</td>
<td>2.799</td>
<td>.0958</td>
</tr>
</tbody>
</table>

The mean score for the young/old was 3.83, and for the old/old it was 2.52.

#### Subhypothesis Nine B

People with higher incomes will rely on neutral information sources more for Medicare supplements than people with lower incomes.

The results indicate no significant difference for subhypothesis Nine B. The two-way analysis of variance in table XXV is supported by the one-way analysis of variance:

### TABLE XXVII

ANOVA RESULTS FOR SUBHYPOTHESIS NINE B

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F-ratio</th>
<th>Probability of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>22.805</td>
<td>.686</td>
<td>.4086</td>
</tr>
</tbody>
</table>

The mean score for the lower income was 3.4, and for the higher it was 4.28.
The following table summarizes the hypotheses:

TABLE XXVIII
SUMMARIZATION OF THE HYPOTHESES

<table>
<thead>
<tr>
<th>Supported</th>
<th>Not Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypotheses:</td>
<td>Hypotheses:</td>
</tr>
<tr>
<td>One</td>
<td>Two A</td>
</tr>
<tr>
<td>One A</td>
<td>Two B</td>
</tr>
<tr>
<td>One B</td>
<td>Four B</td>
</tr>
<tr>
<td>Two</td>
<td>Five A</td>
</tr>
<tr>
<td>Three</td>
<td>Five B</td>
</tr>
<tr>
<td>Three A</td>
<td>Seven</td>
</tr>
<tr>
<td>Three B</td>
<td>Seven A</td>
</tr>
<tr>
<td>Four</td>
<td>Eight</td>
</tr>
<tr>
<td>Four A</td>
<td>Eight A</td>
</tr>
<tr>
<td>Five</td>
<td>Nine</td>
</tr>
<tr>
<td>Six</td>
<td>Nine A</td>
</tr>
<tr>
<td>Six A</td>
<td>Nine B</td>
</tr>
<tr>
<td>Six B</td>
<td></td>
</tr>
</tbody>
</table>

The table above provides a summarization of which hypotheses and subhypotheses are supported or not supported according to the findings presented on the previous pages of this chapter.
Reliability

The table below utilizes Cronbach's alpha coefficient (1) for reliability.

TABLE XXIX

RELIABILITY COEFFICIENTS OF THE QUESTIONNAIRE

<table>
<thead>
<tr>
<th></th>
<th>Automobiles</th>
<th>O-T-C Drugs</th>
<th>Medicare Supplements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informal Sources</td>
<td>0.560</td>
<td>0.841</td>
<td>0.821</td>
</tr>
<tr>
<td>Formal Sources</td>
<td>0.937</td>
<td>0.941</td>
<td>0.951</td>
</tr>
<tr>
<td>Neutral Sources</td>
<td>0.879</td>
<td>0.783</td>
<td>0.856</td>
</tr>
</tbody>
</table>

The large majority of the alpha coefficients were above 0.80, with only two scales below that figure. While the rule-of-thumb for the optimal size of these measures varies among researchers, it is believed that the scales for this study have acceptable reliability.

In the appendix are tables (XL to LXVI) on the percentages of information source use per each product category for the total sample, young/old and the old/old. Also, located in the appendix, are tables on data gathered that pertain to: elderly portrayal in the media, use of special interest publications, and sample characteristics (LXVII to LXXI).
CHAPTER BIBLIOGRAPHY

CHAPTER V

CONCLUSIONS

Conclusions drawn from the results presented in Chapter Four are presented here. The hypotheses and subhypotheses are discussed and related to previous findings from the literature. The chapter concludes with general conclusions, implications, and recommendations for future research. The hypotheses are discussed in order as they appear under the categories of informal, formal and neutral sources.

Informal Sources

Hypothesis One: Over-The-Counter Drugs

Based on study findings, age and income do appear to affect the importance of informal information source use for over-the-counter drugs. More specifically, the young/old, as well as those with higher incomes, tend to be more reliant on informal information sources for over-the-counter drugs.

Interpersonal sources, such as family (immediate and extended), friends, neighbors, and co-workers, are a more important source of information for over-the-counter drugs (particularly for the more affluent) for the young/old than
for the old/old. This suggests a decrease in the use of informal information sources with age. This premise is supported in the literature by Phillips and Sternthal (26) who contend that with advancing age comes a "constriction of lifespace" and a decrease in the use of interpersonal sources. These findings also concur with past work in which external search activity has been shown to decrease with age (27, 29).

Consolidated findings from the informal source use tables for over-the-counter drugs (tables XLIV and XLV in the appendix) are presented in table XXX. The "strongly agree" and "agree" categories are summed (SA+A) to show the differences between the young/old and the old/old for each information source. The percentages of neutral responses are also included:

**TABLE XXX**

INFORMAL INFORMATION SOURCE USE OF THE YOUNG/OLD AND OLD/OLD FOR OVER-THE-COUNTER DRUGS

<table>
<thead>
<tr>
<th>Information Source</th>
<th>Young/Old</th>
<th>Old/Old</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Neutral</td>
<td>(SA+A)</td>
</tr>
<tr>
<td>Immediate Family</td>
<td>10.5%</td>
<td>45.8%</td>
</tr>
<tr>
<td>Other Relatives</td>
<td>20.3%</td>
<td>21.1%</td>
</tr>
<tr>
<td>Friends, Neighbors and Co-workers</td>
<td>21.8%</td>
<td>25.6%</td>
</tr>
</tbody>
</table>
The young/old are more reliant upon the immediate family for over-the-counter drugs than the old/old by a margin in excess of two to one. This finding lends support to the statistics that show the elderly reside apart from their children (less than 10 percent live with their children), (1).

Hypothesis Four: Automobiles

Study findings indicate age and income do affect the importance of informal information sources utilized for automobiles. The young/old tend to be more reliant than the old/old upon informal information sources for automobiles.

As with over-the-counter drugs, interpersonal information sources appear to be more important to the young/old than to the old/old:

TABLE XXXI

INFORMAL INFORMATION SOURCE USE OF THE YOUNG/OLD AND THE OLD/OLD FOR AUTOMOBILES

<table>
<thead>
<tr>
<th></th>
<th>Young/Old</th>
<th></th>
<th>Old/Old</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Neutral</td>
<td>(SA+A)</td>
<td>(SA+A)</td>
<td>Neutral</td>
</tr>
<tr>
<td>Immediate Family</td>
<td>8.3%</td>
<td>60.1%</td>
<td>59.0%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Other Relatives</td>
<td>18.0%</td>
<td>12.0%</td>
<td>12.7%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Friends, Neighbors and Co-workers</td>
<td>19.5%</td>
<td>19.5%</td>
<td>10.2%</td>
<td>5.1%</td>
</tr>
</tbody>
</table>

(derived from pp. 120 and 121 in the appendix)
As indicated in table XXXI, both groups feel immediate family to be very important in purchasing automobiles. Other relatives are seen to be less important, while the young/old rely upon friends, neighbors, and co-workers more than the old/old by over a two to one margin. The old/old's failure to utilize friends, neighbors and co-workers as an information source concurs with the literature indicating a social isolation with advancing age (26).

Informal sources are perceived as having third party source credibility and are sought when perceived risk is high. This risk may manifest itself either socially, monetarily, or physically. The young/old may feel more social pressure exerted by their reference groups than in the case of automobiles than the old/old. This is due, primarily to the lack of reference groups for the old/old. However, the primary reason for the young/old being more reliant on informal sources in the purchasing decision for automobiles than the old/old is they are more likely to be in the market for automobiles.

**Hypothesis Seven: Medicare Supplements**

Insufficient evidence exists to conclude if age and income affect the importance of informal information in relation to Medicare supplements. There was no significant differences between the young/old and old/old with respect to
informal information source use for Medicare supplements. Also, no significant differences are found pertaining to higher and lower incomes and informal information source use for Medicare supplements.

The study group, as a whole, exhibited a moderate utilization of the immediate family as an information source for Medicare supplements, as well as little use of the other interpersonal sources (compiled from pp. 126 and 127 in the appendix):

**TABLE XXXII**

INFORMAL INFORMATION SOURCE USE OF THE YOUNG/OLD AND THE OLD/OLD FOR MEDICARE SUPPLEMENTS

<table>
<thead>
<tr>
<th></th>
<th>Young/Okd</th>
<th>Old/Old</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Neutral</td>
<td>(SA+A)</td>
</tr>
<tr>
<td>Immediate Family</td>
<td>9.8%</td>
<td>24.8%</td>
</tr>
<tr>
<td>Other Relatives</td>
<td>12.0%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Friends, Neighbors and Co-workers</td>
<td>8.3%</td>
<td>13.6%</td>
</tr>
</tbody>
</table>

**Formal Sources**

**Hypothesis Two: Over-The-Counter Drugs**

Age and income do affect the importance of formal information source use for over-the-counter drugs. In the subhypotheses, no significant difference is found between
higher and lower income groups regarding reliance upon formal information sources for over-the-counter drugs. Age is found to be a factor impacting formal information source use for this product class, but not as expected.

Based on the review of the literature, it was anticipated that the old/old would be more reliant upon formal information sources. Phillips and Sternthal (26) contend that with advancing age comes a reduction in the number, variety, and intensity of social roles. With this the mass media serves to fill the social void, thereby, increasing the elderly's reliance on formal information sources. However, the contrary is found to be true where the young/old is discovered to be more reliant on formal information sources for this product class.

Evidence from past research does support the premise that the elderly are prodigious users of the mass media (4, 13, 14, 17, 21, 22, 26, 30). Past work has also found that younger people place more importance on formal information sources than do older people (20, 27). This study supports the proposition of the young/old being more reliant upon formal information sources than the old/old.
TABLE XXXIII

FORMAL INFORMATION SOURCE USE OF
THE YOUNG/OLD AND OLD/OLD FOR
OVER-THE-COUNTER DRUGS

<table>
<thead>
<tr>
<th>Source</th>
<th>Young/Old Neutral</th>
<th>Young/Old (SA+A)</th>
<th>Old/Old (SA+A)</th>
<th>Old/Old Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>15.0%</td>
<td>33.1%</td>
<td>18.0%</td>
<td>8.9%</td>
</tr>
<tr>
<td>In-store</td>
<td>17.3%</td>
<td>15.1%</td>
<td>8.9%</td>
<td>11.5%</td>
</tr>
<tr>
<td>Television</td>
<td>15.8%</td>
<td>27.1%</td>
<td>15.3%</td>
<td>16.7%</td>
</tr>
<tr>
<td>Radio</td>
<td>17.3%</td>
<td>8.3%</td>
<td>3.8%</td>
<td>15.3%</td>
</tr>
<tr>
<td>Newspapers</td>
<td>18.0%</td>
<td>12.0%</td>
<td>12.7%</td>
<td>11.5%</td>
</tr>
<tr>
<td>Magazines</td>
<td>21.8%</td>
<td>11.3%</td>
<td>10.3%</td>
<td>10.3%</td>
</tr>
<tr>
<td>Catalogs</td>
<td>19.5%</td>
<td>2.3%</td>
<td>5.1%</td>
<td>6.4%</td>
</tr>
<tr>
<td>Direct Mail</td>
<td>19.5%</td>
<td>4.5%</td>
<td>6.4%</td>
<td>6.4%</td>
</tr>
<tr>
<td>Outdoor</td>
<td>18.8%</td>
<td>3.0%</td>
<td>0.0%</td>
<td>10.3%</td>
</tr>
<tr>
<td>Salespersons</td>
<td>5.3%</td>
<td>6.8%</td>
<td>11.5%</td>
<td>8.9%</td>
</tr>
</tbody>
</table>

(derived from pp. 132 and 133 in the appendix)

Price acting as a formal information source (price implies the package in this case) is dominate in both groups with television a close second. The young/old display a greater use of these sources by about a two to one margin. In-store advertising, newspapers and magazines are also used by approximately ten percent of the sample.
Hypothesis Five: Automobiles

Based on study findings, age and income are found to affect the importance of formal information source use for automobiles. No significant differences are found between higher and lower income groups regarding reliance upon formal information sources of this product class. Age is found to be a factor influencing formal information source use for automobiles, but (as in the case for over-the-counter drugs) not as expected.

Once again, it was anticipated that the old/old would be more reliant upon formal information sources for this product category. However, this situation also yielded the same results as over-the-counter drugs. Again, the young/old are found to be more reliant on formal information sources for automobiles. This finding supports previously identified trends indicating younger people place more importance on formal information sources than older people.
Price (acting as an information source in lieu of a package) serves as the most dominant formal information source for the purchase of automobiles for both groups. The young/old are more reliant by nearly a two to one margin. Television, radio, newspapers and salespersons are also used by both groups to a lesser degree.

The consumer behavior literature supports the belief that there is an active use of formal information sources
when seeking information on 1) the availability of alternatives, 2) the attributes of alternatives, and 3) the style or design of alternatives (9, 10, 19). The young/old being more affluent, mobile, and active than the old/old are generally thought to display more of a desire to purchase automobiles. Hence, information pertaining to availability, attributes, and design of alternative automobiles from formal sources may be more important to the young/old. Even though the elderly are heavy users of the mass media, the old/old may not display as much interest in media information pertaining to automobiles because they may not be in the market as often for a new car.

Hypothesis Eight: Medicare Supplements

Insufficient evidence exists to determine if age and income affect the importance of formal information use for Medicare supplements. There are no significant differences between the young/old and old/old with respect to formal information source use for this product category. Also, no significant differences are found pertaining to higher and lower incomes and informal information source use for Medicare supplements.
TABLE XXXV

FORMAL INFORMATION SOURCE USE OF
THE YOUNG/OLD AND OLD/OLD FOR
MEDICARE SUPPLEMENTS

<table>
<thead>
<tr>
<th></th>
<th>Young/Old</th>
<th>Old/Old</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Neutral</td>
<td>(SA+A)</td>
<td>Neutral</td>
</tr>
<tr>
<td>Price</td>
<td>11.3%</td>
<td>16.6%</td>
<td>21.8%</td>
</tr>
<tr>
<td>In-store</td>
<td>10.5%</td>
<td>2.3%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Television</td>
<td>12.8%</td>
<td>4.5%</td>
<td>10.2%</td>
</tr>
<tr>
<td>Radio</td>
<td>11.3%</td>
<td>3.8%</td>
<td>7.7%</td>
</tr>
<tr>
<td>Newspaper</td>
<td>11.3%</td>
<td>2.3%</td>
<td>5.1%</td>
</tr>
<tr>
<td>Magazines</td>
<td>12.0%</td>
<td>2.3%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Catalogs</td>
<td>12.0%</td>
<td>0.0%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Direct Mail</td>
<td>9.8%</td>
<td>9.1%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Outdoor</td>
<td>9.8%</td>
<td>1.5%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Salespersons</td>
<td>7.5%</td>
<td>6.1%</td>
<td>11.5%</td>
</tr>
</tbody>
</table>

(derived from pp. 135 and 136 in the appendix)

The group, as a whole, exhibits moderate use of price as a formal information source for Medicare supplements. Little to no use of the remaining formal information sources are found except for television, direct mail and salespersons. Each source is found to have an approximately ten percent use rate. It is interesting that television does not evoke a higher percentage of information source use since it appears to be the primary mode of communication chosen.
Neutral Sources

**Hypothesis Three: Over-The-Counter Drugs**

Age and income do affect the importance of neutral information sources for over-the-counter drugs. The subhypotheses are also supported. The young/old are found more reliant upon neutral information sources for over-the-counter drugs than the old/old. Those with higher incomes are also found to be more reliant upon neutral information sources for over-the-counter drugs than those with lower incomes.

**TABLE XXXVI**

**NEUTRAL INFORMATION SOURCE USE OF THE YOUNG/OLD AND OLD/OLD FOR OVER-THE-COUNTER DRUGS**

<table>
<thead>
<tr>
<th></th>
<th>Young/Old</th>
<th>Old/Old</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Neutral</td>
<td>(SA+A)</td>
</tr>
<tr>
<td><strong>Consumer Reports</strong></td>
<td>15.8%</td>
<td>6.8%</td>
</tr>
<tr>
<td><strong>Print News</strong></td>
<td>17.3%</td>
<td>16.5%</td>
</tr>
<tr>
<td><strong>Broadcast News</strong></td>
<td>12.8%</td>
<td>15.0%</td>
</tr>
<tr>
<td><strong>Medical Doctor</strong></td>
<td>2.3%</td>
<td>76.0%</td>
</tr>
<tr>
<td><strong>Pharmacist</strong></td>
<td>9.8%</td>
<td>52.7%</td>
</tr>
</tbody>
</table>

(derived from pp. 141 and 142 in the appendix)

This category elicited a strong response from both groups. The most dominant neutral information source is medical doctors by a wide margin. The next most mentioned
source is pharmacists. The young/old rely more upon doctors and pharmacists than the old/old by a three to two margin. The general news media was stronger among the young/old. This supports the premise that the elderly utilize the mass media more for information than entertainment (3, 4, 25, 26, 30). This seems to be particularly true for the young/old as compared to the old/old.

Neutral sources are considered to be more factual, unbiased, competent, and trustworthy (19). Medical doctors and pharmacists fit this portrait of credibility, making them a logical choice to utilize when seeking prepurchase information for over-the-counter drugs. According to Roselius (28), the importance of neutral sources increase as a function of physical risk—as the severity of a disease increases so does the need for authoritative information. This idea seems particularly appropriate for over-the-counter drugs.

Hypothesis Six: Automobiles

Age and income do affect the importance of neutral information sources for automobiles. The subhypotheses are also supported. The young/old are more reliant upon neutral information sources for automobiles than the old/old. In addition, those with higher incomes are more reliant upon neutral information sources for automobiles than those with lower incomes.
TABLE XXXVII

NEUTRAL INFORMATION SOURCE USE OF THE YOUNG/OLD AND OLD/OLD FOR AUTOMOBILES

<table>
<thead>
<tr>
<th>Source</th>
<th>Young/Old Neutral</th>
<th>(SA+A)</th>
<th>Old/Old (SA+A)</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Reports</td>
<td>12.8%</td>
<td>20.3%</td>
<td>5.1%</td>
<td>12.8%</td>
</tr>
<tr>
<td>Print News</td>
<td>15.0%</td>
<td>12.0%</td>
<td>6.4%</td>
<td>6.4%</td>
</tr>
<tr>
<td>Broadcast News</td>
<td>15.8%</td>
<td>6.0%</td>
<td>7.7%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Mechanic</td>
<td>20.3%</td>
<td>18.8%</td>
<td>15.3%</td>
<td>15.3%</td>
</tr>
</tbody>
</table>

(derived from pp. 138 and 139 in the appendix)

The most dominant neutral information source for automobiles is a publication, Consumer Reports, with a mechanic ranking next. The young/old utilize Consumer Reports more than the old/old by a ratio of almost four to one. Education may be one reason that the young/old are more reliant upon neutral sources. Higher education levels are found among the young/old due to the demand for mid-level managers, and the large number of World War II veterans who took advantage of the GI bill (34). Neutral sources may attract more educated individuals who routinely expose themselves to these sources under normal circumstances. The better educated may also have no difficulty in interpreting the technical reports.

Mobility may be another reason that the young/old are more reliant upon neutral information sources. Securing
neutral information is more time consuming, thereby, making it more difficult to obtain for the less active and mobile old/old.

**Hypothesis Nine: Medicare Supplements**

Insufficient evidence exists to determine if age and income affect the importance of neutral information sources for Medicare supplements. There are no significant differences between the young/old and the old/old with respect to neutral information source use for this product class. Also, no significant differences are found pertaining to higher and lower incomes and neutral information source use.

**TABLE XXXVIII**

**NEUTRAL INFORMATION SOURCE USE OF THE YOUNG/OLD AND OLD/OLD FOR MEDICARE SUPPLEMENTS**

<table>
<thead>
<tr>
<th></th>
<th>Young/Old</th>
<th>Old/Old</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Neutral</td>
<td>(SA+A)</td>
</tr>
<tr>
<td>Consumer Reports</td>
<td>7.5%</td>
<td>5.3%</td>
</tr>
<tr>
<td>Print News</td>
<td>9.8%</td>
<td>12.0%</td>
</tr>
<tr>
<td>Broadcast News</td>
<td>9.0%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Medical Doctor</td>
<td>8.3%</td>
<td>18.1%</td>
</tr>
<tr>
<td>Lawyer</td>
<td>7.5%</td>
<td>6.0%</td>
</tr>
</tbody>
</table>

(derived from pp. 144 and 145 in the appendix)

Medical doctors, as neutral information sources, are chosen most often by both groups. Usage of general print
media is little to moderate while the other neutral information sources are utilized very little.

The following table summarizes the supported hypotheses:

<table>
<thead>
<tr>
<th>TABLE XXXIX</th>
<th>SUPPORTED HYPOTHESES</th>
</tr>
</thead>
</table>

**O-T-C Drugs:**  
Age and income affect informal source use  
Age affects formal source use  
Age and income affect neutral source use  

The young/old are more reliant upon informal, formal and neutral sources  
Higher incomes are more reliant on informal and neutral sources

**AUTOMOBILES:**  
Age affects informal source use  
Age affects formal source use  
Age and income affect neutral source use  

The young/old are more reliant upon informal, formal and neutral sources  
Higher incomes are more reliant upon neutral sources

**General Conclusions**

Many studies in the past have compared the elderly to the young. This study, in an attempt to recognize the heterogeneity of the elderly, has compared two elderly segments. The purpose of this research was to determine if differences exist between the young/old and the old/old regarding external search behavior and the importance of information sources. Two major findings resulted from this research. First, this study confirms that the elderly are
not a homogeneous group by detecting differences between the two elderly segments regarding external search. Based on this finding alone, the elderly should not be treated as a monolithic whole. The second major finding from this study indicates that the propensity to engage in external search decreases with age. This finding is supported in the literature where Reid, Teel, Vanden Bergh, and Schiffman (27, 29) found that the elderly's overall information seeking decreased with age and more reliance was placed on experience than on external sources. This finding was consistent for all the hypotheses in this study that had significant results.

It is widely documented that the elderly do consider the three information sources in this research important in the purchase decision making process. However, it is also important to realize that the elderly, in past studies, were not segmented into groups, but treated as a single group. This study supports these conclusions of past research but also goes a step further by showing a decline in reliance upon informal sources for over-the-counter drugs and automobiles. Past work also shows that these information sources tend to be more prevalent with younger people (20, 26). This dissertation supports the same trend with respect to the young/old and the old/old.
The reliance of the old/old upon internal memory is not surprising. The decline in the old/old's likelihood of engaging in external search may stem from the costs and determinants of search. Psychological costs incurred with search include frustration, stress, and aggravation (5, 10). All of these feelings could intensify if there is a delay because of search. In addition, the dysfunctional nature of information overload could overwhelm the consumer to the point of confusion (7). Therefore, in order to avoid prepurchase tension, external search could be bypassed altogether. In the face of advanced age, the old/old may be more likely to succumb to these psychological costs.

With respect to determinants of search, the old/old consumer may feel these purchases are routine and do not require external information. In such cases, the consumer may rely upon their experience and the amount and quality of their existing information.

The consumer may have been satisfied with past purchases and rely upon stored information, remaining brand loyal, and once again, eliminates the need for external search (16, 23, 32). The frequency of purchase is also a mitigating factor, where external search declines with the increased frequency of purchase over time (6, 24, 33).

The old/old consumer may be reluctant to engage in external search when there is a failure to recognize the
intensity of the need. The consumer does not have a clear picture of what they want and external search is neglected; this is especially true during a sense of urgency (8, 15).

The literature is not consistent in the case of perceived risk. In some cases, where risk is high, there is a reluctance to use outside sources (18, 27). In such cases, the consumer may have a high degree of self confidence in their decision making ability.

Lastly, the old/old consumer may not derive any pleasure from the shopping/searching experience. This may be particularly true for over-the-counter drugs, automobiles, and Medicare supplements. Shopping, in these instances, would not be considered a leisure time activity.

Implications

The findings of this study are not just reserved for marketers of automobiles, over-the-counter drugs, and Medicare supplements. The implications of this research may extend to all marketers who wish to appeal to the elderly.

Appealing to the Elderly

Marketers insistence on the targeting of young people has had the unintended consequence of antagonizing the elderly. Older people react negatively to stereotypic advertisements; it is difficult for them to relate to the way they are depicted in the media (12, 31). In the survey
reported here, 36.8 percent of the young/old and 41 percent of the old/old felt that the elderly are unrealistically and unfairly portrayed in advertising. Twenty-eight percent of the young/old and 18 percent of the old/old feel that advertising portrays the elderly fairly and realistically. With respect to television, this does not just apply to commercials—television programming is just as much at fault (2). In the current study, 26.3 percent of the young/old and 16.7 percent of the old/old feel the elderly are depicted accurately while 35.4 percent of the young/old and 50 percent of the old/old feel television programming is responsible for inaccurate depictions of the elderly. (Table LXVII in the appendix provides a summary of the percentages derived from this sample pertaining to portrayal of the elderly in the media).

There is a definite challenge for marketers who wish to appeal to the elderly. In order for marketers to effectively communicate their messages to the elderly, the elderly must engage in formal information source acquisition. This study indicates that formal sources are used less frequently than informal or neutral sources. For the marketer, formal sources are the primary means to access the elderly market and the market is not responding. This phenomena may be occurring because marketers do not entirely know how to develop and direct their message. The elderly are tired of
the type of images suggested by advertising. Promotion directed to the elderly may be interpreted as patronizing or insulting by elderly who are sensitive to the topic of age and do not want to be reminded of it. The marketer should avoid falling prey to existing myths and stereotypes that patronize the elderly as helpless and dependent. In this era of changing demographic roles, the marketer must recognize the diversity within the elderly market. The behavior of the young/old is no longer predictable based on traditional roles. Many members of the young/old are active, healthy, intelligent, affluent, optimistic, and mobile—and are becoming more so each year. Therefore, the challenge is more complex because age is an attitude not a market. Promotional messages should reflect good taste and be delivered within entertainment programs reflecting good taste. The young/old consumer may also be approached in traditional ways by deemphasizing the youth movement and adopting a more pragmatic, complimentary, and sensitive tone. The elderly are attracted to businesses who want their business, but they do not want to be singled out. A senior discount, for example, implies the customer is too old or too poor to pay the regular price. Instead, the elderly should be accorded the respect due any long time patron (11, 12).

Marketing to the elderly is a dilemma. It is difficult to target based on age and not remind your market of their
In order to avoid offending the elderly and to cultivate them as the viable market that they are, consider the following recommendations:

1. Appeal to psychological and not chronological age.
2. Emphasize functional appeals over emotional ones.
3. Avoid stereotypes. Use older people in advertisements in a tasteful, dignified manner. Portray the elderly in realistic and active settings.
4. Show happy scenes and cater to their desire to be attractive.
5. Portray them in a positive light as participating members of society.
6. Do not make unsupported assumptions about incomes.

Future Research

Further research to identify classifications appropriate for more refined segmentation of the elderly market is needed. Such research is needed to better understand the heterogeneity of this market. If possible, longitudinal, probability samples should be utilized in refining the age categories. In addition, identifying, evaluating and charting specific media vehicles, particularly those aimed at the elderly, would be helpful in determining the effectiveness of the communication alternatives. A study of information source use over time for new high and low involvement products would yield more comprehensive findings.
CHAPTER BIBLIOGRAPHY


### PERCENTAGES OF INFORMATION SOURCE USE

**TABLE XL**

**INFORMAL INFORMATION SOURCES FOR AUTOMOBILES**

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<thead>
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<th>Source Type</th>
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TABLE XLI

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INFORMAL INFORMATION SOURCES FOR OVER-THE-COUNTER DRUGS  

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INFORMAL INFORMATION SOURCES FOR MEDICARE SUPPLEMENTS

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TABLE LI

FORMAL INFORMATION SOURCES FOR AUTOMOBILES

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TABLE LII

FORMAL INFORMATION SOURCES FOR OVER-THE-COUNTER DRUGS

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TABLE LIV

FORMAL INFORMATION SOURCES FOR OVER-THE-COUNTER DRUGS

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### TABLE LV

**FORMAL INFORMATION SOURCES FOR MEDICARE SUPPLEMENTS**

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### TABLE LVI

**FORMAL INFORMATION SOURCES FOR MEDICARE SUPPLEMENTS**

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# TABLE LIX

NEUTRAL INFORMATION SOURCES FOR AUTOMOBILES

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TABLE LX

NEUTRAL INFORMATION SOURCES FOR AUTOMOBILES

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<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Not Exposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Reports</td>
<td>0.0%</td>
<td>5.1%</td>
<td>12.8%</td>
<td>0.0%</td>
<td>1.3%</td>
<td>80.8%</td>
</tr>
<tr>
<td>Print News</td>
<td>0.0%</td>
<td>6.4%</td>
<td>6.4%</td>
<td>2.6%</td>
<td>0.0%</td>
<td>84.6%</td>
</tr>
<tr>
<td>Broadcast</td>
<td>0.0%</td>
<td>7.7%</td>
<td>3.8%</td>
<td>1.3%</td>
<td>0.0%</td>
<td>87.2%</td>
</tr>
<tr>
<td>Mechanic</td>
<td>6.4%</td>
<td>8.9%</td>
<td>15.4%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>69.2%</td>
</tr>
<tr>
<td></td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
<td>Not Exposed</td>
</tr>
<tr>
<td>----------------</td>
<td>----------------</td>
<td>-------</td>
<td>---------</td>
<td>----------</td>
<td>-------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Consumer Reports</td>
<td>1.9%</td>
<td>2.4%</td>
<td>13.2%</td>
<td>8.5%</td>
<td>2.4%</td>
<td>71.7%</td>
</tr>
<tr>
<td>Print News</td>
<td>3.8%</td>
<td>9.0%</td>
<td>12.7%</td>
<td>6.1%</td>
<td>3.3%</td>
<td>65.1%</td>
</tr>
<tr>
<td>Broadcast</td>
<td>3.8%</td>
<td>8.0%</td>
<td>9.0%</td>
<td>9.0%</td>
<td>2.8%</td>
<td>67.5%</td>
</tr>
<tr>
<td>Doctor</td>
<td>39.6%</td>
<td>29.2%</td>
<td>3.3%</td>
<td>2.8%</td>
<td>0.5%</td>
<td>24.5%</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>22.6%</td>
<td>25.5%</td>
<td>7.1%</td>
<td>1.9%</td>
<td>1.4%</td>
<td>41.5%</td>
</tr>
</tbody>
</table>
TABLE LXII

NEUTRAL INFORMATION SOURCES FOR OVER-THE-COUNTER DRUGS

<table>
<thead>
<tr>
<th>Young/Old</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Not Exposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Reports</td>
<td>3.0%</td>
<td>3.8%</td>
<td>15.8%</td>
<td>10.5%</td>
<td>3.8%</td>
<td>63.2%</td>
</tr>
<tr>
<td>Print News</td>
<td>6.0%</td>
<td>10.5%</td>
<td>7.3%</td>
<td>7.5%</td>
<td>5.3%</td>
<td>53.4%</td>
</tr>
<tr>
<td>Broadcast</td>
<td>6.0%</td>
<td>9.0%</td>
<td>12.8%</td>
<td>10.5%</td>
<td>4.5%</td>
<td>57.1%</td>
</tr>
<tr>
<td>Doctor</td>
<td>44.4%</td>
<td>31.6%</td>
<td>2.3%</td>
<td>3.0%</td>
<td>0.8%</td>
<td>18.0%</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>24.1%</td>
<td>28.6%</td>
<td>9.8%</td>
<td>3.0%</td>
<td>0.8%</td>
<td>33.8%</td>
</tr>
</tbody>
</table>
TABLE LXIII

NEUTRAL INFORMATION SOURCES FOR OVER-THE-COUNTER DRUGS

**Old/Old**

<table>
<thead>
<tr>
<th>Source</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Not Exposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Reports</td>
<td>0.0%</td>
<td>0.0%</td>
<td>8.9%</td>
<td>5.1%</td>
<td>0.0%</td>
<td>85.9%</td>
</tr>
<tr>
<td>Print News</td>
<td>0.0%</td>
<td>6.4%</td>
<td>5.1%</td>
<td>3.8%</td>
<td>0.0%</td>
<td>84.6%</td>
</tr>
<tr>
<td>Broadcast</td>
<td>0.0%</td>
<td>6.4%</td>
<td>2.6%</td>
<td>6.4%</td>
<td>0.0%</td>
<td>84.6%</td>
</tr>
<tr>
<td>Doctor</td>
<td>30.8%</td>
<td>25.6%</td>
<td>5.1%</td>
<td>2.6%</td>
<td>0.0%</td>
<td>35.9%</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>19.2%</td>
<td>20.5%</td>
<td>2.6%</td>
<td>0.0%</td>
<td>2.6%</td>
<td>55.1%</td>
</tr>
</tbody>
</table>
TABLE LXIV

NEUTRAL INFORMATION SOURCES FOR MEDICARE SUPPLEMENTS

<table>
<thead>
<tr>
<th>Total Sample</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Not Exposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Reports</td>
<td>1.4%</td>
<td>3.3%</td>
<td>5.2%</td>
<td>4.2%</td>
<td>2.4%</td>
<td>83.5%</td>
</tr>
<tr>
<td>Print News</td>
<td>1.9%</td>
<td>8.5%</td>
<td>6.1%</td>
<td>4.7%</td>
<td>0.9%</td>
<td>77.8%</td>
</tr>
<tr>
<td>Broadcast</td>
<td>0.0%</td>
<td>6.1%</td>
<td>5.7%</td>
<td>6.1%</td>
<td>0.5%</td>
<td>81.6%</td>
</tr>
<tr>
<td>Doctor</td>
<td>8.0%</td>
<td>11.8%</td>
<td>5.2%</td>
<td>3.3%</td>
<td>1.9%</td>
<td>69.8%</td>
</tr>
<tr>
<td>Lawyer</td>
<td>0.5%</td>
<td>4.7%</td>
<td>7.1%</td>
<td>2.8%</td>
<td>3.3%</td>
<td>81.6%</td>
</tr>
</tbody>
</table>
**TABLE LXV**

NEUTRAL INFORMATION SOURCES FOR MEDICARE SUPPLEMENTS

**Young/Old**

<table>
<thead>
<tr>
<th>Source</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Not Exposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Reports</td>
<td>2.3%</td>
<td>3.0%</td>
<td>7.5%</td>
<td>3.8%</td>
<td>3.0%</td>
<td>80.5%</td>
</tr>
<tr>
<td>Print News</td>
<td>3.0%</td>
<td>9.0%</td>
<td>9.8%</td>
<td>5.3%</td>
<td>1.5%</td>
<td>71.4%</td>
</tr>
<tr>
<td>Broadcast</td>
<td>0.0%</td>
<td>3.8%</td>
<td>9.0%</td>
<td>7.5%</td>
<td>0.8%</td>
<td>78.9%</td>
</tr>
<tr>
<td>Doctor</td>
<td>6.8%</td>
<td>11.3%</td>
<td>8.3%</td>
<td>4.5%</td>
<td>2.3%</td>
<td>66.9%</td>
</tr>
<tr>
<td>Lawyer</td>
<td>0.7%</td>
<td>5.3%</td>
<td>7.5%</td>
<td>4.5%</td>
<td>5.3%</td>
<td>76.7%</td>
</tr>
</tbody>
</table>
### TABLE LXVI

**NEUTRAL INFORMATION SOURCES FOR MEDICARE SUPPLEMENTS**

**Old/Old**

<table>
<thead>
<tr>
<th>Source</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Not Exposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Reports</td>
<td>0.0%</td>
<td>3.8%</td>
<td>1.3%</td>
<td>5.1%</td>
<td>1.3%</td>
<td>88.5%</td>
</tr>
<tr>
<td>Print News</td>
<td>0.0%</td>
<td>7.7%</td>
<td>0.0%</td>
<td>3.8%</td>
<td>0.0%</td>
<td>88.5%</td>
</tr>
<tr>
<td>Broadcast</td>
<td>0.0%</td>
<td>10.3%</td>
<td>0.0%</td>
<td>3.8%</td>
<td>0.0%</td>
<td>85.9%</td>
</tr>
<tr>
<td>Doctor</td>
<td>8.9%</td>
<td>12.8%</td>
<td>0.0%</td>
<td>1.3%</td>
<td>1.3%</td>
<td>75.6%</td>
</tr>
<tr>
<td>Lawyer</td>
<td>0.0%</td>
<td>3.8%</td>
<td>6.4%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>89.7%</td>
</tr>
</tbody>
</table>
FINDINGS ON PORTRAYAL

The first two questions on the questionnaire pertained to the portrayal of older people in advertisements and on television programs. Thirty eight point six percent of the sample felt that older people were not fairly and realistically portrayed in advertisements, and 41 percent felt that older people were not fairly and realistically portrayed in television programs. Further breakdowns follow:

TABLE LXVII

FINDINGS ON PORTRAYAL

Question one:

Older people are realistically and fairly portrayed in ads:

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>No Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y/O</td>
<td>5.3%</td>
<td>23.3%</td>
<td>27.8%</td>
<td>23.3%</td>
<td>13.5%</td>
<td>6.8%</td>
</tr>
<tr>
<td>O/O</td>
<td>7.7%</td>
<td>10.3%</td>
<td>20.5%</td>
<td>29.5%</td>
<td>11.5%</td>
<td>20.5%</td>
</tr>
</tbody>
</table>
Question two:

Older people are realistically and fairly portrayed in television:

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>No Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y/O</td>
<td>6.0%</td>
<td>20.3%</td>
<td>24.8%</td>
<td>23.3%</td>
<td>12.1%</td>
<td>13.5%</td>
</tr>
<tr>
<td>O/O</td>
<td>5.2%</td>
<td>11.5%</td>
<td>11.5%</td>
<td>19.2%</td>
<td>30.8%</td>
<td>21.8%</td>
</tr>
</tbody>
</table>
USE OF SPECIAL INTEREST PUBLICATIONS

Sixty-six point five percent of the sample read magazines directed toward the elderly market. Further broken down, 63.2 percent of the young/old and 71.8 percent of the old/old read these types of magazines.
<table>
<thead>
<tr>
<th>Percentage of the total sample that read this publication</th>
<th>AARP Magazine</th>
<th>Mature Living</th>
<th>Modern Maturity</th>
<th>Fifty Plus</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.98%</td>
<td>13.21%</td>
<td>10.38%</td>
<td>2.38%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage of the sample who read magazines of this type and read this publication</th>
<th>AARP Magazine</th>
<th>Mature Living</th>
<th>Modern Maturity</th>
<th>Fifty Plus</th>
</tr>
</thead>
<tbody>
<tr>
<td>25.53%</td>
<td>19.86%</td>
<td>15.60%</td>
<td>4.26%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage of the entire Y/O sample that read this publication</th>
<th>AARP Magazine</th>
<th>Mature Living</th>
<th>Modern Maturity</th>
<th>Fifty Plus</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.78%</td>
<td>11.28%</td>
<td>12.78%</td>
<td>1.50%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage of the Y/O who read magazines of this type and read this publication</th>
<th>AARP Magazine</th>
<th>Mature Living</th>
<th>Modern Maturity</th>
<th>Fifty Plus</th>
</tr>
</thead>
<tbody>
<tr>
<td>25.00%</td>
<td>17.86%</td>
<td>20.24%</td>
<td>2.38%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage of the entire O/O sample that read this publication</th>
<th>AARP Magazine</th>
<th>Mature Living</th>
<th>Modern Maturity</th>
<th>Fifty Plus</th>
</tr>
</thead>
<tbody>
<tr>
<td>19.23%</td>
<td>16.66%</td>
<td>6.41%</td>
<td>5.12%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage of the O/O who read magazines of this type and read this publication</th>
<th>AARP Magazine</th>
<th>Mature Living</th>
<th>Modern Maturity</th>
<th>Fifty Plus</th>
</tr>
</thead>
<tbody>
<tr>
<td>26.78%</td>
<td>23.21%</td>
<td>8.93%</td>
<td>7.14%</td>
<td></td>
</tr>
</tbody>
</table>
TABLE LXVIII  
(continued)  

<table>
<thead>
<tr>
<th>Percentage of the total sample that read this publication</th>
<th>Mature Woman</th>
<th>Mature Adult</th>
<th>Retirement Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.47%</td>
<td>0.47%</td>
<td>0.47%</td>
<td></td>
</tr>
<tr>
<td>Percentage of the sample who read magazines of this type and read this publication</td>
<td>0.70%</td>
<td>0.70%</td>
<td>0.70%</td>
</tr>
<tr>
<td>Percentage of the entire Y/O sample that read this publication</td>
<td>0.75%</td>
<td>0.75%</td>
<td>0.75%</td>
</tr>
<tr>
<td>Percentage of the Y/O who read magazines of this type and read this publication</td>
<td>1.19%</td>
<td>1.19%</td>
<td>1.19%</td>
</tr>
<tr>
<td>Percentage of the entire O/O that read this publication</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Percentage of the O/O who read magazines of this type and read this publication</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>
CHARACTERISTICS OF THE SAMPLE

Sixty-seven point nine percent of the sample was female, this compares to 59.6 percent of the U.S. elderly according to the American Association of Retired People. Of the young/old, 64.6 percent were female, and 74.3 percent of the old/old were female.

TABLE LXVIX
MARITAL STATUS

<table>
<thead>
<tr>
<th></th>
<th>Total Sample</th>
<th>Y/O</th>
<th>O/O</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>55.2%</td>
<td>64.7%</td>
<td>39.7%</td>
</tr>
<tr>
<td>Widowed</td>
<td>34.4%</td>
<td>26.3%</td>
<td>48.7%</td>
</tr>
<tr>
<td>Single</td>
<td>8.0%</td>
<td>7.5%</td>
<td>8.9%</td>
</tr>
<tr>
<td>OCCUPATION</td>
<td>Total Sample</td>
<td>Y/O</td>
<td>O/O</td>
</tr>
<tr>
<td>--------------------------</td>
<td>--------------</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Professional</td>
<td>15.6%</td>
<td>13.5%</td>
<td>19.2%</td>
</tr>
<tr>
<td>Managerial, Executive</td>
<td>2.8%</td>
<td>3.6%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Administrative, Clerical</td>
<td>25.5%</td>
<td>28.6%</td>
<td>20.5%</td>
</tr>
<tr>
<td>Engineering, Technical</td>
<td>3.8%</td>
<td>6.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Marketing, Sales</td>
<td>10.4%</td>
<td>11.3%</td>
<td>8.9%</td>
</tr>
<tr>
<td>Skilled Craft, Trade</td>
<td>8.0%</td>
<td>8.3%</td>
<td>7.7%</td>
</tr>
<tr>
<td>Semiskilled</td>
<td>10.8%</td>
<td>13.5%</td>
<td>6.4%</td>
</tr>
<tr>
<td>Did not respond</td>
<td>23.1%</td>
<td>15.0%</td>
<td>35.9%</td>
</tr>
</tbody>
</table>
TABLE LXXI

INCOME

<table>
<thead>
<tr>
<th>Total</th>
<th>Sample</th>
<th>Y/O</th>
<th>O/O</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $10,000</td>
<td>19.3%</td>
<td>13.5%</td>
<td>29.5%</td>
</tr>
<tr>
<td>$10,000 to $15,000</td>
<td>17.5%</td>
<td>20.3%</td>
<td>12.8%</td>
</tr>
<tr>
<td>$15,001 to $20,000</td>
<td>17.9%</td>
<td>17.3%</td>
<td>19.2%</td>
</tr>
<tr>
<td>$20,001 to $25,000</td>
<td>9.4%</td>
<td>9.0%</td>
<td>10.3%</td>
</tr>
<tr>
<td>$25,001 to $30,000</td>
<td>3.8%</td>
<td>6.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Over $30,001</td>
<td>14.6%</td>
<td>18.8%</td>
<td>7.7%</td>
</tr>
<tr>
<td>Did not respond</td>
<td>17.5%</td>
<td>15.0%</td>
<td>20.5%</td>
</tr>
</tbody>
</table>
DO NOT PUT YOUR NAME ON THIS QUESTIONNAIRE

YOUR RESPONSES ARE STRICTLY CONFIDENTIAL

Please circle a number from the scale below to show how much you agree or disagree with each statement:

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Not Exposed To This Source</th>
</tr>
</thead>
</table>

1. Older people are realistically and fairly portrayed in ads.  
   5  4  3  2  1  0

2. Older people are realistically and fairly portrayed in TV shows.  
   5  4  3  2  1  0

This next section deals with automobiles, please think of the last new or used car that you have purchased.

When making my decision to purchase an automobile, I used information from:

3. My immediate family  
   5  4  3  2  1  0

4. My other relatives  
   5  4  3  2  1  0

5. My friends, neighbors or co-workers  
   5  4  3  2  1  0

6. The price  
   5  4  3  2  1  0

7. In-store advertising  
   5  4  3  2  1  0

8. TV advertising  
   5  4  3  2  1  0

9. Radio advertising  
   5  4  3  2  1  0

10. Newspaper advertising  
    5  4  3  2  1  0
11. Magazine advertising  
12. Catalogs (i.e. Auto Trader)  
13. Direct mail  
14. Outdoor advertising  
15. Salespersons  
16. Consumer Reports  
17. Printed news reports  
18. Broadcast news reports  
19. A mechanic  

This next section deals with over-the-counter drugs, please think of any nonprescription drug or medication that you have recently purchased.

When making my decision to purchase over-the-counter drugs, I used information from:

<table>
<thead>
<tr>
<th>Source</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Not Exposed to This Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>20. My immediate family</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>21. My other relatives</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>22. My friends, neighbors, or co-workers</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neutral</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
<td>Not Exposed To This Source</td>
</tr>
<tr>
<td>---</td>
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<td>-------</td>
<td>---------</td>
<td>----------</td>
<td>-------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>23. The price and package</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>24. In-store advertising</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>25. TV advertising</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>26. Radio advertising</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>27. Newspaper advertising</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>28. Magazine advertising</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>29. Catalogs</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>30. Direct mail</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>31. Outdoor advertising</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>32. Salespersons</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>33. Consumer Reports</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>34. Printed news reports</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>35. Broadcast news reports</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>36. A medical doctor</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>37. A pharmacist</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>
This next section deals with Medicare supplements, please think of Medicare supplements as insurance plans that cover what Medicare does not.

When making my decision to purchase Medicare supplements, I used information from:

<table>
<thead>
<tr>
<th>Source</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Not Exposed To This Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>38. My immediate family</td>
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<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>39. My other relatives</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>40. My friends, neighbors or co-workers</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>41. The price</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>42. In-store advertising</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>43. TV advertising</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>44. Radio advertising</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>45. Newspaper advertising</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>46. Magazine advertising</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>47. Catalogs</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>48. Direct mail</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>49. Outdoor advertising</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>50. Salespersons</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>51. Consumer Reports</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>52. Printed news reports</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>53. Broadcast news reports</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>54. A medical doctor</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>55. A lawyer</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>
Do you read magazines edited for the older market?

yes ___ no ___

If so which ones? ________________________________

Age: are you 55 to 74 ___
or 75 and over ___

Sex: male ___
female ___

Status: married ___
widowed ___
single ___

In what type of occupation did you spend the majority of your work life?

___ professional (med, law, etc.)
___ managerial, executive
___ administrative, clerical
___ engineering, technical
___ marketing, sales
___ skilled craft or trade
___ semiskilled occupation

What is your annual income? under $10,000 ___
$10,001 to $15,000 ___
$15,001 to $20,000 ___
$20,001 to $25,000 ___
$25,001 to $30,000 ___
over $30,000 ___

Thank you for your participation.
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