ISSN-L: 2223-9553, ISSN: 2223-9944
Vol.4 No.3, May 2013
Academic Research International

A COMPARATIVE STUDY OF MASS MEDIA USE BY ELDERLY BLACKS AND ELDERLY WHITES IN HOUSTON

Friday Karttey Olube

Department of Mass Communication,
Rivers State University of Science and Technology,
Port Harcourt, NIGERIA.

okendu2014@yahoo.com

ABSTRACT

Little, if any, is known about the communications need of the elderly blacks, though they constitute a significant size of the population of the City of Houston. This study investigated the communication choice and use pattern of elderly blacks as compared to their white counterparts. Unlike earlier investigations, which have focused on isolated medium of communication, this study explored the impact of race in the choice and use pattern of individual medium, and the connection between the various medium in relation to race. Three questions were specifically addressed by this study. These are: (1) is there a statistically significant difference between elderly blacks' and elderly whites' communication choice and use pattern? (2) Does socio-demographic variables significantly influence the choice and use of mass media channels by older adults of difference races? (3) Is there a significant difference between elderly blacks and whites in their choice of interpersonal communications? These questions were further broken down and classified into eight testable categories referred to as empirical hypotheses. Answers to these questions were then sought by investigating the sets of variables in each of the empirical hypotheses with the subjects as the independent variable in each case. One hundred and twelve elderly blacks, and one hundred and twenty eight elderly whites, residing in the city of Houston were surveyed. Self-administered questionnaires were distributed to the subjects. Persons who needed help with filling out the questionnaire were assisted by the researchers, who supervised the entire data collection process. Responses were coded and quantified and cross-tabulations of the stated variables and the subject's race (black and white) were provided through computer analysis. The study indicated that there is a statistically significant relationship between subject's race and choice and use of electronic and print media, and that there is no significant difference between elderly blacks and whites in their choice of interpersonal communication. Thus concluding that: (1) Elderly blacks spend more time daily watching television and listening to the radio than their white counterpart, (2) Elderly whites read newspaper more often than elderly blacks with similar levels of education, income, and other basic socio-demographic variables, (3) Elderly blacks use television primarily as a source of information and companionship, (4) Elderly whites use TV primarily for entertainment and to pass time, (5) Both elderly blacks and elderly whites consider reading books and magazines as an important habit, (6) Finally, both groups show no significant difference in their choice of interpersonal communication to justify segmenting the two groups for appeals using the medium.

Keywords: Mass Media, elderly blacks, elderly whites, interpersonal communication

INTRODUCTION

The shifting population patterns are changing the present emphasis on youth to focus on the elderly, who are emerging as a powerful social, political, and economic force which cannot be isolated or ignored. It's time to take a new look at old age and its benefits, needs and

ISSN-L: 2223-9553, ISSN: 2223-9944
Vol. 4 No.3, May 2013

challenges[†]More Americans are facing the prospect of old age today than they did at the beginning of the century. Statistics show that older adults are in the fastest growing age group of the population in the twentieth century. In 1900, four percent of the U.S. population was age 65 or older. Today eleven percent of the population is people 65 and over (see Table 1).

The population report on the elderly by race and sex in Houston shows growth pattern among the two dominant groups (elderly blacks and elderly whites) to be progressing steadily and similarly to the national trend (see Table 2). The reason is that more people are living longer.[‡] Between

Table 1. Number of Persons 65 and over in U.S. population: 1900, 1930, and 1960-1981

Year	*Number*	*Percent*
1900	3,099,000	4.1
1930	6,705,000	5.4
1960	16,675,000	9.2
1970	20,107,000	9.8
1980	25,708,000	11.3
1981	26,253,000	11.4

Source: U.S. Bureau of the Census, Current Population Report, Series P-25, Nos. 311, 519 and 917.

Table 2. Persons 65 and over by Sex and Race 1960-1981 (Percentage Trend)

	1960		*1970*		*1975*		*1980*		*1981*	
	Male	*Female*	*Male*	*Female*	*Male*	*Female*	*Male*	*Female*	*Male*	*Female*
White	6.9	8.4	7.6	10.6	7.9	11.3	9.0	12.9	9.1	13.2
Black	.5	.6	.7	.9	.8	1.1	.9	1.2	.8	1.2

Source: U.S. Bureau of the Census Current Population Report, Series P-20, No. 372.

1970 and 1979 alone there was a 14% increase in the proportions of older adults in the country (from 9.8% to 11.2%). Unfortunately, life after 65 in most cases means retirement from life's major activities.

In our society, many of life's activities and rewards are centered on our work. Work life provides structure to much of life in general. There is the expendable income coming in and the security of meeting financial obligations. One's status in our society is directly related to the job one holds. Friendships and social activities often flow from the workplace. There is a feeling of involvement and connectedness that goes with employment.

Retirement from employment dramatically alters one's lifestyle. One is forced to face changes which challenge one's physical and mental well being, including changing roles, changing family patterns, friendships and other social networks. There is also the change in

[†] Plain Talk About Aging. U.S. Department of Health and Human Services Publication, Vol. 12, Fall 1983, p. 3.
[‡] U.S. Bureau of the Census, Current Population Report, 1980 Series, p. 37.

economic status, behaviours, interests and opportunities. There is no longer a job to provide involvement, meaning, and structure to life. There is the problem of fixed income, and this raises concern about financial matters. Social status can no longer be found at the place of work. Concerns for health increase and the sense of social isolation can become more threatening.

What does the increase in the senior citizen population mean for mass communication usage? Are the elderly blacks and elderly whites' choices and usage of communication channels similar? What has been learned about this growing segment of the population from past research? What medium is most favoured by an elderly black? These questions form the nucleus of this study.

STATEMENT OF THE PROBLEM

It is bad enough to be black in our society. It is also bad to be old in a youth-oriented culture. But to be old and black is indeed to be in a double jeopardy.[§]

A number of studies have been done on the subject of mass communication habits of elderly people. However, there has been very little exploration into how changes of life (from adult to older adult) and one's race impact on media habit. This investigation seeks to gain a better view of the communication use patterns of elderly blacks and elderly whites as separate groups and then comparatively.

Most of the previous studies have treated one medium at a time to the exclusion of others. For example, some of the studies are exclusively on the senior citizens' use of television. A comparative study of older adults' use of television and other channels of communication, such as radio and newspapers, would certainly shed more light on their communication habits.

The demographic characteristic of race is associated with selective liking and disliking of network television programs that were designed to appeal to a mass audience.[**]

Most of the studies treating the different channels have not considered senior citizen segment as a major variable that could influence media habit. The study of each senior citizen's racial group and its characteristics should lend us more knowledge about their behaviour and habits. Previous studies have either drawn their subjects exclusively from within the white community or treated all subjects (whites, blacks and others) as though there were no racial differences.

This study sought answers to three questions.

1. Is there a significant relationship between a person's race and choice of mass communication channel?
2. Does ethnicity have any significant influence on the use of mass media channels?
3. Is there a difference in the liking or disliking of interpersonal communication among elderly blacks and elderly whites?

Definition of Terms

In order to maintain uniformity in interpreting various terms, definitions have been provided.

Older Adult: Persons 65 years and over.

Senior Citizen: Persons 65 years and over.

[§] Jeweldean Jones, Congressional Report on Aging, Presented to the U.S. Senate Committee on Aging, 1967.
[**] James W. Carey, "Variations in Negro/White Television Preferences," Journal of Broadcasting, 1966, 10: 199-212.

ISSN-L: 2223-9553, ISSN: 2223-9944
Vol. 4 No.3, May 2013

Health:	The condition of the subject's eyesight and hearing ability.
Dominant Groups:	Refers specifically to Blacks and Whites in Houston.
Lifestyle:	The characteristic pattern of the life of a person as portrayed by his manners, attitudes, and possessions.

Both older adult and senior citizen were used synonymously in this study.

LITERATURE REVIEW

Pertinent literature of previous studies on the subject of older adults and their attitudes and behaviour toward the mass media will be reviewed under four subheadings: Elderly and Mass Media Use, Minority Elderly, Majority Elderly and Interpersonal Communication Behaviour among Elderly Blacks and Whites.

Studies on Elderly and Mass Media Use

Studies done by Graney (1975), Davis (1971) and Morrison (1979) suggest that changes in communication behaviour and attitudes are correlated phenomena that occur with changes in age. This essentially means that as people grow older, their choice of communication medium and their preference for programs and sections changes. If this is true, then we can safety say that the motivation for using whatever medium, the choice of one program/section over the other, and he desired uses and gratification changes relatively with age.

Doolittle (1971) and Bogart (1972) study the impact of aging as one of the major factors influencing media consumption habits in our society. In their findings, they contended that aging adults' lives are considerably restricted by a number of factors such as poor health, lack of social interaction, depression due to social isolation and sometimes lack of adequate expendable income. To fill the gap created by these conditions, older adults tend to use mass media, especially television, more often than other age groups (Cowgill and Gerson, 1966).

However, the medium and the amount of time spent using it depends on a number of variables, including a person's previous lifestyle, level of education attained, race, sex and financial standing. For instance, a poor minority senior citizen with little or no education, not having an active community life and perhaps few, if any, relatives whom he can relate to, obviously will look to the television, radio and printed materials to occupy his time.

Media use and gratification by different age groups is the subject of studies by Morrison (1979) and Young (1979). Young reviewed most of what was known about the uses and gratifications of the mass media by the elderly until 1979. He focused more on those studies dealing with why the elderly use mass media and found that they rely more on television for news, entertainment and company than any other medium.

Morrison (1979) was concerned in his studies primarily with the actual conditions that necessitate specific patterns of media consumption. These he classified into four basic perspectives, namely: (a) demographic perspective asserts that the time spent in close proximity to a particular medium or content by people defined by particular socio-economic characteristics will tend to develop and retain specific media consumption patterns across the life cycle as a customary behaviour; (b) cultural lifestyle perspective-emphasizes preference for a particular medium or content based on its consummatory value and its symbolic portrayal of preferred cultural or lifestyle group; (c) functional perspective – explores in great detail the motives behind the choice of a specific medium or particular content for its need-satisfaction value, and (d) action motivation perspective-defined as a rational and goal-directed media content seeking decision-marking or self-enhancement and development (here

the researcher considers the elderly person's motives for his/her choice and usage in relation to mass media consumption.

Despite its broader view on media usage, Morrison's study was directed at a population aged 18 to 64 years, thus precluding any investigation of how the same research findings would have applied to the elderly. The impact of the various perspectives considered in Morrison's study on different racial groups, specifically elderly blacks and whites, should be further explored.

In an early study by Schramm and White (1949), age, education and economic status were found to be major factors in newspaper reading. Although the study considered several socio-economic variables, the older adult was not considered as a separate age group.

Clyde (1968) found that pleasant news attracted more readership than any other kind with which it was compared. This raises the question of what is unpleasant to whom. Sometimes what may be considered unpleasant news to a teenager may not necessarily be unpleasant to an older adult. For example, the news of a rock-and-roll music group's canceling its scheduled visit to Houston during a Christmas weekend could be unpleasant news to teenagers, especially rock music fans. Yet, the same news could be considered boring by older adults. Thus, this study's failure to include the elderly was its major limitation.

Studies on Minority Elderly

Carey (1966) conducted a study investigating whether substantial differences exist in the television preferences of black and white families. His findings, like those of Williams and Lindsay (1971), Bogart (1972), and Allen and Clark (1980), suggest that the demographic characteristic of race is associated with selective liking and disliking of network television programs that were designed to appeal to a mass audience. Further, he contended that the same could be true of newspaper readership and radio listening. This does not downplay the significance of other equally significant factors but emphasizes the role of race among other factors.

A study on the influence of culture, historical and political antecedents on blacks and Latinos, and whether or not the different groups are similar in their communication attitudes and behaviour was done by Allen and Clarke (1980). Their findings suggest that more educated blacks tend to watch less television while more educated Latinos tend to watch more television. Further, more educated blacks read the newspaper more often as opposed to the educated Latinos. The major limitation of this study was that no age group was specifically identified. There was also no specific mention of how the situation might be in the case of elderly blacks.

In a study by Stroman and Becker (1978), it was found that real racial differences in media use exist between different races. This study also suggested that the differences are largely due to differences in culture more than anything else. Of the randomly selected 1,575 subjects, 1,401 were white, 142 were black, and 32 were members of other racial groups. In a study which emphasizes culture and habit, one would expect a fairly proportionate number of subjects across the different racial groups. However, the study did not include the 32 members of other racial groups in its comparison. Thus, the findings were based on the comparison made between 1,401 whites and 142 blacks.

Using media criticism as a dependent variable, and age, education, self-concept and mass media use as explanatory variables, Tan (1978) contended that Blacks were more critical than Mexican-Americans of how their ethnic group is portrayed by the media.

ISSN-L: 2223-9553, ISSN: 2223-9944
Vol. 4 No.3, May 2013

Studies on Majority Elderly

Most of the earlier investigation into the mass media habit of older adults used whites as subjects. A study by Davis (1972), for example, which investigated the place of television in the lives of an older audience, used an all white subjects group. Davis found that a majority (75%) of the subjects watched television five hours or less per week. The subjects ranked three categories, out of a list of ten, as their preferred programs. These included: (a) news and public affairs, (b) educational programs, and (c) travelogues. Expressing a subjective evaluation of the place of television on their lives, 64.5% of the sample subjects indicated that it is important and satisfactory. Finally, the author noted that the subjects of the study indicated a feeling that their needs, as they were then, were not adequately met through current television programming. This apparently must be the reason for their low usage of television.

Studies by Clyde (1968), Schramm (1949), Doolittle (1979), Real (1980) and Graney (1974) supported the assertion that elderly whites prefer reading a newspaper over watching television. For example, Doolittle's study found that older adults spend more time reading newspapers than they do watching television or listening to the radio and that this preference only changed as the older adults started experiencing trouble with their eyesight.

Studies on Interpersonal Communication Behaviour among the Elderly

Schramm (1965) noted that higher degrees of social participation tend to create a sense of involvement, a group bond, a circular pattern of influence and decision making. They provide maximum feedback. Studies by Graney (1974), Gerson (1966), Cowgill (1962), and Doolittle (1979) indicated that the older adults would prefer interpersonal communication over any other medium if they had a choice. Interpersonal communication, as considered in this study, is face-to-face conversation and telephone calls to friends and relatives.

Many senior citizens live alone. Others live with family or friends. Whatever the situation, there is the desire among the majority of them, which could be inferred from previous studies, for more social interaction; consequently, an increase in interpersonal of the other or putting too much emphasis on electronic media as opposed to the print media. It should be noted that there are a number of older adults who are still very active and who would prefer to spend more time reading newspapers and magazines for the extra details than watching television or listening to the radio for summarized information.

RESEARCH METHODOLOGY

Information regarding the research design is categorized into three parts. These parts are as follows: (a) subjects (b) instruments/procedures, and (c) data analysis.

Subjects

The study is concerned with black and white elderly living in the city of Houston. The elderly to be considered here are persons 65 years and older. The age is used because it is the official retirement age as classified by the U.S. Census Bureau.

The city of Houston has a total of 114,291 elderly (age 65 and over). Of this number, 78,993 are white while 26,180 are black.[††] Table 3 shows the breakdown by sex and race of the two groups.

[††] Ibid.

Table 3. Breakdown of Elderly in Houston

Sex	*White*	*Black*
Male	29,948	10,941
Female	49,045	15,239

Source: U.S. Census Bureau Report, 1980.

The sample size of this study was set at 240 and it was drawn from among the two groups (elderly blacks and elderly whites). The choice of 240 subjects is due largely to budgetary constraints. There is no doubt that a larger number of subjects would be even better.

Elderly blacks for this investigation were drawn from federal and states supported centers for senior citizens, retirement homes, churches and private homes and apartments. However, the Third Ward area was the primary site from which most of the subjects were drawn.

Third Ward is located in the near Southside of the city's downtown. This area was selected for the research primarily because it has features that could be found in most big cities across the country. The neighborhood, among other things, is the site of the nation's third largest predominantly black university, Texas Southern University. The Houston Citizens' Chamber of Commerce (which caters to the needs of black business organizations in the city) is also located in Third Ward. The city's only black-owned bank and only black-owned savings and loan association in the State of Texas are also located here. In addition, three of the leading black owned newspapers and two black owned radio stations are located in the community. Yet, it is also one of the low socio-economic neighborhoods in Houston.

These elderly whites were selected from federal and state supported retirement centers, private homes and apartments and churches. The choice of these sites is due largely to their close proximity to both the black neighborhood and the downtown area from which most of the black subjects were drawn.

Data Collection Procedure

A survey questionnaire was developed for data collection. The questionnaire was divided into three sections. Section one had eleven questions designed to determine the demographic or background variables of the respondents. These included age, sex, monthly income, household size, and membership in organizations, race, and respondent's level of education. Section two contained thirty affirmative statements developed to measure the respondent's the respondents were given five choices from which to mark the one that best describes his/her situation. The responses to choose from where (a) strongly disagree, (b) disagree, (c) undecided or don't know, (d) agree, and (e) strongly agree.

The questions in Section Three were on communication habits. This variable had fourteen questions and was to measure the respondent's motivation for choosing one medium of mass communication over the other. Also, it measured the frequency of use of the respondent's choice of medium and preference for programs and sections in electronic and print media, respectively.

The questionnaires were administered by two graduate students. The students received some coaching from a member of the graduate faculty knowledgeable in communication research on how to approach the subjects and how to perform the interview where necessary. The researchers assumed that for either health or educational reasons, some of the subjects might not be able to fill out the questionnaires on their own. To deal with that situation, the

ISSN-L: 2223-9553, ISSN: 2223-9944
Vol. 4 No.3, May 2013

questionnaires were distributed to all of the subjects to fill out. Those who could not fill out the questionnaire were interviewed by the researchers using the subject's responses to complete the questionnaire.

The interview schedule was arranged in advance allowing the management of the center or home enough time to choose a convenient time. There is a large space between the questions to make it easy for the subjects to read. Also, the questionnaires were simplified in regards to sentence wording which was necessary to reduce the amount of time taken to fill out the questionnaire.

The collected responses were categorized and coded into eight groups. These groups represent the eight empirical hypotheses. In each category the responses were structured to respond to the specific proposition of the empirical hypothesis in that category. Also, the responses on the general profile of the subjects were coded separately.

Empirical Hypotheses

The following eight empirical hypotheses were formulated from three general hypotheses.

General Hypothesis 1

There will likely be a significant difference in the choice and use of electronic and print media among older adults of different social backgrounds (in this case blacks and whites).

E.H. 1: Elderly blacks are more likely to spend more hours per day viewing television than elderly whites.

E.H. 2: Elderly whites are more likely than elderly blacks to read newspapers everyday.

E.H. 3: Elderly blacks are more like to spend more time listening to the radio than elderly whites.

E.H. 4: Elderly whites are more likely to consider magazine reading as an important habit than elderly blacks.

E.H. 5: The least likely favoured communication habit among older adults will be reading books.

General Hypothesis 2

Socio-demographics variables are likely to influence the choice and use of the channels of mass communication by elderly blacks and elderly whites.

E.H. 6: Elderly whites are more likely than elderly blacks to use television for entertainment and to pass time.

E.H. 7: Elderly blacks are more likely to use television for companionship and information than elderly whites.

General Hypothesis 3

Interpersonal communication choice by the older adults varies according the ethnicity.

E.H. 8: There is a significant difference between elderly blacks and elderly whites in their choice of interpersonal communications.

METHODS OF ANALYSIS

Two major statistical techniques were used in testing the eight empirical hypotheses in this study. They were the Chi-square formula which was used to test whether there was a

statistically significant relationship between variables in each hypothesis; and to test the strength of the relationship, the Gamma formula was used.

The probability level for accepting statistically significant relationships in the hypotheses tested was set at .05. The .05 level of probability indicated that no more than five times in one hundred can the results of the hypotheses tested be due to chance. In an attempt to show the relative significance of the hypotheses, the .01 and .001 levels of significance were reported.

PRESENTATION OF RESULTS

The results and profile of the elderly blacks and elderly whites surveyed are presented in this chapter. Three general hypotheses were extracted from the review of literature on the elderly and mass media use. A total of eight observable empirical hypotheses were derived from the three general hypotheses. This section of the study presents the results of the hypotheses tested.

Profile of the Elderly Blacks and Elderly Whites

In order to understand the subjects used in this investigation, it is important to take a close look at their socio-demographic backgrounds. Elderly blacks and elderly whites in this investigation show essentially similar socio-demographics (See Table 4). There are a number of cases in which a departure is attributed to the number of subjects tested in each of the two groups rather than a substantial shift in quality.

The data in Table 4 show that 23 percent of the elderly surveyed had only grade school education. Of this percentage, blacks accounted for 11.3 percent, with whites accounting

For 11.7 percent. The findings also show that 42.1 percent of the subjects had some college education and beyond the four year college degree level of education. In this category, blacks constituted 18 percent and elderly whites 24.1 percent. In these instances, the two groups were similar.

A profile of the types of residence and size of household shows similarity between the two groups. There are sixty-three elderly (among the subjects) living in private homes. This number accounts for 26.3 percent of the subjects surveyed. Blacks account for 12.5 percent with 13.9 percent being accounted for by whites. The data also show that 35 percent of the elderly surveyed live in a nursing/retirement home with 16.7 percent of this being blacks and 18.3 percent being whites. Nearly half (48.3 percent) of the elderly live alone. A breakdown of this percentage shows blacks being 22 percent and whites 26.3 percent. Here again, the data confirm the similarity between the elderly blacks and elderly whites relative to the type of residence and household size.

Personal income, like all other characteristics presented earlier, shows similarity between the two groups. The data reveal that only 27.5 percent of the elderly surveyed have a monthly income of $300 or less. Blacks represented 12.9 percent and whites 14.6 percent in this category. However, the similarity between the two groups' monthly income is apparent for those persons in the $301-$500 per month category and persons in the $2,000 per month and over category. In the former category, each of the two groups (blacks and whites) constitutes 8.3 percent. In the latter category, only 8 percent of the elderly surveyed are included, with blacks accounting for 4.2 percent and whites accounting for 3.8 percent.

Finally, we should remember that 43.8 percent of these older people live alone, thus indicating that they have small households. Most of them derive income from tax-free social security payments, and others have income from pension funds; so their income problems are

ISSN-L: 2223-9553, ISSN: 2223-9944
Vol. 4 No.3, May 2013

not as severe as they might appear in the first consideration. A few of them still hold paying jobs.

Table 4. Socio-demographic Profile of Elderly Blacks and Whites Surveyed

Race	*Frequency*		*Percent*	
Black	112		46.7	
White	128		53.3	
Sex	*Black*	*White*	*Black*	*White*
Male	47	53	19.6	22.1
Female	65	75	27.1	31.5
Level of Education				
Grade School	27	28	11.3	11.7
Some High school	18	22	7.5	9.2
Graduated High School	14	29	5.8	12.0
Some College	19	32	7.9	13.3
Graduated College	15	19	6.3	7.9
Beyond College Degree	9	7	3.8	2.9
No Response	1	0	0.4	0.0
Household Size				
One	53	63	22.0	26.3
Two to Three	25	22	10.4	9.2
Three to Four	20	32	8.3	13.3
Four and Over	12	8	5.0	3.3
No Response	1	4	.4	1.7
Monthly Income				
Less than $300	31	35	12.9	14.6
$301-500	20	20	8.3	8.3
$501-800	24	34	10.0	14.2
$801-1500	13	23	5.4	9.6
$1500-2000	10	9	4.2	3.8
Over $2000	3	5	1.3	2.9
No Response	11	2	4.6	0.8
Type of Residence				
Private home	30	33	12.5	13.8
Apartment	18	21	7.5	8.8
With Relatives	23	27	9.6	11.3
Nursing Home/Retirement Center	40	44	16.7	18.3
Other	0	3	0.0	1.3
No Response	1	0	.4	0.0

With such closely related socio-demographic qualities as presented in Table 5, it seems, therefore, that both elderly blacks and whites surveyed exhibit characteristics that validate the relationship between both groups in their choice and use of mass media channels.

General Hypothesis 1

There will likely be a significant difference in the choice and use of electronic and print media among older adults of different racial backgrounds (in this case blacks and whites).

Time Spent Per Day Watching Television

The issue of whether elderly blacks and elderly whites, with similar socio-demographic backgrounds, will differ significantly in the length of time spent per day watching television is crucial in any effort at segmenting appeals directed at both groups. The assumption that older adults, regardless of race, spend the same amount of time watching television has led daily to the unintentional insensitiveness to the communication needs of the elderly blacks by program producers. Programs aimed at the older adults are usually designed with the whites as research subjects. Also, they were often expected to appeal to all other adults.

The first empirical hypothesis (E.H. 1) which described the relation between race of older adults and the number of hours spent per day watching television was presented in Table 5. The results show that E.H. 1 was supported by the data. Blacks are more likely to spend more hours per day viewing television than whites. The responses to the question of how many hours per day do you spend watching televisions ranges from one hour per day (the least) to eight hours per day (the maximum). The data show that 18 (8.2 percent) blacks spend from seven to eight hours a day watching television compared to 11 (5.1 percent) whites. The chi-square was 14.01 and the

Table 5. Time Spent Watching Television per day by Race

	Time Spent (Hours)								
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	8+	Total
	7	13	13	30	8	14	9	9	N=103
Black	3.2%	6.0%	6.0%	13.8%	3.7%	6.5%	4.1%	4.1%	
White	0	12	18	40	12	21	3	8	N=114
	0.0%	5.5%	8.3%	18.4%	5.5%	9.7%	1.4%	3.7%	
Total	7	25	31	70	20	35	12	17	N=217
	3.2%	11.5%	14.3%	32.3%	9.2%	16.1%	5.5%	7.8%	100.0

$X^2 = 14.01$, 7df, $p = 0.5$, gamma = .039

Twenty-three observations were missing from the data.

Gamma was .039, which represents a significant relationship between race and his length of time spent watching television.

Elderly blacks and elderly whites were asked to indicate how many hours per day they spend watching television. A distribution of responses to this item is presented in Table 5. The data are listed showing the indication by hours per day of both groups. Overall, four hours per day tops the list of hours per day spent watching television with 70 (32.2 percent) of 240 older adults responding to this item. A breakdown of the responses shows that 30 (13.8 percent) elderly blacks responded to this item while 40 (18.4 percent) elderly whites opted for the

ISSN-L: 2223-9553, ISSN: 2223-9944
Vol. 4 No.3, May 2013

same. Because responses ranged from one hour per day (the least) to eight hours per day (the most), we need the maximum number of hours per day to determine the significance rather than the number of responses.

A combination of older adults spending between seven and eight hours a day watching television shows more blacks, 18 (8.2 percent), than whites, 11 (5.1 percent), as opposed to no whites in the one hour per day category. Elderly whites seem to fall within the average hours rather than the two extremes (or eight hours per day). Blacks, with 13 (6 percent) responding to the two hours per day category, top the whites with 12 (5.5 percent) responding. The three hours per day category shows more whites (8.3 percent) than blacks (6 percent) responding to this item.

The same pattern follows in the five hours per day and six hours per day categories, with whites representing 12 (5.5 percent) and blacks representing 21 (9.7 percent), respectively. Thus, we can conclude that since elderly blacks spend more hours per day watching television than their white counterparts, E.H. 1 supported by this data is justified.

Newspaper Reading Pattern by Race

If whites spend less time per day watching television than their black counterparts, it may be because they (whites) spend more time doing something else. Empirical hypothesis 2 (E.H. 2) predicted that elderly whites are more likely than elderly blacks to read the newspaper every day. The findings of this test are presented in Table 6. The data show 78 (33.8 percent) of the people surveyed as daily newspaper readers. Of this number, only 28 (12.1 percent) are black. On the other hand, the data revealed that 38 (16.5 percent) of the blacks surveyed do not read the newspaper as compared to 27 (11.7 percent) whites. A chi-square of 9.20 and a gamma of .25 indicate a fairly strong relation between newspaper readership and race. Therefore, the data support the hypothesis.

Table 6. Daily Newspaper Reading by Race

	BLACK	*WHITE*	*TOTAL*
Never/Seldom	38 (16.5%)	27 (11.7%	65 (28.1%)
1 to 2 times	25 (10.8%)	23 (10.0%)	48 (20.8%)
Every day	28 (12.1%)	50 (21.6%)	78 (33.8%)
Only on Sundays	16 (6.9%)	23 (10.0%)	39 (16.9%)
Total	107 (100.0%)	123 (100.0%)	230 (100.0%)

$X^2 = 9.20$, 4df, P = .05, gamma = 0.258
Nine observations were missing from the data.

Time Spent Listening to the Radio by Race

Like television, radio does not require active involvement on the part of the listener. Unlike the newspaper which engages the reader's attention, radio is audio and one is never concerned with actively watching as in the case of TV or reading as in the case of the newspaper, thus, making participation more passive than in any other medium of mass communication. Also unique about radio is the quality of being easily segmented to serve the needs of any specific targeted audience. It is, therefore, not surprising that Empirical Hypothesis 3 predicated that blacks are more likely to spend more time listening to the radio

than whites. Table 7 presents the data on the findings. As shown in the table, 32 (13.7 percent) blacks spend four or more hours daily listening to the radio as compared to 26 (11.2 percent) whites in the same category. Thus, these data support E.H. 3 which statistically is significant at the .04 level of probability; the chi-square was 8.06 with 3 degrees of freedom and a gamma of -.27 was found. These statistical tests clearly illustrate that a significant relationship exists between time spent listening to the radio and race.

Ranking Magazine Reading Habits

Considering the high degree of involvement associated with buying and reading a magazine, one would assume that fewer

Table 7. Time Spent Listening to Radio per Day by Race

Time Spent (Hours)	*Black*	*White*	*Total*
0-2	14 (6.0%)	26 (11.2%)	40 (17.1%)
2-4	38 (16.3%)	54 (23.2%)	92 (39.5%)
4-6	26 (11.2%)	21 (9.2%)	47 (23.2%)
6+	32 (13.7%)	22 (9.4%)	54 (23.2%)
Total	110 (100.0%)	123 (100.0%)	233 (100.0%)

$X^2 = 8.06$, 3df, P = .04 gamma = .277
Seven observations were missing from the data.

Elderly blacks than whites would consider it an important habit. The data in Table 8 present the results of testing E.H. 4. This hypothesis says that elderly whites are more likely to consider magazine reading as an important habit than elderly blacks. The findings indicate that 44 (20.9 percent) of those surveyed considered reading a magazine an important habit. Surprisingly, blacks and whites who consider reading magazines an important habit are almost divided evenly, 21 (10 percent) blacks and 23 (10.9 percent) whites. Thus, the data reject the hypothesis. The chi-square was 5.25 with 3 degrees of freedom and the gamma was 0.14. The rejection of the hypothesis suggests that there is no statistically significant relation between race and magazine reading habits.

Table 8. Ranking Magazine Reading as a Habit by Race

Ranking	*Black*	*White*	*Total*
Not Important	27 (12.8%)	15 (7.1%)	42 (19.9%)
Somewhat important	27 (12.8%)	33 (15.3%)	60 (28.4%)
Fairly Important	28 (13.3%)	37 (17.5%)	65 (30.8%)
Very Important	21 (10.0%)	23 (10.9%)	44 (20.9%)
Total	103 (100.0%)	108 (100.0%)	211 (100.0%)

X = 5.250, 3df, P = .15 gamma = .149
Twenty-nine observations were missing from the data.

There could be some possible explanations for the rejection. Magazine, like radio, is a highly segmented medium of communication. Most magazines are written for a specific audience;

ISSN-L: 2223-9553, ISSN: 2223-9944
Vol. 4 No.3, May 2013

and since there are many types appealing to different interests, it is likely that each of the racial groups will find one magazine or another appealing to its needs.

Book Reading Habits

Book reading demands more than the casual attention from the reader. It seems, therefore, that as a channel of communication, it will be the least favoured by older adults, regardless of race. The data in Table 9 present the test

Table 9. Ranking Book Reading as a Habit by Race

Ranking	*Black*	*White*	*Total*
Not Important	30 (14.6%)	29 (14.1%)	59 (28.6%)
Somewhat important	27 (13.1%)	39 (18.9%)	66 (32.0%)
Fairly Important	22 (10.7%)	21 (10.2%)	43 (20.1%)
Very Important	24 (11.7%)	14 (6.8%)	38 (18.4%)
Total	103 (100.0%)	103 (100.0%)	206 (100.0%)

$X^2 = 4.85$, 3df, P = .18 gamma = .11
Thirty-four observations were missing from the data.

On E.H. 5. The data reject the hypothesis. Only 59 (28.6 percent) of the 206 persons who responded to the item said reading books as a habit is not important. Nearly three-fourths (71.4 percent) of the older adults surveyed indicated their responses which ranged from somewhat important to very important. The chi-square was 4.85 with 3 degrees of freedom and the gamma was –.11. Contrary to the hypothesis, findings show a strong relation between older adults and reading books as a habit.

General Hypothesis 2: Socio-demographic variables are likely to influence the choice and use of the channel of mass communication by elderly blacks and elder whites.

Use of Television by Race

There is no doubt that television viewing, since its inception, has become a major activity in the life of older adults. This, however, does not mean that the blacks and their white counterparts use the medium for the same purpose. Empirical Hypothesis 6 predicted that elderly whites are more likely than elderly blacks to use television for entertainment and to pass time. Table 10 presents the findings on this predication. As indicated in the table, whites constituted 18 percent of the respondents choosing entertainment as their purpose for watching television as compared to 6 percent blacks. Also, the data show that 4.3 percent of the respondents who watch television to Pass time were whites, with no blacks in this category. Thus, a statistically significant relationship was found which supports Empirical Hypothesis 6. A chi-square of 37.45 and a gamma of .31 with 7 degrees of freedom indicating a fairly strong relationship, thus confirming that there exists a relation between race and use of television.

Purpose of TV by Race

Using the same table (Table 10) as E.H. 6, E.H. 7 predicted that blacks are more likely to use television for companionship and information than whites. The data (Table 10) show blacks with 13.7 percent for companionship and 12.9 percent for information. On the other hand, the

data revealed that only 4.7 percent and 9.9 percent of the whites responded to the items on companionship and information, respectively. These data revealed that Empirical Hypothesis 7 (E.H. 7) was supported by the data. A chi-square of 37.45 and a gamma of .31 were found to be statistically significant at the .001 level of probability. This shows that a significant relationship exists between race and use of television.

Table 10. Determining Reason or Purpose for Watching TV by Race

Reason	*Black*	*White*	*Total*
Companionship	32 (13.8%)	11 (4.7%)	43 (18.5%)
Relaxation	25 (10.7%)	24 (10.3%)	49 (21.0%)
Entertainment	14 (6.0%)	42 (18.0%)	56 (24.0%)
Information	30 (12.9%)	23 (9.9%)	53 (22.7%)
Nothing better to do	3 (0.4%)	5 (2.1%)	8 (3.4%)
To escape	1 (0.4%)	4 (1.7%)	5 (2.1%)
To pass time	0 (0.0%)	10 (4.3%)	10 (4.3%)
Other	3 (1.3%)	6 (2.6%)	9 (4.3%)
TOTAL	108 (100.0%)	125 (100.0%)	233 (100.0%)

$X^2 = 37.46$, 7df, P = .001, gamma = .32
Seven observations were missing from the data.

General Hypothesis 3

There is a significant difference between elderly blacks and elderly whites in their choice of interpersonal communication.

Data on Tables 11(a) and 11(b) are combined to determine whether or not blacks and whites vary in their choice of interpersonal communication. Essentially, the two tables were used to determine what percentage of each racial group chooses interpersonal communication as a necessary channel of communication. To support or reject E.H. 8 which says that there is a significant difference between elderly blacks and elderly whites in their choice of interpersonal communication, two questions were tested separately in Tables 11(a) and (b). Data on Table 11(a) specifically tested the question: Do you spend enough time communicating with family, relatives, or friends by telephone or mail? The data revealed that 64.6 percent of the persons surveyed said yes. Interestingly, 27.9 percent of the positive responses were blacks compared to 36.7 percent for whites. There was a chi-square of 1.7 and a gamma of –.19 indicating no statistically significant difference between blacks' and whites' responses.

Similarly, data on Table 11(b) specifically tested the question: Do you usually have enough opportunity for conversations with other people? With a sample response of either yes or no, we found no statistically significant difference. The table shows 37.2 percent of the blacks said yes as compared to 38.1 percent whites. A chi-square of 1.5 and a gamma of .20 were found. This illustrates the non-existence of a significant difference between the two groups.

ISSN-L: 2223-9553, ISSN: 2223-9944
Vol. 4 No.3, May 2013

Thus, Empirical Hypothesis 8 was rejected by the data. Of the two questions tested for this hypothesis, the first

Table 11 (A). Assessing Degree of Interpersonal Communication by Race

Do you spend time communicating with Your family?	*Black*	*White*	*Total*
Yes	72 (30.1%)	83 (34.7%)	155 (64.9%)
No	40 (16.7%)	44 (18.4%)	84 (35.1%)
Total	112 (100.0%)	127 (100.0%)	239 (100.0%)

X^2 = .001, 1df, P = .97, gamma = 1.02
One observation was missing from the data.

Table 11 (B). Assessing Conversation Opportunity by Race

Usually have enough conversation opportunity.	*Black*	*White*	*Total*
Yes	89 (37.2%)	91 (38.1%)	180 (75.3%)
No	23 (9.6%)	36 (15.1%)	59 (24.7%)
Total	112 (100.0%)	127 (100.0%)	239 (100.0%)

X^2 = 1.55, 1df, P = .2, gamma = 2
One observation was missing from the data.

One was to justify the fact that visiting offers an opportunity for interaction with others, thus stimulating communication. The second question simply justifies the assumption that, if you hold conversations with people during most of our free time, it will likely reduce your use of another medium.

Table 12. Summary of Empirical Hypotheses Tested

Empirical Hypotheses	*Chi Square*	*Gamma*	*Probability Level*	*Decisions*
Time spent watching television per day by reading	14.01	.03	.05	Accept
Daily newspaper reading by race	9.20	.25	.05	Accept
Time spent listening to radio per day by race	8.06	.27	.04	Accept
Ranking magazine reading as a habit by race	5.25	.15	.15	Reject
Ranking book reading as a habit by race	4.85	.11	.18	Reject
Determining reason or purpose for watching television by Blacks	37.46	.32	.001	Accept
Determining reason for watching TV by whites	37.46	.32	.001	Accept
There is a significant difference in interpersonal communication between races	a) .001	-.02	.97	Reject
	b) 1.55	0.2	0.2	Reject

Five of the eight empirical hypotheses which were tested in the study were confirmed and three rejected by the data. See Table 12 for the summary of the results. The confirmation of nearly two-thirds (62.5 percent) of the research hypotheses clearly indicates that elderly blacks and elderly whites differ significantly in their choice and use of mass media channels.

SUMMARY OF FINDINGS

The survey of the comparative use of mass media by elderly blacks and elderly whites in Houston provided a depictive analysis of senior citizens' (Blacks and Whites) characteristics, communication medium choice and use patterns. Although blacks and whites choice and use pattern. Although blacks and whites surveyed exhibit similar socio-demographic qualities, there exists between them a substantial differences in the choice of electronic and print media. The use of television by both groups differs significantly, too. However, blacks and whites in this study show no statistically significant difference in interpersonal communication choice and use patterns.

This study, thus, strengthens a number of hypotheses. These include (a) that elderly blacks spend more time daily watching television and listening to the radio than their white counterparts; (b) elderly whites read the newspaper more often than elderly blacks with similar levels of education, income, and other basic socio-demographic variables; (c) elderly blacks use television primarily as a source of information and companionship; and (d) on the other hand, elderly whites use television primarily for entertainment and to pass time. This may explain why elderly whites read the newspaper daily perhaps for information.

The study, on the other hand, rejected hypotheses that suggested the existence of differences between older adults specifically blacks and whites in a number of habits. These are (a) that both elderly blacks and elderly whites consider reading books and magazines as an important habit and (b) that both groups show no significant difference in their choice of interpersonal communication to justify segmenting the two groups for appeals using this medium. In conclusion, elderly blacks and elderly whites, with essentially the same characteristics, are significantly different in their choice and use of mass media channels.

STUDY IMPLICATIONS AND RECOMMENDATIONS

Granting that significant differences exist between elderly blacks and elderly whites in their choice and use of mass communication channels, it thus implies that media establishments have a great deal to gain by segmenting programs aimed at the elderly.

1. Specific communication needs of the elderly blacks will need to be identified through extensive research by the media organizations. It is necessary for such research to actively solicit and recruit elderly blacks as subjects. The same should be done in relation to other races.
2. Elderly blacks' se the television as a source of information of any interest to elderly blacks be presented more often on television and radio rather than in the newspaper. By the same token, information aimed at or of interest to the elderly audience should be presented more often in the newspaper.
3. The input of blacks is necessary in the design of programs aimed at them. Also, more air time should be given to programs that appeal to the elderly blacks. This will invariably compensate for the minimum time they spend reading newspapers.
4. Politicians and other public policy makers will need to address elderly blacks specifically using the appropriate medium during elections or any together. By so doing, appeals aimed at this segment of the society could be more effective.

ISSN-L: 2223-9553, ISSN: 2223-9944
Vol. 4 No.3, May 2013

5. With social security benefits, pension funds, and better money management, elderly blacks could be considered a major market segment by advertisers. Thus, through knowledge of not only what products they buy most but also the communication use pattern of the group (elderly blacks) is essential to the success of any new product introduced into the market that aims at elderly blacks.
6. High involvement appeals using an interpersonal communication medium must actively do so among all older adults regardless of race. Older adult's interpersonal communication need shows no significant difference. Therefore, any differences in the effect of a specific appeal both elderly blacks and elderly whites suing interpersonal communication could be interpreted as individual rather than a racial difference.

AREA FOR FURTHER RESEARCH

Further studies on media use patterns among elderly blacks and elderly whites, emphasizing the influence of health of the respondent on their choice and use of media channel, should be explored. The time of day when each group (blacks and whites) watches television or listens to radio intensively should be studied if we are going to understand when to air specific programs. Further studies in these areas and current findings on the two groups will invariably provide for a better understanding of their communication need and use patterns.

REFERENCES

Allen, R. L., & David E. C. (1980). Ethnicity and Mass Media Behaviour: A Study of Blacks and Latinos, *Journal of Broadcasting,* 24: 23-34.

Arnoff, C. (1979). Old Age in Prime Time, *Journal of Communication Gerontologist*, 19:23-43.

Barton, R. L. & Elliot, S. (1978). Media and Aging: A Critical Review of an Expanding Field of Communication Research, *Central States Speech Journal*, 29:173-186.

Bogart, L. (1972). Negro and White Media Exposure: New Evidence, *Journalism Quarterly,* 49:15-21.

Broussard, Joseph,et al., (1980). News of Aged and Aging in Ten Metropolitan Dailies, Journalism Quarterly, 57:324-327.

Butler, R. N. (1979). Breaking Images: The Media and Aging, *Columbia Journalism Monographs,* 3:37-45.

Carey, J. W. (1966). Variations in Negro/White Television Preferences, *Journal of Broadcasting,* 10:199-212.

Cassata, M. B. et al., (1980). The older Adult in Daytime Serial Drama, *Journal of Communication,* 30:48-49.

Clyde, R. W. (1968). News Readership as a Function of Several Affective Characteristics, *Journalism Quarterly,* 45:535-537.

Cowgill, D. O. & Baulch, N. (1962). The Use of Leisure Time by Older People, *The Gerontologist,* 2:47-50.

Cutler, N. E., & Danowski, J. A. (1980). Process Gratification in Aging Cohorts, *Journalism Quarterly,* 57(2).

Danowski, J. A. & Hanneman, G. J. (1980). Aging and Preferences for Interactive Cable Services, *Journal of Broadcasting,* 24(3): 337-345.

Davis, R. H. (1972). Television and Older Adults, *Journal of Broadcasting*, 15:153-159.

Davis, R. H., Bartel, D. J. & Matin, D. (1976). Assessing Television Viewing Behaviour of older Adults, *Journal of Broadcasting,* 20:77-78.

Dimmick, J. W., Thomas, A., McCain, & Theodore, W. B. (1979). Media Use and the Lifespan, *American Behavioural Scientist,* 23:7-31.

Doolittle, J. C. (1979). News Media Use by older Adults, *Journalism Quarterly,* 56:311-317, 345.

Gantz, Walter, et al., (1980). Approaching Invisibility: The Portrayal of the Elderly in Magazine Advertisements, *Journal of Communication,* 30:56-60.

Gerbner, George, et al., (1980). Approaching Invisibility: The Portrayal of the Elderly in Magazine Advertisements, *Journal of Communication,* 30:37-47.

Gerson, W. M. (1966). Mass Media Socialization Behaviour: Negro-White Differences, *Social Forces*, 45:4-50.

Glick, P. C. (1979). The Future Marital Status and Living Arrangements of the Elderly, *The Gerontologist,* 19:301-309.

ISSN-L: 2223-9553, ISSN: 2223-9944
Vol. 4 No.3, May 2013

Graney, M.J. (1975). Communication Uses and the Social Activity Constant, *Communication Research,* 2:347-366.

Hwang, J. (1974). Aging and Information, *Communication,* 3:58-61.

Jones, J. (1967). Congressional Report on Aging. Presented to the U.S. Senate Committee on Aging, Washington, D. C.

Kaluger, G., & Kaluger, M. F. (1979). *Human Development.* 2nd Edition. St. Louis: C. V. Mosby,

Kent, K. & Rush, R. R. (1976). How Communication Behaviour of Older Persons Affect Their Public Affairs Knowledge, *Journalism Quarterly,* 53:40-46.

Korzenny, F. & Kenndorf, K. (1980). Television Viewing and Self-Concept of the Elderly, *Journal of Communication,* 30:71-80

Lee, E. B. & Louis, B. (1981). Television Uses and Gratification Among Black Children, Teenagers and Adults, Jo*urnal of Broadcasting,* 25:203-208.

Morrision, A.J. (1979). Mass Media Use by Adults, *American Behavioural Scientist*, 23:71-93.

Peterson, M. (1973). The Visibility and Image of Older People on Television, *Journalism Quarterly,* 50:569-573.

Pfeiffer, E. (1977). Psychopathology and Social Pathology, in J. E. Birren and K. W. Schaie (eds.) *Handbook of the Psychology of Aging*. New York: Van Nostrand Reinhold.

Phillips, L. W. & Sternthal, B. (1977). Age Differences in Information Processing, *Journal of Marketing Research,* 14:444-457.

Plain Talk About Aging: (1983). U.S. Department of Health and Human Services, Vol. 12, Fall p. 3.

Price, G. (1956). Notes on a Usage Study Technique, *Journalism Quarterly,* 33:524-526.

Real, M. et al., (1980). Television Access for Older Adults, *Journal of Communication,* 30:81-88.

Rubin, A. M. (1982). Directions in Television and Research, *Journal of Broadcasting,* 26:537-551.

Rubin, A. M. (1982). Contextual Age and TV Use Reexamining a Life Position Indicator, in Burgoon, M. (ed.) *Communication Yearbook 6*. Beverly Hills: Sage Publications, pp. 583-604.

Rubin, A. M. (1982). Older Persons' Television Viewing Patterns and Motivations, *Communication Research,* 9 (2): 287-313.

Rubin, A. M., & Rubin, R. B. (1982). Contextual Age and Television, *Human Communication Research,* 8 (3): 228-244.

Rush, R. & Kent, K. K. M. (1976). Communication Channel Selection Considerations for Reaching Older Persons: Part 1, *Educational Gerontology,* 1:379-388.

Rush, R. and Kent, K. K. M. (1977). Communication Channel Selection Considerations for Reaching Older Persons: Part II, *Educational Gerontology,* 2:71-84.

Salisbury, P. A. (1981).Older Readers: Newspaper Readership After Age 65, *Newspaper Research Journal,* 3 (1): 38-44.

Schramm, W. (1949). Age, Education, Economic Status: Factors in Newspaper Reading, *Journalism Quarterly,* 26:149-159.

Schreiber, E. & Douglas A. B. (1980). How the Elderly Perceive Television Commercials, *Journal of Communication*, 30:61-70.

Sharon, A. T. (1974). Racial Differences in Newspaper Readership, *Public Opinion Quarterly*, 38:611-617.

Stephens, N. (1981). Media Usage and Media Attitude Changes with Age and with Time, Journal of Advertising, 10 (1): 38-48.

Stroman, C. A. & Lee, B. B. (1978). Racial Differences in Gratifications, *Journalism Quarterly*, 55: 767-771.

Swank, C. (1979). Media Use and Gratifications: Need Salience and Source Dependence in a Sample of the Elderly, *American Behavioural Scientist*, 23:95-117.

Tan, A. S. (1978). Evaluation of Newspapers and Television by Blacks and Mexican-Americans, *Journalism Quarterly*, 55:673-681.

U.S. Bureau of the Census, (1980). Current Population ReportSeries,, P-37.

Weaver, D. H., Wilhoit, G. C. & Paul, R. (1979). Personal Needs and Media Use, *ANPA News Research Report #21*,:2-7.

Wells, W. D. & Gubar, G. (1966). Life Cycle Concept in Marketing Research. *Journal of Marketing Research,* 3:355-365.

Wenner, L. (1976). Functional Analysis of Television Viewing for Older Adults. *Journal of Broadcasting,* 20, 77-88.

Williams, Frederick, and Howard Lindsay. Ethnic and Social Class Differences in Communication Habits and Attitudes, *Journalism Quarterly,* 1971, 48, 672-678.

Young, T. J. Use of the Media by Older Adults, *American Behavioural Scientist,* 1979*, 23*(1): 119-136.