# MASS MEDIA CHANNEL REPERTOIRE: <br> MOTIVE, RESIDENTIAL LOCATION, TYPE OF MEDIUM <br> AND RESIDENT TYPE AS PREDICTORS OF MEDIA ACTIVITY 

by

CLARENCE JOSEPH COTTON, JR.

(Under the direction of Joseph R. Dominick, Ph.D.)


#### Abstract

Is a respondent's residential location a significant variable in explaining the formation of a channel repertoire from among the mass media available in distinct geographic regions? Four hundred eighteen college students completed surveys between the spring of 1997 and the fall of 2000. Respondents identified which interpersonal and mass media activities they were most likely to use to satisfy nine Uses and Gratification motives. A Chi-Square and t-test were used to determine the likelihood that a medium would be used to satisfy a particular motive and the number of media included in a respondent's channel repertoire, respectively. Results indicate that for certain motives urban respondents were more likely to use interpersonal and mass media activities than rural respondents. Further, urban respondents have a larger number of mass media activities in their repertoire than rural respondents. Most notably, the control variables (race, gender and income level) were better predictors of media activity than residential location, type of medium or resident type.


INDEX WORDS: Uses and Gratifications, Mass Media Use, Urban, Rural, Channel Repertoire, Active Audience, Media Ecology

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DOCTOR OF PHILOSOPHY

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## DEDICATION

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## CHAPTER 1 INTRODUCTION

## 1. Purpose of Study

Does residential location (e.g. urban, suburban, rural) influence an individual's need to use mass media channels? Is a respondent's ecological environment a significant variable in explaining the formation of a channel repertoire from among the available mass media in distinct geographic locations? In this formulation residential location refers to the physical space occupied by a respondent. Channel repertoire refers to the inclusion of available mass media to fulfill needs based upon a uses and gratifications analysis into some motivations for mass media use.

The mass media as a group are the most pervasive vehicles for communicating society's news, information, entertainment, culture, mores and values to a large, diverse and heterogeneous body (Carey, 1989). As such, a clearer understanding of possible relationships among environmental variables and the mass media's ability to effectively communicate messages to mass audiences is crucial. An empirical analysis of the relationship between mass media use and the evaluation of such use by an active audience (Berelson, 1949; Katz, Gurevitch \& Haas, 1973) may provide salient clues into the nature of residential location and other socio-economic predictors of mass media use.

Our reality is bounded by interaction with the natural environment. Today, this interaction inevitably includes the use of various media channels that are acknowledged as significant agents in the quest to make sense of our surroundings. An investigation
into the variety of methods used by humans for diversion, personal relationship development and maintenance, to bolster their personal identity and for surveillance of their physical environment is the catalyst for this study. This study supposes that the relationship between residential location and user access to, and use of, the media channels that deliver mass mediated messages into our lives is a worthwhile study.

When humans had only the primitive technologies of unmediated human speech and early writing, the reach of an idea was limited by the energy of the scribe, the cost of papyrus, and the maximum volume of the speakers voice before the milling crowd (Innis, H., 1950). Routinely, the recording of social interaction and government was limited to what took place nearby; politics and culture were set by geographic parameters and the information which traveled between communities transversed these distances by interpersonal means. In the age of mass communications, developments in communication have required the learning of special skills, such as reading, writing, and computer use. Further, the mass media have required the use of expensive equipment such as printing presses, motion picture studios, broadcasting facilities and computer networks. This has imposed some limits on who can receive communications and even severer limitations on who can control their dissemination (Lacy, 1996).

Ecological limitations on who could receive communications began to significantly erode during the nineteenth century. In the mid nineteenth century formalized public education efforts lead to increases in literacy by mass audiences, modes of transportation became mechanized, and retrieval systems allowed for mass consumption of information. At the turn of the nineteenth century, the public's appetite for information was high and it was fed by thousands of penny papers across the nation.

By 1922 Walter Lippmann marveled at the tension created by public demand for information concerning complex events happening at a distance. It seemed that the few fragments of information available to the average citizen about macro-level societal events were insufficient in the citizen's quest to evaluate and navigate his or her environment.

Today, the numerous national, regional and local networks of mass media channels and content routinely provide timely, and often, immediate information about the lives of people and events on earth and beyond. The intricate network of digital media: satellites, optical fiber, and coaxial cable and now, internet-based and wireless communication bring audiences information about events in densely populated urban areas and from the sparsely populated outposts of human awareness. In relative terms, it seems humankind's ability to send and receive real time information about distant events has overcome the limits of geography.

The purpose of this study is to examine if geographic residential location is a significant variable in explaining the identification, selection and formation of a repertoire of mass media channels by an active and purposive audience.

## II. Differences in the Polar Nature of Urban and Rural Life

The cities and their surrounding suburbs have come to represent aggregated metropolitan markets around which television and radio broadcasting and newspapers are organized. Urbanization is one of the critical defining characteristics of industrial society. Originally built around navigable ports and rivers, or sources of water power and, later, railroad junctions, cities have evolved as social, cultural and commercial
centers in their own right. The growth of suburban belts around American cities following World War II had dramatic effects on the character of the cities themselves, but relatively little effect on the media that served them (Herzog, 1944).

The distance from the periphery to an urban center appears to be influential in media use even in developing countries (Katz et. al., 1973). Various studies have shown that migrants from rural areas living in suburban fringes of large cities quickly adopt media habits similar to those of the urban center and develop media use habits similar to those of more affluent city dwellers. For instance, Mishra (1970) found that suburban slum dwellers had greater radio and newspaper use than would have been predicted from general population media use averages for Indian media users. Similarly, in rural areas, media use may be greater than averages would predict. MacLean (1952) found greater farmer use of magazines than that of small city or village residents in Minnesota. Frey (1966) found that rural Turkey residents made greater use of newspapers than subscriptions would imply - readership per copy was higher than in the city. This implies a greater use of media for information seeking by rural people, and it also hints at a more important social context for media use in rural areas.

As the technical constraints (limited spectrum allocations, lack of interconnectivity, multiple platforms, limited bandwidth, investment expenditures, etc.) begin to fall away, there is more opportunity for mediated communications. This increase in the number and type of mass media channels may mean an increase in availability, but how will this availability diffuse in rural areas where identification of media channels and adoption by individuals is often precipitated by interpersonal communications (Rogers and Shoemaker, 1971). Furthermore, rural sociologists concede
that "unprecedented changes, propelled by the way we produce and use information are happening in North American as well as elsewhere" (Dillman, 1983: 346). These changes are having differing consequences upon rural and urban localities, but "very little attention has been given to what the differential consequences might be"(Dillman, 1983).

## A. Measuring the Sociological Concepts of Urban and Rural

Since the terms "urban" and "rural" are often used glibly, definitive conceptualizations are as various as the academic disciplines which systematically analyze these concepts. This is true despite the fact that the rural and urban segments of the population present great contrasts. The difficulties of making a clear-cut destination between the two population groups arise from at least two major problems. The first is the impossibility of utilizing simple statistical categories in delineation. The second is that it is almost impossible to categorize rural-urban differences (Bertrand, 1958).

Traditionally, small, isolated, homogeneous and economically independent communities are considered "rural" and those communities with large heterogeneous populations and complex technologies are considered urban. But with the rapid changes in modern societies, many researchers have noted the convergence of rural and urban ways of life, and "an increasing degree of interdependence between the city and the countryside" (Fuguitt, 1963; 257).

These studies suggest either that rural/urban differences are no longer salient variables of social life or that the variables themselves need clarification. The latter is assumed in this study. Many social scientists have identified some of the more crucial conceptual and empirically measurable differences involved (e.g. Wirth, 1938; Redfield,

1941; Duncan, 1957; Dewey, 1960; Hauser, 1965; Morris, 1968; Gans, 1962; Lewis, 1965; Sjoberg, 1964; Gibbs and Martin, 1962; Greenberg and Dominick, 1970 and Hindman, 2000). Various approaches have been tried, yet the need for conceptual and methodological refinement remain.

In the early social science literature, the study of rural/urban patterns was considered to be very significant. Most of the well-known sociologists were occupied, in one way or another, with an attempt to explain the differences in the social life of rural and urban societies. Maine's (1930: status and contract, Tonnies; (1940) Gemeinschaft and Gesellschaft, Durkheim's (1947) organic and mechanical solidarity and Becker's (1950) sacred and secular dichotomies are attempts to explicate the essential nature of the urbanization phenomena. These researchers sought to answer the question, "What are the organizational, cultural and psychological consequences and accompaniments of the transformation of a society from a rural situation to an urban one?"

In their pursuit of the same question, Sorokin and Zimmerman (1929), Wirth (1938), Redfield (1941, 1947), Smith (1947), and Loomis (1957) employed multiple criteria in distinguishing between rural and urban communities. Sorokin and Zimmerman (1929: 13-58), for example, delineated rural and urban communities on the basis of the following criteria: (1) occupational differences, (2) differences in community size, (3) differences in density of population, (4) environmental differences, (5) differences in social differentiation, (6) differences in social stratification, (7) differences in social mobility, (8) differences in social interaction, and (9) differences in social solidarity.

While the Sorokin-Zimmerman formulation is more descriptive than analytical, the Wirth-Redfield framework is drawn from the theoretical and empirical studies of Park
(1952), in which the city is the independent variable explaining various other social and cultural variables. Wirth (1938) distinguished the city from the rural community by greater size, density, and heterogeneity of the population. The city's development is accompanied by the emergence of a secular order, a breakdown in the traditional normative fabric of everyday experience, and the rise of formal group relations and controls. Urbanism is a way of life and it involves a more fluid and mobile existence.

On the other hand, Redfield characterized the rural or "folk" society as " small, isolated, nonliterate, and homogeneous with a strong sense of group solidarity" (1947: 297). The people of these societies have a relatively simple division of labor and technology. Behavior is more intimate and personal and strongly patterned by conventional religious and familial values.

Besides the multi-criteria approaches, there are also many other single-criterion approaches. More often than not, the single-criterion employed in rural/urban differentiation is community size (e.g. Browning, 1962; Duncan and Reiss, 1956; Schnore, 1961; Tisdale, 1942). This approach provides an easy measurement to distinguish among communities, but it also has several weaknesses and invites many criticisms.

Perhaps the most severe criticism launched against these rural/urban studies is that the basis of differentiation, whether multi-criteria or single-criteria, must be examined in the context of a given cultural system, and hence, most of the criteria of differentiation are not uniformly interpretable. Lewis (1951) criticized Redfield in particular, while Pocock (1960) challenges the entire field of rural/urban studies on this point. Although Richard Dewey (1960) treats rural/urban differences in simple
demographic terms, he strongly recommends the use of cultural variables in the differentiation analysis.

These criticisms raise serious questions about the validity and utility of the rural/urban concept in cross-cultural and historical studies. At the operational level, the rural/urban variable should focus on the measure that is most appropriate to the time and the place situation of communities and on the interrelationship of rural and urban places within a society.

Sjoberg (1964) provides a basis for the analysis of rural/urban patterns in three "constructed historical types" of societies, where the major "explanatory variable" considered is technology. He views increasing urbanization as a result of changes in a society's technology; from human energy to animal energy to inanimate energy.

Bealer, Willits and Kuvlesky (1965) examine three components of "rurality," namely "ecological, occupational and socio-cultural," and suggest a composite definition. These researchers further encourage the development of a multifactor measurement considering these aspects of rurality.

Kaufman and Singh (1969) indicate that the universality of the concept is to be seen in terms of the "demographic, social and cultural dimensions." They suggest that there is a need for a universally applicable empirical measure, which should, originally, be constructed on the demographic dimension of size and density of population. Then, the measurement should be expanded to incorporate the other relevant correlates, especially those of cultural and social significance, within a clearly identified time and place context. Cultural correlates are to be seen in the level of technology and the
accompanying standards of production and consumption. The social dimensions are to be seen in the community, organizational and role structures of the society.

Obviously, any definition is an arbitrary one and as such is subject to criticism. One definition that has received some acceptance across academic disciplines, is that prescribed by the Census Bureau for the purpose of estimating the U.S. population. It provides a satisfactory point of departure for statistical and cultural comparisons (Bertrand, 1958):

The Census Bureau defines urban as comprising all territory, population and housing units in urbanized areas and in places of 2,500 or more persons outside urbanized areas. More specifically, urban consists of territory, person, and housing units in: (1) places of 2,500 or more persons incorporated as cities, villages, and town, but excluding the rural portion of extended cities; (2) Census designated place of 2,500 or more persons; (3) other territory, incorporated or incorporated, included in urbanized areas. Rural includes territory, population and housing units not classified as urban. "Rural Farm" comprises all rural households and housing units on farms (places from which \$1,000 or more of agricultural products were sold in 1989). "Rural Non-farm" comprised the remaining rural.

The general concept of a metropolitan area (MA) is one of a large population nucleus, together with adjacent communities that have a high degree of economic and social integration with that nucleus. The MA classification is a statistical standard, developed by the Federal Office of Management and Budget. Each MA must contain either a place with a minimum population of 50,000 or a Census Bureau-defined urbanized area and a total MA population of at least 100,000 . The 100,000 total requirement applies to the one or more counties which may comprise the metro area in question (Census Bureau, 1990).

With this as background, this study concedes that three types of influence (geographic, social and cultural) come together in the socialization process and account for the unique characteristics of a given individual or group, and provide a more satisfactory definition of the rural/urban continuum, based on multiple criteria. Such a definition emphasizes the empirical reality of the gradation from the relatively small,
isolated village, through the larger village, to the market town, the small city, the larger city and finally to the metropolitan community (Etheridge and Mookherjee, 1974).

The interplay of these particular influences may account for rural/urban differences. There is some controversy among rural sociologists as to whether ruralurban differences occur in dichotomous fashion or along a continuum. Proponents of the former, more conventional theory posits that differences between the two populations are categorical in nature and in direct opposition to one another. Proponents of the continuum theory hold that rural-urban differences occur in relative degrees in a range extending between the two polar extremes of rural and urban. The position taken in this study is one of "rural and urban" rather than "rural or urban."

Differing perceptions of the physical environment are certainly important elements of human geography, but socio-cultural characteristics of places also attract and repel people. People get information about places from personal experience, from correspondence and telephone conversations with residents, from films, plays, novels, and most, from television and radio, and through personal conversation with people who have visited them (Abler, 1974, p.338).

## B. Identifying Key Components of Geographic Community

According to the American Heritage Dictionary of the English Language (1992), there are at least five broad meanings to the word community:

Community: (1) A. A group of people living in the same locality and under the same government. B. The district or locality in which such a group lives. (2) A group of people having a common interest: the scientific community; the international business community. (3) A. Similarity or identify: a community of interests. B. Sharing, participation and fellowship. (4) Society as a whole; the public. (5) Ecology. A. A group of plants and animals living and interacting with one another in a specific region under relatively similar environmental conditions. B. The region occupied by a group of interacting organisms.

The first definition identifies a physical place such as a town, city, or neighborhood. A group of people who live in that place are associated because they share physical proximity, and live under common rules and shared government. Often, but not always, they also share a common cultural and historical heritage. The second meaning is a social group of any size that shares common interests, whether those are social, professional, occupational, or religious. These are the virtual communities or on-line communities that are often found on computer networks. Community members gather together electronically in news groups or mailing lists to discuss specific topics which range from academic research to hobbies. There are no geographic boundaries to on-line communities and participants can be located anywhere in the world. Using this definition, an individual may belong to a number of these "communities."

Similar to the dictionary definitions is the discussion of community in Melvin Webber's Urban Place and Nonplace Urban Realm (1964, p.108):

The idea of community has similarly been tied to the idea of place. Although other conditions are associated with the community including a sense of belonging, a body of shared vales, a system of social organization, and interdependency of spatial proximity continues to be considered a necessary condition.

Further, he discusses the idea that accessibility rather than proximity is becoming a more important aspect of place. He says spatial proximity is less important than interaction and reminds the reader that it is clearly no linguistic accident that community and communication share the Latin root communis, in common. Communities comprise people with common interests who communicate with each other (Webber, 1964). Those who share the same neighborhood or city share an interest in lowering the social
costs of doing so, and they share an interest in the quality of certain services and goods that can be supplied only locally. It is this thread of common interests in traffic flow on streets, garbage collection, facilities for child rearing, protection from miscreant neighbors and from the inhospitable elements, and the like, that furnishes the reason-forbeing of municipal government...certain business firms and voluntary institutions. (p.111) In addition to these two common meanings of community, a third meaning is becoming more prominent. In this definition, community is a "feeling' of belonging or attachment and sharing something in common. It is not just that you are part of a community, you must feel and be conscious that you are part of a community and be responsible for it. This is not a new concept. In 1630, on a ship bound for New England, John Winthrop lectured that

We must delight in each other, make each other's condition our own, rejoice together, mourn together, always having before our eyes our Communion and Community in the work, our Community as members of the same body. (Wilson, 1968, p. 1).

The prominence of this social value has risen and fallen since Winthrop's time, but recently it has become popular again. In the last quarter century there has been a growing belief that the alienation and lack of connection felt by individuals in society can be relieved by returning to and strengthening communities and community institutions.

In the study of the influence of geographic residential location upon the formation of a mass media repertoire, all three definitions are relevant. People who use the mass media live in a physical community, and discuss topics common to that particular community. Related to this is the common community goal of strengthening community. This can mean the ability of the community to develop and attain its goals, but it can
also refer to the attachment that residents feel towards the neighborhood or place where they live.

## C. Community Attachment and Mass Media Use

To better understand the aspect of attachment to community that a resident may or may not feels, it is useful to review some of the research from environment behavior literature on the variables that influence community attachment.

In information theory terms, individuals or groups are selective filters through which information from the environment must pass (Kirk, 1951, 1963). The filters are models and theories of the world. They make some experiences meaningful and others irrelevant and unperceived. Every individual has his own unique filter, but we can group individuals into classes of greater or lesser generality on the basis of the characteristics of their filters (Lowenthal, 1961). The basic perceptual model of human behavior places people in information streams, with both the nature of their filters and the differing content of the message streams influencing behavior. (Eliot Hurst, 1974)

Attachment to neighborhood is considered to be a complex process and a significant amount of research has been done, particularly in showing the effects of population size, density, length of residence, age and status on whether the person feels a sense of belonging, whether that person is interested in the community and whether the person would be sorry to leave the community (Greenberg \& Dervin, 1970, Kasarda \& Janowitz, 1974; Stamm, 1985; Cook, 1988).

Some of the more interesting and recent research (Woolever, 1992) has shown that attachment to a neighborhood results from the amount of interaction by the residents, which includes informal visiting with neighbors and formal participation in neighborhood
organizations. However, predictors that influence the amount of participation include both individual characteristics (income, length of residence, sex, presence of children, home ownership, education and age) and the neighborhood context (status, density, and heterogeneity).

Community ties have been linked to media use for several decades, often in research that operationalizes the concept with sets of readily identifiable indicators such as home ownership and voter registration. A search for reliable predictors comes at a time when newspapers and broadcasters are struggling to maintain their audiences, and information about community ties is useful to assess their competition with other media.

However, more recently scholars have moved beyond predictive models to develop conceptual models of audience behaviors and build on existing theory. The studies reported here focus on the relationship between media use and community ties, using a conceptualization of the latter that emphasizes the location of the neighborhood.

The issue of community ties is essentially a restatement of the integration or involvement hypothesis, which says that personal communication behaviors -- including mass media use -- increase as one is integrated into the pertinent social system, such as a territorial community. A parallel can be found at the individual level of information processing, where involvement in the topic or situation leads to greater attention and subsequent learning; the relationship expressed by involvement here is between the individual and either the topic (e.g., being extremely interested in campaign coverage) or the situation (e.g., enjoying reading or TV viewing). Shifting our attention to individual behavior across situations, involvement refers to the "tie" or "link" between the individual and the community environment (neighborhood, suburb, or metropolitan level)
(Jeffres, Dobos, \& Lee, 1988). Though generally research has examined static relationships, the media use-involvement relationship may be reciprocal over time.

The view that integration into the community produces greater media use is based on the assumption that media use fulfills various functions or needs (e.g., emotional release, social utility, personal reference or surveillance of the environment) that occur as a consequence of a growing density of ties to the community. For example, if a resident works in a community, joins a local church, has children in local schools, votes in local elections, pays local taxes, shops at local stores and generally conducts one's daily behaviors in the local community, then media behaviors are functional on a variety of dimensions enabling some of those ties to persist over time, making some ties more "effective," and so forth.

Janowitz (1952) hypothesized that because modern communities are large and diverse, people use community newspapers to integrate themselves into smaller, more homogeneous communities that surround them. Similarly, Gans (1962) found that Italians on the West Side of Boston were not integrated into the city but were closely integrated into their small neighborhood area. Janowitz later narrowed the view of "local" by arguing that because of the vast heterogeneity of the modern urban area, metropolitan daily newspapers could no longer effectively serve an integrating function. Rather, his community integration hypothesis asserted that by reading the smaller neighborhood weeklies, individuals grew attached to their communities and the community had formed a basis for consensus.

Further, the concepts of "urban" and "rural" have been shown to be significant in the method respondents use to process their environment. For instance, rural farmers
are more likely to make a decision to buy a product or adopt an innovation based largely on interpersonal forms of communication (Rogers and Shoemaker, 1971), While the reasons for ritualistic use of television to overcome feelings of loneliness and provides companionship vary greatly among urban and rural respondents (Greenberg and Dervin, 1970; Allen and Christy, 1992; Hart, 1994). These studies suggest that characteristics of the traditional mass media work in unison with environmental factors to affect media selection. In effect, the mass media and culture influence media use.

In order to establish a reasonable unit of analysis, this study proposes the use of the Census Bureaus methodology to demarcate metropolitan areas, urban identifying individuals who reside in counties within the limits of metropolitan areas (MA), and rural classifying those who reside in counties outside these boundaries. Using such a framework, data collected from respondents will allow data to be comparatively evaluated to determine if relationships exist among population density, status and heterogeneity in these areas of human population and the identification, selection and subsequent use of available mass media channels.

## III. Theoretical Framework: The Uses and Gratification Approach

Key to understanding, and predicting mass media use, is identifying patterns of use and subsequent evaluation by those using the media. The uses and gratifications approach is one paradigm that assumes that the best method for an empirical analysis of such phenomena is to ask the mass media user. Social science researchers have undertaken audience-driven observation in America since the 1940s. Early gratifications investigations aimed to determine why people used or what gratification people sough
from certain media content. Herzog (1944), Berelson (1949), Merton and Lazarsfeld (1950), Schramm, Lyle and Parker (1961), Bogart (1965), Greenberg (1974), Rubin (1979, 1985), and Lin (1993) all have asked mass media users to elucidate about their motives, interactions and gratifications derived from mass media and attendant messages. Although the formal tenets of the uses and gratifications perspective where not adhered to, the studies primarily where interested in exploring audience needs and motives as variables that intervene before media impact, instead of observing the persuasive effects of the media (Rubin, 1994).

## A. Human Needs and Mass Media Use

Over the last fifty years investigations using this approach have come in and out of favor (Elliot, 1974). At best, uses and gratification distractors will argue, it represents an attempt to explain something of the way in which individuals use communication technologies, among other resources in their environment, to satisfy their needs and to achieve their goals, and to do so by asking them.

Uses and gratifications research incorporates a functional paradigm which considers the audience to be actively engaged in the mass communication process, its methods rests upon a body of assumptions that have some degree of internal coherence and are arguable in the sense that not everyone contemplating them would find them self evident.

Rosengren (1974) and Katz et al (1974) sketched the initial tenets of this paradigm. These assumptions have been revised since then to reflect learning about media audiences (see Palmgreen, 1984, Palmgreen, Wenner \& Rosengren, 1985; A. Rubin, 1986). Currently, the model has five basic assumptions:
(1) The audience is conceived of as active, that is, an important part of mass media use is assumed to be goal directed (McQuail, Blumler and Brown, 1972). (2) In the mass communication process much initiative in linking need gratification and media choice lies with the audience member. (3) A host of social and psychological factors mediate people's communication behavior. Predispositions, interaction, and environment mold expectations about the media (A. Rubin, 1994). (4) The media compete with other sources of need satisfaction. The needs served by mass communication constitute but a segment of the wider range of human needs, and the degree to which they can be adequately met through mass media consumption certainly varies. (5) People are typically more influential than the media in the relationship, but not always. One's initiative mediates patterns and consequences of media use.

Katz et al (1974) listed two other early assumptions of the perspective: (a) methodologically, people can articulate their own motives to communicate (i.e., selfreports provide accurate data about media use); and (b) value judgments about the cultural significance of media content or use should be suspended until motives and gratifications are fully understood. Self-reports are still used, but along with other modes of inquiry. And, because we now have a better understanding of motivation, inquiry can turn to questions of cultural significance (A. Rubin, 1994).

In the uses and gratification approach media use is determined by a need which motivates the user to select media, among other alternatives, to gratify these needs (see Klapper, 1960). The assumption that the mass media might satisfy certain needs has its first inkling of theoretical formulation in Laswell's famous formula: "who uses which media, under what circumstances, for what reasons and with what effects?" McQuail,

Blumler and Brown (1972), define four major categories of needs which the media seek to gratify: (1) Diversion (escape from constraints of routine; escape from the burden of problems; emotional release); (2) Personal Relationships (companionship; social utility); (3) Personal Identity (personal reference; reality exploration; value reinforcement); (4) Surveillance (need for information in our complex world). Katz et al. (1974A) and Rosengren (1974) have developed more elaborate models.

Contemporary uses and gratifications researchers contend though audience oriented, the uses and gratifications approach is not necessarily conservative (Katz, Blumler, Gurevitch, 1974A). Its main contribution has been towards a better description of the audience, of audience behavior and of different media and different kinds of examples of content in terms of their audience appeal (McQuail \&Windahl, 1993). Its significance as a theoretical foundation for empirical inquiry into motives for various social actions, including mass media use, is as relevant today as it ever has been (see Perse and Courtright, 1993).

## B. Use of Media in a Spatial Context

This approach to mass media research views people as active communicators because they are aware of their needs, evaluate various communication channels and content, and select the mass or interpersonal channel that they believe will best satisfy the gratifications they seek.

Troldahl (1965) has argued that social and demographic characteristics of individuals may not be very valuable in explaining media behavior. After reviewing many studies of consumption of mass media content, Troldahl concluded, "where subaudiences are merely classified by social and demographic characteristics, not used as
indicators of some more basic psychological or social process, the researcher has not gone far in explanatory purpose". This is a warning to look beyond the correlations and ask why a certain personal characteristic, i.e. residential location, should be associated with mass media use. Unless that characteristics' role in influencing communication behavior can be explained, such a study will have dubious usefulness.

Kline (1971) would perhaps agree that classifying media users according to demographics is not very useful in itself. Yet his analysis of interrelationships of personal variables and mass media behavior produced useful results. He examined various ecological and demographic variables in relation to time spent with media. Several of those variables relate to the prime concern of this study; namely, geographic residential location.

This study attempts to understand the relationship between the availability of different mass media and the formation of a repertoire of mass media channels to gratify needs. Information of this nature is best gathered by direct input from the mass media user. From available mass media channels, respondents will be asked to describe (list and rank) their media activities for several repertoire to satisfy needs in terms of usefulness and appeal. Data obtained will yield use and appeal surfaces that spatially map the media identification patterns of the groups surveyed. Such maps will provide a geographic analysis of how people seek gratification of their needs from all available mass media sources. It is assumed that such surfaces are the results of information flows and group values, and are good predictors of future spatial behavior (Abler, 1974).

Specifically, this researcher seeks to investigate the relationship of geographic residential location upon how (1) certain basic human needs of lower and higher order
interact with the (3) structure of the surrounding society, including media structure, which result in (4) [the formation of] differential combinations [of mass media channels] so individual problems, being more or less strongly felt, [can be gratified.] Thus, (5) perceive solutions to these problems; the combination of problems and solutions will result in (7) differential patterns of actual media consumption.

## IV. Developments in the Availability of Mass Media Channels

## A. General Theory of Media Evolution

Media historians have developed a general theory of media evolution that predicts a pattern of specialization (Merrill and Lowenstein, 1971). It is, in effect, a three-stage model, progressing from (1) the elite stage to (2) the mass stage to (3) the specialized stage, and it attempts to characterize the evolution of and competition among newspapers, motion pictures, radio and television in twentieth-century America. In effect, this is a conceptualization of the element of time in the diffusion of innovation paradigm where time spent with the innovation being key to adoption or rejection (Everrett, 1973).

Further, as Bostian (1974) asserts, as media evolve they "spread from larger urban centers to smaller towns and into rural areas. Accordingly, the resulting use of the media system - the flow of information - is primarily from urban to rural areas.

If we think of media evolution in terms of the communications process, then the next questions are whether greater media availability is associated with greater use of media by individuals and how does the media specialization process occur along the rural/urban continuum.

In one of the few studies to provide comparative data for urban, suburban and rural residents of a given geographic area, MacLean (1952) examined use of radio, newspapers, magazines, books and movies in Minnesota. He measured both the personal use of media in terms of reported regular reading and listening and viewing, and in terms of time spent with media. He interviewed city ( 500,000 or more inhabitants), small city $(11,000)$, village $(1,500)$ and rural respondents and found that the use of mass media declined from city toward farm. City respondents' media use was highest in all categories.

Bostian and Ross (1962) found that rural Wisconsin families, with slightly less media availability than the average U.S. resident, had media use, measured in time spent, equal to that of a national sampling. Time spent with television, radio, newspapers and magazines were approximately equal for farm families as for the nationwide sample. However, the specific content and program preferences are somewhat different. Radio farm programs and farm magazines were important sources of technical information for the rural residents.

Perse and Courtright (1993) compared how twelve different communication channels including television, VCR's, cable television, motion pictures, conversation, newspapers, telephones, music, books magazines, radio and computers fill needs. They identified five channel Channels: video, interpersonal, print, computer and audio. The interpersonal cluster (conversation and telephone) was rated the most useful at filling various needs, with computer rated the least useful.

Findings from these studies suggest that when a new medium is introduced, it is adopted first by an educated elite who have the cultural skills and financial wherewithal
to become early adopters. As the price of the new medium falls and it becomes more widely accepted, it increasingly emphasizes mass-appeal content and becomes more widely accepted, and increasingly becomes dominated by the economics of the mass audience. But when a new, competitive medium arises, the old medium must specialize and take advantage of its unique technological appeal in order to survive (Neuman,

## 1991). B. Choice in an Age of Plenty

Assuming that the general theory of media evolution is correct, will the formation of a mass media channel repertoire be influenced by the geographic limitations imposed on the set of available mass media channels? For example, television program choice studies have found that under imperfect awareness of all the program options, the easy solution to deciding what to watch is to form a channel repertoire, that is, a limited number of channels to be used regularly. Similarly, in a price discrimination system the user may simplify life by settling for a limited repertoire of channel types (Baldwin et al., 1996). While this model posits a connection from the origins of needs to effects of media in that the strength of needs (gratifications sought) will ultimately determine the impact of ... any selected communication channel (Lometti et al., 1977). This connection has received little investigation from a geographical perspective (Charney, 1996).

This study seeks to investigate the relationship between geography and the economics of mass media upon a respondent's formation of a mass media channel repertoire.

## V. Geography and Mass Communications Flows

## A. Models of Information Flow

James Rosse's (1978) umbrella model of competition in the newspaper industry presents a more general model of how audiences are produced in time and space (Wildman, 1994). The model describes a pattern of newspaper distribution in major metropolitan areas that is strikingly similar to the global pattern of video trade flows. Rosse's model argues that major city newspapers circulate in a ripple effect throughout a region while newspapers in smaller suburbs have smaller, unidirectional circulation zones. He further notes that this flow of information tends to be from the center out with "virtually no product moving in the reverse direction" (Wildman, 1994).

Wildman extends Rosse's model to include the broadcast television media. He points out that cable superstations like WGN and WTBS, whose signals are distributed to cable subscribers across the United States, are examples of one way flows. "The superstations are all over-the-air broadcasters in major metropolitan areas whose signals are carried by satellite and microwave to television viewers in smaller communities and rural area." And just as in Rosse's model, small market stations have never achieved any prominence as sources of the distant signals imported by cable systems. As with newspapers and video products, the flows are predominately from large to small markets (Wildman, 1994).

Similarly, diffusion of innovation is a paradigm concerned with the spread of an innovation over time and space (new ideas, practices, objects, etc.). This theory supposes that the impact of mass media is, at best, tempered by the influence of interpersonal channels. The two-step flow supposes that opinion leaders and their followers are remarkably similar in many attributes. Diffusion research calls this similarity homophily, or the degree to which pairs of individuals who interact are similar in certain attributes
such as beliefs, values, education, or social status. However, in the diffusion of innovation, heterophily is most often present. Heterophily is the degree to which pairs of individuals who interact are different in certain attributes. A high degree of sourcereceiver heterophily, is often present in the diffusion of innovations since new ideas often come from people who are quite different from the receiver. This creates unique problems in obtaining effective communication (Severin and Tankard, 1992).

Because inherent characteristics of life in urban or rural areas add to heterophily, the uses and gratifications approach posits that the mass media will compete with other familiar environmental sources of gratification. The formation of a mass media channel repertoire is in effect the respondent's probable response to a need (e.g. a need for content, familiarity, exposure and social continuity) for attachment to the residential location or geographic community.

## B. Media Use and Geographic Community Identity

Beyond degree of urbanization and mass media availability, what is there about residential location that influences the communication habits of individuals? Is the context of "community" helpful in explaining mass media communication habits? What characteristics of the immediate surroundings, including cultural and social contexts, interact to compel the respondent to choose mass media to satisfy needs?

Edelstein and Larsen (1960) found that the urban weekly served as a facilitating agent for community. Bogart and Orenstein (1965), in a study of media use in an interurban area, also found support for the assertion that urban weeklies supplement daily newspapers, in effect serving a distinct integration function for local communities.

Carter and Clarke (1963) examined this by measuring place of residence as related to an individual's best source of "integrative" news. They defined integrative news as that which "emphasizes community values and convey information about social organizations in which people cooperate in order to achieve objectives". They found that city and suburban residents would likely use media they viewed as best sources of integrative news. Of city men, $82 \%$ had high interest in daily newspapers as a source of integrative news and $18 \%$ had high interest in weeklies. Of suburban men, $38 \%$ chose dailies for integrative news and $62 \%$ selected weeklies. They concluded that situational influences of suburban living lead to greater involvement with local concerns and greater interest in local media.

MacLean and Pinna (1958) found a preference for "local" news by respondents. They found a high correlation (.88) between the distance from the newspaper reader's place of residence to the source of news and the reader's perceived interest in that news. In short, physical distance from a source of news is correlated with psychological (as measured by news interest) distance from the news. Further, they report that psychological distance will strongly influence our choice of mass media and more especially our selection of content within these media.

This research suggests a close connection between local media use and community integration. Use of local media content should connect the person to events and issues of community life that may engender feelings of allegiance to and ties to the community. Also, ties to the community should generate closer attention to the local media.

Since this study is concerned with the relationship between the formation of a mass media channel repertoire and community ties, relevant geographic units would include those targeted by media organizations, including neighborhoods as well as larger units such as suburbs and cities. The geographical units may differ in how they serve as the basis for cognitive links such as personal identity. This could lead to differential selection of mass media channels.

As a concept, community attachment has multiple dimensions ("communities within communities") which are links among formal or informal social structures. This is similar to the argument of Tichenor, Donohue and Olien (1980) who proposed that a total community system may consist of interaction with a variety of subsystems "communities within communities," - including the mass media. One's involvement with one community subsystem therefore should depend upon the structure of the community.

Large, heterogeneous communities are likely to have a number of differentiated interest groups or "communities within communities" compared to smaller homogeneous communities. In effect, there are more interpersonal, video, print, audio and computer media channels to choose from. Because of specialization and heterogeneity, people are more likely to depend upon the mass media subsystem for communication and interaction in more complex communities. In smaller communities, ties are more localized. Involvement is more interactive and ties correlate with each other. As Janowitz (1952) and Tichenor, Donohue and Olien (1980) have pointed out, the media subsystem (especially the local newspaper) is looked upon as a community resource. People with a local orientation are more likely to be exposed to and use local media. Leaders in these
local communities will be exposed to regional and out-of-state media in order to satisfy their role requirements, whereas most other locally involved people may be satisfied with local media.

Cable television, like newspapers, may relate to community ties as ways of bridging spatial, social, political, and information gaps that are common particularly in urban settings. Studies of the relationship between home ownership and cable use suggests an association with spatial ties (membership) to communities. Relationships between length of residence and use of cable for rebroadcast of local commercial TV signals suggest residential preference for local content.

Although much of contemporary network research suggests the importance of studying integration through interpersonal networks, some of the research casts doubt upon use of the geographical community as the appropriate focus of media use (Bender, 1978; Calhoun, 1988). The reasoning is that interpersonal networks, particularly in the light of recent technological developments tend to cut across geographical boundaries. Despite this, it is debatable whether the local community, the city and immediate surrounding areas, remain appropriate focal points for community integration and democratic processes, especially considering the reach of most local media outlets. Much of the recent activity to reinvigorate democratic processes have taken place in local communities (Rosen \& Taylor, 1992).

In sum, these studies suggest the importance of the social setting or community in media use and preferences. Also, they go beyond the implication that individuals are interested only in the urbanizing aspects of mass media. Further, studies suggest that people have strong dispositions toward media and content that are physically and
psychologically close, that relate to the sense of community and social organization, and that relate to daily living and work patterns. In other words, most people are localites, not cosmopolites, in most mass media selection and use (Merton, 1948).

## VI. Economic Models of Media Market Homogeneity and Centrality

Instances of residential location influencing the flow of information have increased profoundly. Technological advances and rising costs have placed control of American media in the hands of large centralized organizations whose values are those of the marketplace. Even the Internet, born of the desire to decentralize the flow of information, has become the latest communication technology to be exploited for corporate gain. Since media are urbanizing phenomena values reflected in media content are usually those of an urban, modernizing society. Since rural society is not perceived as modern, the explicit or implicit objective is to change the rural people toward greater modernity (i.e. urbanity, increased use of media).

## A. Economic Limitation of Content Production Competition

Another consideration of mass media economics involves the norms of the various communications industries. Just as centripetal forces affect the physical environment, industry culture reinforces and exaggerates pressures toward homogeneity and mass market popularity. Hotelling (1929) attempted to explain the general tendency of markets toward homogeneity and centrality when he theorized that content is finite and differentiation of the mass media by channel might reveal useful information about use patterns. His case studies and approach to modeling have provided inspiration to analysts of these issues for 50 years. He noted that the dynamics for retailers on Main Street may well apply also to other dichotomous situations (Neuman, 1991). An explicit
application of this genre of economic theory to television programming was developed by Peter Steiner in 1952 and elaborated in the following years by Rothenberg (1962), Wiles (1963), McGowan (1967), and Owen, Beebe, and Manning (1975).

## B. Availability of Mass Media Channels and Utility

Because the number of consumers is so critical to the economics of the media industries, audience sizes for various media are carefully monitored by independent agencies such as the Audit Bureau of Circulation for newspapers and magazines and Nielsen and Arbitron for broadcasters (Neuman, 1991). Further, Steiner posited that there are various viewing groups, with preferred types of programming and little interest in any other programming and that content providers have an incentive to maximize income by maintaining the largest possible viewing audience, given audience preference and competition from other providers.

This model suggests that economic pressure is consistently in the direction of making forecasts about garnering large portions of the mass audience, rather than retreating from a possible position of leadership to serve smaller minority audience tastes. The implication for the study at hand is that since audience size is key to the economic success of the mass media and large aggregates of the audience are located in urban areas content providers will centrally locate in these areas and provide content which will appeal to the largest possible audience segments. Therefore, the number of mass media that locate in sparsely populated areas will be few and the availability of a variety of mass media channels from which to choose will be reduced. Thus, the relationship between the variety of audience interests and what providers will offer in a public communications system depends on two critical variables: The number of content providers and the relative status, density and size of available audience segments
(Neumann, 1991). Hence, as the models illustrate, the formation of a mass media channel repertoire should be affected by population density and market competition, or the lack of such, among the producers and distributors of content.

It tends to follow, in this era of media convergence, that a respondent's geographic status should be a variable around which the formation of a mass media channel repertoire may be organized. Will the use of available mass media indicate a differential relationship between geography and the function of mass media in the lives of urban and rural audiences? For example, Ryan and Gross (1943) concluded that rural farmers used newspapers and magazines for in-depth analysis of information. Herzog (1944) found that respondents used radio for escape and relaxation. MacLean (1952) concluded that farmers had higher use of magazines than one would predict from the use of an rural/urban topology because the magazines read were mostly farm magazines which carried vital information used in the business of farming. More recent research has concluded that conversation and the telephone rate highest when there is a need to show affection, for control, or for inclusion (Perse and Courtright, 1993). Further, despite the introduction of computer-mediated communication, only recently has a reconfiguration of needs gratification begun to differentiate among users of computermediated activities.

This study contends that an investigation of the relationship between geographic residential location and subsequent formation of a mass media channel repertoire will uncover significant differences in the use of mass media activities available to satisfy nine uses and gratification motives (see Appendice B for detailed discussion of these motives). Basically, the study will provide a glimpse into the unique contributions "city life", "suburbs sprawl" and "country living" may have upon the channels selected by users of the mass media.

In conclusion, such an investigation may extend the groundwork into the study of the phenomena of mass media selection for four related reasons. First, this study investigates media use patterns along a rural/urban continuum. Thus, it attempts to place the breadth of media use across space. Data collected can test the hypothesis that geography will be less significant in a wired, computer-mediated society. The results would allow for a better determination of the influence of residential location upon the formation of mass media channel repertoire and for a detailed analysis of the relationship of environment and media choice. Second, by isolating geographic residential location as a social variable, this study may identify if, and how, this factor contributes to media use and dependency. Further, hypotheses about the normative images of media forms in identification and selection can be tested. For instance, can the media alternate for one another in certain situation (i.e., the lack of one media in one area) or, are the defined images rigidly assigned to the functionality of certain media? Finally, this study will provide a comparative analysis of interpersonal-mass media linkages among residents along the rural/urban continuum. This may offer some insight into what sources of communication are preferred by people under varying circumstances.

## VII. Conclusion

The focus of this study is to investigate geographic residential location and its influence upon the identification, selection and formation of a mass media channel repertoire by mass media users.

In large metropolitan communities, people have more communication alternatives. Thus, mass media channels compete among themselves and with those communications created at work, in religious communities, or in organizations based on shared interests or goals, for attention. How an individual orients his or her communication behaviors among the many choices depends on many factors but
availability, location, population density and market competition are physical characteristics that set the parameters for choice. In smaller, homogenous communities, people have fewer social, economic and occupational options and these geographic specific variables affect communication activities. As Ahlbrandt, notes, smaller neighborhoods offer residents opportunities for more interpersonal interactions and participation (Ahlbrandt, 1996). In less competitive markets, with fewer consumers, mass media use might reflect more practical use of available mass media channels.

An individual's access to information has long been considered essential for the development of that person's ability to acclimate into society as a valuable, productive member. An individual's choice of mass communication media can provide a wealth, or dearth, of information about his environment. The substance and context of much of this information are filtered through gatekeepers that process these messages. Most of these messages are prepared in and distributed from urbanized areas. It is posited that as the geographic distance from an urban area increases the number of production and distribution centers and the availability of a multiplicity of traditional mass media channels will decrease. Thus, urban dwellers will have more varied mass media channel repertories and rural respondent's mass media channel repertories will be similar in the choice and ordering of mass media channels.

The mass media have become more pervasive than ever in the dissemination of information about our environment. The development of objective considerations about this growing effect of the mass media on users must adapt as the media landscape changes. Just as race, education and social status have all been investigated for their effect on the mass communication process, other readily apparent but understudied variables should be considered. Allen \& Christy (1992) are among the sociological researchers who have discovered that economic status and educational attainment are
somewhat affected by the areas in which you reside. Greenberg and Dervin (1970) reported that economic factors and geographic location have an influence on certain mass media users. Hotelling (1950) and Steiner (1952) have determined that market forces influence the variety of producers and messages generated in areas of human population. Research by Merton (1949) first identified the concepts of localism and cosmopolitanism as they relate the use of the mass media.

Stamm and others $(1983,1985,1986)$ have linked mass media use to the concepts of community attachment. Finally, Bostian and Ross (1962), Bostian (1974), Rosse (9178) and Wildman (1994) have articulated that mass media messages tend to flow from major urban areas to smaller rural areas with little bi-directional flow of information. It is appropriate that these findings be applied to the polar nature of urban and rural residents for two reasons: one, little mass media research exists which compares these populations and two, few studies have attempted to compare the formation of mass media channel repertoires among urban and rural respondents.

## VIII. Research Questions

1. Per Motive, is the inclusion of a Mass Media Activity into a respondent's Mass Media Channel Repertoire influenced by Residential Location?
2. Per Motive, do Urban residents have a greater number of Mass Media Channels in their Mass Media Channel Repertoire than their Rural counterparts?
3. Per Motive, does Residential Location influence the inclusion of Traditional Media Activities and Newer Mass Media Activities in a respondent's Mass Media Channel Repertoire?
4. Per Motive, does a respondent's level of attachment (Resident Type) to community influence the number of Mass Media Channels included in a respondent's Mass Media Channel Repertoire? If so, which attachment types are significant?
5. Do the following socio-economic indicators -- race, gender and income level -influence inclusion of Mass Media Channels in a respondent's Mass Media Channel Repertoire?

## CHAPTER 2 LITERATURE REVIEW

## 1. Introduction

This chapter will synthesize several bodies of literature that investigate mass media use from the perspective of the active audience (O'Sullivan et al, 1994, p. 326). In particular, this chapter summarizes studies which investigate mass media use from economic, geographic, and uses and gratification research perspectives then gives a brief description of the forms of mass media channels to be investigated in the study.

## II. Economic Analysis of Mass Communication Behavior

One of the fundamental contributions of geography is the analysis of the relations between location and communication - a systems approach, where something is and the links that exist between it and other spatially-separated points. Geographic methodology operates in a spatial context, with particular references to spatial patterns (McDaniel, 1968, p.13). The distance between the objects or activities represents an obstacle for interaction, and a spatial pattern in fact implies a pattern of distance. The spatial separation then of the activities initiates movement or an interaction between them under certain conditions. Transportation is a measure of the relations between areas, and is therefore essentially geographical, being involved with concepts like spatial interaction, areal association, etc. Transport studies are concerned not just with the flow of goods or people, but with the flow of ideas, innovations, money, and credit. Thus, communication is included as part of the transportation system (McDaniel, 1968, p.55). Circulation and
its study is maintained by some geographers to provide deep insight into the meaning of areal differences, and to provide a key for measuring the likeness and differences among places on the earth. A number of geographers view the core of geography as primarily a study of spatial interaction and this concept of circulation.

Crowe (1938) and Ullman (1953) see this movement as an indicator of the degree of connection and as underlying patterns of interchange. Crowe's argument that human geography must be based on circulation, on "men and things moving," provided the conceptual foundation for postwar interaction largely in terms of commodity and people movements. Even though Ullman's statement urged the inclusion of information flows in spatial interaction studies, substantive work concentrated almost exclusively on transportation and commodity flows (Abler, 1974, p. 334).

Despite this bias toward things and people, communications gradually assumed greater theoretical importance. Some analysts, like $\operatorname{Zipf}(1946 ; 1949)$, sought to discover principles which govern spatial flows of information. Zipf, Stewart (1947), and Warntz (1957) worked in the context of the gravity model and its variations. The gravity model is one of the earliest models to be applied in the social sciences. It is a simple attempt to describe precisely the two most obvious factors affecting the amount of flow or interaction between two points: population and distance (Taaffe, Gauthier and O'Kelly, 1996). It posits that analogs of physical gravity can describe and predict, mathematically, the movement and interactions of people based on their location (Dunbar, 1991). Newer constructs of physical relations use adjustable exponents for distance and population and, in some cases, specify constraints on flows from origins along routes and to destinations
(Tocalis, 1978). Seneca and Cicchetti (1969) analyzed spatial variation in telegraph message volume in a gravity model context. Mackay (1958), used the same model to measure the effect of a cultural boundary on information flows. A somewhat different approach was taken by Nystuen and Dacey (1961), who used telephone message flows to derive hierarchical relationships among central places. On the whole, the vastly improved world transportation (communications) net has resulted in a lowering of the cost of movement and this has made possible the economic specialization of areas (Mc Daniel, 1968, p.56). All of these studies assume that interaction with mass media is susceptible to the laws of nature.

Up until the 1930's, geographers tended to view the world as static, fixed, and determined. In tandem, mass communication theoretical constructs of the era tended to view human behavior as predictable in terms of a given set of environmental factors. Geographers proposed that behavior was determined in fact by the physical environment and its component elements. Most other social science researchers acknowledged a powerful effects model of mass media. Later this environmental determinism was replaced by superficially less certain explanations (McQuail, 1987; McLeod, 1991), but ones which still relied on a deterministic notion (Severin and Tankard, 1992). More recently, a third approach has arisen which assumes that humans only respond to their perceptible environment, and that decisions and behavior with respect to economic activities, i.e. "spending" time with the mass media, can only have meaning within this perceptual environment. Thus, human behavior is not determined solely by physical environment nor any all-encompassing rationality. The behavioral environment can be
defined as all stimuli to which a particular individual or group responds, whether those stimuli be internal or external (Mc Daniel, 1968, p. 15). Thus, the significance of any findings from this study is limited insight into one dimension of the mass communication process.

A rejection of earlier deterministic viewpoints also rejects rational man, as a certain, all knowing, optimizing, economically rational being. Simon (1957) contrasts this concept of humans as optimizers and satisficers. He posits that since no one can possibly be aware of all alternatives when decisions need to be made and we are unable to know the final outcome of our actions, we do not try to optimize but rather satisfy. Therefore, we attempt to find a line of action that is satisfactory, and we adopt it without necessarily being concerned about whether or not there may be a better course of action. In this view, human actions or behaviors, are not wholly determined by physical environment, free-will, or economic rationalism. In deed, decisions are made within the learned abilities of the individual. To some degree, the ability to learn is influenced by the wealth of environmental stimulus. For the case at hand, since sparsely populated areas have fewer mass media channels, rural respondents will have to choose from fewer available media channels to satisfy motives for use. Thus, rural respondents may alternate one or another available medium for a preferred but unavailable one. In sum, their repertoires will include fewer mass media channels.

In real world terms, an individual does not have complete information, and if he did, he would not have learned how to assess it - this is Simon's notion of "bounded rationality." The satisficer within his perceptual bounds chooses along a preference
scale, which would vary from person to person and from group to group. This preference scale might stretch from say the optimal solution to a choice which makes one worse off, although the actual range of choices would be more restricted (Mc Daniel, 1968). This ranking of available choices within " perceptual bounds" can also be applied in media research to identify the ability of media to gratify needs (Perse and Courtright, 1993).

## III. The Relationship Between Economic Theory and Uses and Gratifications Constructs

Economic changes in audiences' choice behavior has been studied by employing a theoretical framework drawn from bioecology. Forty years ago, Erlich and Holm (1962) pointed out the potential for merging ecological thought with the social science disciplines, including economics. The reason underlying their suggestions is straightforward. Albeit in different spheres of activity, economists and ecologists study the utilization of resources. These two disciplines employ similar theoretical constructs - a similarity often obscured by differences in labels. The label gratification is a familiar term in media research, but neglected by economists. As is the case in economics and ecology, difference in the labeling of concepts have obscured the meaning common to concepts from media research and economics. Gauging meaning both from the dictionary definitions and common usage, the gratifications concept is quite close to the economic term utility. The idea of satisfaction is at the core of the meaning of both terms. In economics, utility is the subjective satisfaction an individual derives from an object or activity. When a person makes a decision, the attainable choice alternative with the highest perceptible utility is chosen. However, economists do not normally approach the study of consumer utilities by directly measuring them. Instead, economists analyze
consumer expenditures in dollars as an indicant of the underlying utilities (Dimmick, 1993). Thus, utility, and gratification, a media research, term as similar theoretical constructs are by extension susceptible to similar analytical techniques.

## A. Gratification, Information and Time Spent with Mass Media

The conceptual basis of gratification opportunities is drawn from Carlstein's (1982) work on time geography that is rooted in the work of the Swedish geographer Torsten Hagerstrand. Time geography is based on the simple yet central fact that people — individual and groups - change locations over time. Hagerstrand (see Carlstein, 1982) has developed a time-geographic notation that traces changes of location as paths in time space. The activities of a human population form a web of paths in time-space and individual paths come together in bundles that might represent households, factories, or universities. Thus, if economists measure utility indirectly by consumer expenditures in dollars, utility's media analog, gratification might also be measured indirectly by the amount of time exchanged for that spent with media. Time spent with media serving as the "underlying utility" for media choice.

Carlstein (1982) observed that human time was a resource since all activities require it. All activities cannot be performed at once but, instead, must be enacted sequentially. The notion of time as a limited resource results in the concept of a population time budget. The aggregate time supply or budget is obtained simply by multiplying population size by the length of the observation period. As the term budget is meant to emphasize, only a limited number of activities can be performed within a given period. Carlstein conceptualizes the time budget at the level of the population.

However, for the purposes of explicating the idea of gratification opportunities, it is more useful to think of household or individual time budgets because media use, as an aspect of leisure, actually occurs at these levels of analysis (Dimmick, 1993).

## B. Formation of Information Flow Maps

Whereas some analysts use information flows to derive functional economic regions, others map information regions because of their usefulness as explanatory variables. Hagerstrand was the original stimulus for such work. According to Morrill and Pitts (1967, p. 418), Hagerstrand asked Swedish farmers how many farms they could name, starting outward from their own, as a means of delimiting the region from which they would most likely receive information. Marble and Nystuen (1962) developed more direct means of estimating the sizes and shapes of the regions from which groups were likely to receive messages. Morrill and Pitts (1967) proposed that we distinguish among individual, local, regional, and long distance information fields and suggested possible measures by which such field could be delimited (pp. 418-420). Cox (1969A; 1969B) describes the individual voter as a "node in a communication network along which flows information relevant for the voting decision". Cox found information regions to be very important determinants of voting behavior. For him information regions are powerful explanatory variables. By extension, individuals are nodes in information regions (Murphey, 1961), and regions and their information contents are major determinants of behavior. Such logic assumes that the stimulus (e.g. media channels) available in the immediate environment interacts with economic, geographic and social constraints to produce differing media use patterns along the rural/urban continuum.

## IV. Geographic and Spatial Analysis of Communication Behavior

When information flows are considered, we enter the realm of spatial process. Spatial process and spatial structure are duals, and the distinction between them is ultimately artificial (Blaut, 1961). Information pathways and their effects are poorly mapped by geographers because of their limited importance in geographical theory. Studies devoted to explaining agricultural (Bostian, 1974), industrial (Fossum, 1974), and commercial patterns (Lacy, 1996) emphasize media which make movements of things and people possible. Explicitly or implicitly, economic geographical theory portrays humankind as creatures who makes decisions in an environment in which desirable resources are scarce (Abler, 1974, p. 327).

The growing importance of communications was first recognized in the latter half of the nineteenth century. Ratzel conceived of nations as organisms rooted in places. Accordingly, he gave considerable attention to the role of transportation and communications as the circulatory and nervous system of such socio-spatial organisms. He argued that verkehr (transportation and information communication) was critical to the formation of both cities and nations (Ratzel, 1921). Verkehr (circulation), for Ratzel, is the "master of space" (raumbewaltiger), and in political terms, "the most important of the significant accomplishments of circulation is the transmission of information" (Ratzel, 1921, p. 319; Huckel, 1907). Van Cleef (1937) devoted four chapter of his book Trade Centers and Trade Routes to the importance of mass and interpersonal media in trade and transportation, emphasizing the ways modern economic organization depends on efficient intercommunication systems. Cavailles (1940) summarized a number of
earlier studies of transportation and information transmission. Soree (1948) discussed ideas movements but his comments occupy only a small portion of the 200 pages he devoted to "The Conquest of Space."

Recognition of the importance of communication in human affairs has historically been associated with organic theories of society. Herbert Spencer (1910, Part 2, Volume 1), whose thesis was that society is an organism, treated communications in detail. He argued that social systems are composed of three kinds of interdependent organs, which perform alimentary, vascular, and neural functions, respectively. These subsystems are analogous socially to groups engaged in manual production, trade, and control (p. 469). To coordinate the actions of an aggregate, individual or social, there must be not only a governing center, but there must also be a medium of communication through which this center may affect other parts (p.533). Spencer felt the efficiency of the electric telegraph gave social organisms of his day a superior coordinating capacity. Many current ideas about communications are similar to Spencer's. Cooley (1894), quarreled with some of Spencer's ideas, but was very much influenced by them, and he gave considerable attention to both transportation and communications. He distinguished two "mechanisms of communication," one for material communication (transportation) and one for psychical communication. Moving physical masses is the essence of transportation, whereas material movements do not take place in communications, or if they do (as in postal communication or e-mail), such movements are incidental to the essence of the process.

Harold Innis $(1950,1964)$ published two remarkable books on communications. Empire and Communications (1950), describes the dependence of large scale political organization on reliable communications media. The Bias of Communication (1964) explores the effect of media on society and culture. Innis originated the media interpretation of history and society (Innis, H. , 1944), and more than any other individual provided the stimulus for modern communication research. He compared light and heavy media, suggesting that utilizing one more than the another determines how institutions within society — and society itself — are structured (Stewart, 1994).

Detailed comparative analysis of the locations of media facilities, information activities and residential location are still scarce, as are studies of media operations and flows through communications networks. The mass communication literature investigating the spatial orientation of communication is limited prior to 1960. This is due mainly to studies prior to this marginalizing the importance of spatial considerations.

Many theoreticians now argue that the quantity and quality of information that people receive are the major determinants of the decisions they make. We live in a communications era, a period in which phenomena at such polar scales as international relations and the growth processes of cells in the human body are analyzed and explained with reference to communications processes (Deutsch, 1966; Lowenstein, 1970).

## V. Organic Theory and the Development of Mass Media Niches

Individuals or groups can receive information from outside themselves only through personal experience or via information transmitting media. Existing ideas (theories and models) about the environment are filters, which pass some information to
the receiver in unaltered or modified form and block other information. Similarly, existing notions partially determine the information received; most people read columnists and subscribe to periodicals that share their views rather than seeking viewpoints in conflict with their preconceived notions. The behavioral environment is composed of filtered information, and in conjunction with needs and desires it produces decisions and behavior that also affect the receipt of information (Abler, 1974, p. 329330).

Dimmick and Rothenbuhler (1984) and Carroll (1985) applied the niche metrics of ecological theory to analysis of media conduct. This approach considers a media industry as a population; a company as a member or organism of this population; and audience, capital resources, and contents as resources necessarily required for the maintenance of the population.

In his overview of the development of the niche concept, Pianka (1983) pointed out that ecologists have expended a great deal of effort over several decades in differentiating population from environment. Because the niche concept was first introduced in the early $20^{\text {th }}$ century, some definitions have emphasized the environmental aspect of the niche at the expense of population characteristics, whereas others have given prominence to population attributes and neglected the environmental aspect. Definitions of niche with an environmental bias have, for example, focused on the population's habitat, (e.g.. where media content providers locate). On the other hand, definitions with a population bias have emphasized behavioral or structural adaptations (e.g. type of content to provide).

Contemporary ecologists, however, recognize that the niche concept implies a relation between population and environment. Ricklefs (1979) defined the niche as "all the components of the environment with which the population interacts" (p.875). The niche concept therefore denoted a relation between attributes of the environment and attributes of the population. Hence, if the conceptual confusion that surrounded earlier bioecological definitions is to be avoided, any translation of the concept into uses and gratification research must retain the relational quality of the niche while preserving the distinction between population and environment. This distinction can be made when an attempt to investigate the relationship between the different forms (channels) of the media available in a geographic area, do not attempt to measure use at the micro-level (identifying particular local newspapers or radio stations). These types of studies will produce data specific to a certain area. A more holistic approach would be to keep the identification of media use abstracted to the macro-level identifying preference for one form or media over another.

## A. Classifying Communication Media

Personal experience brings us only a part of our information about the world. A large input is received through other channels which can conveniently be divided into mass and interpersonal media, each of which can be further divided into informal and formal categories. Formal media require prepared channels and are essentially one-way information delivery systems. Very few people can act as senders; most people can only receive the information the few transmit. Formal mass media require a special setting, such as a theater or a cinema, or special equipment such as television or radio
transmitters and printing presses. Until recently, informal (no interposed channel) mass media have been almost non-existent (Abler, 1974, p.330). Progress in computermediated technology, however, now permits everyone to be a publisher.

Interpersonal media allow two-way information transmission. The average person can act as both sender and receiver, even though the bulk (70-80 percent) of the traffic in the formal interpersonal media is business information. The informal interpersonal media are the most ubiquitous of all. At the same time, they are the most difficult media to map precisely because they are so informal.

These distinctions are central to the identification of mass media channels along the rural/urban continuum for one overriding reason. They allow for speculations about the relationship between media structure and geography to be mapped graphically. Historically, informal and interpersonal forms of communications are the most tried communication systems. Thus, these methods of communication are often considered more reliable (if not efficient), they require high sender-receiver involvement and are conducive to community building. Therefore, use of these forms of media should be higher in rural areas. In addition, formal and mass forms of communication are more recent in their diffusion. In fact, most are the result of the urbanization of humankind. These methods of communication are often use to coordinate and control, they are much more efficient than informal and interpersonal forms of communication and they require low sender-receiver involvement. Use of these forms of media should be high in urban areas.

## B. Residential Location as Node in Information Flow

Communications media will continue to affect peoples' spatial behavior and general spatial organization. Like any other space adjusting technology, communications media offer people certain behavioral and locational options. The fundamental concerns are what people do in terrestrial space and why they do it. Information is a powerful explanatory variable in this kind of geography. Whether we consider decisions about residential location, recreational travel, or plant and store locations, information (and the media through which it moves) are critical (Abler, 1974, p.331).

Mass and interpersonal media are organized industries, and they can be examined in the same way that geographers might analyze the location of the steel industry or some other activity. From this perspective, none of the mass media have been subjected to detailed locational analysis to date.

Information activities (production and distribution) are heavily concentrated in the Megalopolitan complex, especially in New York City (Gottman, 1961, 1966; Vernon, 1963; Sreberny-Mohammadi, 1991). An increasing proportion of our urban labor force is engaged in information occupations. Our metropolitan areas, and especially their central cores, are turning into information processing machines. Cities have become communication media; their raison d'etre is to enable people to communicate (Meier, 1962; Hall, 1966). In contrast to those who argue that modern communications will enable information activities to abandon the cities (e.g., Webber and Webber, 1967), Tornqvist (1968) thinks cybernation and other information based techniques will keep such activities concentrated in cities.

## VI. Media Channels*

## A. Interpersonal and Informal Media Channels

Until recently in history most people received most of their information about their environment via interpersonal media. The introduction of books and newspapers changed this situation somewhat, and radio and television changed it even more. Theories of interpersonal communication range from an evolutionary angle that suggests a genetic basis for gregariousness and communication between members of a species (for example, Lorenz, 1966; Morris, 1977) through to a behaviorist approach that posits an increase in the frequency of interpersonal responses resulting from selective reinforcement (Skinner, 1953).

Mass communication studies have characterized interpersonal communication sources as functional alternatives that compete with other media to satisfy different needs. Although interpersonal communication is used to satisfy many different goals (Dillard, Segring \& Harden, 1989), Rubin, Perse \& Barbato (1988) observed that the most salient interpersonal communication motives are pleasure/entertainment, affection, inclusion/social contact, escape, relaxation, and control.

Some sociologists and media researchers argue that the salience mass media have probably already peaked in general importance in advanced nations, and during the next several decades the important innovation will be in formal interpersonal communications systems and in do-it-yourself (informal) mass media (Abler, 1974, p. 339).

The social nature of the residential setting has much to say about interpersonal contacts, and their importance in sub-societies. Research has shown that interpersonal
communication patterns do differ among urban, suburban and rural areas. Wirth (1938) has suggested that the personality development and life style is rooted in an urban inhabitant's ecological location. Galpin (1922) noted that the structure of rural communities has much to say about rural social organizations and the resulting communication patterns.

Research into the diffusion of innovation has developed several commonly-held assertions about information flow in non-industrial, rural societies. Basically, the more traditional intimate interpersonal pattern associated with rural cultures (Bostian, 1974) is suspended by urban dwellers who seem to substitute mass media and individual one-way communication (Greenberg and Dervin, 1970).

Interpersonal media and informal mass media (e.g. electronic bulletin boards, electronic-mail) tend to make people more heterogeneous. Because our time is limited, we normally communicate with people with similar interests or jobs. We form distinct intercommunications groups with the messages flowing among members of one group being quite distinct from the messages flowing among members of another. Interpersonal media tends to divide people into groups, as do informal mass media, which usually channel messages among small numbers of like-minded people in virtual or interestbased communities. Because technological innovations will continue to make interpersonal and small group media more sophisticated and less expensive than they are now, diversity will be promoted (Abler, 1974).

Formal interpersonal media (telegraph, telephone, and postal communications) are classic spatial systems. All are still very important communication activities, but in
order to survive had adopted very specialized functions. In advanced and many developing nations, these services are virtually ubiquitous. Langley (1963) found that because postal and telegraph and telephone services must be ubiquitous to be effective, and because their managers must also minimize network costs, the problems involved in organizing national postal and telephone networks are complex, even in small nations. Thus, it is speculated that informal and interpersonal means of communication will be included in media repertoire more often by rural respondents than by their urban counterparts.

## B. Print Media

The use of print media require a level of concentration higher than that of other mass media forms. Most often, the user makes a transaction with the medium exchanging time and attention for some form of need gratification. Unlike, the broadcast and electronic media, print media require the user to be literate. This and the relative advantage of this media form find that people tend to read less than they listen or view because of the level of difficulty for involvement.

Grossman (1968) found the print media to be the most appropriate to democracy — referring to the preference of print for issues over personalities, and the relative ease with which a reader can detach from what is being read. Further, Bogue ( 1962) suggested that print media is best for the dissemination of family planning information referring to the durability of print and the privacy in which it is consumed. Elliott and Quattlebaum (1973) have also found the print media to be helpful in satisfying informational needs.

## i. Books

With the exception of speech, no human invention has played so important a role in communication for so long a time as the book. No other media has been so prevalent and effective a means of storing and transmitting to others the records, knowledge, literature, speculations, and entertainments characteristic of human society. In the $20^{\text {th }}$ century, the idea of "the book" was embodied in the printed codex. The printed book in codex form is only one episode in the long history of the book. Broadsides, monographs, and pamphlets all have represented a 'book" of information. Currently, electronic and digitized storage and retrieval mechanisms are influencing how people seek and preserve the information, literature, history, records, and entertainment for which they have long used the book.

Today, the book industry disseminates information alongside various electronic and other print media, but given its historical role in American development, the book industry influences the overall structure and sociocultural context of all print-based media. The "coming of the book" (Febvre and Martin, 1976) gave material form and a market price to great amounts of information but did not erase the older cultural expectations of oral tradition: that the system of signs and the meanings they conveyed in the minds of the readers transcend the physical substance of the book (Barnouw et al., 1989).

The form, intellectual involvement and relative advantage of this medium may have a negative effect on the identification and inclusion of books in a mass media repertoire. The number of telematic media channels available to urban and rural dwellers should also have an influence on inclusion of this channel in a respondent's repertoire.

## ii. Newspapers

As a medium of communication, newspapers have been most notable as purveyors of information, whereas books and magazines have been the dominant medium for ideas. In earlier times, when the print-based press was the only medium for conveying mass information, it was an obvious source of power for state and church, and often was controlled by one or the other or both.

Sociological forces such as population growth, industrialization, labor organization, and a reform spirit transformed America in the first half of the $20^{\text {th }}$ century. The newspaper mirrored these dramatic events and helped shape the national and social destiny. This nation building was often at the expense of development of rural areas and its society.

Recently, two fundamental social shifts have influenced the newspaper industry. First, concentration of ownership in groups and chains, already a prominent phenomenon before the war, rose sharply after the World War II (Weinfeld, 1936; Newrath, 1944; Nixon, 1945). In the United States the percentage of newspapers owned by chains rose threefold between 1945 and 1980, so that some two-thirds of the approximately 1,700
U.S. dailies, representing more that three-fourths of the total daily circulation, had come under group ownership. In fact, four-fifths of all U.S. dailies are currently group owned (Garrison, 1994). Furthermore, competition is redefining the newspaper industry. At the beginning of the $20^{\text {th }}$ century, media competition was daily newspaper against daily newspaper in most communities. But at the dawn of the $21^{\text {st }}$ century, daily newspapers are more and more alone in publishing the news in a given metropolitan area. Instead, newspapers are now competing against other forms of news media, such as weekly newspapers, specialized or topical newspapers, local broadcast television, cable television, radio, magazines, and specialized newsletters aimed at the leisure time of potential readers and the dollars of potential advertisers (Garrison, 1994).

Newspapers have become recognized as the means of reaching mass audiences, rather than as means of reaching segmented audiences that were once available when multiple newspapers existed. Today, other media -- particularly radio, magazines, and cable television -- are used to segment audiences. In large local markets, some newspapers have begun to segment portions of their markets in geographic terms by providing cost-saving zoned editions that highlight information to a tightly defined region serving customers only in a small portion of the entire newspaper's readers.

The tangible newspaper product is the information packaged and delivered in the form of the newspaper, information that includes news, features, and advertising. Geography influences circulation and sales because the desirability of a newspaper to advertisers normally increases as circulation rises and decreases as circulation decreases
(e.g. Evans, 1969). Readers find newspapers more desirable when they contain information significant to them (Fleener, 1976).

The ability of readers to find reasonable alternatives for a local daily newspaper is limited because newspapers are inherently local products, identified with a specific geographic market by the news and advertising conveyed about that market. Daily newspapers from outside the market can substitute in terms of state, national, and international information, but they do not provide usable local information. Weekly and non-daily papers provide some local news, but not state, national, and international information. And the range of information provided by weeklies is limited so it is rare for readers to substitute non-dailies as information sources (Picard, 1993).

At times, readers may supplement the information in a local newspaper with a newspaper from outside the area. If a local newspaper provides only minimal national or international coverage or financial news, for instance, some of its readers may supplement that information by also subscribing to the New York Times or the Wall Street Journal. Other readers may supplement their normal newspaper consumption by acquiring USA Today while traveling or to provide greater sports or entertainment coverage than they receive in their local paper (Picard, 1993).

Television, cable, and radio provide news and information, but the quantity and quality of their services differ. The number of stories covered on national and local newscasts is relatively low by comparison with newspaper content, and the information provided is usually far briefer than that provided by newspapers. As a result, these media do not serve as reasonable alternatives for newspapers for most newspaper readers.

Magazines, especially weekly news magazines, provide more extensive information, but their frequency keeps newspapers readers from using them as substitutes (Picard, 1993).

Many persons, especially young persons, appear uninterested in the current content of newspapers and make greater use of other media. Persons of all ages who cannot read, or do not read well, can be expected to increasingly use broadcast and cable services for their information needs.

Nevertheless, a great number of people can still be expected to want information of the type found in newspapers and there will continue to be a need for firms to gather and convey such information. Some futurists predict, however, that the newspaper itself will disappear because of changes in production and distribution. They argue that the printing aspects of the industry will disappear and the electronic product currently being produced by the news and advertising portions of newspaper companies will be transposed into an electronic newspaper delivered via cable or computer. Traditionalists disagree, but concede that changes are inevitable in this industry (Picard, 1993).

Almost anyone one can carry a newspaper anywhere, and no equipment is required to access it; only lighting and norms that prohibit it in certain situation ( e.g., while someone is speaking, while driving) limit reading. Newspapers, being addressed to an entire local population, employ a symbol system that is common and general. Not only are items that may only interest certain groups placed in special sections, but if items are brief and uninteresting people need not search far for an item of greater interest (Smith, 1995).

The livelihood of newspapers depends on use by a geographically localized audience. Its ability to capture the significance of local events, promote community interest and give detailed attention to local concerns gives makes it more advantageous than broadcast media and books and magazines. This media should be included in repertoire of individuals with strong ties to the community and those actively seeking information about local surroundings. Urban dwellers should include this media in their repertoire more often than rural residents because it serves as a substitute for interpersonal surveillance of the environment.

## iii. Magazines

In contrast with the newspaper, television, motion picture and popular music industries, the magazine industry is not dominated by a handful of companies. One need only examine any large newsstand to gaze over the thousands of magazines published every year. Anyone who has wandered into a magazine store knows that although there are hundreds of publications available, from hobbyist quarterlies to scandal sheets to serious monthlies, there are but a handful of choices within each category. Whether on professional wrestling or summarizing the news of the week, a handful dominate (Gomery, 1993, 1989; Porter, 1989; Scherer and Ross, 1990).

Historically, magazines are periodic publications that contain in each issue an assortment of items. The term magazine, meaning "storehouse," originally suggested diverse content, but in recent times most magazines have become highly specialized, each attracting a sharply defined audience with items related to a specific range of
interests - which are usually, at the same time, designed to attract support from advertisers serving those interests.

When the modern magazine was born in the last years of the nineteenth century, it was, in retrospect, an almost inevitable consequence of the changes that had begun to alter the U.S. landscape after the Civil War. The industrial and technological revolution was changing the economy from an agricultural to an industrial one. Mass production and improved transport were opening up national markets beyond local and regional ones. Steady increases in population, abetted by a flood of immigrants, and higher levels of literacy, the result of the spread of popular education created a middle-class audience with considerable buying power and leisure time that made it a desirable target for advertisers.

The rise of new media competing for public attention - motion pictures, radio, television and others - was for a time seen as a mortal danger to magazines. But in fact their rise encouraged a proliferation of magazines catering to enthusiasts for the new media. The importance of magazines as a communications medium - the number of magazines, the range and nature of the content, the use people make of them, and the relative prestige - varied from nation to nation. The penetration of magazines into the adult population is generally highest in the most industrialized nations. As disseminators of information and attitudes regarded as desirable, magazines seem to be secondary in importance to newspapers, but are a significant supplement.

The first national mass media, magazines have played an important role in American politics, education, culture, acculturation, and socialization. Magazines not
only have informed but also have provided entertainment and recreation to countless isolated families during times when these pleasures were few and far between.

According to the Magazine Publishers Association (MPA) each reader spends an average of sixty-one minutes on each copy read (Guthrie, 1988). Nearly all Americans, 94 percent read magazines during the average month. The middle-class and highly educated consumers are the best readers (Kern-Foxworth, 1994). Endres (1989) surmised that video and computer ancillary products of magazines are potentially very lucrative ventures, noting the phenomenal success of the Cosmopolitan magazine exercise/make over series and the blockbuster sales of the Sports Illustrated swimsuit video. Magazine industry leaders are optimistic about the potential of these ancillaries because projections for 1995 were for one in three home to have a computer (Boyd, 1989), and some magazine publishing companies have found that 80 percent or more of their readers own at least one video cassette recorder (VCR) (Harbert, 1989). One of the most interesting facts uncovered by the study was that business magazine publishers tend to concentrate on computer-based products, while consumer magazine companies focus on the video market.

The production of regional editions of "national" magazines (Twedt, 1968) further vitiates the homogenizing power of mass printed media. Postal area coding and computerized mailing lists make it possible to vary both advertising and editorial content to suit regional tastes (Abler, 1970).

In sum, magazines offer specialized material (e.g., the news of the week, business, photography, popular music, food, architecture, farming techniques), publish
periodically (e.g., weekly, monthly, quarterly) and can distribute nationally, regionally or locally (Smith, 1995). Their usefulness often derives less from immediacy than from depth of coverage. They should be included in the repertoires homogeneous groups interested in specialized knowledge (such as farmers or accountants). Although the search for knowledge and entertainment should influence use of this medium, rural respondents should include it in their repertoires more for its information value than for entertainment.

## C. Broadcast and Electronic Media

In the electronic media, spatial tension should result when local and national events compete for audience attention. This forces local mass media channels and national channels to weigh content impact. Often the activities of national channels, which are overwhelmingly concentrated in New York City, with a few outliers in Washington and Los Angeles and other major urban areas, supercede content produced locally. Because the time devoted to such activity is perishable local affiliates must purvey national programs along with local information when deciding what information is most valuable to their audiences.

Donald Innis $(1953,1960)$ explored problems caused by the space-filling nature of broadcast media. Where settlements with thresholds to support a radio or television station are closely spaced, "crowding" occurs. The average size of cities with broadcast stations is smaller in sparsely settled areas than in densely settled regions because of the interference problems encountered when the broadcast bands are filled to capacity. Thus
people in sparely populated areas sometimes have more radio stations to listen to than people in densely populated areas.

## i. Radio

Currently, the radio industry operates with several radio stations in the most markets that choose from a small number of popular formats (e.g., country, urban contemporary, adult contemporary, talk, album-oriented rock) and then a small number compete within that category. Thus, there is not perfect competition, with companies freely going in and out of business (radio stations rarely go off the air), but competition within an acceptable number of formats (Gomery, 1993). (Barnouw et al., 1989).

Commercial radio stations are community-based and identify themselves as such. Their assigned power and antenna orientation define their service areas. Most FM stations and AM stations serve relatively small areas (some clear-channel AM stations can serve large areas during the day and can be received nationally after sundown). Signals originate locally, but material may come from any locale. Local news and talk shows are locally gathered, prepared, and presented. Many stations try to build an identity by developing local personalities.

The radio industry in the United States is also one of the most open of the mass media industries. But a radio station in any market does have a share of guaranteed market power in that FCC licensing guarantees that no competitor can takeover that selected spot on the dial. It has defined its niche by tailoring material to the lifestyles of
pre-selected homogeneous groups. It encourages involvement when other media cannot compete (e.g., while exercising, showering, driving to and from work).

Initially, radio programming in rural areas often covered education, extension, farming, ranching, rodeos, and entertainment. Radio and television were vital in bringing information to farmers and helped in more efficient production and wiser marketing. Rural broadcasting began with weather reports to farmers in 1921 and expanded to market reports and finally educators, extension agents, government representatives, and industry spokesmen talking to farmers. This was accomplished through the development of agriculture-oriented programming, regional and national farm networks and wire services, the National Association of Farm Broadcasters and farm driven advertising (Baker, 1981). Thus, radio influenced rural culture. "The radio was of profound importance for the American people because it opened their ears to the sound of the world and provided a medium which became an instrument for social change. Rural Americans have benefited the most from radio because they were the most isolated and had the most to gain from an improved communication system (Wik, 1981).

When radio and television diffused across the nation, larger cities tended to accept both radio and television first, with smaller centers starting stations only some years after the larger cities (Bell, 1965). A secondary tendency was for such innovations to be adopted first in the northeast and on the West Coast, then into the interior of the nation. A later analysis by Berry (1970) confirmed Bell's conclusion that television diffused down the nation's urban hierarchy. In Sweden, the diffusion of
television receivers followed a hierarchical course, but with important neighborhood effects (Tornqvist, 1967).

Social situations determine how audiences use radio. Its inclusion in a repertoire of mass media channels certainly should be influenced by the needs of the users. Radio in rural areas has traditionally been a source of information and a important link in the surveillance of the environment. In urban areas the medium has been used to entertain or serve as a surrogate for interpersonal communication. This reasons for use of radio should still differentiate along the rural/urban continuum.

## ii. Broadcast Television

Television needs to be defined because it has different meaning to different people. To the average American viewer, the generic term refers to any pictures and sound that appear on the video screen. To broadcasters, television is a traditional over-the-air broadcast technology that uses the frequency spectrum the same way as radio does by sending an electromagnetic signal at the speed of light from a transmitter to an antenna in your home. To cablecasters, it is the technology upon which their industry is dependent for survival. Television has the capability of receiving a variety of video signals. A few are television broadcast signals; other, like (HBO) and (MTV), are signals sent via cable or satellite. The discussion of television here focuses on over-the-air broadcast television.

It has been hypothesized that commercial support of television broadcasting, with its emphasis on mass appeal, created a corresponding incentive for networks and local stations to cater to the mass taste or lease common denominator of program taste rather
than supply distinctive high quality programs of cultural or uplifting educational value (Owen et al, 1974).

Over-the-air television stations are heavy users of non-local material. All primetime and much morning and afternoon programming of network affiliated stations originates outside of the local community. Thus, use of television to satisfy the need for entertainment may be related to the need to escape local bounds. Television also serves an important surveillance function and offers some programming which provide opportunities for self-improvement.

The quality of broadcast television signals in remote rural areas affects the mediums ability to adequately fulfill any uses. Inclusion of television in mass media channel repertoire will be dependent upon the use of other mass media, for example, use in conjunction with satellite technology, VCRs or, in some areas, cable. When television is included in repertoire it should be for information or entertainment needs. In urban areas, inclusion of television in a repertoire should coincide with a need for entertainment.

## iii. Cable Technology

Both Heeter and Greenberg (1988) and Webster (1989) have found that a relatively minor technical innovation - cable - has reorganized television consumption behavior substantially (cf. Becker, Creedon, Blood, and Fredin, 1989: Schoenbach and Becker, 1989; Sparkes and Delbel, 1989).

By the early 1960s, the cable industry was undergone a series of changes that would transform it from a community reception service into a comprehensive primary
communications medium. Now, with subscribership at or above $60 \%$ of the nation's households, cable has become a medium in its own right and a powerful rival to broadcast television. Some forecasters even see it as the core of a revolution in telecommunications (Barnouw et al., 1981).

The introduction of satellite-delivered national programming led to an important new revolution in cable in the late 1970s, accelerating the industry's development as a distinctive television service. Two dynamic programming entities led the way. Home Box Office (HBO), Time, Inc.'s pay-TV movie service, and Turner Broadcasting Company's (now Time Warner) Atlanta independent station WTBS-TV began using communications satellites to distribute their signals to cable systems throughout the country. The feasibility of satellite distribution of both broadcast and non-broadcast programming soon led to the development of dozens of additional nationwide program services (cable networks, pay-TV services, and 'superstations") from which cable operators could fill vacant channels (Howard and Carroll, 1993). This bought about the practice of offering "tiers" of programming and services and established the practicality of networking cable program services, thereby allowing cable to grow rapidly into a major industry (Barnouw et al., 1981 ).

Most of the country, other than sparsely populated rural areas (because the population is too dispersed) (Finney, 1996), is now wired; latest (1992) estimates indicated that cable service is available to $96 \%$ of all U.S. homes (Kagan \& Associates, 1992). While few new cable systems are yet to be constructed, numerous older systems are being rebuilt, upgrading channel capacity to permit two-way communication and to
allow carriage of additional signals from the ever-increasing multitude of program services now available.

Interestingly, the cable industry's historical development followed a sequence from small, typically isolated communities, to medium-sized cities, and finally to large cities. This unusual diffusion pattern occurred for several reasons. The smaller and more isolated communities had poor or no reception in the pre-satellite era, and the demand for television reception was high. Also, other recreational avenues were sparse. Mediumsized cities came next because they typically had fewer broadcast television stations, costs of installing cable were low, and - in many cases - political hurdles were lower. Finally, the major urban centers had many stations on the air; and an operator might have multiple political jurisdictions to contend with in metropolitan areas (Howard and Carroll, 1993).

Cable technology is limited by economic concerns. It requires critical mass in order to be a viable endeavor. The most remote of rural areas are not populated enough to warrant wiring. In these areas, television use will be mediated by other extending technologies (i.e., VCRs or satellite). In urban areas use of cable should be high among those respondents seeking entertainment and information gratifications. Typically, it has brought its subscribers more and clearer programming, but the offerings have largely echoed those of other media.

## D. New Technology Channels i. Video Storage Devices

Watching a videocassette privately at home on a television screen is not the same experience as attending a movie. Most of the unique features of movie-going - having a small choice further limited by show times and theater location, traveling to and from a theater, being seated in the dark - are missing. Morley (1989) asserts that "... film... consumption either on television or on video in the home ... provide(s) quite a different context of reception, and therefore quite a different set of subject positions for the viewer." Webster (1989: 202) has suggested that the VCR be conceptualized as a "television channel" programmed by its owner. Klopfenstein (1989) has conculded that the growth and diffusion of VCRs has almost matched the explosive pattern of the first black and white television sets.

Despite this, in the early 1980s, several factors retarded the penetration of VCRs among the U.S. population. First, the massive program supply of traditional TV channels and especially pay TV characterized the American scene (Ogan, 1989; Wade, 1985). Second, the controversy over the interpretation of copyright laws prevented the penetration of VCRs into American homes. It was not until January 1984 that a decision by the United States Supreme Court gave the "all clear" message to home videotapers. Further, hardware and software costs prevented a rapid diffusion in America but in 1984 demand for VCRs as well as cassettes started to rise rapidly. Finally, major studios assumed an adversarial stance toward the new medium. Release of motion pictures on video began slowly in 1980 with catalogs from Warner Brothers, Universal and Paramount (Hellerman and Soramaki, 1985).

In 1991, it was estimated that $70 \%$ of American homes had a VCR. Presently, video distribution has become the most important single source of income for the American film industry. In 1980 video cassettes accounted for $1 \%$ of U.S. studio revenue, in 1990 it accounted for 43\% (Garnham, 1990; "US Studios Hit," 1991). Video rental has been more popular than sell-though. In 1990, the revenue from video cassettes for the U.S. film and video industry was $\$ 10.8$ billion; rentals provided more than two thirds of the business (Hellman and Soramaki, 1994).

Inclusion of VCR mediated television use in a mass media channel repertoire will depend upon the need for entertainment and the absence of other visual forms of mass communication. In rural areas where broadcast and cable television is physically limited and satellite broadcasting is a growing option, VCR use should out rank print media for its ability to entertain. In urban areas, use of VCR technology makes it a competitor to cable or satellite television for this purpose. In these areas use of video cassettes to gain information about the local community and personal development should be minimal, but use for relationship maintenance may equal that of rural users.

## ii. Satellite Technology

Domestic uses of satellites for television are primarily for transmission to and from broadcasting stations, and transmission from program services to the head ends of cable systems. The use of satellites by cable systems permit low cost networking of the hundreds of cable systems in the United States, thus promoting the wide spread growth of pay channel services (such as HBO and Cinemax) and basic cable network services (such as C-Span, CNN, and USA). Without satellites, cable operators would have been
severely handicapped in effort to provide the vast array of programming now available over dozens of channels.

With these applications came an unanticipated development: the emergence of 'backyard' home satellite dish (HSD) terminals. By the end of the 1970s, the cost of TVRO (television receive only) terminals for cable head ends had fallen to the point where they came within the reach of individual households. The antennas were big (over two meters in diameter) and cost between $\$ 2,000$ and $\$ 3,000$. But the investment was attractive because it permitted the users to tune into the multitude of signals beamed to cable head ends and broadcast stations - without any payment for the programs. What began as a piggyback phenomenon amounting to $5,000 \mathrm{HSD}$ terminals in place in 1980, grew rapidly to cumulative sales of more than three million terminals by mid-1990 ("Monthly Satellite Systems, 1990). Signal scrambling was introduced in 1986, and procedures were later devised to require HSD terminal users to pay for those signals (National Cable Television Association, 1983). The institution of payment has slowed, but failed to halt growth of HSD sales (Johnson and Castleman, 1991).

Most of the above uses are within the C-band frequencies allocated by the FCC for "fixed satellite service" (FSS). In addition, the FSS includes a set of higher frequencies in the Ku-band. The Ku-band is especially attractive for Direct Broadcast Satellite (DBS) technology because it permits smaller receiving antennas that those needed for C-band frequencies.

Because DBS is by definition satellite addressable from a technical standpoint, the most important issues focus on competitiveness and user acceptance. Competition in
the market in which DBS participates is very strong. DBS operators have overcome several significant barriers to entry: procuring a license to operate, distributing DBS terminals and securing an adequate supply of programming. Because the cable franchises already have a strong foothold in the urban market, rollout of DBS services addressed the unmet needs of approximately 30 million homes not presently passed by cable. In this market DBS competes with a subset of audio and video delivery modes. TVRO receivers are large and stationary, DBS is portable (about 18 inches in diameter). In addition, DBS has a competitive advantage over both cable and broadcast television because of its ability to deliver HDTV (high definition television)-quality programming to a mass audience much sooner than broadcast or cable television (Adamson et al., 1995).

One major drawback of DBS systems is they don't have the capacity to carry the signals of all local broadcasting stations or channels dedicated for use by individual subscribers (necessary for video on-demand). The same nationwide or region-wide coverage that makes DBS appealing also is an impediment. Even with the use of signal compression to increase capacity, a DBS system only carries a fraction of the available VHF/UHF local signals that are broadcast today (Broadcasting, May 1993). Thus, conventional VHF/UHF antennas are needed by DBS subscribers - a drawback especially in areas of poor over-the-air reception (Johnson, 1994).

Reduced cost, increased portability and increase programming make satellite technology ideally suited for rural audiences who seek entertainment gratification. The lack of surveillance of the local community makes it less likely to be used for this function. In urban areas, satellite technology is a growing competitor of cable and VCRs.

Thus, rural and urban audiences will include this in an entertainment repertoire at the expense of other television extending technologies.

## iii. Computer-Mediated Communication

Although most often viewed as a tool for performing calculations, processing data, and manipulating symbols, the computer is also an information technology and a medium of communication (Lubar, 1993; Provenzo, 1986). And any form of human computer interaction can be seen as a form of communication, varying in degree to which the computer or the user is in control (Chesebro and Bosnall, 1989). Thus, such interactions would include both human programming computers and computers programming humans (e.g., through educational software, video games, etc.) As well as using computer programs to input, store, search for, manipulate, output, and transmit information. The qualities most closely connected to contemporary computer-mediated communication, interactive computing, and direct human to human communication are dependent on the addition of video technology as a way to display information graphically and allow for much faster feedback then waiting for mechanically produced printouts and the addition of sufficient computing power and programming to handle multiple users simultaneously (Strate, Jacobson and Gibson, 1996).

Along with electronic mail (e-mail), which is asynchronous (the exchange of information is not in real time), early forms of computer-mediated communication, synchronous chat (text exchanged "live" as in a telephone conversation), and computer bulletin boards allowed for interchange among many different users (later variations
include the computer conference, the mailing list, discussion list or listserv, and the newsgroup).

Beyond e-mail, the current cyberspace includes Usenet newsgroups, the Internet Relay Chat (IRC), and connections to remote computers through Telnet. Also, accessible are multi-user dungeons or multi-user dimensions (MUDs), that is, programs or nodes that allow many people to participate in role playing games or simply interact in a computer-simulated environment. Moreover, many cyberspace nodes include databases of information that can be accessed and downloaded through File Transfer Protocol (FTP), Gopher, Wide Area Information Servers (WAIS), or the World-Wide Web (WWW).

As Anthony Smith (1993) points out, cyberspace retrieves the ancient idea of the Alexandrian library as a storehouse to which people come, reversing the Gutenbergian principles of mass production and distribution (but not necessarily mass communication).

Generally, terminal costs are rising and line-haul costs are dropping, which means that distance, as such, has a decreasing effect on availability. Many postal services have been available at flat rate prices for over a century, and flat-rate pricing is increasingly important in telecommunications (Abler, 1974). When satellite facilities are used, for example, there are no differences in transmission and terminal costs whether the call moves eight or eight thousand kilometers. Utilizing the third dimension completely eliminates distance-cost relationships in two-dimensional terrestrial space. In communications the historic trend has clearly been towards decreased friction of distance. (Abler, 1968).

Intuitively, computer-mediated communications should not differ greatly by respondent residential location in its inclusion in media repertoire. This is because the information available to the urban dweller via the computer interface is also available to the rural resident at comparable costs in economic and physical terms. Since computer mediated communication allow for interactivity between the producers and users of information transcendent of spatial biases repertoires constructed by rural and urban respondents should include use of computers at similar rates with differences determined by needs rather than geography and residential location.

## VII. Conclusion

Today, while new media are making local information circulation easier, they are simultaneously doing peculiar things to distance. Throughout human history, interaction costs have always increased with distance. Costs of movement still increase with distance, but the nature of such functions are constantly being adjusted.

A review of literature from the fields of economics, geography, and the uses and gratifications of mass communications reveal several interesting factors about the interdisciplinary nature of mass media usage:

1. Separately, the spatial relationship of humankind and the information in the environment has received a lot of theoretical attention;
2. Gratification and utility, as similar concepts, are susceptible to similar measurement techniques. These terms are often measured by time spent with media.
3. The selection of certain media activities and residential location may indicate future usage patterns;
4. People tend to satisfy, rather than optimize, their communication behavior. This trend is significant because message producers will not gamble on introducing a new channel if a more senior medium has relative advantage;
5. The communication media have inherent properties which determine how the media will be identified and then selected by audiences to help them gratify certain needs.
6. Studies into the use of different media channels indicate each medium is used for multiple and varying reasons
7. Communication media survive and are sustained by developing and exploiting a niche within a community;
8. Traditionally, the influence of mass media has been broadly generalized and failed to include the effect of geography upon media selection and use. Such reasoning is counter to most sociological theory that consider the aggregation of humankind to be an organic system and the media as vital organs in the function of that system.
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## CHAPTER 3 <br> METHODOLOGY

## 1. Introduction

The focus of this chapter is to identify the method used to measure the relationship between geographic residential location, resident type and the use mass media channel repertoire to satisfy motives. First, each of the pertinent variables will be defined. This will be followed by a rationale for the use of a quantitative approach and specifically the selection of a survey to measure this phenomenon. Next, will be a discussion of the development of the survey instrument, its reliability and validity, the sampling procedure and, finally, how the data were collected

## II. Variables and Operationalizations

## A. Predictor Variables

The predictor variables in this study are: 1) Residential Location; 2) Resident Type and, as control variables, age, gender and income level.

In this study, Residential Location will refer to one of four geographical cells that all respondents will be placed into. The typology employed in this study will assign respondents into one of four residential location cells - Rural, Rural fringe, Urban fringe or Urban. Such a rural/urban typology is in agreement with the classification system used by the United States Census Bureau to classify populated areas. Using this definition (see pages 9-10) respondents will be placed into either the rural=1, rural fringe $=2$, urban fringe $=3$ or urban $=4$, cell according to a classification scheme based
upon population data from corresponding zip codes supplied by the respondent. (see Appendices A for zip code data description and categorizations).

## 1. Residential Location

Using the definition and parameters outlined on pages 9 and 10, respondents will be classified as Rural, and coded with a" 1 ", if they reside in a zip code where 1,000 people or less live in the zip code. Respondents will be classified as Rural Fringe, coded as a" 2 ", if they do not live in a rural zip code and live in a zip code where 1,750 or less people live in the zip code. Likewise, to be classified as a Urban Fringe resident, and coded with a " 3 " a respondent must live in a zip code where there are more than 1,750 people but less than 2,500 people reside in the zip-code area. Finally, to be classified as an Urban respondent, coded as a" 4 " the respondent must live in an area where 2,500 people or more live inside the zip-code zone.

It is logical to use the urban rural designations as a classification system for empirical research. However, there are some methodological concerns that must be addressed. Namely, is density of population an accurate determinant of what constitutes the states "urban" or "rural"? Of course, an argument can be made that the designations themselves are questionable. However, some framework to quantify the concepts had to be used. It was decided that the designations used by the United States Census Bureau offered some recognized and stable labeling system. Ultimately, the goal of empirical research is to investigate nature and label observations for analysis. Such a mode of inquiry demands that logical choices about the conditions of observation be made.

## 2. Resident Type

Resident type refers to the length of time a respondent has live in an area and the respondent's intent to stay in an area. Resident type is a measure of commitment to neighborhood and will be empirically observed by asking respondents to indicate how long they have lived in an area and their intent to remain in an area during the next five years (see Stamm and Fortini-Campbell, 1981).

Respondents are assigned a resident type based upon their response to items \#73 and \#74 in Section three of the questionnaire. Respondents are Drifters, coded with a " 1 ", if they have lived in an area less than five years and intend to leave the area within the next five years. Settlers, coded with a " 3 ", are respondents that have lived in an area less than five years and are not likely to leave the area in the next five years. Settled respondents, coded with a " 2 ", are those individuals that have lived in an area for five years or more and are likely to remain in the area. Relocators, coded as a " 4 ", are those respondents who have lived in an area for five or more years and are likely to leave within the next five years. Resident type is used to determine level of attachment to a community. Community attachment level has been associated with media use (see Stamm, 1985).

## 3. Socio-Economic Indicators

The following variables will be measured for their strength of relationship in the use and formation of mass media channel repertoire: age, race, gender education level and income level. Hindman (2000) found that the rate of adoption of personal computers is becoming less closely associated with social-economic indicators. This study will
measure the five mentioned socio-economic indicators for their strength of relationship to residential location and type and in the selection of mass media channels in a repertoire.

## B. Dependent Variables

The dependent variables for this study are 1) Mass Media Channel Repertoire, 2) Media Activities and Media Channels, and, 3) Traditional Media and Newer Media Channels.

## 1. Mass Media Channel Repertoire

Mass media Channel Repertoire refers to the set of media activities and Channels a respondent identifies as able to satisfy particular motives or needs as defined in the Uses and Gratification literature. The literature in this area indicates that there are several broad reasons for human communication (see Rubin 1985; Rubin and Rubin, 1985; Perse and Courtright, 1993; McQuail, 1987, and McQuail and Gurevitch, 1974).

Since the 1940s (Herzog, 1944; Berelson, 1949; Riley and Riley, 1951; Katz, 1959), researchers using the Uses and Gratifications approach have identified several possible motives for using the media. Berelson (1949) asked respondents to list reasons they missed reading the newspaper during a newspaper strike. Riley and Riley (1951) found that children that were well integrated into peer groups used adventure stories for games while less well integrated children used the stories for fantasizing and daydreaming. Herzog (1944) found that radio soap operas fulfilled different functions for different radio listeners.

This study will operationalize the nine motives identified by Rubin (1983) in his study of what uses and gratifications television content holds for its users. In the 1983
study, Rubin concluded that users of television content identify specific motives for using television and/or its content. The motives are: for relaxation, for companionship, out of habit, to pass time, for entertainment, for social interaction, to obtain information, to be stimulated (arousal) and to escape (the reality of daily life) In this study respondents are able to choose from several different media, not just television, to satisfy the nine motives.

## 2. Media Activities and Media Channels

In Sections one and two of the questionnaire, respondents were asked to identify which of several media activities they had done in the last week. The 27 media activities in section one are grouped into one of five media Channels. The five Channels are: Interpersonal, Print, Audio, Video and Computer. Media activities are included in Channels that reflect the inherent nature of, or technology used by, media to convey a message between a sender and a receiver.

For instance, the Interpersonal media cluster is composed of the following activities: spoke with a person face to face; wrote a letter to or received a letter from someone; spoke with a person on a home telephone; used a beeper or pager; or, spoke with another person on a cellular telephone. Each of the activities involve interpersonal communication to some degree. The Print cluster includes the following activities: read a book; read a national newspaper; read a local daily newspaper; read a local weekly newspaper; read a national magazines; read a regional magazine; or, read a trade journal. Each of the activities involve decoding messages from the book, newspapers or magazines. The Audio cluster includes the following activities: listened to pre-recorded
music or audio on cassette, compact disk or vinyl; listened to music on AM radio, listened to news or talk on AM radio; listened to music on FM radio; or, listened to news or talk on FM radio. Each of the activities involve decoding aural messages. The Video cluster includes the following activities: went to a movie theater to see a movie; watched a pre-recorded movie on videocassette; used a VCR to record and view some television programming; watched broadcast television; watched cable television; or, used a satellite disk to watch television programming. Each of these activities requires its audience to decode aural and visual messages. Finally, the Computer cluster includes the following activities: used a computer to send or receive e-mail; used a computer to access a website; or, used a computer to play a game by yourself or with others. Each of the activities requires the use of a computer to access or send a message.

The inclusion of any media activity in the particular media cluster will constitute the use of that mass media channel in a respondent's repertoire. Thus, if a respondent does any one of the activities in the interpersonal cluster, the interpersonal channel is included in the respondent's repertoire to satisfy a motive.

## 3. Traditional Media and Newer Media

In this study traditional media will refer to media activities in the interpersonal and print Channels. Newer Media Technologies are those media activities that are in the audio, visual and computer media Channels.

## C. Assumptions

This study assumes that people are active communicators and are aware of their needs. Likewise, they are able to evaluate various communication channels and content
to select the mass or interpersonal media they believe will satisfy the gratification sought. People are also aware of functional alternatives, or different channels (media) that can fill similar needs (Perse \& Courtright, 1993).

Observing and inferring regular patterns of human communication is not easy. The task requires that we observe human communication and [sometimes] assign numbers to what is observed (Monge and Contractor, 1988). Further, use of this type of empirical methodology demands some form of measurement to analyze and report observations

Objective measurement of the gratification of needs is based upon the concept of the mass media, along with other sources, being able to satisfy perceived needs. The selection of a media channel to satisfy a need is often based on inherent properties of the channel to fulfill such needs.

Prior research has shown that the relationship between the identification and gratification of certain needs and the mass media ability to satisfy such needs is ideally suited for observation by quantitative methods (Greenberg et al. Urban poor, Bostian and Ross, 1962 and Bostian, 1974).

## III. The Instrument

The final instrument has three sections. The first section of the questionnaire is divided into two parts. This section of the instrument was designed to determine which media activities respondents have used within the last week. In the first part of Section One respondents are asked to estimate which media activities they did during the last week by checking a corresponding square (a check indicating the respondent had done
the activity in the last week) located next to each of the activities on the list. This part of the questionnaire has 27 media activity stems. These activities are numbered sequentially from A through AA. In this part of Section One of the questionnaire each of the 27 responses are then grouped into one of five media Channels based upon the characteristics of the media activity. See Figure 1 for the media Channels and media activity groupings for section one.

Section Two of the questionnaire asks respondents to identify the number of different media activities they use in an attempt to satisfy the nine Uses and Gratification needs measured by (Rubin, 1983). Items 47 through 66 asks each respondent to identify all of the media activities they would likely use, from a list of 12 media activities, to achieve one of the nine Uses and Gratifications motives being measured. This portion of the question is designed to measure how many media and, ultimately, which media channels respondents use to satisfy their Uses and Gratification needs. See Figure 1 for the list of media activities for Section two. Section Three of the questionnaire asked the respondents to provide demographic information. This information will be used as control variables in this study. Age, Gender and Income level are the three socio-economic indicator data used as controlling variables. Three questions (number 72 through 74) asking for the residential location, length of residence and inclination to move by the respondent is the basis for a predictor variable measured in the analyze of the data set in the next chapter of this study.

Figure 1
Interpersonal Channel

Print Channel
A. Read a book A. Read book
B. Read nat'l newspaper
B. Read newspapers
C. Read local daily
D. Read local weekly
E. Read nat'l magazine
F. Read regional mag.
G. Read trade journal

Audio Chanel
A. Listen to prm
A. Listen to prm
B. Music on AM radio
C. News/talk on AM
D. Music on FM radio
E. News/talk on FM

Video Channel

Computer Channel
A. Go to movie theater
A. Go to movie thtr.
B. PRV on television
B. Watch video rcdg.
C. Record/view on tv
C. Watch television
D. Watch broadcast tv
E. Watch cable tv
F. Watch satellite tv
A. Send/receive e-mail
A. use computer
B. Access internet/www
C. To play games
D. To do business tasks

The final instrument used in this research project was developed over several months during the summer of 1997. The initial versions were critiqued by Dr. Joseph Dominick and based upon his recommendations revisions made. Portions of the instrument were adapted from similar instruments used by early uses and gratifications researchers (Rubin, 1983, Perse and Courtright, 1993).

A test instrument was administered to a small group of volunteers. The purpose of this test was detecting typographical, grammatical, readability and layout errors. After corrections were made to the instrument, the final draft was approved and administered to
two groups of respondents $(\mathrm{n}=55)$ at the University of Georgia. Group One $(\mathrm{n}=44)$ consisted of students in an introductory mass media course at the university. Group Two $(\mathrm{n}=11)$ consisted of students in a graduate research methods course at the university.

## A. Item Validity

The pretest was collected in the Spring Quarter of 1997 at the University of Georgia from students in an Introduction to The Electronic Mass Media course ( $\mathrm{n}=44$ ) and a Research Methods graduate seminar. ( $\mathrm{n}=11$ ) The data were coded and analyzed using SPSS. A Four-fold Point Correlation and resultant Phi Coefficient significance test of variables 47 through 66 in the questionnaire indicate that the items operationalized to measure uses and gratification motives do offer significant relationships in all motive categories (see Appendice B) for Phi Coefficients and significance levels for all nine motives). In these tables are each of the nine motives and the questionnaire items used in an attempt to measure each motive. Also, the tables include a graphical display of statistical data for each motive.

Items designed to measure the nine Uses and Gratifications motives seem to be correlated. Seven of the nine motives ( $78 \%$ ) have high item correlations. Three motives - To Escape, Out of Habit and For Companionship have $58 \%$ of their items correlated at the .05 confidence level or higher. One motive - To Pass Time has $80 \%$ of its items correlated at the . 05 confidence level or higher. Two motives -- For Entertainment and To be Stimulated (arousal) have $91 \%$ of their items correlated at the .05 confidence level or higher. Finally, one motive - For Relaxation has $100 \%$ of its items correlated at the .05 confidence level or higher.

## IV. Data Collection <br> A. The Final Data Set

The final data set includes responses from 374 respondents. The questionnaires were not collected in a random fashion. Data on 432 variables were collected, of that, data from 247 variables will be used in this study. Twelve demographic measures were collected (see Table 1 for demographic descriptives).

A convenience survey method was used to collect data. The researcher understands that the validity of the sample has external validity limitations because the data were not randomly selected. This is a shortcoming of the study and must be addressed if any large-scale administration of the instrument is to be implemented. However, the high inter-item reliability of items designed to measure motives indicates that such an observation method may merit future investigation.

The questionnaire was self administered with the assistance of four trained interviewers. Five interviewers at six academic locations in the United States collected responses. During the fall of 1997, the final questionnaire was presented to all incoming freshman students and continuing education students at Hampton University in Hampton, Virginia. Of that first request, 197 students completed the survey between October 4 -November 17, 1997. Freshmen were chosen because they may still identify with the communities they left to come to attend college. Continuing education students were selected to gather responses from older respondents.

During the summer and fall of 1998 (June 4 -- November 20, 1998) 100 more questionnaires were mailed to four universities around the United States, 63 were
returned; all returned questionnaires were included in the final data set. Among those locations are; the University of Oklahoma -- Norman, Oklahoma ( $\mathrm{n}=23$ ), Rust College -Tougaloo, Mississippi ( $\mathrm{n}=11$ ), the University of Wisconsin -Whitewater -- Whitewater, Wisconsin ( $\mathrm{n}=15$ ) and the University of North Dakota -- Grand Fork, North Dakota ( $\mathrm{n}=14$ ). Including completed surveys from these institutions was done to increase the geographic diversity of the sample.

During the spring semester of 1999, the questionnaire was administered to 143 students in introductory courses in the Department of Mass Media Arts at Hampton University. All of theses surveys were usable and include in the final data set. Finally, during the fall of 2000, 60 questionnaires were mailed to members of Meadow Fork Baptist Church in Travelers' Rest, South Carolina. Forty were returned completed. There were 418 questionnaire completed between the spring of 1997 and the fall of 2000 . Of these 418 returned questionnaires, 43 did not contain geographic data and a respondent from the Virgin Islands completed one. Thus, there are 374 completed questionnaires in the survey ( $\mathrm{n}=374$ ).

The question of maturation as a threat to the internal validity of the data set is reasonable considering the amount of time that passed from the time the initial questionnaires were completed until the time the last questionnaires were completed. Individual respondents' level of familiarity with media activities and possible gratifications of those activities may have changed between the spring of 1997 and the fall of 2000. These factors may or may not have had some effect upon the choices made by early respondents and those choices made by latter respondents. For this reason the
mean scores of all observed variables where compared to determine if responses where significantly different between those respondents that completed the questionnaire in the spring of 1997 (T1) and the fall of 2000 (T2). The comparison of the variable means for the observed variables indicate that T1 respondents had higher means scores among 46 percent of the 393 variables observed in this study. T2 respondents had higher mean scores among 54 percent of the variables. Although T2 scores were higher among more variables there were no discernible patterns apparent in the distribution of mean scores. The distribution of mean scores provides support for the argument that there may be a slight directional difference of mean scores toward T2 respondents. Thus, some maturation of the respondents may have occurred during the administration of the questionnaire. This threat to internal validity might be better managed in future research by reducing the amount of time that passes during the data collection process.

Eleven items in the questionnaire gathered demographic data from the respondents. Below are the descriptive data for those items. Gender, Race and Income Level will be discussed further in Chapter four.

## B. Analysis of Data

The final questionnaire attempts to measures media use through the formation of a media repertoire for nine uses and gratification motives by four residential locations and by attachment to those locations. Data collected in this study will be analyzed using two statistical test for nominal level data - Chi Square $\left(X^{2}\right)$ and T-test are the selected test.

For Research Questions \#1, \#3, \#4 and \#5 in this study a Chi Square ( $X^{2}$ )
contingency table will be used to compare the means. For Research Question \#2 in this study a t -test will be used to test.

Table 1
Data Set Demographic Characteristics

| Age | \% |
| :--- | ---: |
| $18-29$ years old | 83 |
| $30-39$ years old | 9 |
| $40-49$ years old | 6 |
| $50-59$ years old | 2 |
| 60 years or older | 1 |


| Level of Education | $\%$ |
| :--- | ---: |
| Some college | 73 |
| High School Graduate | 12 |
| College Graduate | 9 |
| Advanced Degree | 5 |
| $8-12$ years of education | 1 |


| Time in Community | $\%$ |
| :--- | ---: |
| Up to one year | 83 |
| Ten or more years | 9 |
| Two to five years | 6 |
| Six to ten years | 2 |


| Television signal into the home  <br> $\%$  |  |
| :--- | ---: |
| Antenna | 67 |
| Cable | 31 |
| Satellite | 2 |
|  |  |


| Race | $\%$ |
| :--- | ---: |
| African American | 60 |
| European American | 33 |
| Other** | 5 |
| Native American | 1 |
| Asian American | 1 |


| Income Level | $\%$ |
| :--- | ---: |
| $\$ 0-19,999$ per year | 64 |
| $\$ 20,000-\$ 39,999$ | 17 |
| $\$ 40,000-\$ 59,999$ per year | 10 |
| $\$ 60,000$ per year or more | 9 |

Plan to move within 5 years \%
Yes
No


| Gender | \% |
| :--- | ---: |
| Female | 67 |
| Male | 33 |


| Residential Location* | $\%$ |
| :--- | ---: |
| Rural | 13 |
| Rural Fringe | 6 |
| Urban Fringe | 21 |
| Urban | 60 |


| Community Attachment Level |  |
| :--- | ---: |
| \% |  |$|$| Drifters | 50 |
| :--- | ---: |
| Relocators | 22 |
| Settler | 13 |
| Settled | 16 |

## CHAPTER 4 <br> DATA ANALYSIS AND DISCUSSION

## 1. Introduction

The purpose of this study was to explore the effect of residential location as a predictor variable in explaining the identification, selection and formation of a repertoire of mass media Channels by an active and purposive audience. The premise of the study is that people have several mass media channel repertoire, which are influenced by environmental needs and motives. Key variables in this study are residential location, resident type, type of medium (traditional or newer) and selected socio-economic indicators (race, gender, and income level).

This chapter is a discussion of the findings of this study. Each of the five research questions mentioned at the end of chapter one will be addressed in turn. For each, the key variables being analyzed and statistical test applied will be identified. Finally, each significant relationship will be graphed and discussed.

## II. Research Question \#1

1. Per Motive, is the inclusion of a mass media activity into a respondent's mass media channel repertoire related to residential location?

This question focuses on the following variables: Motive and Residential Location upon the selection of Mass Media Activities and the formation of Mass Media Channel Repertoire. A Chi-Square $\left(\chi^{2}\right)$ was applied to determine the degree of
relationship. As can be seen in Tables 2a-c, residential location is significantly related to seven motives.

Table 2a
Percent of Respondents using media channels (d.f. $=3$ )

| Motive: To Relax | Rural <br> $\mathbf{N}=\mathbf{4 8}$ | Rural Fringe <br> $\mathbf{N}=\mathbf{2 3}$ | Urban Fringe <br> $\mathbf{N}=\mathbf{8 0}$ | Urban <br> $\mathbf{N}=\mathbf{2 2 3}$ | $\chi^{2}$ | $\mathbf{p}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Interpersonal | 71 | 65 | 71 | 76 | 1.79 | ns |
| Print | 71 | 74 | 75 | 72 | .403 | ns |
| Audio | 79 | 87 | 96 | 94 | 15.33 | .01 |
| Video | 94 | 96 | 85 | 83 | 6.06 | ns |
| Computer | 40 | 35 | 25 | 27 | 4.29 | ns |
| Motive: for Companionship | Rural | Rural Fringe | Urban Fringe | Urban | $\chi^{2}$ | $\mathbf{p}$ |
| Interpersonal | 85 | 96 | 83 | 93 | 9.68 | .02 |
| Print | 77 | 52 | 85 | 64 | 4.98 | ns |
| Audio | 77 | 91 | 66 | 83 | 2.56 | ns |
| Video | 94 | 87 | 91 | 88 | 1.67 | ns |
| Computer | 44 | 35 | 38 | 36 | 1.00 | ns |
| Motive: Out of Habit | Rural | Rural Fringe | Urban Fringe | Urban | $\chi^{2}$ | $\mathbf{p}$ |
| Interpersonal | 75 | 83 | 79 | 83 | 2.27 | ns |
| Print | 60 | 74 | 70 | 77 | 6.16 | ns |
| Audio | 71 | 87 | 86 | 83 | 5.48 | ns |
| Video | 94 | 83 | 93 | 89 | 2.87 | ns |
| Computer | 44 | 35 | 38 | 36 | 1.00 | ns |

The motives related to residential location are: to relax, for companionship, for entertainment, to pass time, for social interaction, to obtain information and to escape (daily life). The significant media Channels are interpersonal, audio and video. Further, Tables 2a-c demonstrates interpersonal media activities are significantly related to five motives. Mass media activities are significantly related to three motives.

Table 2a indicates that significantly more urban respondents include the audio channel (listen to pre-recorded music or radio) in their repertoire to relax than rural respondents. In fact, one in five rural respondents didn't use audio media activities for this purpose. On the other hand, almost all urban respondents (94\%) use audio media
activities to relax. Although urban respondents almost universally include audio media activities in their repertoire to relax, only 7 of 10 rural respondents are likely to use such media activities to satisfy this motive. For companionship, rural respondents are significantly less likely to include interpersonal media activities in their repertoire than their urban counterparts. Eighty-five percent of rural respondents include interpersonal media activities in their companionship repertoire. Ninety-three percent of urban respondents include these activities in their repertoire to satisfy this motive.

Table 2b
Percent of respondents using media channels (d.f. $=3$ )

| Motive: For Entertainment | Rural <br> $\mathbf{N}=\mathbf{4 8}$ | Rural Fringe <br> $\mathbf{N}=\mathbf{2 3}$ | Urban Fringe <br> $\mathbf{N}=\mathbf{8 0}$ | Urban <br> $\mathbf{N}=\mathbf{2 2 3}$ | $\chi^{2}$ | $\mathbf{p}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Interpersonal | 58 | 83 | 73 | 81 | 12.08 | .01 |
| Print | 69 | 74 | 75 | 68 | 1.70 | ns |
| Audio | 81 | 83 | 85 | 90 | 3.53 | ns |
| Video | 96 | 96 | 98 | 96 | .355 | ns |
| Computer | 48 | 49 | 34 | 41 | 3.12 | ns |
| Motive: To Pass Time | Rural | Rural Fringe | Urban Fringe | Urban | $\chi^{2}$ | $\mathbf{p}$ |
| Interpersonal | 88 | 83 | 86 | 95 | 9.75 | .02 |
| Print | 88 | 83 | 89 | 83 | 1.63 | ns |
| Audio | 83 | 87 | 90 | 94 | 6.96 | ns |
| Video | 98 | 96 | 99 | 98 | .955 | ns |
| Computer | 46 | 52 | 48 | 51 | .574 | ns |
| Motive: for Social Interaction | Rural | Rural Fringe | Urban Fringe | Urban | $\chi^{2}$ | $\mathbf{p}$ |
| Interpersonal | 85 | 91 | 88 | 91 | 1.51 | ns |
| Print | 42 | 26 | 54 | 51 | 6.82 | ns |
| Audio | 71 | 70 | 89 | 87 | 12.15 | .01 |
| Video | 92 | 87 | 98 | 97 | 8.69 | .03 |
| Computer | 50 | 44 | 35 | 48 | 4.53 | ns |

Also, Table 2a illustrates that the use of media channel to satisfy the out of habit motive is not significantly related to residential location.

Table 2 b shows that for entertainment urban respondents include the interpersonal cluster in their repertoire more than rural respondents. Here, four of five (81\%) urban
respondents say they include the interpersonal media channel (speaking face to face, writing or reading a letter or speaking on the telephone) in their repertoire for this purpose. On the other hand, less than $60 \%$ of rural respondents use these activities for entertainment.

Table 2c
Percent of Respondents using media channels (d.f. $=3$ )

| Motive: to Obtain Information | Rural <br> $\mathbf{N}=\mathbf{4 8}$ | Rural Fringe <br> $\mathbf{N}=\mathbf{2 3}$ | Urban Fringe <br> $\mathbf{N}=\mathbf{8 0}$ | Urban <br> $\mathbf{N}=\mathbf{2 2 3}$ | $\chi^{2}$ | P |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Interpersonal | 69 | 83 | 84 | 88 | 10.97 | .01 |
| Print | 88 | 96 | 96 | 89 | 4.81 | Ns |
| Audio | 67 | 78 | 76 | 70 | 2.34 | Ns |
| Video | 88 | 100 | 95 | 94 | 5.08 | Ns |
| Computer | 46 | 52 | 49 | 57 | 2.67 | Ns |
| Motive: for Arousal | Rural | Rural Fringe | Urban Fringe | Urban | $\chi^{2}$ | $\mathbf{P}$ |
| (stimulation) | 56 | 74 | 64 | 60 | 2.40 | Ns |
| Interpersonal | 54 | 61 | 59 | 55 | .680 | Ns |
| Print | 54 | 70 | 63 | 52 | 4.85 | Ns |
| Audio | 88 | 96 | 88 | 88 | 1.29 | Ns |
| Video | 36 | 39 | 35 | 33 | .507 | Ns |
| Computer | 46 | 78 | 65 | 74 | 15.51 | .001 |
| Motive: to Escape (daily life) | Rural | Rural Fringe | Urban Fringe | Urban | $\chi^{2}$ | $\mathbf{P}$ |
| Interpersonal | 46 | 52 | 59 | 63 | 267 | Ns |
| Print | 54 | 74 | 65 | 74 | 3.21 | Ns |
| Audio | 77 | 91 | 76 | 86 | 5.97 | Ns |
| Video | 40 | 35 | 26 | 32 | 2.57 | Ns |
| Computer |  |  |  |  |  |  |

Also, Table 2 b indicates that to pass time urban respondents include the interpersonal cluster in their repertoire significantly more than rural respondents. Ninetyfive percent of urban respondents use interpersonal media activities for this purpose.

Likewise, $88 \%$ of rural respondents used interpersonal media activities to pass time.
Another relationship highlighted in Table 2b indicates, for social interaction most respondents use audio media activities. Seven in 10 (71\%) rural respondents include the
audio channel in their repertoire to satisfy this motive. Eighty-six percent of urban respondents say they use pre-recorded music or listen to radio for social interaction.

Finally, this table reveals that most respondents use video media activities for social interaction. More than $97 \%$ of urban respondents use video media activities for social interaction. Nearly ninety-two percent of rural respondents use these activities to satisfy this motive. The percentages reported for the social interaction motive should be considered with caution. The relationship between the two questionnaire items designed to measure this motive is insignificant for 10 of 12 media activities being observed (see appendice B).

Table 2c shows that to obtain information urban respondents include the interpersonal cluster in their repertoire significantly more than rural respondents. Nearly 7 in 10 rural respondents (69\%) use these media activities for this purpose. Almost 9 in 10 (88\%) urban respondents say they use this media cluster to obtain information. It is interesting to note that more that $30 \%$ of rural respondents say they don't use interpersonal media activities to obtain information.

Further, Table 2c illustrates that urban respondents are significantly more likely to use interpersonal media activities to escape (daily life). Less than one-half ( $46 \%$ ) of rural respondents included interpersonal media activities in their repertoire to escape (daily life). Nearly 3 of 4 (74\%) Urban respondents say they use some interpersonal media activity to escape daily life.

In summary, urban respondents are significantly more likely than rural respondents to include the interpersonal media cluster in their repertoire for
entertainment, to pass time, to obtain information and to escape (daily life). Further, urban respondents are significantly more likely than rural respondents to include the audio and video media Channels in their repertoire for social interaction. The percentages reported for the social interaction motive should be considered with caution. The relationship between the two questionnaire items designed to measure this motive is insignificant for 10 of 12 media activities being observed (see appendice B).

## III. Research Question \#2

Per Motive, do Urban residents have a greater number of Mass Media Activities in their Mass Media Channel Repertoire than their Rural counterparts?

This questions focuses on the following variables: (predictors -Motive and Residential Location (Urban and Rural) upon (dependent variable -- Media Activities and Mass Media Channel Repertoire) A t-test was applied to determine if the mean number of media activities included in a respondent's repertoire is the same for Urban and Rural respondents.

Mean values for the number of media activities included in a respondent's mass media channel repertoire were determined by combining the responses to each item that measure a particular motive, then dividing the total number of responses for each motive by the total number of items used to measure that motive (see appendice B ). The mean value for each media cluster was then compare for rural and urban respondents.

Table 3a
Mean number of media activities in mass media channel repertoire

| Motive: To Relax | Rural <br> $\mathbf{N}=\mathbf{7 1}$ | Urban <br> $\mathbf{N}=\mathbf{3 0 3}$ | $\mathbf{t}$-value | $\mathbf{d f}$ | $\mathbf{p}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Interpersonal | .937 | 1.08 | -1.19 | 372 | ns |
| Print | 1.10 | .919 | .81 | 372 | ns |
| Audio | 1.00 | 1.28 | -3.52 | 372 | .000 |
| Video | 1.26 | 1.27 | -.12 | 372 | ns |
| Computer | .289 | .191 | 2.06 | 372 | .04 |
| Motive: For Companionship | Rural | Urban | t-value | $\mathbf{d f}$ | $\mathbf{p}$ |
| Interpersonal | 1.11 | 1.23 | -1.28 | 372 | ns |
| Print | .817 | .713 | 1.07 | 372 | ns |
| Audio | .795 | .946 | -1.78 | 372 | ns |
| Video | 1.08 | 1.21 | -1.27 | 372 | ns |
| Computer | .309 | .252 | 1.17 | 372 | ns |
| Motive: Out of Habit | Rural | Urban | $\mathbf{t}$-value | $\mathbf{d f}$ | $\mathbf{p}$ |
| Interpersonal | .929 | 1.08 | -1.47 | 371 | ns |
| Print | .761 | .854 | -.93 | 371 | ns |
| Audio | .398 | .507 | -2.55 | 371 | .01 |
| Video | 1.11 | 1.21 | -1.11 | 371 | ns |
| Computer | .366 | .314 | 1.01 | 372 | ns |

As can be seen in Tables 3a-c, six of nine motives are significantly related to residential location. Among these six motives, all five media Channels are represented in various mass media channel repertoire. The motives are: to relax, out of habit, for entertainment, to pass time, for social interaction and to obtain information. The significant media Channels are interpersonal, print, audio, video and computer.

Table 3b
Mean number of media activities in mass media channel repertoire

| Motive: <br> For Entertainment | Rural <br> $\mathbf{N}=\mathbf{7 1}$ | Urban <br> $\mathbf{N}=\mathbf{3 0 3}$ | $\mathbf{t}$-value | $\mathbf{d f}$ | $\mathbf{p}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Interpersonal | .866 | 1.06 | -1.73 | 372 | ns |
| Print | .930 | .825 | .90 | 372 | ns |
| Audio | .887 | 1.02 | -1.53 | 372 | ns |
| Video | .373 | .292 | 1.52 | 372 | ns |
| Computer | Rural | Urban | $\mathbf{t}$-value | $\mathbf{d f}$ | $\mathbf{p}$ |
| Motive: <br> To Pass Time | 1.08 | 1.44 | -3.45 | 372 | .001 |
| Interpersonal | 1.09 | 1.04 | .48 | 372 | ns |
| Print | .953 | 1.19 | -2.81 | 372 | .005 |
| Audio | 1.48 | 1.66 | -1.83 | 372 | ns |
| Video | .399 | .351 | .88 | 372 | ns |
| Computer | Rural | $\mathbf{U r b a n}$ | $\mathbf{t}$-value | $\mathbf{d f}$ | $\mathbf{p}$ |
| Motive: | .958 | 1.04 | -.87 | 372 | ns |
| For Social Interaction | .324 | .482 | -2.02 | 372 | .04 |
| Interpersonal | .824 | .998 | -2.15 | 372 | .03 |
| Print | 1.06 | 1.37 | -3.64 | 372 | .000 |
| Audio | .296 | .279 | .37 | 372 | ns |
| Video |  |  |  |  |  |
| Computer |  |  |  |  |  |

As Table 3a illustrates, the number of interpersonal media activities in urban respondents' repertoire to relax is significantly higher than the number of interpersonal media activities used by rural respondents to relax. Further, use of computers is significantly higher among rural respondents than among urban respondents to satisfy this motive. Also, Table 3a reveals that the number of activities included in urban respondents' companionship repertoire is significantly higher than the number used by rural respondents.

Table 3c
Mean number of media activities in mass media channel repertoire

| Motive: <br> To Obtain Information | Rural <br> $\mathbf{N}=\mathbf{7 1}$ | Urban <br> $\mathbf{N}=\mathbf{3 0 3}$ | $\mathbf{t - v a l u e}$ | $\mathbf{d f}$ | $\mathbf{p}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Interpersonal | 1.28 | .993 | -1.90 | 372 | ns |
| Print | .549 | .514 | .58 | 372 | ns |
| Audio | .789 | .905 | -1.63 | 372 | ns |
| Video | .338 | .336 | .05 | 372 | ns |
| Computer | Rural | Urban | t-value | $\mathbf{d f}$ | $\mathbf{p}$ |
| Motive: | .803 | .782 | .19 | 371 | ns |
| For Arousal (stimulation) | .683 | .606 | .80 | 371 | ns |
| Interpersonal | .592 | .575 | .19 | 371 | ns |
| Print | 1.41 | 1.65 | -1.94 | 371 | .05 |
| Audio | .296 | .240 | 1.12 | 371 | ns |
| Video | Rural | Urban | $\mathbf{t - v a l u e}$ | $\mathbf{d f}$ | $\mathbf{p}$ |
| Computer | .275 | .344 | -.137 | 371 | ns |
| Motive: |  |  |  |  |  |
| To Escape (daily life) | .648 | .661 | -.14 | 371 | ns |
| Interpersonal | .704 | .820 | -1.33 | 371 | ns |
| Print | 1.08 | 1.25 | -1.37 | 371 | ns |
| Audio | .268 | .220 | .99 | 371 | ns |
| Video |  |  |  |  |  |
| Computer |  |  |  |  |  |

Likewise, urban respondents have a significantly higher number of audio media activities in their companionship repertoire than the number included in rural respondents' repertoire to satisfy this motive.

Finally, Table 3a shows that urban respondents include a significantly higher number of audio media activities in their repertoire out of habit than rural respondents.

Table $3 b$ indicates urban respondents have a higher number of interpersonal media activities in their entertainment repertoire than rural respondents. Interestingly, the number of video media activities is relatively high for rural and urban respondents.

However, the number of video media activities in an urban respondent's entertainment repertoire is significantly higher than the number of video media activities in a rural respondent's repertoire. Both, rural and urban respondents use a relatively large numbers of interpersonal media activities in their repertoire to pass time. But, use of interpersonal media activities to pass time is significantly higher among urban respondents than among rural respondents. The same is true for the number of audio media activities and video media activities used by urban respondents and rural respondents to pass time.

Finally, Table 3 b shows there is no significant difference in the number of activities used by rural and urban respondents for social interaction.

Table 3c illustrates that urban respondents use a significantly higher number of interpersonal media activities in their repertoire to obtain information than rural respondents. Further, urban respondents include a significantly higher number of video media activities in their arousal repertoire than rural respondents.

Finally, Table 3c shows urban respondents include a significantly higher number of interpersonal media activities in their repertoire to escape daily life than rural respondents. Also, this table indicates that urban respondents have significantly higher number of audio media activities and video media activities in their repertoire to escape daily life than rural respondents.

In summary, urban respondents have a significantly larger number of media activities in their various repertoire than rural respondents. Urban respondents have a significantly larger number of media activities in three Channels for social interaction than rural respondents. The percentages reported for the social interaction motive should be considered with caution. The relationship between the two questionnaire items designed to measure this motive is insignificant for 10 of 12 media activities being observed (see appendice B).

Respondents are split on the relaxation motive. Urban respondents have a significantly larger number of audio media activities in their repertoire than rural respondents. Rural respondents are significantly more likely to include computer activities in their relaxation repertoire than urban respondents.

For the out of habit motive urban respondents have a significantly larger number of audio media activities in their repertoire than rural respondents. For the entertainment motive urban respondents have a significantly larger number of video media activities in their repertoire than rural respondents. And, to pass time urban respondents use a significantly larger number of interpersonal media activities than rural respondents.

## IV. Research Question \#3

Per Motive, does Residential Location influence the inclusion of Traditional Media Activities and Newer Mass Media Activities in a respondent's Mass Media Channel Repertoire?

This questions focuses on the following variables: (predictors -Motive and Residential Location upon (dependent variables -- Mass Media Activity, and Mass Media

Channel Repertoire) A Chi-Square statistic ( $\chi^{2}$ ) was applied to determine degree of relationship and significance level. This question seeks to determine if a respondent's

Table 4
Percent of respondents using traditional or newer media (d.f. $=3$ )

| Motive: To Relax | $\begin{aligned} & \text { Rural } \\ & \mathbf{N}=48 \end{aligned}$ | Rural Fringe $\mathbf{N}=23$ | Urban Fringe $\mathrm{N}=\mathbf{8 0}$ | $\begin{aligned} & \text { Urban } \\ & \mathbf{N}=\mathbf{2 2 3} \end{aligned}$ | $\chi^{2}$ | p |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Traditional | 42 | 22 | 45 | 40 | 4.08 | ns |
| Newer | 40 | 40 | 25 | 26 | 5.61 | ns |
| Motive: <br> For Companionship | Rural | Rural Fringe | Urban Fringe | Urban | $\chi^{2}$ | p |
| Traditional | 96 | 100 | 94 | 97 | 2.54 | ns |
| Newer | 40 | 39 | 36 | 37 | . 201 | ns |
| Motive: <br> Out of Habit | Rural | Rural Fringe | Urban Fringe | Urban | $\chi^{2}$ | p |
| Traditional | 52 | 61 | 54 | 48 | 2.15 | ns |
| Newer | 35 | 39 | 39 | 35 | . 573 | ns |
| Motive: for entertainment | Rural | Rural Fringe | Urban Fringe | Urban | $\chi^{2}$ | p |
| Traditional | 56 | 39 | 49 | 49 | 1.90 | ns |
| Newer | 27 | 26 | 21 | 24 | . 638 | ns |
| Motive: to pass time | Rural | Rural Fringe | Urban Fringe | Urban | $\chi^{2}$ | p |
| Traditional | 35 | 30 | 25 | 27 | 1.88 | ns |
| Newer | 10 | 17 | 14 | 21 | 3.92 | ns |
| Motive: for social interaction | Rural | Rural Fringe | Urban Fringe | Urban | $\chi^{2}$ | p |
| Traditional | 58 | 48 | 65 | 57 | 2.79 | ns |
| Newer | 52 | 44 | 38 | 43 | 2.60 | ns |
| Motive: to obtain information | Rural | Rural Fringe | Urban Fringe | Urban | $\chi^{2}$ | p |
| Traditional | 38 | 22 | 43 | 41 | 3.57 | ns |
| Newer | 21 | 44 | 28 | 33 | 4.77 | ns |
| Motive: for arousal | Rural | Rural Fringe | Urban Fringe | Urban | $\chi^{2}$ | p |
| Traditional | 48 | 57 | 45 | 43 | 1.74 | ns |
| Newer | 25 | 26 | 29 | 25 | . 529 | ns |
| Motive: to escape (daily life) | Rural | Rural Fringe | Urban Fringe | Urban | $\chi^{2}$ | p |
| Traditional | 44 | 13 | 36 | 40 | 7.06 | ns |
| Newer | 54 | 35 | 28 | 35 | 9.51 | . 02 |

residential location is related to their use of traditional media (interpersonal, print and audio) and/or newer media (video and computer).

As can be seen in Table 4, there is one significant relationship between residential location, traditional and newer mass media activities and the formation of mass media channel repertoire. The use of newer media is significantly related to residential location when respondents are attempting to escape daily life.

Further, this table indicates that rural respondents are significantly more likely to use newer media channels (video or computer) than urban respondents to escape daily life. Over one-half (54\%) of rural respondents include newer media activities in their repertoire to escape. Only $35 \%$ of urban respondents use newer media activities to satisfy this motive.

There are no other motives that are significantly related to type of medium. In summary, only the satisfaction of one motive is significantly related to type of media. Thus, type of media is not a significant predictor of mass media activity among respondents. There was significantly different use of media for only one motive (to escape daily life).

## V. Research Question \#4

Per Motive, does a respondent's level of attachment (Resident Type) to community influence the number of Mass Media Channels included in a respondent's Mass Media Channel Repertoire? If so, which attachment types are significant?

This questions focuses on the following variables: (predictors - Motive and Resident Type upon (dependent variables -- Mass Media Channels, and Mass Media Channel Repertoire) A Chi-Square ( $\chi^{2}$ ) was applied to determine degree of relationship
and significance level. For each motive, does the length of time a respondent lives an area and his or her intent to stay in the area influence their Mass Media Channel

## Repertoire?

Table 5a
Percent of respondents using media channels by resident type (d.f. $=3$ )

| Motive: to relax | Drifters <br> $\mathbf{N}=\mathbf{1 8 7}$ | Relocators <br> $\mathbf{N}=\mathbf{8 1}$ | Settlers <br> $\mathbf{N}=\mathbf{4 7}$ | Settled <br> $\mathbf{N}=\mathbf{5 9}$ | $\chi^{2}$ | $\mathbf{p}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Interpersonal | 77 | 70 | 77 | 76 | 3.15 | ns |
| Print | 72 | 73 | 62 | 83 | 6.11 | ns |
| Audio | 94 | 96 | 94 | 81 | 12.23 | .006 |
| Video | 80 | 90 | 94 | 88 | 8.33 | .04 |
| Computer | 21 | 31 | 28 | 48 | 15.32 | .001 |
| Motive: for |  |  |  |  |  |  |
| companionship | Drifters | Relocators | Settlers | Settled | $\chi^{2}$ | $\mathbf{p}$ |
| Interpersonal | 91 | 90 | 85 | 90 | 1.70 | ns |
| Print | 65 | 64 | 68 | 64 | .225 | ns |
| Audio | 83 | 80 | 85 | 83 | .600 | ns |
| Video | 91 | 82 | 94 | 93 | 7.70 | .05 |
| Computer | 32 | 41 | 36 | 51 | 7.23 | ns |
| Motive out of habit | Drifters | Relocators | Settlers | Settled | $\chi^{2}$ | $\mathbf{p}$ |
| Interpersonal | 80 | 90 | 72 | 81 | 6.94 | ns |
| Print | 73 | 78 | 72 | 70 | 1.31 | ns |
| Audio | 86 | 83 | 75 | 76 | 4.76 | ns |
| Video | 89 | 88 | 94 | 95 | 3.10 | ns |
| Computer | 32 | 41 | 36 | 51 | 7.23 | ns |

To review, Drifters have lived in an area less than five years and plan to leave the area within five years. Settled respondents have lived in an area for five years and plan to remain in the area. Settlers have lived in an area less than five years and don't plan to leave in the next five years. Relocators have lived in an area for five years but plan to leave within five years. As can be seen in Tables 5a-c five motives and four media channels are significantly related to a respondent's length of time in an area and his or
her intent to remain in that area. The significant motives are to relax, for companionship, for entertainment, to obtain information and for arousal (stimulation).

The significant media channels are interpersonal, audio video and computer. Only $21 \%$ of Drifters say they use Computer Media activities to relax. Forty-eight percent of Settled respondents say they use these activities to satisfy this motive.

Table 5a shows that to relax resident type is significantly related to respondents including audio, video and computer channels in their mass media channel repertoire. Ninety-four percent of Drifters use audio media activities to relax. Only $81 \%$ of Settled respondents say they use these activities to satisfy this motive. Relocators and Settlers are significantly more likely to include video media activities in their relaxation repertoire than Drifters or Settled respondents. Ninety percent of Relocators and 94\% of Settled respondents say they use video media activities to relax. Just $80 \%$ of Drifters and $88 \%$ of Settled respondents say they use these activities to satisfy this motive. Also, Table 5 b illustrates that for companionship, Relocators are significantly less likely to include video media activities in their mass media channel repertoire than Drifters, Settlers or Settled respondents. Also, this table indicates that resident type is not significantly related to the motive out of habit.

Table 5 b illustrates that Settlers are significantly less likely to include interpersonal media activities in their media channel repertoire for entertainment than Drifters, Relocators or Settled respondents. Only 2 of 3 (66\%) Settlers stated they would use this channel to satisfy this motive. Mass media channel repertoire for neither the motive to pass time nor for social interaction are significantly related to resident type.

Table 5b
Percent of respondents using media channels by resident type (d.f. $=3$ )

| Motive: for entertainment | $\begin{array}{\|c\|} \hline \text { Drifters } \\ \mathrm{N}=187 \end{array}$ | Relocators $\mathrm{N}=\mathbf{8 1}$ | $\begin{array}{\|c} \hline \text { Settlers } \\ \mathrm{N}=\mathbf{4 7} \end{array}$ | $\begin{array}{\|c\|} \hline \text { Settled } \\ \mathbf{N}=\mathbf{5 9} \\ \hline \end{array}$ | $\chi^{2}$ | p |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Interpersonal | 82 | 73 | 66 | 70 | 8.59 | . 03 |
| Print | 71 | 70 | 62 | 71 | 1.68 | ns |
| Audio | 89 | 84 | 85 | 86 | 1.71 | ns |
| Video | 98 | 94 | 98 | 95 | 3.46 | ns |
| Computer | 38 | 38 | 43 | 53 | 4.52 | ns |
| Motive: to pass time | Drifters | Relocators | Settlers | Settled | $\chi^{2}$ | p |
| Interpersonal | 92 | 91 | 92 | 88 | 1.10 | ns |
| Print | 86 | 85 | 85 | 83 | . 225 | ns |
| Audio | 93 | 93 | 96 | 83 | 6.83 | ns |
| Video | 98 | 96 | 100 | 98 | 2.46 | ns |
| Computer | 49 | 53 | 40 | 54 | 2.55 | ns |
| Motive: for social interaction | Drifters | Relocators | Settlers | Settled | $\chi^{2}$ | p |
| Interpersonal | 92 | 88 | 89 | 83 | 4.05 | ns |
| Print | 50 | 42 | 47 | 56 | 2.85 | ns |
| Audio | 86 | 84 | 79 | 83 | 1.35 | ns |
| Video | 97 | 93 | 98 | 97 | 3.23 | ns |
| Computer | 44 | 47 | 45 | 48 | . 360 | ns |

Table 5c reveals that Settled respondents are significantly less likely to include interpersonal media activities in their channel repertoire to obtain information than Drifters, Relocators and Settlers. Three of 4 (75\%) Settled respondents say they use interpersonal media activities to obtain information. Ninety percent of Drifters use interpersonal media activities to obtain information. Likewise, Settled respondents are significantly less likely to include interpersonal media activities in their repertoire to satisfy the arousal motive. Less than one-half ( $48 \%$ ) of Settled respondents say they use interpersonal media activities for arousal. On the other hand, two-thirds (66\%) of Drifters and Settlers (68\%) say they include interpersonal media activities to satisfy the arousal motive.

Table 5c
Percent of respondents using media channels by resident type (d.f. $=3$ )

| Motive: to Obtain Information | Drifters <br> $\mathbf{N}=\mathbf{1 8 7}$ | Relocators <br> $\mathbf{N}=\mathbf{8 1}$ | Settlers <br> $\mathbf{N}=\mathbf{4 7}$ | Settled <br> $\mathbf{N}=\mathbf{5 9}$ | $\chi^{2}$ | $\mathbf{p}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Interpersonal | 90 | 83 | 77 | 75 | 10.76 | .01 |
| Print | 91 | 88 | 94 | 92 | 1.55 | ns |
| Audio | 72 | 69 | 68 | 75 | .735 | ns |
| Video | 96 | 90 | 89 | 97 | 5.50 | ns |
| Computer | 55 | 52 | 53 | 51 | .326 | ns |
| Motive: for Arousal |  |  |  |  |  |  |
| (stimulation) | Drifters | Relocators | Settlers | Settled | $\chi^{2}$ | $\mathbf{p}$ |
| Interpersonal | 66 | 56 | 68 | 48 | 8.78 | .03 |
| Print | 58 | 56 | 47 | 58 | 1.91 | ns |
| Audio | 58 | 57 | 45 | 54 | 2.70 | ns |
| Video | 89 | 88 | 85 | 92 | 1.13 | ns |
| Computer | 29 | 36 | 34 | 46 | 5.51 | ns |
| Motive: to Escape (daily life) | Drifters | Relocators | Settlers | Settled | $\chi^{2}$ | $\mathbf{p}$ |
| Interpersonal | 72 | 73 | 66 | 54 | 7.27 | ns |
| Print | 62 | 54 | 66 | 61 | 1.96 | ns |
| Audio | 74 | 68 | 68 | 70 | 1.63 | ns |
| Video | 83 | 86 | 77 | 83 | 2.03 | ns |
| Computer | 31 | 33 | 30 | 37 | 1.13 | ns |

Lastly, this table indicates that the motive to escape daily life is not significantly related to resident type.

## VI. Research Question \#5

Does the following socio-economic indicators (race, gender and income level) influence inclusion of Mass Media Channels in a respondent's Mass Media Channel Repertoire?

This questions focuses on the following variables: (control - race, gender and income level) (dependent variables -- Mass Media Activity, and Mass Media Channel Repertoire). A Chi-Square ( $\chi^{2}$ ) statistic was applied to determine if there were any significant relationships between the control variables and the dependent variables. Residential Location, Resident Type, and type of medium (traditional or newer) were
significant predictor variables for 26 media activity categories when respondents formed media channel repertoire. The socio-economic indicators (race, gender and income level) accounted for 39 significant relationships among respondents who formed media channel repertoire. Thus, the selected socio-economic indicators accounted for more significant relationships among respondents than residential location, type of medium or resident type. The influence each control variable has upon the formation of media channel repertoire now will be discussed.

## a. Race

As can be seen in Tables 6a-c, race is significantly related to all nine motives and all media channels.

Table 6a illustrates that rural respondents are less likely to use audio to relax than urban respondents. Eighty-six percent of rural white respondents compared to 97 percent of urban white respondents say they use audio media activities to relax. Likewise, 81 percent of rural blacks compared to 93 percent of urban black respondents say they use audio media activities to relax. Furthermore, among blacks, rural respondents are significantly more likely to include video media activities in their repertoire to relax than their urban counterparts. Ninety-three percent of rural blacks compared to 78 percent of urban blacks say they use the video media channel to relax. And, among whites, rural respondents are significantly more likely than their urban counterparts to use computer media activity to relax. Forty-six percent or rural whites compared to 24 percent of urban whites say they use the computer media channel to relax.

Table 6a
Percent of respondents using media channels by race (d.f. $=1$ )

| Motive: To Relax | Rural White $\mathrm{N}=22$ | Urban White $\mathrm{N}=100$ | $\chi^{2}$ | p | Rural Black $\mathrm{N}=43$ | Urban Black $\mathrm{N}=181$ | $\chi^{2}$ | p |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Interpersonal | 73 | 69 | . 119 | ns | 72 | 77 | . 531 | ns |
| Print | 68 | 80 | 1.46 | ns | 70 | 67 | . 089 | ns |
| Audio | 86 | 97 | 4.36 | . 04 | 81 | 93 | 6.13 | . 01 |
| Video | 100 | 94 | 1.39 | ns | 93 | 78 | 5.12 | . 02 |
| Computer | 46 | 24 | 4.13 | . 04 | 35 | 24 | 2.00 | ns |
| Motive: <br> For Companionship | Rural White | Urban White | $\chi^{2}$ | p | Rural <br> Black | Urban Black | $\chi^{2}$ | p |
| Interpersonal | 93 | 88 | 1.05 | ns | 84 | 91 | 2.09 | ns |
| Print | 59 | 72 | 1.42 | ns | 72 | 60 | 2.09 | ns |
| Audio | 91 | 78 | 1.09 | ns | 77 | 86 | 2.35 | ns |
| Video | 91 | 91 | . 000 | ns | 93 | 89 | . 626 | ns |
| Computer | 55 | 32 | 3.48 | . 05 | 40 | 38 | . 057 | ns |
| Motive: <br> Out of Habit | Rural White | Urban <br> White | $\chi^{2}$ | p | Rural Black | Urban Black | $\chi^{2}$ | p |
| Interpersonal | 77 | 82 | 0263 | ns | 77 | 82 | . 709 | ns |
| Print | 77 | 73 | . 170 | ns | 61 | 77 | 5.16 | . 02 |
| Audio | 86 | 87 | . 006 | ns | 72 | 83 | 2.30 | ns |
| Video | 86 | 95 | 2.20 | ns | 93 | 88 | . 940 | ns |
| Computer | 55 | 32 | 3.98 | . 05 | 40 | 38 | . 057 | ns |

Table 6 b shows that urban black respondents are significantly more likely than rural blacks to include audio media activities in their repertoire to pass time. Eighty-six percent of rural blacks compared to 95 percent of urban blacks say they use interpersonal media activities to pass time. Further, rural whites are significantly more likely than urban white respondents to use computer media activities to pass time.

Further, this table indicates that rural whites are significantly more likely than urban whites to use computer media activity for companionship. Fifty-five percent of rural whites compared to $32 \%$ of urban whites say they use computer media for companionship.

Urban black respondents are significantly more likely to use print media activities out of habit than rural black respondents. More than three of four (77 percent) urban blacks compared to just over three of five (61 percent) of rural black respondents say they use print media activities out of habit.

Finally, table 6a reveals that rural white respondents are significantly more likely to use computer media activity that urban white respondents out of habit. More than onehalf (55 percent) of rural respondents compared to less than one in three (32 percent) of urban whites say they use the computer media channel out of habit.

Table 6b indicates that rural black respondents are significantly less likely than urban black respondents to use interpersonal media activities for entertainment. Eighty percent of urban black respondents compared to 55 percent of rural blacks say they use the interpersonal media channel to satisfy their entertainment motive. Sixty-four percent of rural white respondents say they use computer activities for entertainment while only 30 percent of urban white respondents say they use that activity to satisfy the entertainment motive.

Table 6b
Percent of respondents using media channels by race (d.f. $=1$ )

| Motive: <br> For Entertainment | Rural <br> White <br> $\mathbf{N = 2 2}$ | Urban <br> $\mathbf{W h i t e}$ <br> $\mathbf{N}=\mathbf{1 0 0}$ | $\chi^{2}$ | $\mathbf{p}$ | Rural <br> Black <br> $\mathbf{N}=\mathbf{4 3}$ | Urban <br> Black <br> $\mathbf{N}=\mathbf{1 8 1}$ | $\chi^{2}$ | $\mathbf{p}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Interpersonal | 82 | 77 | .243 | ns | 55 | 80 | 11.07 | .000 |
| Print | 73 | 76 | .104 | ns | 65 | 67 | .082 | ns |
| Audio | 82 | 84 | .063 | ns | 81 | 91 | 3.46 | ns |
| Video | 100 | 100 | $*$ | $*$ | 95 | 96 | .004 | ns |
| Computer | 64 | 30 | 8.85 | .003 | 42 | 41 | .003 | ns |
| Motive: |  |  |  |  |  |  |  |  |
| To Pass Time | Rural <br> White | Urban <br> White | $\chi^{2}$ | $\mathbf{p}$ | Rural <br> Black | Urban <br> Black | $\chi^{2}$ | $\mathbf{p}$ |
| Interpersonal | 86 | 89 | .123 | ns | 86 | 95 | 4.49 | .03 |
| Print | 82 | 89 | .863 | ns | 88 | 81 | 1.24 | ns |
| Audio | 91 | 96 | .999 | ns | 84 | 92 | 2.51 | ns |
| Video | 100 | 100 | $*$ | $*$ | 98 | 98 | .088 | ns |
| Computer | 68 | 45 | 3.88 | .05 | 40 | 52 | 2.14 | ns |
| Motive: | Rural <br> For Social Interaction <br> White | Urban <br> White | $\chi^{2}$ | $\mathbf{p}$ | Rural <br> Black | Urban <br> Black | $\chi^{2}$ | $\mathbf{p}$ |
| Interpersonal | 96 | 89 | .847 | Ns | 84 | 91 | 1.72 | ns |
| Print | 36 | 54 | .224 | Ns | 37 | 51 | 2.58 | ns |
| Audio | 77 | 82 | .263 | Ns | 70 | 91 | 10.99 .000 |  |
| Video | 96 | 98 | .487 | Ns | 91 | 97 | 3.85 | .05 |
| Computer | 68 | 48 | 4.22 | .04 | 40 | 43 | .180 | ns |

Urban blacks are significantly more likely than rural black respondents to use audio and video media activities for social interaction. More than 90 percent of urban blacks and 70 percent of rural black respondents say they use the audio media channel for social interaction. Similarly, 97 percent of urban blacks and 91 percent of rural blacks say they use the video media channel for social interaction. The percentages reported for the social interaction motive should be considered with caution. The relationship between the two questionnaire items designed to measure this motive is insignificant for 10 of 12 media activities being observed (see appendice B).

Rural white respondents are significantly more likely than urban whites to use the computer media channel for social interaction. Sixty-eight percent of rural white
respondents compared to 48 percent of urban whites say they use the computer media channel for social interaction.

Table 6c
Percent of Respondents using media channels by race (d.f. $=1$ )

| Motive: <br> To Obtain Information | Rural <br> White $\mathrm{N}=22$ | Urban <br> White $\mathrm{N}=100$ | $\chi^{2}$ | p | Rural <br> Black $\mathrm{N}=43$ | Urban Black $\mathrm{N}=181$ | $\chi^{2}$ | p |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Interpersonal | 82 | 90 | 1.19 | ns | 70 | 86 | 6.08 | . 01 |
| Print | 91 | 93 | . 113 | ns | 88 | 91 | . 196 | ns |
| Audio | 73 | 72 | . 005 | ns | 70 | 71 | . 015 | ns |
| Video | 100 | 100 | * | * | 86 | 92 | 1.05 | ns |
| Computer | 68 | 47 | 3.24 | ns | 40 | 56 | 3.95 | . 05 |
| Motive: <br> For Arousal (stimulation) | Rural <br> White | Urban White | $\chi^{2}$ | p | Rural <br> Black | Urban Black | $\chi^{2}$ | p |
| Interpersonal | 82 | 60 | 3.72 | . 05 | 54 | 65 | 1.84 | ns |
| Print | 55 | 50 | . 149 | ns | 54 | 60 | . 347 | ns |
| Audio | 55 | 62 | . 420 | ns | 61 | 53 | . 773 | ns |
| Video | 100 | 90 | 2.40 | ns | 86 | 87 | . 048 | ns |
| Computer | 55 | 29 | 5.27 | . 02 | 28 | 35 | . 861 | ns |
| Motive: <br> To Escape (daily life) | Rural <br> White | Urban <br> White | $\chi^{2}$ | p | Rural <br> Black | Urban Black | $\chi^{2}$ | p |
| Interpersonal | 73 | 69 | . 119 | ns | 49 | 74 | 10.35 | . 001 |
| Print | 50 | 64 | 1.49 | ns | 56 | 62 | . 536 | ns |
| Audio | 77 | 71 | . 353 | ns | 65 | 73 | 1.04 | ns |
| Video | 100 | 87 | 3.20 | ns | 74 | 82 | 1.40 | ns |
| Computer | 55 | 25 | 7.45 | . 006 | 33 | 33 | . 005 | ns |

Urban black respondents are significantly more likely than rural blacks to use interpersonal media activities to obtain information. Eighty-six percent of urban black respondents compared to 70 percent of rural blacks say they use the interpersonal media channel to obtain information. Likewise, urban blacks are significantly more likely to use the computer media channel to obtain information. Fifty-six percent of urban blacks compared to 40 percent of rural blacks say they use the computer media channel to obtain information.

Further, Table 6 c reveals that rural white respondents are significantly more likely to use the interpersonal and computer channels for arousal. Eighty-two percent of rural whites compared to 60 percent of urban white respondents say they use the interpersonal media channel for arousal or stimulation. Similarly, Fifty-five percent of rural whites compared to 29 percent of urban white respondents say they use the computer media channel for arousal or stimulation.

Finally, Table 6c indicates that urban black respondents are significantly more likely than rural blacks to use interpersonal media activities to escape daily life. Seventyfour percent of urban blacks compared to 49 percent of rural blacks say they use the interpersonal channel to escape daily life. Also, this table reveals that rural white respondents are significantly more likely than urban whites to use the computer media channel to escape daily life. More than twice as many rural respondents ( 55 percent) say they use the computer media channel to escape daily life than urban respondents (25 percent).

In summary, race is a significant predictor of media activity for all uses and gratification motives being observed. This is better than residential location, type of medium or resident type. The interpersonal media channel is significantly related to six motives. Mass media channels are significantly related to all nine motives.

## b. Gender

As tables 7a-c illustrate, gender is significantly related to five of nine motives. The interpersonal media channel is significantly related only to the motive to obtain
information. Mass media channels are significantly related to the relaxation, entertainment, to pass time and social interaction motives.

Table 7a
Percent of respondents using media channels by gender (d.f. $=1$ )

| Motive: <br> To Relax | Rural <br> Female <br> $\mathbf{N = 4 3}$ | Urban <br> N = 207 | $\chi^{2}$ | $\mathbf{p}$ | Rural <br> Male <br> $\mathbf{N = 2 7}$ | Urban <br> Male <br> $\mathbf{N}=\mathbf{9 4}$ | $\chi^{2}$ | $\mathbf{p}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Interpersonal | 74 | 78 | .228 | ns | 63 | 68 | .249 | ns |
| Print | 67 | 75 | 1.16 | ns | 82 | 67 | 2.10 | ns |
| Audio | 81 | 94 | 7.94 | .005 | 82 | 96 | 6.20 | .01 |
| Video | 93 | 84 | 2.32 | ns | 96 | 81 | 3.78 | .05 |
| Computer | 40 | 20 | 7.78 | .005 | 37 | 39 | .048 | ns |
| Motive: | Rural <br> Female | Urban <br> For Companie | $\chi^{2}$ | $\mathbf{p}$ | Rural <br> Male | Urban <br> Male | $\chi^{2}$ | $\mathbf{p}$ |
| Interpersonal | 93 | 94 | .088 | ns | 82 | 82 | .003 | ns |
| Print | 77 | 69 | 1.00 | ns | 56 | 54 | .014 | ns |
| Audio | 79 | 84 | .307 | ns | 85 | 83 | .074 | ns |
| Video | 95 | 91 | .949 | ns | 85 | 86 | .017 | ns |
| Computer | 37 | 35 | .092 | ns | 44 | 40 | .140 | ns |
| Motive: | Rural <br> Out of Habit | Urban | $\chi^{2}$ | $\mathbf{p}$ | Rural <br> Male | Urban <br> Male | $\chi^{2}$ | $\mathbf{p}$ |
| Interpersonal | Female | Female |  | $\mathbf{p e n}$ |  |  |  |  |
| Print | 81 | 84 | .184 | ns | 74 | 79 | .262 | ns |
| Audio | 63 | 76 | 3.12 | ns | 67 | 75 | 1.81 | ns |
| Video | 77 | 85 | 1.55 | ns | 74 | 81 | .588 | ns |
| Computer | 93 | 90 | .307 | ns | 85 | 89 | .338 | ns |

As can be seen in Table 7a urban respondents are significantly more likely than their rural counterparts to include audio media activities in their mass media channel repertoire to relax. Eighty-two percent of rural male respondents and 81 percent of rural females say they use the audio media channel to satisfy this motive. In contrast, ninetyfour percent of urban female respondents and 96 percent of urban male respondents say they use the audio media channel satisfy this motive. Just 40 percent of rural females use the computer media channel to relax. This is twice the percentage of urban females ( 20 percent) who say the use the computer media channel to relax.

Finally, as this table illustrates, gender is not significantly related to companionship nor the out of habit motives.

Table 7b
Percent of respondents using media channels by gender (d.f. $=1$ )

| Motive: |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| For Entertainment | Rural <br> Female <br> $\mathbf{N}=\mathbf{4 3}$ | Urban <br> Nemale <br> $\mathbf{N}=\mathbf{2 0 7}$ | $\chi^{2}$ | $\mathbf{p}$ | Rural <br> Male <br> $\mathbf{N = 2 7}$ | Urban <br> Male <br> $\mathbf{N}=\mathbf{9 4}$ | $\chi^{2}$ | $\mathbf{p}$ |
| Interpersonal | 72 | 82 | 2.03 | ns | 59 | 72 | 1.69 | ns |
| Print | 67 | 72 | .358 | ns | 85 | 93 | 1.38 | ns |
| Audio | 79 | 88 | 2.71 | ns | 85 | 89 | .358 | ns |
| Video | 93 | 99 | 4.64 | .03 | 100 | 94 | 1.81 | ns |
| Computer | 49 | 36 | 2.59 | ns | 44 | 46 | .014 | ns |
| Motive: | Rural <br> To Pass Time | Urban | $\chi^{2}$ | $\mathbf{p}$ | Rural <br> Male | Urban <br> Male | $\chi^{2}$ | $\mathbf{p}$ |
| Interpersonal | 95 | 95 | .003 | ns | 74 | 87 | 2.74 | ns |
| Print | 81 | 86 | .596 | ns | 74 | 65 | .799 | ns |
| Audio | 84 | 93 | 4.19 | .05 | 85 | 93 | 1.38 | ns |
| Video | 93 | 100 | 9.71 | .002 | 100 | 95 | 1.50 | ns |
| Computer | 44 | 49 | .303 | ns | 52 | 52 | .001 | ns |
| Motive: | Rural | Urban | $\chi^{2}$ | $\mathbf{p}$ | Rural <br> Male | Urban <br> Male | $\chi^{2}$ | $\mathbf{p}$ |
| For Social Interaction | Female | Female | $\boldsymbol{\chi}^{2}$ | $\mathbf{p e m a l e}$ |  |  |  |  |
| Interpersonal | 88 | 92 | .517 | ns | 85 | 86 | .017 | ns |
| Print | 42 | 53 | 1.81 | ns | 30 | 49 | 3.16 | ns |
| Audio | 74 | 89 | 6.95 | .01 | 63 | 84 | 5.69 | .02 |
| Video | 88 | 99 | 14.87 | .000 | 93 | 95 | .168 | ns |
| Computer | 49 | 44 | .342 | ns | 44 | 46 | .014 | ns |

Table 7b indicates that urban female respondents are significantly more likely to use video media activities in their entertainment repertoire than their rural counterparts. Ninety-nine percent of urban females and 93 percent of rural females say they use video activities to relax. Audio and video media activities are significantly related to the motives to pass time and for social interaction. Urban females are significantly more likely than rural females to use audio and video media activities to pass time. Ninetythree percent of urban female respondents and 84 percent of rural female respondents say they include video media activities in their repertoire to pass time. Further, $100 \%$ of
urban female respondents and 93 percent of rural female respondents say they use the video media channel to pass time.

Table 7c
Percent of respondents using media channels by gender (d.f. $=1$ )

| Motive: <br> To Obtain Information | Rural <br> Female <br> $\mathbf{N = 4 3}$ | Urban <br> Nemale <br> $\mathbf{N}=\mathbf{2 0 7}$ | $\chi^{2}$ | $\mathbf{p}$ | Rural <br> Male <br> $\mathbf{N = 2 7}$ | Urban <br> Male <br> $\mathbf{N}=\mathbf{9 4}$ | $\chi^{2}$ | $\mathbf{p}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Interpersonal | 72 | 90 | 9.80 | .002 | 78 | 81 | .125 | ns |
| Print | 86 | 93 | 2.02 | ns | 96 | 88 | 1.50 | ns |
| Audio | 74 | 73 | .069 | ns | 63 | 70 | .512 | ns |
| Video | 91 | 97 | 2.97 | ns | 93 | 90 | .119 | ns |
| Computer | 47 | 54 | .722 | ns | 48 | 56 | .574 | ns |
| Motive: | Rural <br> Female | Urban <br> Female | $\chi^{2}$ | $\mathbf{p}$ | Rural <br> Male | Urban <br> Male | $\chi^{2}$ | $\mathbf{p}$ |
| Interpersonal | 67 | 64 | .159 | ns | 52 | 54 | .049 | ns |
| Print | 56 | 62 | .634 | ns | 56 | 41 | 1.68 | ns |
| Audio | 63 | 53 | 1.47 | ns | 52 | 60 | .513 | ns |
| Video | 84 | 87 | .430 | ns | 100 | 90 | 2.79 | ns |
| Computer | 37 | 32 | .458 | ns | 33 | 37 | .138 | ns |
| Motive: |  |  |  |  |  |  |  |  |
| To Escape (daily life) | Rural <br> Female | Urban <br> Iemale | $\chi^{2}$ | $\mathbf{p}$ | Rural <br> Male | Urban <br> Male | $\chi^{2}$ | $\mathbf{p}$ |
| Interpersonal | 61 | 73 | 2.92 | ns | 52 | 67 | 2.09 | ns |
| Print | 61 | 68 | .939 | ns | 44 | 49 | .170 | ns |
| Audio | 70 | 73 | .241 | ns | 67 | 69 | .059 | ns |
| Video | 77 | 87 | 2.61 | ns | 89 | 78 | 1.66 | ns |
| Computer | 40 | 29 | 2.05 | ns | 33 | 36 | .074 | ns |

Likewise, urban respondents are significantly more likely than rural respondents to use audio media activities for social interaction. Furthermore, urban female respondents are significantly more likely than rural female respondents to use video media activities for social interaction. Less than three in four rural respondents say they use the video channel to satisfy this motive. But, more than four of five urban respondents say they use the video media channel for social interaction. Almost all (99 percent) urban females say they use the video media channel for social interaction.

Eighty-eight percent of rural females say they use the video media channel to satisfy this
motive. The percentages reported for the social interaction motive should be considered with caution. The relationship between the two questionnaire items designed to measure this motive is insignificant for 10 of 12 media activities being observed (see appendice B). Table 7c indicates that urban female respondents are significantly more likely to include interpersonal media activities in their repertoire to obtain information. Seventytwo percent of rural female respondents use these activities to satisfy this motive. Ninety-nine percent of urban female respondents say they use these activities to obtain information. Finally, this table indicates that gender is not significantly related to the arousal or escape motives.

In summary, gender is a significant predictor of media activity for five of nine uses and gratification motives. It is a better predictor of media activity than type of medium. Both, gender and resident type were significant predictor variables of media activity for five of the nine uses and gratification motives. The interpersonal media channel is significantly related to one motive. Mass media channels are significantly related to four motives.

Table 8a
Percent of respondents using media channels by yearly income level (d.f.=1)

| Motive: <br> To Relax | $\begin{aligned} & \text { Rural } \\ & <40 \mathrm{~K} \\ & \mathrm{~N}=57 \end{aligned}$ | $\begin{array}{\|c} \hline \text { Urban } \\ <40 \mathrm{~K} \\ \mathrm{~N}=241 \end{array}$ | $\chi^{2}$ | p | $\begin{gathered} \hline \text { Rural } \\ >40 \mathrm{~K} \\ \mathrm{~N}=14 \end{gathered}$ | $\begin{gathered} \hline \text { Urban } \\ >40 \mathrm{~K} \\ \mathrm{~N}=54 \end{gathered}$ | $\chi^{2}$ | p |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Interpersonal | 70 | 77 | 1.08 | ns | 64 | 65 | . 001 | ns |
| Print | 68 | 74 | . 804 | ns | 86 | 69 | 1.63 | ns |
| Audio | 81 | 94 | 9.89 | . 002 | 86 | 100 | 7.95 | . 005 |
| Video | 93 | 82 | 4.31 | . 04 | 100 | 89 | 1.71 | ns |
| Computer | 37 | 27 | 2.39 | ns | 43 | 22 | 2.43 | ns |
| Motive: <br> For Companionship | $\begin{aligned} & \text { Rural } \\ & <40 \mathrm{~K} \end{aligned}$ | Urban $<40 \mathrm{~K}$ | $\chi^{2}$ | p | $\begin{gathered} \text { Rural } \\ >40 \mathrm{~K} \end{gathered}$ | Urban $>40 \mathrm{~K}$ | $\chi^{2}$ | p |
| Interpersonal | 91 | 92 | . 013 | ns | 79 | 83 | . 173 | ns |
| Print | 67 | 66 | . 025 | ns | 79 | 65 | . 961 | ns |
| Audio | 81 | 81 | . 012 | ns | 86 | 91 | . 304 | ns |
| Video | 90 | 88 | . 054 | ns | 100 | 91 | 1.40 | ns |
| Computer | 39 | 36 | . 124 | ns | 50 | 37 | . 780 | ns |
| Motive: <br> Out of Habit | $\begin{aligned} & \text { Rural } \\ & <40 \mathrm{~K} \end{aligned}$ | Urban <br> <40K | $\chi^{2}$ | p | $\begin{aligned} & \text { Rural } \\ & >40 \mathrm{~K} \end{aligned}$ | Urban $>40 \mathrm{~K}$ | $\chi^{2}$ | p |
| Interpersonal | 83 | 81 | . 072 | ns | 57 | 87 | 6.43 | . 01 |
| Print | 61 | 74 | 3.77 | . 05 | 79 | 82 | . 061 | ns |
| Audio | 74 | 82 | 1.89 | ns | 86 | 89 | . 108 | ns |
| Video | 90 | 90 | . 003 | ns | 93 | 93 | . 001 | ns |
| Computer | 39 | 36 | . 124 | ns | 50 | 37 | . 780 | ns |

## c. Income Level

As Tables 8a-c illustrate, income level is significantly related to eight of nine motives. The interpersonal media channel is significantly related to four motives. The mass media channels are significantly related to five motives.

Table 8a indicates that urban respondents are significantly more likely than their rural counterparts to include audio media activities in their channel repertoire to relax. Ninety-four percent of urban respondents earning less than $\$ 40,000$ per year compared to 81 percent of rural respondents earning less than $\$ 40,000$ per year say they use the audio channel to relax. Likewise, 100 percent of urban respondents earning at least $\$ 40,000$ per year compared to 86 percent of rural respondents earning at least $\$ 40,000$ per year
say they use the audio channel to relax. Income level is not significantly related to the companionship motive. Income level is not significantly related to the companionship motive.

Table 8b
Percent of respondents using media channels by yearly income level (d.f.=1)

| Motive: <br> For Entertainment | Rural $<40 \mathrm{~K}$ $\mathrm{N}=57$ | Urban $<40 \mathrm{~K}$ $\mathrm{N}=241$ | $\chi^{2}$ | p | $\begin{aligned} & \text { Rural } \\ & >40 \mathrm{~K} \\ & \mathrm{~N}=14 \end{aligned}$ | Urban $>40 \mathrm{~K}$ $\mathrm{N}=54$ | $\chi^{2}$ | p |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Interpersonal | 68 | 81 | 4.27 | . 04 | 57 | 70 | . 888 | ns |
| Print | 67 | 69 | . 148 | ns | 86 | 74 | . 837 | ns |
| Audio | 79 | 87 | 2.50 | ns | 93 | 96 | . 311 | ns |
| Video | 95 | 96 | . 279 | ns | 100 | 100 | * | * |
| Computer | 46 | 39 | . 837 | ns | 57 | 37 | 1.51 | ns |
| Motive: <br> To Pass Time | $\begin{aligned} & \text { Rural } \\ & <40 \mathrm{~K} \end{aligned}$ | $\begin{array}{\|l\|l\|} \hline \text { Urban } \\ <40 K \end{array}$ | $\chi^{2}$ | p | $\begin{aligned} & \text { Rural } \\ & >40 \mathrm{~K} \end{aligned}$ | Urban $>40 \mathrm{~K}$ <br> $>40 \mathrm{~K}$ | $\chi^{2}$ | p |
| Interpersonal | 90 | 94 | 1.30 | ns | 71 | 87 | 1.99 | ns |
| Print | 83 | 86 | . 432 | ns | 100 | 85 | 2.35 | ns |
| Audio | 83 | 93 | 5.50 | . 02 | 93 | 96 | . 311 | ns |
| Video | 97 | 98 | . 799 | ns | 100 | 98 | . 263 | ns |
| Computer | 46 | 50 | . 389 | ns | 57 | 48 | . 360 | ns |
| Motive: <br> For Social Interaction | $\begin{aligned} & \text { Rural } \\ & <40 \mathrm{~K} \end{aligned}$ | Urban $<40 \mathrm{~K}$ | $\chi^{2}$ | p | $\begin{aligned} & \text { Rural } \\ & >40 \mathrm{~K} \end{aligned}$ | Urban $>40 \mathrm{~K}$ | $\chi^{2}$ | p |
| Interpersonal | 88 | 90 | . 175 | ns | 86 | 91 | . 304 | ns |
| Print | 39 | 52 | 3.05 | ns | 29 | 56 | 3.24 | ns |
| Audio | 67 | 87 | 13.83 | . 000 | 86 | 89 | . 107 | ns |
| Video | 90 | 98 | 7.70 | . 01 | 93 | 98 | 1.09 | ns |
| Computer | 46 | 45 | . 012 | ns | 57 | 46 | . 523 | ns |

Further, Table 8a indicates that urban respondents earning at least $\$ 40,000$ per year are significantly more likely to use interpersonal media activities out of habit than rural respondents earning at least $\$ 40,000$ per year. Eighty-seven percent of urban respondents earning at least $\$ 40,000$ per year compared to fifty-seven percent of rural respondents earning at least $\$ 40,000$ per year say they use the interpersonal channel out of habit. Likewise, urban respondents earning lest than $\$ 40,000$ per year are significantly
more likely than rural respondents earning less than $\$ 40,000$ per year to use print media activities out of habit.

Nearly three of four (74 percent) of urban respondents earning les than $\$ 40,000$ per year compared to just over three of five (61 percent) of rural respondents earning less than $\$ 40,000$ per year say they use the print channel out of habit.

Table 8 demonstrates that urban respondents earning least $\$ 40,000$ per year are significantly more likely to include interpersonal media activities in their repertoire for entertainment than rural respondents earning less than $\$ 40,000$ per year. Eighty-one percent of urban respondents earning less than $\$ 40,000$ annually say they use interpersonal media activities for entertainment. Sixty-eight percent of rural respondents earning less than $\$ 40,000$ annually say they use the interpersonal channel for entertainment.

Further, Table 8 b indicates that urban respondents earning less than $\$ 40,000$ per year are significantly more likely than their rural counterparts to include audio media activities in their repertoire to pass time. Ninety-three percent of urban respondents earning less than $\$ 40,000$ annually say they use the audio channel to pass time. Eightythree percent of rural respondents earning less than $\$ 40,000$ per year say they use the audio channel to pass time.

Further, urban respondents earning less than $\$ 40,000$ annually are significantly more likely than their rural counterparts to include audio media activities in their social interaction repertoire. Sixty-seven percent of rural respondents earning less than $\$ 40,000$ say they use these activities to satisfy this motive. Eighty-seven percent of their urban
counterparts say they use the audio channel for social interaction. Urban respondents earning less than $\$ 40,000$ per year are significantly more likely than rural respondents earning less than $\$ 40,000$ per year to use video media activities for social interaction. Ninety-eight percent of urban respondents earning less than $\$ 40,000$ per year say they use the video channel for social interaction. Ninety percent of rural respondents earning less than $\$ 40,000$ annually say they use the video channel for social interaction. Again, these numbers should be considered with caution The percentages reported for the social interaction motive should be considered with caution. The relationship between the two questionnaire items designed to measure this motive is insignificant for 10 of 12 media activities being observed (see appendice B).

Table 8c illustrates, urban respondents earning less than $\$ 40,000$ per year are significantly more likely than their rural counterparts to include interpersonal media activities in their repertoire to obtain information. Seventy-four percent of rural respondents earning less that $\$ 40,000$ annually say they use the interpersonal channel to obtain information. Eighty-eight percent of their urban counterparts say they use the interpersonal channel for the same purpose.

Table 8c
Percent of Respondents using Media Channels by yearly Income Level (d.f.=3)

| Motive: <br> To Obtain Information | Rural <br> <40K <br> $\mathrm{N}=57$ | $\begin{array}{l\|} \text { Urban } \\ <40 \mathrm{~K} \\ \mathrm{~N}=241 \end{array}$ | $\chi^{2}$ | p | $\begin{array}{\|c} \hline \text { Rural } \\ >40 \mathrm{~K} \\ \mathrm{~N}=14 \\ \hline \end{array}$ | $\begin{gathered} \hline \text { Urban } \\ >40 \mathrm{~K} \\ \mathrm{~N}=54 \\ \hline \end{gathered}$ | $\chi^{2}$ | p |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Interpersonal | 74 | 88 | 8.06 | . 004 | 71 | 82 | 687 | ns |
| Print | 87 | 91 | . 689 | ns | 100 | 93 | 1.10 | ns |
| Audio | 65 | 70 | . 494 | ns | 93 | 78 | 1.63 | ns |
| Video | 91 | 95 | . 927 | ns | 93 | 96 | . 311 | ns |
| Computer | 47 | 55 | 1.13 | ns | 50 | 54 | . 061 | ns |
| Motive: <br> For Arousal (stimulation) | $\begin{aligned} & \text { Rural } \\ & <40 K \end{aligned}$ | $\begin{gathered} \text { Urban } \\ <40 \mathrm{~K} \end{gathered}$ | $\chi^{2}$ | p | $\begin{array}{\|l\|l} \hline \text { Rural } \\ >40 K \end{array}$ | $\begin{gathered} \hline \text { Urban } \\ >40 \mathrm{~K} \end{gathered}$ | $\chi^{2}$ | p |
| Interpersonal | 63 | 63 | . 000 | ns | 57 | 57 | . 000 | ns |
| Print | 49 | 57 | 1.24 | ns | 86 | 56 | 4.28 | 04 |
| Audio | 58 | 55 | . 137 | ns | 64 | 52 | 693 | ns |
| Video | 88 | 87 | . 040 | ns | 100 | 96 | . 534 | ns |
| Computer | 33 | 32 | . 020 | ns | 50 | 39 | . 567 | ns |
| Motive: <br> To Escape ( daily life) | $\begin{array}{\|l\|} \hline \text { Rural } \\ <40 \mathrm{~K} \\ \hline \end{array}$ | $\begin{gathered} \text { Urban } \\ <40 \mathrm{~K} \\ \hline \end{gathered}$ | $\chi^{2}$ | p | $\begin{array}{\|l} \hline \text { Rural } \\ >40 \mathrm{~K} \\ \hline \end{array}$ | $\begin{aligned} & \hline \text { Urban } \\ & >40 \mathrm{~K} \\ & \hline \end{aligned}$ | $\chi^{2}$ | p |
| Interpersonal | 63 | 73 | 2.19 | ns | 29 | 66 | 6.66 | . 01 |
| Print | 51 | 64 | 3.29 | ns | 64 | 59 | . 117 | ns |
| Audio | 67 | 71 | . 490 | ns | 79 | 74 | . 120 | ns |
| Video | 83 | 85 | . 167 | ns | 79 | 80 | . 007 | ns |
| Computer | 35 | 30 | . 494 | ns | 50 | 33 | 1.33 | ns |

Further, Table 8 c shows that rural respondents earning at least $\$ 40,000$ per year are significantly more likely than urban respondents earning at least $\$ 40,000$ per year to use print media activities for arousal or stimulation. Eighty-six percent of rural respondents who earn at least $\$ 40,000$ per year say they use the print channel for arousal.

Finally, Table 8c shows that two of three urban respondents earning at least $\$ 40,000$ per year say they include interpersonal media activities in their repertoire to escape daily life. For comparison, just 29 percent of rural respondents earning at least $\$ 40,000$ say they use these activities for the same purpose.

In summary, income level is a more significant predictor of media activity for eight of nine motives. This is better than residential location, type of medium or resident
type at predicting media use. The interpersonal media channel is significantly related to four motives. Mass media Channels are significantly related to five motives.

Overall, the socio-economic indicators (race, gender and income level) produced 39 significant relationships in this data set. The predictor variables - residential location, type of medium (traditional or newer) and resident type -- accounted for 26 significant relationships.

## CHAPTER 5 <br> CONCLUSION

## 1. Overview

This chapter will summarize the major findings of this study. Further, it will offer some interpretation and speculation about the meaning of these findings. Also, it will identify some limitations of the study and finally, provide recommendations for future study in this area.

Is a respondent's residential location a significant variable in explaining the formation of a channel repertoire from among the mass media available in distinct geographic regions? In this study residential location was the variable being observed in explaining the formulation of a channel repertoire for some motives to use media. Channel repertoire refers to the inclusion of available media activities to fulfill needs based upon a uses and gratifications analysis into some motivations for mass media use.

This study has drawn from several bodies of literature that investigate mass media use from the perspective of the active audience (Katz, 1974B, Berelson, 1949; Katz, Guervitch and Haas, 1973; O’Sullivan et al, 1994). In particular, this study investigated mass media use from economic (Hotelling, 1950; Steiner, 1952; Allen and Christy, 1974) geographic, (Merton, 1949; Bertrand, 1958; Greenberg and Dervin, 1970) and uses and gratification research (Rubin, 1994; Perse and Courtright, 1993) perspectives.

The mass media as a group are the most pervasive vehicles for communicating society's news, information, entertainment, culture, mores and values to a large, diverse
and heterogeneous body (Carey, 1989). As such, a clearer understanding of possible relationships among environmental variables and the mass media's ability to effectively convey messages to mass audiences is crucial.

The motives investigated in this study were divided into four broad categories (see McQuail et. al., 1972). Each category has several related motivations. For instance, the diversion motive includes the following similarly related motivations: to relax, for entertainment, to pass time, to escape (daily life). The personal relationship motive includes the following motives: for companionship and for social interaction. The personal identity motive includes the following motives: for arousal (stimulation), out of habit. The surveillance motive includes the following motivation: to obtain information. Similar uses and gratification studies have use such typologies to measure media use (Herzog, 1944; Berelson, 1949; Greenberg and Dominick 1969, Greenberg, 1974; deBock, 1980; Levy, M. and Windahl, 1984; Mettler, 1989; Perse and Courtright, 1993; Perse and Dunn, 1995)

The predictor variables in this study are: 1) Residential Location; 2) Resident Type and 3) Type of Media. The control variables are age, gender and income level.

Four hundred eighteen self-administered questionnaires were completed between the spring of 1997 and the fall of 2000. Of these 418 returned questionnaires, 45 did not contain geographic data and a respondent from the Virgin Islands completed one. Thus, there are 374 completed questionnaires in the final data set (see page 91 for a demographic description of the data set).

The survey attempts to measure media use through the respondent's formation of a channel repertoire for nine uses and gratification motives. Respondents were classified into one of four mutually exclusive residential locations and attachment types. Data collected in this study were analyzed using two statistical tests for nominal level data Chi Square $\left(\chi^{2}\right)$ and t-test.

For research questions \#1, \#3, \#4 and \#5 a Chi Square $\left(\chi^{2}\right)$ contingency table was used to compare the percent of respondents using media activities. For research question \#2 a t-test was used to determine if the number of media activities used is significantly different between rural and urban respondents.

## Research Question \#1

Per Motive, is the inclusion of a Mass Media Activity into a respondent's Mass Media Channel Repertoire influenced by Residential Location?

Table 9a
Percent of respondents who used interpersonal media (d.f. $=3$ )

| Motives | Urban <br> $\mathbf{n = 2 2 3}$ | Rural <br> $\mathbf{n = 4 8}$ | $\chi^{2}$ | $\mathbf{p}$ |
| :--- | :---: | :---: | :---: | :---: |
| For Companionship | 93 | 85 | 9.68 | .02 |
| For Entertainment | 81 | 58 | 12.08 | .01 |
| To Pass Time | 95 | 88 | 9.75 | .02 |
| To Obtain Information | 88 | 69 | 10.97 | .01 |
| To Escape (daily life) | 74 | 46 | 15.51 | .001 |

Yes, urban respondents are significantly more likely than rural respondents to include interpersonal and mass media activities in their channel repertoire for seven of nine motives. But, among urban respondents, interpersonal media activities not mass media activities are preferred to satisfy motives. Using McQuail et al's (1972) typology as a framework, urban people are more likely to interact with other people rather than the
mass media for the development and maintenance of personal relationships, diversion and for the surveillance of their environment. Despite living in more densely populated areas where they may have access to a greater number of mass media activities (i.e. urban fringe, urban) these respondents are still more likely to use interpersonal media activities to satisfy motives than mass media activities.

In contrast, the use of mass media activities among respondents is significantly different for the development and maintenance of personal relationships and for diversion. When considering motives for media use, urban respondents have significantly different interpersonal and mass media channel repertoire than their rural counterparts.

Table 9b
Percent of respondents who used mass media channels (d.f. $=3$ )

| Motives | Urban <br> $\mathbf{n = 2 2 3}$ | Rural <br> $\mathbf{n = 4 8}$ | $\boldsymbol{\chi}^{2}$ | $\mathbf{p}$ |
| :--- | :---: | :---: | :---: | :---: |
| Audio to relax | 93 | 85 | 9.68 | .02 |
| Audio for social interaction | 81 | 58 | 12.08 | .01 |
| Video for social interaction | 95 | 88 | 9.75 | .02 |

## Research Question \#2

Per Motive, do Urban residents have a greater number of Mass Media Channels in the Mass Media Channel Repertoire than their Rural counterparts?

Yes, urban respondents use a greater number of mass media channels than rural respondents to satisfy seven motives. And, urban respondents use a greater number of interpersonal activities than rural respondents to pass time. Likewise, urban respondents use a greater number of mass media activities than rural respondents but rural respondents use computer activities significantly more than urban respondents to relax. This indicates that urban respondents use a significantly larger number of interpersonal
and mass media activities to navigate their environments than rural respondents. And, urban respondents are more likely than rural respondents to use more interpersonal activities to escape from the burden of problems or as emotional release.

Table 9c
Mean number of interpersonal media activities in channel repertoire (d.f. $=372$ )

| Motives | Urban <br> $\mathbf{n}=\mathbf{3 0 3}$ | Rural <br> $\mathbf{n}=\mathbf{7 1}$ | $\mathbf{t -}$ <br> value | $\mathbf{p}$ |
| :--- | :---: | :---: | :---: | :---: |
| To pass time | 1.44 | 1.08 | -3.45 | .001 |

Furthermore, urban respondents have a greater number of mass media channels in their repertoire to satisfy seven motives. Urban respondents use mass media activities as diversion, to develop and maintain personal relationships and identity, and for the surveillance of their environment. The number of computer activities used by rural respondents to relax is significantly higher than the number used by urban respondents.

Table 9d
Mean number of mass media activities in channel repertoire (d.f. $=372$ )

| Motives | Urban <br> $\mathbf{n = 3 0 3}$ | Rural <br> $\mathbf{n = 7 1}$ | t-value | $\mathbf{P}$ |
| :--- | :---: | :---: | :---: | :---: |
| Audio to relax | 1.28 | 1.00 | -3.52 | .000 |
| Computer to relax | .191 | .289 | 2.06 | .04 |
| Audio out of habit | .507 | .398 | -2.55 | .01 |
| Video for entertainment | 2.02 | 1.80 | -1.96 | .05 |
| Audio to pass time | 1.19 | .953 | -2.81 | .005 |
| Print for social interaction | .482 | .324 | -2.02 | .04 |
| Audio for social interaction | .998 | .824 | -2.15 | .03 |
| Video for social interaction | 1.37 | 1.06 | -3.64 | .000 |
| Print to obtain information | 1.47 | 1.28 | -2.05 | .04 |
| Video for arousal <br> (stimulation) | 1.65 | 1.41 | -1.94 | .05 |

This indicates that computer mediated activities may be used by rural respondents to escape from their daily routine. Computer activities may allow rural respondents the ability to transcend time and space. This interaction may allow the rural respondent to enjoy his or her physical environment but still have access to some emotional release or escape from his or her daily routine.

## Research Question \#3

Per Motive, does Residential Location influence the inclusion of Traditional Media Activities and newer Mass media Activities in a respondent's Mass Media Channel Repertoire?

No, only for one motive is there a significant difference in the use of mass media activities. For the other eight motives there is no significant difference in the use of traditional or newer media activities among respondents. And, rural respondents are significantly more likely to use newer media activities as a diversion. As the discussion of research question \# 2 indicates, rural respondents seem to choose computer mediated activities more than urban respondents as a means to escape from their daily routine and problems or for emotional release. Again, interaction with computer mediated content offers/provides rural respondents some release from unpleasant environmental factors.

Table 9e
Percent of respondents using newer media to satisfy motive (d.f. $=3$ )

| Motives | Urban <br> $\mathbf{n}=\mathbf{2 2 3}$ | Rural <br> $\mathbf{n = 4 8}$ | $\boldsymbol{\chi}^{2}$ | $\mathbf{p}$ |
| :--- | :---: | :---: | :---: | :---: |
| To escape (daily life) | 35 | 54 | 9.51 | .02 |

## Research Question \#4

Per Motive, does a respondent's level of attachment (Resident Type) to community influence the inclusion of Mass Media Channels in a respondent's Mass Media Channel Repertoire? If so, which attachment types are significant?

No, in fact, to satisfy three motives drifters are more likely to use interpersonal media activities than settled respondents. Drifters (people who have lived in an area for five years of less and plan to leave within five years) prefer interpersonal media activities as diversion, to develop and maintain personal identity and as a means of surveillance of their environment. This indicates that respondents that say they have little commitment to their community may not be willing to invest the time it takes to develop extensive, localized mass media channel repertoire as a means of navigating their environment.

Table 9f
Attachment types use of interpersonal media activities (d.f.=3)

| Motives | Drifters <br> $\mathbf{n = 1 8 7}$ | Settled <br> $\mathbf{n = 5 9}$ | $\boldsymbol{\chi}^{2}$ | $\mathbf{p}$ |
| :--- | :---: | :---: | :---: | :---: |
| For entertainment | 82 | 70 | 8.59 | .03 |
| To obtain information | 90 | 75 | 10.76 | .01 |
| For arousal (stimulation) | 66 | 48 | 8.78 | .03 |

One other relationship between resident types and media activities that should be briefly mentioned in this discussion is the use of computers to relax. Settled respondents (individuals who have lived in an area for at least five years and do not plan to leave) are more likely than other resident types to use computer media activities for diversion (i.e., entertainment). This may, as Hindman (2000) states, allow long-term residents of "nonmetropolitan communities to compensate for their 'rural poverty' in retail choice, information sources," etc. Again, individuals who know they are not likely to leave an
area for awhile seem to use the time and space-shifting attributes computer-mediated activities offer to escape their daily existence.

Table 9g
Attachment types use of mass media activities (d.f. $=3$ )

| Motives | Drifters <br> $\mathbf{n = 1 8 7}$ | Relocator <br> $\mathbf{n = 8 1}$ | Settlers <br> $\mathbf{n = 4 7}$ | Settled <br> $\mathbf{n = 5 9}$ | $\chi^{2}$ | $\mathbf{p}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Video for companionship | 91 | 82 | 94 | 93 | 7.70 | .05 |
| Audio to relax | 94 | 96 | 94 | 81 | 12.23 | .006 |
| Video to relax | 80 | 90 | 94 | 88 | 8.33 | .04 |
| Computer to relax | 21 | 31 | 28 | 48 | 15.32 | .001 |

## Research Question \#5*

a. Per motive, does Race influence inclusion of Mass Media Channels in a respondent's Mass Media Channel Repertoire?

Yes, race is significantly related to the use of mass media activities to satisfy seven motives. Rural whites are significantly more likely than urban whites to use computer mediated activities for diversion, to develop and maintain their personal relationships, and to develop and maintain their personal identity. In this particular study, it seems as though rural white respondents used computer-mediated activities to compensate for a lack of interpersonal interaction.

Conversely, urban blacks that include mass media activities in their repertoire are significantly more likely than rural black respondents to rely upon audio, video and print activities to satisfy motives. Urban black respondents are much more likely to use audio for diversion than rural blacks. Urban black respondents are much more likely to use print media activities to develop and maintain their personal identity than rural blacks and urban blacks are significantly more likely to use audio and video activities as a means to bolster personal relationships than their rural counterparts. But, rural blacks are
much more likely than urban black respondents to use video media activities for diversion.

Table 9h
Percent using mass media activities by race and residential location (d.f. $=1$ )

| Motives | Urban Blacks <br> $\mathbf{n = 1 8 1}$ | Rural Blacks <br> $\mathbf{n = 4 3}$ | $\chi^{2}$ | $\mathbf{p}$ |
| :--- | :---: | :---: | :---: | :---: |
| Audio to relax | 93 | 81 | 6.13 | .01 |
| Print out of habit | 77 | 61 | 5.16 | .02 |
| Audio for social interaction | 91 | 70 | 10.99 | .000 |
| Video for social interaction | 97 | 91 | 3.85 | .05 |
| Computer to obtain information | 56 | 40 | 3.95 | .05 |
| Video to relax | 78 | 93 | 5.12 | .02 |
| Motive | Urban Whites <br> $\mathbf{n = 1 0 0}$ | Rural Whites <br> $\mathbf{n = 2 2}$ | $\chi^{2}$ | $\mathbf{p}$ |
| Computer to relax | 24 | 46 | 4.13 | .04 |
| Computer for companionship | 32 | 55 | 3.98 | .05 |
| Computer out of habit | 32 | 55 | 3.98 | .05 |
| Computer for social interaction | 48 | 68 | 4.22 | .04 |
| Computer for arousal <br> (stimulation) | 29 | 55 | 5.27 | .02 |
| Computer to escape (daily life) | 25 | 55 | 7.45 | .006 |

Also, race and residential location are significantly related to the use of interpersonal media activities to satisfy five motives. Urban blacks are significantly more likely than rural blacks to use interpersonal media activities as a means to escape from their daily routine and for surveillance of their environment. On the other hand, rural whites are significantly more likely than urban whites to include interpersonal media activities in their repertoire to develop and maintain their personal identity (i.e., to be stimulated or out of habit). It seems as if urban blacks prefer face to face communication for its ability to entertain and inform (see Greenberg and Dervin, 1970).

Furthermore, rural whites use interpersonal media activities for their arousing and stimulating qualities.

Table 9i
Percent using interpersonal media by race and residential location (d.f. $=1$ )

| Motive | Urban Blacks <br> $\mathbf{n = 1 8 1}$ | Rural Blacks <br> $\mathbf{n = 4 3}$ | $\chi^{2}$ | $\mathbf{p}$ |
| :--- | :---: | :---: | :---: | :---: |
| For entertainment | 80 | 55 | 11.07 | .000 |
| To pass time | 95 | 86 | 4.49 | .03 |
| To obtain information | 86 | 70 | 6.08 | .01 |
| To escape (daily life) | 74 | 49 | 10.35 | .001 |
| Motive | Urban Whites <br> $\mathbf{n = 1 0 0}$ | Rural Whites <br> $\mathbf{n = 2 2}$ | $\chi^{2}$ | $\mathbf{p}$ |
| For arousal (stimulation) | 60 | 82 | 3.72 | .05 |

B. Per motive, does Gender influence inclusion of Mass Media channels in a respondent's Mass Media Channel Repertoire?

Gender and residential location are only significantly related to the use of mass media activities to satisfy four motives. Diversion and the development and maintenance of personal relationships are the motives that differ significantly according to gender.

Urban males and females are significantly more likely than their respective rural counterparts to include audio media activities in their repertoire to relax. Further, urban females are more likely to use video media activities for other diversions such as entertainment and to pass time. Also, these same respondents are more likely to use audio media activities than rural females for diversion and for the development and maintenance of personal relationships. This finding is similar to conclusions reached by Elliott and Quattlebaum (1979).

Table 9j
Percent using mass media activities by gender and residential location (d.f. $=1$ )

| Motives | Urban Females <br> $\mathbf{n = 2 0 7}$ | Rural <br> Females n=43 | $\chi^{2}$ | $\mathbf{p}$ |
| :--- | :---: | :---: | :---: | :---: |
| Audio to relax | 94 | 81 | 7.94 | .005 |
| Video for entertainment | 99 | 93 | 4.64 | .03 |
| Audio to pass time | 93 | 84 | 4.19 | .05 |
| Video to pass time | 100 | 93 | 9.71 | .002 |
| Audio for social interaction | 89 | 74 | 6.95 | .01 |
| Video for social interaction | 99 | 88 | 14.87 | .000 |
| Computer to relax | 20 | 40 | 7.78 | .005 |
| Motive | Urban Males <br> $\mathbf{n = 9 4}$ | Rural Males <br> $\mathbf{n = 2 7}$ | $\chi^{2}$ | $\mathbf{p}$ |
| Audio to relax | 96 | 82 | 6.20 | .01 |
| Audio for social interaction | 84 | 63 | 5.69 | .02 |
| Video to relax | 81 | 96 | 3.78 | .05 |

Also, urban females are significantly more likely than rural females to include interpersonal media activities in their repertoire for diversion.

Table 9k
Percent using interpersonal media by race and residential location (d.f. $=1$ )

| Motive | Urban Females <br> $\mathbf{n}=\mathbf{1 8 1}$ | Rural Females <br> $\mathbf{n}=\mathbf{4 3}$ | $\chi^{2}$ | $\mathbf{p}$ |
| :--- | :---: | :---: | :---: | :---: |
| To relax | 90 | 72 | 9.80 | .002 |

C. Per motive, does Income Level influence inclusion of Mass Media Channels in a respondent's Mass Media Channel Repertoire.
(Please note: for ease of discussion, in this section, respondents earning less than $\$ 40,000$ per year will be identified as lower income. Those respondents earning more than $\$ 40,000$ will be identified as upper income.)

Yes, for five motives income level is significantly related to a respondent's formation of mass media channel repertoire. Lower income urban respondents are significantly
more likely than upper income urban respondents to use audio media activities for diversion, and the development and maintenance of personal relationships. This finding supports conclusions drawn by Greenberg and Dervin (1970). Likewise, lower income urban respondents are significantly more likely to include video media activities in their channel repertoire for similar reasons. Whereas, lower income urban respondents are significantly more likely to use print media activities out of habit, upper income rural respondents are significantly more likely to use print media activities for arousal and/ or stimulation.

Table 91
Percent using mass media activities by income level and residential location (d.f.=1)

| Motive | Urban $<\mathbf{4 0 K}$ <br> $\mathbf{n = 2 4 1}$ | Rural $<\mathbf{4 0 K}$ <br> $\mathbf{n = 5 7}$ | $\chi^{\mathbf{2}}$ | $\mathbf{p}$ |
| :--- | :---: | :---: | :---: | :---: |
| Audio to relax | 94 | 81 | 9.89 | .002 |
| Print out of habit | 74 | 61 | 3.77 | .05 |
| Audio to pass time | 87 | 67 | 13.83 | .000 |
| Audio for social interaction | 93 | 83 | 5.50 | .02 |
| Video for social interaction | 98 | 90 | 7.70 | .01 |
| Video to relax | 82 | 93 | 4.31 | .04 |
| Motive | Urban $>\mathbf{4 0 K}$ <br> $\mathbf{n = 5 4}$ | Rural $>\mathbf{4 0 K}$ <br> $\mathbf{n = 1 4}$ | $\chi^{2}$ | $\mathbf{p}$ |
| Print for arousal (stimulation) | 86 | 56 | 4.28 | .04 |

Also, income level is significantly related to the use of interpersonal media activities to satisfy three motives. Upper income urban respondents are significantly more likely than lower income rural respondents to use interpersonal media activities for diversion and for surveillance of their environment. Likewise, upper income urban respondents are significantly more likely to use interpersonal media activities for diversion.

Table 9m
Percent using interpersonal media by income level and residential location (d.f.=1)

| Motive | Urban $<\mathbf{4 0 K}$ <br> $\mathbf{n = 2 4 1}$ | Rural $<\mathbf{4 0 K}$ <br> $\mathbf{n}=\mathbf{5 7}$ | $\chi^{2}$ | $\mathbf{p}$ |
| :--- | :---: | :---: | :---: | :---: |
| For entertainment | 81 | 68 | 4.27 | .04 |
| To obtain information | 88 | 74 | 8.06 | .004 |
| Motive | Urban $>\mathbf{4 0 K}$ <br> $\mathbf{n}=\mathbf{5 4}$ | Rural $>\mathbf{4 0 K}$ <br> $\mathbf{n}=\mathbf{1 4}$ | $\chi^{2}$ | $\mathbf{p}$ |
| To escape (daily life) | 66 | 29 | 6.66 | .01 |

## II. Summary

In summary, the control variables -- race, gender and income level were consistently better indicators of media activity than the predictor variables -- residential location, resident type or type of medium. Race was significantly related to seven motives. Income level was significantly related to five motives and gender to four. On the other hand, residential location was significantly related to seven motives, resident type was significantly related to three motives and type of medium to one motive.

When residential location was isolated, urban respondents were more likely than rural respondents to use interpersonal media activities instead of mass media activities to navigate their environment. Furthermore, urban residents seem to use more interpersonal and mass media activities than rural respondents but rural respondents were more likely to use computer media activities for diversion than urban respondents. This indicates that newer media activities may provide some tension-relieving opportunities for rural respondents that newer media activities apparently don't offer for urban respondents.

And, urban respondents, despite the availability of more media activities from which to
choose, use traditional interpersonal media activities to satisfy more motives than rural respondents. This supports the position that mass media may not set the public's agenda but the media may offer support for various beliefs and opinions.

When a respondent's attachment to a community (Resident Type) was isolated, interpersonal media activities were preferred to mass media activities by Drifters (respondents who had little attachment to that community) when compared to other resident types. Another interesting finding about resident type as a predictor variable is that Settled respondents (individuals who have lived in a community for at least 5 years and plan to remain in the area) prefer, more than any other resident type, to use computer activities for diversion. This indicates that, much like rural respondents, Settled respondents will seek out computer media activities for relaxation. Recently, Hindman, (2002) found similar results when investigating the uses of various computer media activities.

Rural respondents were more likely to use newer media activities for diversion (to escape daily life) than traditional media activities. The space and time-condensing nature, convenience and ease of use of newer media may satisfy geography-based motivations for rural respondents that traditional media activities don't.

Race was a significant predictor variable for diversion, personal identity, personal relationships and surveillance of the environment. This variable produced more significant relationships than any other variable except residential location. Urban blacks were more likely than rural blacks to prefer mass media activities to satisfy motives. On the other hand, rural whites were more likely than urban whites to prefer computer media
activities for diversion, personal relationships and personal identity. Except for the use of video activities for relaxation, urban blacks are more likely to use mass media activities than their rural counterparts. The preference to use computer media activities by rural whites indicates that these respondents find computer media activities adequate "functional alternatives" to both interpersonal and other mass media activities.

Broadly, the use of interpersonal media activities among urban blacks mirrors that of urban respondents in general. Blacks use of interpersonal activities was at similar levels as that of the entire sample for diversion and surveillance of the environment.

As a variable, gender accounted for four significant relationships. Urban females were significantly more likely to use audio and video media activities for diversion and personal relationships. Comparatively, urban males were significantly more likely to use audio media activities for diversion and personal relationships. But, rural males were more likely to use video media activities for diversion than urban males. The prospect that mass media activities offer functional alternatives for urban females indicates that these respondents are highly aware of the advantages of certain media to provide particular motive satisfaction. This offers both academic and industry researchers numerous activities investigate

When the variable income level was isolated, lower income urban respondents were significantly more likely to use interpersonal and mass media activities. Lowincome urban respondents used audio and video activities for diversion and personal relationships. However, low-income rural respondents were more likely to use video media activities for relaxation than their urban counterparts. Print media activities were
more likely to be used by upper income urban respondents than their rural counterparts. This finding that the use of audio and video activities by lower income urban respondents for diversion and personal relationship supports Greenberg and Dervin's 1970 study. The use of print media by upper income urban respondents supports industry research that print (books, newspapers and magazines) appeal to older, educated individuals.

Urban respondents are significantly more likely to use interpersonal media activities for diversion and surveillance of the environment. Lower income urban respondents are more likely to use interpersonal media activities for entertainment and to obtain information. Upper income urban respondents were more than twice as likely to use interpersonal media activities to escape their daily lives. This indicates that lower income respondents use mass media activities to satisfy more motives than interpersonal media activities.

Individually, residential location, resident type and type of medium used by people to help them navigate their environment seems to be less significant predictors of media use than race, gender and income level. However, in combination, motive, residential location, resident type and type of medium offer some possibilities for delving into the types of motivations people may have for specific media use habits. As this study and other similar research indicate, the conceptualizations and methodologies used by researchers to replicate and capture these motivations will continue to offer much fodder for much academic and industry debate.

To use the Uses and Gratifications perspective as the theoretical underpinning for communications research continues to receive much flack for it supposed lack of
heuristic value but as this study, and recent related research has found, there is some support for the argument that the active audience is alive and well. For specific motives like diversion certain respondents indicated they prefer to use certain media activities instead of others to satisfy stated motives. This finding alone is impetus enough to refine the methodology and instrument and conduct similar study in a burgeoning, every evolving media environment. What is it about the nature of the media form that attracts a person's attention?

Over the past five decades, continued research into the uses and gratifications of media audiences has resulted in valuable contributions to the scientific knowledge of the communication process. Among these contributions are: the establishment of intermedia usage (Katz, Gurevitch and Haas, 1973); "alternative functions" of communications technologies (Katz et. al., 1973); and, comparisons of the identification of normative images of mass media (Perse and Courtright, 1993). More recent studies have focused upon investigating if a "digital divide" exists among rural and urban computer users (Hindman, 2000) and what factors influence the adoption of newer media technologies (Lin and Jeffres, 1998). Media are tools. Understanding the nature of the relations of humankind and the tools they choose to use to navigate their environment warrants continued investigation.

## III. Limitations of Study

This study has three limitations that should be addressed in future studies. First, data collected for this study was not randomly selected. The method for collecting survey data was from "readily accessible subjects for study" - a convenience sample.
"Critics argue that regardless of what results they may generate, available samples do not represent the population and therefore have no external validity. Proponents of the available sample procedure claim that if a phenomenon, characteristic, or trait does in fact does exist, it should exist in any sample." (Wimmer and Dominick, 1987)

Demographic data (see page 91) reveals that the composition of the data set is two-thirds female, three-fifths African American, four-fifths urban or urban fringe. In future research a stratified random sample may allow more representative trends to be detected among these demographic characteristics. The randomness of selection may be less important than selection of people who do truly live in rural areas, urban centers, etc. Including the communication habits of these "pure" types may more accurately reflect the nature of the residential locations being observed.

The length of the questionnaire should be adjusted. The amount of data collected requires a significant investment on the respondent's part. The mean completion time to complete a survey was not observed but typically, respondents completed the survey in about 20 minutes.

In 1983 Sharp and Frankel administered a short version ( 25 minutes) and a long version ( 75 minutes) of a questionnaire to a sample. The percentage of completed interviews in both conditions was virtually the same. Electronic versions of the questionnaire may allow researchers the opportunity to test such a hypothesis.

Lastly, the final design of the questionnaire was completed in the winter of 1997. It was first administered in the spring of 1997. The last respondents to complete the questionnaire did so in the spring of 2000 . During this time numerous computer media
activities were introduced or matured with audiences. Among them, the ubiquioustness of e-mail, instant messaging and listening to audio and video files. Such diversity of information sharing via the Internet and computer may still be in the early stages of diffusion but this study didn't observe respondents use of discrete computer-mediated activities (see Hindman, 2000).

## IV. Recommendations for Future Research

1. The mass media channels available to most Americans are highly diverse. Differences in usage patterns may indicate the stage of diffusion of media activities. Are newer media activities at similar stages among all residential locations? This is an issue that warrants further study.
2. In this iteration of the survey the computer media cluster allowed for only one selection. All other media groups offered respondents at least two activities from which to choose. During future research this omission of the diversity and breadth of computer media activity should be addressed.
3. As the tables in Appendice B indicate most questionnaire items designed to measure motive had significant inter-item reliability. Only the scores for the items designed to measure social interaction indicate low reliability. This issue must be addressed in future study.
4. Different measures of activity, not just identification, should be observed. Observations of the amount of time spent with a medium and the rank order of the media to satisfy needs will allow for much more sophisticated statistical analysis.
5. The media influence us by their very being. The are a part of our ecology. It can be argued that many social and cultural activities are a function of their existence. The findings of this study offer data that imply that there are differential uses of various media forms. Does the environment in which the media forms exist influence how the forms may be perceived and ultimately adopted? Future study in this area may produce interesting findings about the nature of being and media use.
6. Finally, it seems that computer use by upper income rural whites is significantly different from that of other respondents in this study. Are upper income rural whites at the leading edge of the adoption curve in their use of computer media activities? If so, what criteria are these respondent's using in their media activity selection process? Do they apply the same criteria whenever new media activities are presented to them? How are the media activities of these respondents similar and different from other respondents?
[^1]
## BIBLIOGRAPHY

1990 Census of Population and Housing, Guide Part B, Glossary. (1993). Washington, D. C: U.S. Government Printing Office.

2000 Census of Population and Housing, Guide Part B, Glossary. (2002). Washington, D.C.: U.S. Government Printing Office.

Abler, Robert. (1970). ZIP-code Areas as Statistical Regions, Professional Geographer, 22, No. 5, pp. 270-274.
----------------. (1974) The Geography of Communications. In Michael E. Eliot Hurst (ed.), Transportation Geography: Comments and Readings. New York: McGraw-Hill.
----------------. (1991). Hardware, Software, and Brainware: Mapping and Understanding Telecommunication Technologies, in Brunn, S.D. and Leinbach, T.R. (eds.), Collapsing Space and Time: Geographic Aspects of Communication and Information, London: Harper Collins Academic, pp. 31-48.

Adamson, Sten, B. Smith, d. Roberts, R. Sogegian, L. Schubert and D. Walters. (1994). Advanced Satellite Communications: Potential Markets. Park Ridge, N.J.: Noyes Data Corporation.

Ahlbrandt, Roger. (1996). Using Research to Build Stronger Neighborhoods: A Study of Pittsburgh's Neighborhoods, in Ralph Taylor, (ed.), Urban Neighborhoods: Research and Policy, (New York: Praeger).

Allen, Joyce \& Christy. (1992). African Americans in Rural Society: Directions in Public Policy. American Journal of Agricultural Economics: 74, pp. 826-835.

The American Heritage Dictionary of the English Language. (1992). Third Edition. Boston: Houghton Mifflin Company.

Baker, John. (1981). Farm Broadcasting: The First Sixty Years. Ames, IA.: Iowa State University Press.

Bakis, H. (1981). Elements for a Geography of Telecommunication, Geographical Research Forum, 4, pp. 31-45.

Baldwin, Thomas F., D. Stevens McVoy and Charles Steinfield. (1996). Convergence: Integrating Media, Information \& Communication. Thousand Oaks: Sage Publications.

Barnouw, Erik. (1970). The Image Empire: A History of Broadcasting in the United States from 1953. New York: Oxford University Press.
----------------. (1975). Tube of Plenty: Evolution of American Television. New York: Oxford University Press.
---------------. (1989). George Gerbner, Wilbur Schramm, Tobia Worth and Larry Gross. (eds.) International Encyclopedia of Communications. New York: Oxford Press.

Bealer, Robert, Fern Willits and William Kuvlesky. (1965). The Meaning of "Rurality" in American Society. Rural Sociology, 30, pp. 255-266.

Becker, H. (1950). Through Social Values to Social Interpretation. Durham, N.C.: Duke University Press.

Becker, Lee B., Sharon Dunwood, and Sheizaf Raafaeli. (1982). Cable's Impact on the Use of Other News Media, Journal of Broadcasting, 27: 127-40.

Bell, Daniel. (1994). "Communication Technology: For Better or for Worse?" In The Information Society: Economic, Social and Structural Issues, ed. Jerry L. Salvaggio (Hillsdale, NJ: Lawrence Erlbaum, 1989): 89-104; John C. Allen and Don A. Dillman, Against All Odds: Rural Community in the Information Age (Boulder, CO: Westview Press, 1994).

Bell, William. (1965). The Diffusion of Radio and Television Broadcasting in the United States. Unpublished M.S. Thesis, Pennsylvania State Univeristy, Department of Geography.

Bender, Thomas. (1978). Community and Social Change in America. Baltimore, MD: Johns Hopkins University Press.

Berelson, Bernard. (1949). What Missing the Newspaper Means, in P. Lazarsfeld and F. Stanton (eds.) Communication Research, 1948-49. New York: Harper \& Row.

Berry, Brian. (1970). The Geography of the United States in the Year 2000, Ekistics, 29, 174, pp. 339-351.

Bertrand, Alvin. (1958). Rural Sociology: An Analysis of Contemporary Rural Life. McGraw-Hill: New York, NY.

Blaut, James. (1961). Space and Process. Professional Geographer, 13, No.4, (July), pp. 1-7.

Blumler, Jay and Elihu Katz. (1974). (eds.) The Uses of Mass Communications: Current Perspectives on Gratification Research. Sage Publications: Beverly Hills, CA.

Bogart, Leo. (1965). The Mass Media and the Blue-Collar Worker, in A. Bennett and W. Gomberg (eds.) Blue-Collar World: Studies of the American Worker. Englewood Cliffs, N.J.: Prentice-Hall.

Bogart, Leo and Frank Orenstein. (1965). Mass Media and Community Identity in an Interurban Setting, Journalism Quarterly, 42: 179-188.

Bostian, Lloyd. (1966). The Two-Step Flow: Cross-Cultural Implications. Journalism Quarterly, 43: 109-117.
------------------- and John Ross. (1962). Mass Media Use and The Wisconsin Farm Family. Research Bulletin 234, Agricultural Experiment Station, University of Wisconsin.
-----------------. (1974). Mass Communication Differences Between Urban, Suburban and Rural Areas: Cross-Cultural Comparisons. Paper presented at the Annual Meeting of the Association for Education in Journalism (57 ${ }^{\text {th }}$, San Diego, CA., August 18-21).

Boyd, Robert. (1989). Information Age Hitting High Gear: Satellite Transmissions Transforming the Way We Work, Play, Learn. Akron Beacon Journal: (February 12).

Brazil, John. (1981). Murder Trials: Murder and Twenties America. American Quarterly, 33, No. 2, pp. 163-184.

Browning, H. (1962). Urbanization in Mexico. Unpublished Doctoral Dissertation. University of California - Berkeley.

Calhoun, C. (1988). Populist Politics, Communications Media and Large Scale Societal Integration. Sociological Theory, 6, 219-241.

Carey, James. (1989). Communication as Culture: Essays on Media and Society. Boston: Unwin Hyman.
-----------------. (1981) Culture, Geography and Communications: The Work of Harold Innis in an American Context. In W.H. Melody, L. Salter, and P. Heyer (Eds.),

Culture, Communication and Dependency: The Tradition of H. A. Innis. Norwood, NJ.: Ablex.
------------------. and Moss, M. L. (1985). The Diffusion of New Telecommunication Technologies, Telecommunications Policy, 9, pp. 145-58.

Carlstein, Tommy. (1982). Time Resources, Society and Ecology: On the Capacity for Human Interaction in space and Time in Preindustrial Societies. Lund, Sweden: The Royal University of Lund.

Carter, Roy and Peter Clarke. (1963). Suburbanite, City Residents and Local News. Journalism Quarterly, 40, (Autumn), pp. 548-558.

Cavailles, Henri. (1940). Introduction to the Geography of Circulation. Annals of Geography, 49. pp. 170-182.

Charney, Tamar. (1996). Uses and Gratification of On-line Services. http:<br>www.tc.msu.edu/tc960/ung.htm

Chesebro, J. and D. Bosnall. (1989). Computer-mediated Communication: Human Relationships in a Computerized World. Tuscaloosa, AL.: University of Alabama Press.

Childress, H. (1994). Place, Narrative, and Relationship: A New Approach to Place Attachment. University of Wisconsin, School of Architecture and Urban Planning.

Christenson, James and Don Dillman. (1973). Rural Urban Value Patterns. Paper Presented at Rural Sociological Society Annual Meetings. College Park, MD.: August 23-26.

Cochran, Thomas. (1975). Media as Business: A Brief History. Journal of Communication, 25, pp. 155-165.

Cohen, Akiba, Mark Levy and Karen Golden. (1988). Children's Uses and Gratifications of Home VCRs. Communication Research, 15, 6, pp. 772-280.

Cohen, Lester. (1964). The New York Graphic: The World's Zaniest Newspaper. Philadelphia, PA.: Chilton.

Collins, Janay, Joey Reagan, and John Abel. (1983). Predicting Cable Subscribership: Local Factors, Journal of Broadcasting, 27, No. 2, pp. 177-183.

Cooley, Charles. (1894). The Theory of Transportation. Proceedings of the American Economic Association, 9, 3, May, 1984). Reprinted in Sociological Theory and social Research. New York: Holt, 1930, a collection of Cooley's works. Page references refer to the reprinting.

Cook, Christine. (1988). Components of Neighborhood Satisfaction: Responses from Urban and Suburban Single-Parent Women. Environment and Behavior, 20, No. 2, (March: 115-149).

Coser, Lewis, Charles Kadushin and Walter Powell. (1982). Books: the Culture and Commerce of Publishing. New York: Basic Books.

Cox, Kevin. (1969A). The Voting Decision in Intra-Urban Space. Proceedings of the Association of American Geographers, 1. pp. 43-46.
--------------. (1969B). The Voting Decision in a Spatial Context, in Progress in Geography, Vol. 1. (eds.) Christopher Board et al. London: Edward Arnold, pp. 81-117.

Crowe, P. R. (1938). On Progress in Geography. Scottish Geographical Magazine, 54, pp. 1-19.
$\mathrm{D}=$ Antonio, Michael. (1994). I or We. Mother Jones. (June), pp. 20-26.
Desmond, Robert. (1981). Windows on the World: World News Reporting, 1900-1920. Ames, IA: Iowa State University Press.

Deutsch, Karl. (1966). The Nerves of Government. New York: The Free Press.
Dewey, Richard. (1960). The Rural-Urban Continuum: Real but Relatively Unimportant. American Journal of Sociology, 66, pp. 60-66.

Dillman, Don. (1983). Rural North America in the Information Society: An Invitation to the 1984 RSS Meeting. The Rural Sociologist, 5: 345-57.
----------------- and Donald Beck. (1988). Information Technologies and Rural Development in the 1990s. The Journal of State Government

Dimmick, John. (1985). Niche Formulas for Gratification Measures. Unpublished manuscript, The Ohio State University, Department of Communication, Columbus.
------------------ and Jean Dobos. (1988). Factor Analysis and Gratification Constructs. Journal of Broadcasting and Electronic Media, 32, 3, pp 335-350.
------------------. (1993). Ecology, Economics and Gratification Utilities, in Media Economics: Theory and Practice. (eds.) Alison Alexander, James Owers and Rod Carveth. Hillsdale, N. J.: Lawrence Erlbaum Associates.
------------------- and E. Rothenbuhler. (1984). The Theory of the Niche: Quantifying Competition among Media Industries. Journalism of Communication, 34: 103119.

Ducey, Richard V. Dean Krugman, and Donald Eckrich. (1983). Predicting Market Segments in the Cable Industry: The Basic and Pay Subscribers, Journal of Broadcasting, 27: 155-61.

Dunbar, Gary. (1991). Modern Geography: An Encyclopedic Survey. New York: Garland Publishing, Inc.
------------------ and Albert Reiss. (1956). Social Characteristics of Urban and Rural Communities, 1950. New York: John Wiley.

Duncan, Otis. (1951). Community Size and the Rural-Urban Continuum. In Paul Hatt and Albert Reiss (eds.) Cities and Society. New York: The Free Press.

Durkheim, Emile. (1947). The division of Labor in Society. G. Simpson (Trans. and ed.). Glencoe, Il.: The Free Press.

Edelstein, Alex S. and Otto Larsen. (1960). The Weekly Press Contribution to a Sense of Urban Community, Journalism Quarterly, 37: 489-498.

Edwards, J. and Peter Monge. (1975). A Comparison of Data Collection Procedures for the Study of Communication Networks and Structure (Technical Report \#6). Arlington, VA.: Office of Naval Research.

Elliott, P. (1974). Uses and Gratification: A Critique and a Sociological Alternative, in (eds.) Katz, Elihu et. al. The Uses of Mass Communication. Beverly Hills, Ca: Sage Publications.

Elliott, William and Cynthia Quattlebaum. (1979). Similarities in Patterns of Media Use: A cluster Analysis of Media Gratifications. The Western Journal of Speech Communication, 43: 61-72.

Endres, Kathleen. (1989). New Technology Ancillary Products in Magazine Publishing: A Pilot Study. Paper presented to the Magazine Division of the Association for Education in Journalism and Mass Communication. Washington, D.C:(August)

Eliot Hurst, Michael. (1974). Transportation Geography: Comments and Readings. New York: McGraw-Hill.

Erlich, P. and H. Holms. (1962). Patterns and Populations. Science, 137, 652-657.
Ethridge, Maurice and Harsha Mookherjee. (1974). A Rural-Urban Topology. Paper Presented at the Rural Sociology Section of the Southern Association of Agricultural Scientists Annual Meeting at Memphis, TN.: February 3-6.

Evans, James. (1969). Clover Leaf: The Good Luck Chain, 1899-1933. Journalism Quarterly, 46, pp. 482-491.

Febvre, Lucien and Henri Martin. (1976). The Coming of the Book: The Impact of Printing, 1450-1800. London: New Left Books.

Ferguson, Douglas. (1992). Channel Repertoire in the Presence of Remote Control Devices, VCRs and Cable Television. Journal of Broadcasting and Electronic Media, 36: 83-91.
----------------------- and Elizabeth Perse. (1993). Media and Audience Influences on Channel Repertoire. Journal of Broadcasting and Electronic Media, 37: 31-47.

Finney, Robert. (1994). Television, in Handbook on Mass Media in the United States: The Industry and its Audience. Westport, Ct.: Greenwood Press. pp.

Fleener, Nickieann. (1976). Breaking Down Buyer Resistance: Marketing the 1935 Pittsburgh Courier to Mississippi Blacks. Journalism History, 13, pp. 78-85.

Fossum, John. (1974). Urban-Rural Differences in Job Satisfaction. Industrial and Labor Relations Review, 27, No. 3, pp. 405-409.

Frey, Frederick. (1966). The Mass Media and Rural Development in Turkey. Cambridge, MA.: MIT Center for International Studies, Rural Development Research Report 3.

Fuguitt, Glenn. (1963). The City and Countryside. Rural Sociology, 28, pp. 246-261.
------------------. (1985). The Nonmetropolitan Population Turnaround, Annual Review of Sociology 1985, 11:259-280.

Galpin, C. (1922). Rural Life. New York: The Century Co.
Gans, Herbert. (1962A). The Urban Villagers: Group and Class in the Life of Italian Americans. New York: Free Press.
-----------------. (1962B). Urbanism and Suburbanism as Ways of Life: A Re-evaluation of Definitions. in Arnold Rose (ed.) Human Behavior and Social Processes. Boston, MA.: Houghton Mifflin Co.

Garnham, Nicholas. (1990). Economics of the U.S. Motion Picture Industry. In N. Garnham (ed.) Capitalism and Communication: Global Culture and the Economics of Information. London: Sage. pp. 169-209.

Garrison, Bruce. (1994). Newspapers, in Erwin Thomas and Brown Carpenter (eds.) Handbook on Mass Media in the United States: the Industry and its Audiences. pp.94-113.

Gibbs, Jack and Walter Martin. (1962). Urbanization Technology and the Division of Labor. American Sociological Review, 27, pp. 667-577.

Gomery, Douglas. (1989). Media Economics: Terms of Analysis. Critical Studies in Mass Communication, 6, pp. 43-60.
--------------------. (1993). Who Owns the Media? in Media Economics: Theory and Practice. (eds.) Alison Alexander, James Owers and Rod Carveth. Hillsdale, N. J.: Lawrence Erlbaum Associates.

Gottman, Jean. (1961). Megalopolis. Cambridge, Mass.: M.I.T Press.
Gottman, Jean. (1966). Metropolis on the Move: Geographers Look at Urban Sprawl. New York: Wiley.

Greenberg, Bradley. (1965). The Kennedy Assassination and the American Public. Stanford, CA.: Stanford University Press.
. (1974). Gratifications of Television Viewing and Their Corelates for British Children, in J.G. Blumler and E. Katz (eds.) The Uses of Mass Communication. Beverly Hills, CA.: Sage Publications.
------------------------ and Brenda Dervin. (1970). Use of the Mass Media by the Urban Poor. New York: Praeger.

Gustafson, W. Eric. (1959). Printing and Publishing, in Max Hal (ed.) Made in New York. Cambridge, Mass.: Harvard University Press. pp. 135-239.

Grotta, Gerald and Doug Newsom. (1982). How Does Cable in the Home Relate to Other Media Use Patterns? Journalism Quarterly, 59:598-91, 609.

Hall, Peter. (1966). The World Cities. London: World University Library.
Harbert, Ted. (1989). Telephone Interview by Kathleen Endres with Ted Harbert, Executive Producer. New York Times Magazine: (March 2).

Hart, David. (1994) All in the Family. The University of Georgia Research Reporter, (Summer), pp. 4-9.

Hauser, Philip. (1965). Observations on the Urban-folk and Urban-Rural dichotomies as Forms of Western Ethnocentrism in Philip Hauser and Leo Schnore (eds.) The Study of Urbanization. New York: John Wiley.

Hays, Robert. (1993). New Communications Technologies in Agriculture: A Bibliography Part 2 - Computers. Agricultural Communication Research Report 32. University of Illinois at Urbana-Champaign.

Hellman, H. and M. Soramaki. (1994). Competition and Content in the US. Video Market. Journal of Media Economics, 7, No. 1, pp. 29-49.
--------------. (1985). Economic Concentration in the Video Cassette Industry: A Cultural Comparison. Journal of Communication, 35, No. 3, pp. 122-134.

Herzog, Herta. (1944). What Do We Really Know about Daytime Serial Listeners? In P.F. Lazarsfeld and F.N. Stanton (eds.) Radio Research 1942-43. New York: Duell, Sloan \& Pearce.

Hillery, George A. (1955). Definitions of Community: Areas of Agreement, Rural Sociology, 20: 111-12.

Hindman, Douglas. (2000). The Rural-Urban Digital Divide. Journalism and Mass Communication Quarterly, 77, No. 3, pp. 549-560.

Hotelling, Harold. (1929). Stability in Competition. Economic Journal, 39, pp. 41-57.
---------------------. (1950). Why We Have The Two-Party System. American Journal of Economics and Sociology, 10: 13-15.

Howard, Herbert and Sidney Carroll. (1993). Economics of the Cable Industry, in Alison Alexander, James Owers and Rod Carveth (eds.). Media Economics: Theory and Practice. Hillsdale, N. J.: Lawrence Erlbaum Associates.

Huckel, G.A. (1907). The geography of circulation: Friedrich Ratzel. Annals of Geography, 15, pp. 401-418: 16, pp. 1-14.

Husni, Samir. (1988). Guide to New Magazines. Des Moines, IA: Meredith Corporation.
Innis, Donald. (1953). The Geography of Radio in Canada. The Canadian Geographer, 3, pp. 89-97.
-----------------. (1960). Radio and Television in the United Sates. Focus: January.
Innis, Harold. (1944). On the Economic Significance of Culture. Journal of Economic History, Supplement, The tasks of Economic History, 4, pp. 80-97.
----------------. (1950). Empire and Communication. Oxford: The Clarendon Press.
----------------- (1964). The Bias of Communication. Toronto: University of Toronto Press.

Janowitz, Morris. (1952). The Community Press in an Urban Setting, Glencoe, IL: The Free Press.

Jeffres, Leo, Jean Dobos, \& Lee, J. (1988). Media Use and Community Ties. Journalism Quarterly, 65, pp. 575-581.
---------------, Jean Dobos and May Mano Sweeney. (1987) Communication and Commitment to Community, Communication Research, 14, pp. 619-643.

Johnson, Leland and Deborah Castleman. (1994). Toward Competition in Cable Television. Cambridge, MA.: The MIT Press.
------------------. (1991). Direct Broadcast Satellites: A Competitive Alternative to Cable Television. Santa Monica, CA.: Rand.

Jowett, G. and J. Linton. (1989). Movies as Mass Communication. (Second edition). Newbury Park, CA.: Sage.

Kagan, Paul and Associates. (1992). Marketing New Media. Carmel, CA.: Author (March 16).

Kasarda, John D. and Morris Janowitz. (1974) Community Attachment in Mass Society. American Sociological Review, 39: 328-339.

Katz, Elihu, Michael Gurevitch and Hadassah Haas. (1973). On the Use of the Mass Media for Important Things. American Sociological Review, 38: 164-181.
---------------, Jay Blumler \& Michael Gurevitch. (1974A). Utilization of Mass Communication by the Individual. In Jay Blumler and E. Katz (eds.), The Uses of Mass Communications: Current Perspectives on Gratifications Research. Sage Publications: Beverly Hills, CA.
-------------. (1974B). The Uses of Mass Communication. (eds.) Beverly Hills, Ca.: Sage Publications.

Kaufmann, Harold and Avtar Singh. (1969). The Rural-Urban Dialogue. Rural Sociology, 34, pp. 546-551.

Kellerman, Aharon. (1993). Telecommunications and Geography. Belhaven Press: London.

Kern-Foxworth, Marilyn. (1994). Magazines, in Handbook on Mass Media in the United States: The Industry and its Audiences. Westport, Ct.: Greenwood Press. pp. 7391.

Killworth, P. and H. Bernard. (1974). CATIJ: A New Sociometric and its Application to a Prison Living Unit. Human Organization, 33: 335-350.

Klapper, Joseph. (1960). The Effects of Mass Communication. New York: Free Press.
Kline, Paul. (1993). The Handbook of Psychological Testing. Routledge: London.
Kline, F. Gerald. (1971). Media Time Budgeting as a Function of Demographics and Lifestyle, Journalism Quarterly, 48, (Summer), pp. 211-221.

Klopfenstein, B. (1989). The Diffusion of the VCR in the United States. In M.R. Levy (ed.) The VCR Age: Home Video and Mass Communication. Newbury Park, CA.: Sage.

Kobre, Sidney. (1959). Modern American Journalism. Tallahassee, FL.: Florida State University Press.

Lacy, Dan. (1996). From Grunts to Gigabytes: Communications and Society. Urbana, IL.: University of Illinois Press.

Lacy, Stephen and Lucinda Davenport. (1994). Daily Newspaper Market Structure, Concentration, and Competition. Journal of Media Economics, 7, No. 3, pp. 3346.

Langley, G. A. (1963). Telecommunications in Malaya. Journal of Tropical Geography, 17, pp. 79-91.

Laumann, E. , P. Marsden and D. Pensky. (1983). The Boundary Specification Problem in Network Analysis. In R. Burt and M.J. Minor (eds.) Applied Network Analysis. Beverly Hills, CA.: Sage.

Lerner, Daniel. (1968). Communication and Change in the Developing Countries. Honolulu: East West Center Press.

Levy, M. (1951). Life in a Mexican Village: Tepoztlan Restudied. Urbana, IL.: University of Illinois Press.
----------- and Sven Windahl. (1984). Audience Activity and Gratifications: A Conceptual Clarification and Exploration. Communication Research, 11, 1, pp. 51-78.
-----------. (1989). The VCR Age: Home Video and Mass Communication. Newbury Park, CA.: Sage.

Lewis, Oscar. (1965). Further Observations on the Folk-urban Continuum and Urbanization with Special Reference to Mexico City in Philip Hauser and Leo Schnore (eds.). The Study of Urbanization. New York: John Wiley.

Lichtenstein, Allen and Lawrence Rosenfield. (1984). Normative Expectations and Individual Decisions Concerning Media Gratification Choices. Communication Research, 11: 393-413.

Lin, Carolyn. (1993). Adolescent Viewing and Gratification in a New Media Environment. Mass Communication Review, 20 (1/2), pp. 39-50.

Lometti, Guy, Byron Reeves and Carl Bybee. (1977). Investigating the Assumptions of Uses and Gratifications Research. Communication Research, 4, pp. 321-338.

Loomis, c. and J. Beagle. (1957). Rural Sociology: The Strategy of Change. Englewood Cliffs, N.J.: Prentice-Hall, Inc.

Lorenz, K. (1966). On Aggression. London: Methuen.

Lowenstein, Werner. (1970). Intercellular Communication. Scientific American, 222, 5, pp. 78-86.

Lowenthal, David. (1961). Geography, Experience, and Imagination: Towards a Geographical Epistemology. Annals of the Association of American Geographers, 51, pp. 241-260.

Lubar, S. (1993). Infoculture: The Smithsonian Book of Information Age Inventions. Boston: Houghton Mifflin.

Mackay, J. R. (1958). The Interactance Hypothesis and Boundaries in Canada, Canadian Geographer, 11, pp. 1-8.

MacLean, Malcom. (1952). Mass Media Audiences: City, Small City, village and Farm. Journalism Quarterly, 29, pp. 271-282.
----------------------- and Luca Pinna. (1958). Distance and News Interest: Scarperia, Italy. Journalism Quarterly, 35, (Winter), pp. 36-48.

Maine, H. (1930). Ancient Law. London: J. Murray.
Mandelbaum, Seymour. (1972). Community and Communications. New York: W.W. Norton \& Company, Inc.

Marble, Duane, and John D. Nystuen (1962). An Approach to the Direct Measurement of Community Mean Information Fields. Papers and Proceedings of the Regional Science Association, 11, pp. 99-109.

Maslow, Abraham. (1954). Motivation and Personality. New York, NY.: Harper.
McDaniel, Robert and Michael E. Eliot Hurst.(1968). A Systems Analytic Approach to Economic Geography. Washington, D.C.: Association of American Geographers.

McGowan, (1967). Competition Regulation and Performance in Television Broadcasting. Washington University Law Quarterly (Fall).

McLeod, J. (1991). The Seamless Web: Media and Power in the Post-Modern Global Village. Journal of Popular Communication, 25, No. 2, pp. 69-78.

McQuail, Denis. (1972). Sociology of Mass Communication. Harmandsworth: Penguin.
--------------------. (1987). Mass Communication Theory: an Introduction. (Second edition). United Kingdom: Sage Publications.
-------------------, Jay Blumler and J. R. Brown. (1972). The Television Audience: A Revised Perspective, in Elihu Katz, Jay Blumler and Micahel Gurevitch (eds). The Uses of Mass Communication. Beverly Hills, CA.: Sage Publication.
and Michael Gurevitch. (1974). Explaining Audience Behavior: Three Approaches Considered. In Jay Blumler and E. Katz (eds.), The Uses of Mass Communications: Current Perspectives on Gratifications Research. Sage Publications: Beverly Hills, CA.

- and Sven Windahl. (1993). Communication Models for the Study of Mass Communication. New York: Longman.

Meier, Richard. (1962). A Communication Theory of Urban Growth. Cambridge, Mass.: M.I.T. Press.

Merrill, John and Ralph Lowenstein. (1971). Media, Messages and Men: New Perspectives in Communication. Columbia, MO.: David McKay.

Merton, R. (1949). Types of Influentials: The Local and the Cosmopolitan. In P. F. Lazarfeld \& F. Stanton (eds.), Communications Research, 1948-1949. New York: Harper \& Brothers.
-------------. and Paul Lazarsfeld. (1950). Studies in the Scope and Method of "The American Soilder'". New York: The Free Press..

Mishra, Vishwa. (1970). Mass Media Use and Modernization in Greater Delhi Basties. Journalism Quarterly, 47, (Summer), pp. 331-39.

Monge, Peter and Noshir Contractor. (1988). Communication Networks: Measurement Techniques in James Tandy (ed.) A Handbook for the Study of Human Communication. New York, NY.: Sage. pp. 107-138.

Monthly Satellite Systems Shipment Update. (1990). Sat Vision, Satellite Broadcasting and Communications Association (SCBA). September: p. 27.

Morrill, Richard, and Forrest Pitts. (1967). Marriage, Migration, and the Mean Information Field: A Study of Uniqueness and Generality. Annals of the Association of American Geographers, 57, 2, pp. 401-422.

Morris, Desmond. (1977). Manwatching: A Field Guide to Human Behavior. New York: HN Abrams.

Morris, R. (1968). Urban Sociology. Frederick: Praeger Publishing.

Murphey, Gardner. (1961). Toward a Field Theory of Communication. Journal of Communication, 11, 4, pp. 196-201.

National Cable Television Association. (1989). Facts Concerning the Status of the Home Satellite Dish Industry and Scrambled Programming. Washington, D. C. (November).

Neuman, Russell W. (1991). The Future of the Mass Audience. Cambridge University Press: Cambridge.

Neurath, Paul. (1944). One-Publisher Communities: Factors Influencing Trend. Journalism Quarterly, 21, pp. 230-42.

Neuwirth, Kurt., Charles Salmon and Maryl Neff. (1989). Community Orientation and Media Use. Journalism Quarterly, 66, pp. 31-39.

Nixon, Raymond. (1945). Concentration and Absenteeism in Daily Newspaper Ownership. Journalism Quarterly, 22, pp. 97-114.

Nystuen, John, and Michael Dacey. (1961). A Graph Theory Interpretation of Nodal Regions. Papers and Proceedings of the Regional Science Association, 7, pp. 2942.

Ogan, C. (1989). The World Wide Cultural and Economic Impact of Video. In M.R. Levy (ed.) The VCR Age: Home Video and Mass Communication. Newbury Park, CA.: Sage. pp. 230-251.

O’Sullivan, Tim, John Hartley, Danny Saunders, Martin Montgomery and John Fiske. (1994 ). Key Concepts in Communication in Cultural Studies.

Owen, Bruce, Jack Beebe \& Willard Manning (1975). Television Economics. Lexington, MA.: Lexington Books.

Park, Robert. (1952). Human Communities. Glencoe, IL.: The Free Press.
Perse, Elizabeth. (1990). Audience Selectivity and Involvement in the Newer Media Environment. Communication Research, 17, 5, pp. 675-697.
and John Courtright. (1993). Normative Images of Communication Media: Mass and Interpersonal Channels in the New Media Environment. Human Communication Research, 19: 485-503.

Pianka, Eric. (1983). Evolutionary Ecology (Third edition). New York: Harper \& Row.

Picard, Robert. (1993). Economics of the Daily Newspaper Industry, in Alison Alexander, James Owers and Rod Carveth (eds.). Media Economics: Theory and Practice. Hillsdale, N. J.: Lawrence Erlbaum Associates.
---------------- . (1989). Media Economics: Concepts and Issues. Newbury Park, CA.:
Sage.
Pocock, D. (1960). Sociologies - Urban and Rural. Contributions Indian Sociology, 4, pp. 63-81.

Porter, B. (1989). The Newsweeklies: Is the Species Doomed? Columbia Journalism Review, pp. 23-29.

Pred, Allan. (1967). Behavior and Location. Lund: Gleerup. Lund Studies in Geography, Series B, Human Geography, No. 27.

Provenzo, E.F., Jr. (1986). Beyond the Gutenberg Galaxy. New York: Teachers College Press.

Ratzel, Friedrich. (1921). Anthropogeographie, Third Edition. Stuttgart: Englehorns.
Ricklefs, Robert. (1979). Ecology (Second edition). New York: Chiron Press.
Redfield, Robert. (1941). The Folk Culture of Yucatan. Chicago: University of Chicago Press.
--------------------. (1947). The Folk Society. American Journal of Sociology, 52, pp. 293308.

Rogers, Everett and F. Floyd Showmaker. (1971). Communication of Innovations: A Cross-Cultural Approach. New York: The Free Press.

Rose, Lance. (1995). Netlaw, Your Rights in the Online World: The Guidebook to the Changing Legal Frontier. Berkeley, CA.: Osborne McGaw-Hill.

Rosen, Jay and Paul Taylor. (1992). The New News v. The Old News: the Press and Politics in the 1990s. New York: Twentieth Century Fund Press.

Rosengren, Karl. (1974). Uses and Gratifications: a Paradigm Outlined. In Jay Blumler and E. Katz (eds.), The Uses of Mass Communications: Current Perspectives on Gratifications Research. Sage Publications: Beverly Hills, CA.

Rosse, James. (1978). An Economist's Description of the Media Industry. In Proceeding of the Symposium on Media Concentration, December 14-15, 1978. (Vol 1., pp. 40-192). Washington, D.C.: Bureau of Competition, Federal Trade Commission.

Rothenberg, J. (1962). Consumer Sovereignty and the Economics of TV Programming. Studies in Public Communications, 4, (Fall): 45-54.

Rubin, Alan. (1979). Television Use by Children and Adolescents. Human Communication Research, 5, No. 2, pp. 109-120.
---------------. (1983). Television Uses and Gratifications: the Interactions of Viewing Patterns and Motivations. Journal of Broadcasting, 27:1, pp. 37-51.
---------------. (1985). Uses and Gratification: Quasi-functional Analysis, in Joseph Dominick and James Fletcher (eds.) Broadcasting Research Methods. Boston: Allyn \& Bacon.
---------------. (1986). Uses, Gratifications, and Media Effects Research in Jennings Bryant and Dolf Zillman (eds.) Perspectives on Media Effects. Lawrence Erlbaum Associates: Hillsdale, N.J., pp. 281-302.
---------------. (1994). Media Uses and Effects. In Jennings Bryant and dolf Zillman (eds.) Media Effects: Advances in Theory and Research. Lawrence Erlbaum Associates: Hillsdale, N.J., pp. 417-436.
--------------- and Rebecca Rubin. (1985). Interface of Personal amd Mediated Communication. A Research Agenda. Critical Studies in Mass Communication, 2,: 26-53.

Rubin, Rebecca, Elizabeth Perse and Carole Barbato. (1988). Conceptualization and Measurement of Interpersonal Communication Motives. Human Communication Research, 14, 4, pp. 602-628.

Ryan and Gross. (1943). The Diffusion of Hybrid Seed Corn in Two Iowa Communities. Rural Sociology, 8, pp. 15-24.

Scherer, Frederic. and D. Ross. (1990). Industrial Market Structure and Economic Performance (Third edition). Boston: Houghton Mifflin.

Schnore, Leo. (1961). The Statistical Measurement of Urbanization and Economic Development. Land Economics, 37, pp. 229-245.

Seneca, Joseph, and Charles Cicchetti. (1969). A Gravity Model Analysis of the Demand for Public Communication. Journal of Regional Science, 9, 3, pp. 459-470.

Severin, Werner and James Tankard, Jr. (1992). Communication Theories: Origins, Methods, and Uses in The Mass Media. Longman Publishing Group: New York, NY.

Shumaker, Sally and Daniel Stokols. (1982). Residential Mobility as a Social Issue and Research Topic, Journal of Social Issues, No. 3, pp. 1-19.

Sidel, M. Kent. (1994). Radio, in Erwin Thomas and Brown Carpenter (eds.) Handbook on Mass Media in the United States: the Industry and its Audiences. pp. 1322-146.

Simon, Herbert. (1957). Models of Man: Social and Rational; Mathematical Essays on Rational Human Behavior in a Society Setting. New York: Wiley

Sjoberg, Gideon, (1964). The Rural-Urban Dimension in Preindustrial, Transisitional and Industrial Societies. in Robert E. Faris (ed.) Handbook of Modern Sociology. New York: Rand McNally.

Skinner, Burrhus. (1953). Science and Human Behavior. New York: MacMillan.

Smith, Anthony. (1993). Books to Bytes: Knowledge and Information in the Post Modern Era. London: British Film Institute.

Smith, T. Lynn. (1947). The Sociology of Rural Life. (revised edition). New York: Harper \& Row.

Soree, Max. (1948). The Foundations of Human Geography. Vol II, The Foundation Techniques. Paris: Armand Colin.

Sorokin, Pitirim and Carle Zimmerman. (1929). Principles of Rural-Urban Sociology. New York: Henry Holt.

Spencer, Herbert. (1910). Principles of Sociology, Vol. 1. (Third edition). New York: Appleton.

Stamm, Keith R. (1985). Newspaper Use and Community Ties, Norwood, N.J.: Ablex Publishing Co.
--------------------. and Lisa Fortini-Campbell. (1983). The Relationship of Community Ties to Newspaper Use, Journalism Monographs, No. 84.
--------------------. and R. Weis. (1986). The Newspaper and Community Integration: A Study of Ties to a Local Church Community. Communication Research, 13, pp. 125-137.

Steiner, P. O. (1952). Program Patterns and Preferences and the Workability of Competition in Radio Broadcasting. Quarterly Journal of Economics. (May).

Stewart, John. (1947). Empirical Mathematical Rules Concerning the Distribution and Equilibrium of Population. Geographical Review, 37, pp. 461-485.

Stewart, Robert. (1994). Alternative Analytical Maps of the Information Economy. Journal of Media Economics, 7, No. 3, pp. 15-31.

Strate, Lance, Ronald Jacobson and Stephanie Gibson. (1996). Surveying the Electronic Landscape: An Introduction to Communication and Cyberspace. In Lance Strate, R. Jacobson and S. Gibson (eds.) Communication and Cyberspace. Cresskill, N.J.: Hampton Press, Inc. pp. 1-22.

Taaffe, Edward, Howard Gauthier and Moron O’Kelly. (1996). Geography of Transportation. Upper Saddle River, NJ.: Prentice Hall.

Thomas, Erwin and Brown Carpenter. (1994). Handbook on Mass Media in the United States: The Industry and Its Audiences. Westport, CT.: Greenwood Press.

Tichenor, Phillip, George Donohue and Clarice Olien. (1990). Community Conflict and the Press. Beverly Hills: Sage Publications.

Tisdale, Hope. (1942). The Process of Urbanization. Social Forces, 20, pp. 311-316.
Tocalis, T.R. (1978). Changing Theoretical Foundations of the Gravity Concept of Human Interaction,, in B.J. L. Berry (ed.) The Nature of Change in Geographical Ideas. pp. 66-124, 154-167.

Tomita, Tetsuro. (1980). The New Electronic Media and Their Place in the Information Market of the Future in Anthony Smith (ed.) Newspapers and Democracy: International Essays on a Changing Medium. Cambridge, Mass.: M.I.T. Press, pp 49-62.

Tonnies, Frederic (1940). Fundamental Concepts of Sociology. C.P. Loomis (trans. 7 suppl.). New York: American Book Co.

Tornqvist, Gunnar. (1967). Growth of TV Ownership in Sweden, 1956-65. Stockholm: Alvvist and Wikksell.
----------------------. (1968). Flows of Information and the Location of Economic Activity. Lund: Gleerup. Lund Studies in Geography, Series B, Human Geography, No. 30.

Troldahl, Verling. (1965). Studies in Consumption of Mass Media Content. Journalism Quarterly, 42, (Autumn), pp. 596-606.

Twedt, Dik. (1968). Toward a Single System of Standard Geographical Units. Journal of Marketing, 32, pp. 71-73.

Tweeten, Luther. (1984). High Technology in Rural Settings. State of the Art Paper. University of Tennessee Office of Research in High Technology Education: Washington, D.C.

Ullman, Edward. (1956). The Role of Transportation and the Bases for Interaction. in Man's Role in Changing the Face of the Earth. William L. Thomas, Jr., (ed.) Chicago: University of Chicago Press, pp. 862-882.
U.S. Studios Hit by Slowdown of Worldwide Film Revenues. (1991). Screen Finance. (March 20): pp 10-13.

Van Cleef, Eugene. (1937). Trade Centers and Trade Routes. New York: D. AppletonCentury.

Vernon, Raymond. (1963). Metropolis, 1985. Garden City, N.Y.: Doubleday.
Viswanath, Kasisomyajula, John Finnegan, Brenda Rooney and John Potter. (1990). Community Ties in a Rural Midwest Community and Use of Newspapers and Cable Television. Journalism Quarterly, 67, pp. 899-911.

Wade, G. (1985). Film, Video and Television: Market Forces, Fragmentation and Technological Advance. London: Comedia.

Warntz. William. (1957). Contributions Toward a Macro-Economic Geography: A Review. Geographical Review, 47, pp. 420-424.

Webber, Melvin. (1964). The Urban Place and the Nonplace Urban Realm. In Explorations in Urban Structure, M. Webber, J. Dyckman, and D. Foley (eds.) Philadelphia: University of P

Webster, James. (1986). Audience Behavior in the New Media Environment. Journal of Communication, 36, 3, pp. 77-91.
----------------------. and Carolyn Webber. (1967). Culture, Territoriality, and the Elastic Mile, in H. Wentworth Eldredge (ed.) Taming Megalopolis, Vol. 1. Garden City, N.Y.: Doubleday.

Weinfeld, William. (1936). The Growth of Daily Newspaper Chains in the United States: 1923, 1926-1935. Journalism Quarterly, 13, pp. 357

Wik, Reynold. (1981). The Radio in Rural American During the 1920s. Agricultural History, 55, (October), pp. 339-50.

Wildman, Steven. (1994). One-way Flows and the Economics of Audiencemaking in James Ettema and D. Charles Whitney (eds.) Audiencemaking: How the Media Create the Audience. Thousand Oaks: Sage Publication.

Wiles, Peter. (1963). Pilkington and the Theory of Value. Economic Journal, 73, (June).
Wilson, R. (1968). In Quest of Community: Social Philosophy in the United Sates, 18601920. New York: John Wiley and Sons, Inc. 1968.

Winters, C. (1979). The Social Identity of Evolving Neighborhoods, Landscape, 23, pp. 8-14.

Wirth, Louis. (1938). Urbanism as a Way of Life. American Journal of Sociology, 44, (July), pp. 1-24.

Wolpert, Julian. (1964). The Decision Process in Spatial Context. Annals of the Association of American Geographers, 54, 4, pp. 537-558.

Woolever, Cynthia. (1992). A Contextual Approach to Neighborhood Attachment. Urban Studies, 26, No. 1, pp. 99-117.

Zboray, Ronald. (1994). Books, in Handbook on Mass Media in Erwin Thomas and Brown Carpenter (eds.) The United States: The Industry and Its Audiences. (eds.). Westport, CT.: Greenwood Press.

Zipf, George. (1946). Some Determinants of the Circulation of Information. American Journal of Sociology, 59, pp. 401-421.
----------------. (1949). Human Behavior and the Principle of Lease Effort. Cambridge, Mass.: Addison-Wesley.

## APPENDIX A

ZIP CODE DATA DESCRIPTION AND CATEGORIZATION

In section III of the questionnaire a respondent was asked to give the Zip Code for the area in which they reside. Based upon this information, each respondent was classified into one of four geographic cells using the U.S. Census Bureau's definitions or urban and rural and population estimates from The Sourcebook of Zipcode Demographics.

Zip Code
Distribution by State

|  | Total \# of Respondents | Percent of Data Set | \# of Rural Respondent S | $\begin{array}{r} \text { \# of Rural } \\ \text { Fringe } \\ \text { Respondents } \\ \hline \end{array}$ | $\begin{array}{r} \text { \# of Urban } \\ \text { Fringe } \\ \text { Respondents } \\ \hline \end{array}$ | \# of Urban Respondents |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Virginia | 183 | 48.93\% | 3 | 6 | 30 | 144 |
| Georgia | 48 | 12.83\% | 1 | 4 | 13 | 30 |
| South Carolina | 40 | 10.70\% | 40 | 0 | 0 | 0 |
| Oklahoma | 30 | 8.02\% | 1 | 5 | 10 | 14 |
| Wisconsin | 13 | 3.48\% | 0 | 0 | 5 | 8 |
| North Dakota | 12 | 3.21\% | 2 | 3 | 2 | 5 |
| Texas | 10 | 2.67\% | 0 | 1 | 6 | 3 |
| New Jersey | 4 | 1.07\% | 0 | 0 | 1 | 3 |
| North Carolina | 4 | 1.07\% | 1 | 0 | 1 | 2 |
| Illinois | 3 | 0.80\% | 0 | 0 | 1 | 2 |
| Maryland | 3 | 0.80\% | 0 | 0 | 0 | 3 |
| Minnesota | 3 | 0.80\% | 0 | 3 | 0 | 0 |
| California | 2 | 0.53\% | 0 | 0 | 0 | 2 |
| District of Columbia | 2 | 0.53\% | 0 | 0 | 1 | 1 |
| Mississippi | 2 | 0.53\% | 0 | 1 | 1 | 0 |
| Ohio | 2 | 0.53\% | 0 | 0 | 1 | 1 |
| Connecticut | 1 | 0.27\% | 0 | 0 | 0 | 1 |
| Florida | 1 | 0.27\% | 0 | 0 | 0 | 1 |
| Indiana | 1 | 0.27\% | 0 | 0 | 0 | 1 |
| Kansas | 1 | 0.27\% | 1 | 0 | 0 | 0 |
| Kentucky | 1 | 0.27\% | 0 | 1 | 0 | 0 |
| Louisiana | 1 | 0.27\% | 0 | 0 | 1 | 0 |
| Massachusetts | 1 | 0.27\% | 0 | 0 | 1 | 0 |
| Michigan | 1 | 0.27\% | 0 | 0 | 1 | 0 |
| Missouri | 1 | 0.27\% | 0 | 0 | 1 | 0 |
| Nebraska | 1 | 0.27\% | 0 | 0 | 1 | 0 |
| New York | 1 | 0.27\% | 0 | 0 | 1 | 0 |
| Pennsylvania | 1 | 0.27\% | 0 | 0 | 0 | 1 |
| Tennessee | 1 | 0.27\% | 0 | 0 | 0 | 1 |
|  | 374 | 100.00\% | 49 | 24 | 78 | 223 |

If the respondent's Zip Code had less than 1,000 residents in the corresponding The Sourcebook of Zip Code Demographics zip code then the respondents was classified as rural, denoted as " 1 " in the Place column of the Data set. If the Zip Code had between 1,000 and 1,750 residents the respondent was classified as rural fringe, denoted as " 2 " in the Place column of the data set. If there were between 1,750 and 2.5000 residents in the Zip Code area then the respondent was classified as urban fringe, denoted as " 3 " in the place column of the data set. If the Zip Code area had more than 2.500 residents the respondent was classified as urban, denoted as " 4 " in the place column of the data set.

A review of the Zip Code data reveals that respondents came from 29 states. Forty nine percent of respondents were from Virginia. Seventy percent were from Virginia, Georgia (13 percent) or South Carolina (11 percent).

## APPENDIX B

ITEM CORRELATION TABLES

1. A four-fold point correlation of items $\# 50$ and $\# 59$ was administered to measure the instrument's ability to capture the relaxation motive. The following table illustrates the Phi Coefficient and significance level for each media cluster.

Table 1
Motive: For Relaxation measured by Items \#50 and \#59

## Wording of Item

50. The media I use because they relax me are:
51. The media I use because they allow me to unwind are:

Four-Fold Point Correlation Table

| Media Activity | Phi <br> Coefficient | Significance <br> Level | N |
| :---: | :---: | :---: | :---: |
| Face to Face | . 344 | .011* | 55 |
| Write or Read a letter | . 267 | .049* | 55 |
| Talk on the telephone | . 500 | .000** | 55 |
| Read a book | . 644 | .000** | 55 |
| Read newspapers | . 461 | .000** | 55 |
| Read magazines | . 336 | .012* | 55 |
| View a movie at a theater | . 557 | .000** | 55 |
| Listen to pre-recorded music | . 328 | .015* | 55 |
| Listen to radio | . 386 | .004** | 55 |
| Watch television | . 436 | .001** | 55 |
| Watch a videocassette | . 419 | .001** | 55 |
| Use a computer | . 523 | . 000 ** | 55 |

Phi Coefficient significant $>.22$
** significant at .01 level
*significant at .05 level
2. A four-fold point correlation of items \#48 and \#60 was administered to measure the instrument's ability to capture the companionship motive. The following table illustrates the Phi Coefficient and significance level for each media cluster.

Table 2
Motive: For Companionship measured by Items \#48 and \#60

## Wording of Item

48. The media I use because they make me feel less lonely are:
49. The media I use when there is no on else to talk to or be with are:

Four-Fold Point Correlation Table

| Media |
| :--- |
|  |
| Activity |


| Phi <br> Coefficient | Significance <br> Level | N |  |
| :--- | :---: | :---: | :---: |
| Face to Face | .092 | .505 | 55 |
| Write or Read a letter | .704 | .000 | 55 |
| Talk on the telephone | -.111 | .421 | 55 |
| Read a book | .436 | $.001^{* *}$ | 55 |
| Read newspapers | .232 | .088 | 55 |
| Read magazines | .270 | $.047^{*}$ | 55 |
| View a movie at a theater | .664 | $.000^{* *}$ | 55 |
| Listen to pre-recorded music | .256 | .059 | 55 |
| Listen to radio | .538 | $.000^{* *}$ | 55 |
| Watch television | .311 | $.014^{*}$ | 55 |
| Watch a videocassette | .439 | $.001^{* *}$ | 55 |
| Use a computer | .477 | $.000^{* *}$ | 55 |

Phi Coefficient significant $>.22$
** significant at .01 level
*significant at .05 level
3. A four-fold point correlation of items $\# 49$ and $\# 54$ was administered to measure the instrument's ability to capture the out of habit motive. The following table illustrates the Phi Coefficient and significance level for items measuring each media cluster.

Table 3
Motive: Out of Habit measured by Items \#49 and \#54

## Wording of Item

49. The media I use just because they are there are:
50. The media I use out of habit are:

Four-Fold Point Correlation Table

| Media <br> Activity | Phi <br> Coefficient | Significance <br> Level | N |
| :---: | :---: | :---: | :---: |
| Face to Face | . 359 | .007** | 55 |
| Write or Read a letter | . 231 | . 090 | 55 |
| Talk on the telephone | . 157 | . 251 | 55 |
| Read a book | . 156 | . 257 | 55 |
| Read newspapers | . 187 | . 171 | 55 |
| Read magazines | . 369 | .006** | 55 |
| View a movie at a theater | . 408 | . 002 ** | 55 |
| List to pre-recorded music | . 267 | .049* | 55 |
| Listen to radio | . 484 | .000** | 55 |
| Watch television | . 440 | . 001 ** | 55 |
| Watch a videocassette | . 245 | . 072 | 55 |
| Use a computer | . 528 | . 000 ** | 55 |

Phi Coefficient significant $>.22$
** significant at .01 level
*significant at .05 level
4. A four-fold point correlation of items \#44, 56 and $\# 61$ was administered to measure the instrument's ability to capture the pass time motive. The following table illustrates the Phi Coefficient and significance level for items measuring each media cluster.

Table 4
Motive: To Pass Time measured by Items \#47, 59 and \#60

## Wording of Questions

47. The media I use when I have nothing better to do are:
48. The media I use because they pass the time away, particularly when I'm bored are:
49. The media I use to occupy my free time are:

Four-Fold Point Correlation Table

| Media Activity | Phi <br> Coefficient | Significance <br> Level | N |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Face to Face | $\begin{array}{lllll}\text { A) } .490 & \text { B) } .348 & \text { C) } .252\end{array}$ | A) $.000 * *$ B) $.010 *$ C) .065 | A) 55 | B) 54 | C) 55 |
| Write or Read a letter | $\begin{array}{lllll}\text { A) } .357 & \text { B) } .626 & \text { C) } .395\end{array}$ | A) $.007 * *$ B) $.000 * *$ C) $.000 * *$ | A) 55 | B) 55 | C) 55 |
| Talk on the telephone | $\begin{array}{llll}\text { A) } .66 & \text { B) } .702 & \text { C) } .664\end{array}$ | A) $.000 * *$ B) $.000 * *$ C) $.000 * *$ | A) 55 | B) 54 | C) 54 |
| Read a book | $\begin{array}{llll}\text { A) } .266 & \text { B) } .260 & \text { C) } .395\end{array}$ | $\begin{array}{llll}\text { A) } .050 * & \text { B) } .058 & \text { C) } .003 * *\end{array}$ | A) 55 | B) 54 | C) 54 |
| Read newspapers | $\begin{array}{llll}\text { A) } .505 & \text { B) } .266 & \text { C) } .481\end{array}$ | $\begin{array}{llll}\text { A) } .00 * * & \text { B) } .052 & \text { C) } .000 * *\end{array}$ | A) 55 | B) 54 | C) 54 |
| Read magazines | $\begin{array}{llll}\text { A) } .261 & \text { B) } 492 & \text { C) } .609\end{array}$ | $\begin{array}{llll}\text { A) } .054 & \text { B) } .000 * * & \text { C) } .000 * *\end{array}$ | A) 55 | B) 54 | C) 54 |
| View a movie at a theater | $\begin{array}{lllll}\text { A) } .389 & \text { B) } .340 & \text { C) } .399\end{array}$ | A) $.003 * *$ B) $.012 *$ C) $.003 * *$ | A) 55 | B) 54 | C) 54 |
| List to pre-recorded music | $\begin{array}{llll}\text { A) } .266 & \text { B) } .352 & \text { C) } .494\end{array}$ | $\begin{array}{llll}\text { A) } .050 * & \text { B) } .009 & \text { C) } .000 * *\end{array}$ | A) 55 | B) 54 | C) 54 |
| Listen to radio | $\begin{array}{lllll}\text { A) } .461 & \text { B) } .405 & \text { C) } .666\end{array}$ | A) $.000 * *$ B) $.000 * *$ C) $.000 * *$ | A) 55 | B) 54 | C) 54 |
| Watch television | A) .481 B) . 175 C) . 175 | $\begin{array}{llll}\text { A) } .000 * * & \text { B) } .205 & \text { C) } .205\end{array}$ | A) 55 | B) 54 | C) 54 |
| Watch a videocassette | $\begin{array}{lllll}\text { A) } .567 & \text { B) } .430 & \text { C) } .406\end{array}$ | A) $.000 * *$ B) $.001 * *$ C) $.002 * *$ | A) 55 | B) 54 | C) 54 |
| Use a computer | $\begin{array}{lllll}\text { A) } .748 & \text { B) } .678 & \text { C) } .735\end{array}$ | A) $.000 * *$ B) $.000 * *$ C) $.000 * *$ | A) 55 | B) 54 | C) 54 |

Phi Coefficient significant $>.22$
** significant at .01 level
*significant at .05 level
\#--coefficients, significance level and sample size correspond (a. b., c)
5. A four-fold point correlation of items \#51 and \#62 was administered to measure the instrument's ability to capture the entertainment motive. The following table illustrates the Phi Coefficient and significance level for items measuring each media cluster.

Table 5
Motive: For Entertainment measured by Items \#51 and \#62

## Wording of Questions

51. The media I use because they entertain me are:
52. The media I use because they amuse me are:

Four-Fold Point Correlation Table

| Media <br> Activity | Phi <br> Coefficient | Signific Level | N |
| :---: | :---: | :---: | :---: |
| Face to Face | . 379 | .005** | 54 |
| Write or Read a letter | . 800 | .000** | 54 |
| Talk on the telephone | . 652 | .000** | 54 |
| Read a book | . 529 | .000** | 54 |
| Read newspapers | . 415 | .000* | 54 |
| Read magazines | . 573 | .000** | 54 |
| View a movie at a theater | . 465 | .000** | 54 |
| List to pre-recorded music | . 321 | .018* | 54 |
| Listen to radio | . 374 | .005** | 54 |
| Watch television | . 125 | . 368 | 54 |
| Watch a videocassette | . 449 | .001** | 54 |
| Use a computer | . 610 | .000** | 54 |

Phi Coefficient significant $>.22$
** significant at .01 level
*significant at .05 level
6. A four-fold point correlation of items \#53 and \#63 was administered to measure the instrument's ability to capture the social interaction motive. The following table illustrates the Phi Coefficient and significance level for items measuring each media cluster.

Table 6
Motive: For Social Interaction measured by Items \#53 and \#63

## Wording of Questions

53. The media I use because they provide something to do when friends come over are:
54. The media I use so I can talk with other people about events are:

Four-Fold Point Correlation Table

| Media <br> Activity <br> CoefficientSignificance <br> Level |  |  |
| :--- | :---: | :---: |
| Face to Face |  |  |$| .119$ N

Phi Coefficient significant $>.22$
** significant at .01 level
*significant at .05 level
${ }^{\mathrm{a}}=$ cannot compute because at least one of the variables is a constant.
7. A four-fold point correlation of items \#55,57 and \# 64 was used to measure the instrument's ability to capture the obtain information motive. The following table illustrates the Phi Coefficient and significance level for items measuring each media cluster.

Table 7
Motive: To Obtain Information measured by Items \#55, 57 and \#64

## Wording of Item

55. The media I use to understand what goes on in the United States and the world are:
56. The media I use to obtain useful information for daily life are:
57. The media I use because they help me learn things about myself and others are:

## Four-Fold Point Correlation Table

| Media <br> Activitiy | Phi Coefficient | Significance Level | N |
| :---: | :---: | :---: | :---: |
| Face to Face | A) . 335 B) . 269 C). 262 | A) .013* B) .056 C) .050* | $\begin{array}{lll}\text { A) } 55 & \text { B) } 54 & \text { C) } 54\end{array}$ |
| Write or Read a letter | $\begin{array}{llll}\text { A) } .486 & \text { B) } .265 & \text { C) } .203\end{array}$ | A) $.000 * *$ B) .053 C) .142 | $\begin{array}{lll}\text { A) } 55 & \text { B) } 54 & \text { C) } 54\end{array}$ |
| Talk on the telephone | $\begin{array}{llll}\text { A) } .340 & \text { B) } .305 & \text { C) } .216\end{array}$ | A) $.011^{*}$ B) $.025^{*}$ C) .117 | $\begin{array}{lll}\text { A) } 55 & \text { B) } 54 & \text { C) } 54\end{array}$ |
| Read a book | $\begin{array}{lll}\text { A) } .492 & \text { B) } .415 & \text { C) } .260\end{array}$ | A) $.000 * *$ B) $.002 * *$ C) .057 | $\begin{array}{lll}\text { A) } 55 & \text { B) } 54 & \text { C) } 54\end{array}$ |
| Read newspapers | $\begin{array}{lll}\text { A) } .159 & \text { B) } .110 & \text { C) } .287\end{array}$ | A) .246 B) .429 C) $.035^{*}$ | $\begin{array}{lll}\text { A) } 55 & \text { B) } 54 & \text { C) } 54\end{array}$ |
| Read magazines | $\begin{array}{llll}\text { A) } .477 & \text { B) } .211 & \text { C) } .326\end{array}$ | A) $.000 * *$ B) .126 C) $.016^{*}$ | $\begin{array}{lll}\text { A) } 55 & \text { B) } 54 & \text { C) } 54\end{array}$ |
| View a movie at a theater | $\begin{array}{lll}\text { A) } .481 & \text { B) } .194 & \text { C) } .470\end{array}$ | A) .000** B) .159* C) .000** | $\begin{array}{lll}\text { A) } 55 & \text { B) } 54 & \text { C) } 54\end{array}$ |
| List to pre-recorded music | A) .-. 065 B). a C) .a | A) . 638 B). - C). - | $\begin{array}{lll}\text { A) } 54 & \text { B) } 54 & \text { C) } 54\end{array}$ |
| Listen to radio | $\begin{array}{lll}\text { A) } .635 & \text { B) } .347 & \text { C) } .324\end{array}$ | A) .000** B) .010* C) .017* | $\begin{array}{lll}\text { A) } 55 & \text { B) } 54 & \text { C) } 54\end{array}$ |
| Watch television | $\begin{array}{lll}\text { A) } .635 & \text { B) } .252 & \text { C) } .204\end{array}$ | A) $.004 * *$ B) .066 C) .140 | $\begin{array}{lll}\text { A) } 55 & \text { B) } 54 & \text { C) } 54\end{array}$ |
| Watch a videocassette | $\begin{array}{lll}\text { A) . a } & \text { B) . } 329 & \text { C) . a }\end{array}$ | A). - B) .015* C) . - | $\begin{array}{lll}\text { A) } 55 & \text { B) } 54 & \text { C) } 54\end{array}$ |
| Use a computer | $\begin{array}{lll}\text { A) } .264 & \text { B) } .157 & \text { C) } .467\end{array}$ | $\begin{array}{lll}\text { A) } .051 & \text { B) } .269 & \text { C) } .000 * *\end{array}$ | $\begin{array}{lll}\text { A) } 55 & \text { B) } 54 & \text { C) } 54\end{array}$ |

## Phi Coefficient significant >. 22

** significant at .01 level
*significant at .05 level
${ }^{\mathrm{a}}=$ cannot compute because at least one of the variables is a constant.
8. A four-fold point correlation of items \#58 and \# 65 measures the instrument's ability to capture the Stimulation (arousal) motive. The following table illustrates the Phi Coefficient and significance level for items measuring each media cluster.

Table 8
Motive: To be Stimulated (arousal) measured by Items \#58 and \#65

## Wording of Questions

58. The media I use because they are thrilling are:
59. The media I use because they are exciting are:

Four-Fold Point Correlation Table

| Media Activity | Phi <br> Coefficient | Significance Level | N |
| :---: | :---: | :---: | :---: |
| Face to Face | . 363 | .007** | 54 |
| Write or Read a letter | . 809 | .000** | 54 |
| Talk on the telephone | . 779 | .000** | 54 |
| Read a book | . 190 | . 169 | 54 |
| Read newspapers | . 352 | .009** | 54 |
| Read magazines | . 539 | .000** | 54 |
| View a movie at a theater | . 660 | . 000 ** | 54 |
| List to pre-recorded music | . 586 | .000** | 54 |
| Listen to radio | . 583 | .000** | 54 |
| Watch television | . 441 | .000** | 54 |
| Watch a videocassette | . 741 | .000** | 54 |
| Use a computer | . 523 | .007** | 54 |

Phi Coefficient significant $>.22$
** significant at .01 level
*significant at .05 level
9. A four-fold point correlation of items \#52 and \# 66 measures the instrument's ability to capture the escape motive. The following table illustrates the Phi Coefficient and significance level for items measuring each media cluster.

Table 9
Motive: To Escape (the reality of daily life) measured by Items \#52 and \#66

## Wording of Item

52. The media I use to escape the reality of everyday life are:
53. The media I use so I can get away from what I'm doing are

Four-Fold Point Correlation Table

| Media Activity | Phi <br> Coefficient | Signif <br> Level | N |
| :---: | :---: | :---: | :---: |
| Face to Face | . 252 | . 066 | 54 |
| Write or Read a letter | . 081 | . 560 | 54 |
| Talk on the telephone | . 144 | . 300 | 54 |
| Read a book | -. 053 | . 703 | 54 |
| Read newspapers | . 370 | .006** | 54 |
| Read magazines | . 026 | . 853 | 54 |
| View a movie at a theater | . 389 | .004** | 54 |
| List to pre-recorded music | . 594 | .000** | 54 |
| Listen to radio | . 481 | .000** | 54 |
| Watch television | . 446 | .001** | 54 |
| Watch a videocassette | . 564 | .000** | 54 |
| Use a computer | . 480 | .000** | 55 |

Phi Coefficient significant $>.22$
** significant at .01 level
*significant at .05 level

## APPENDIX C

SURVEY QUESTIONNAIRE

## Mass Media Use

In this booklet is a series of questions about the mass media in your community. Please take a few minutes to complete the survey. Answer each question as it applies to you.

Do not write your name on this questionnaire or identify yourself in any way. Your responses will be used for research purposes only. Your responses will not be associated with you in any manner. Please be candid and honest.

When you have completed the questionnaire please return it in the self-addressed stamped envelope that has been included.

Thank you for participating in this survey.

## Section One <br> Media Use

As you answer these questions please think about the ass media available to you in your community. For example, when answering questions about radio, consider the radio stations that you can receive in your community. Answer each question based upon your estimate of the influence each medium has upon your life.

1. Which of the following activities have you done during the last week?

Check all that apply
A. spoke with a person face to face
B. wrote a letter to or received a letter from someone
C. spoke with a person on a home telephone
D. used a beeper or pager
E. spoke with another person on a cellular telephone
F. read a book
G. read a national newspaper
H. read a local daily newspaper
I. read a local weekly newspaper
J. read a national magazine
K. read a regional magazine
L. read a trade journal
M. went to a movie theater to see a movie
N. listened to pre-recorded music or audio on cassette, compact disk or vinyl
O. listened to music on AM radio
P. listened to news or talk on AM radio
Q. listened to music on FM radio
R. listened to news or talk on FM radio
S. watched a pre-recorded movie on videocassette
T. used a VCR to record and view some television programming
U. watched broadcast television
V. watched cable television
W. used a satellite disk to watch television
X. used a computer to send or receive e-mail
Y. used a computer to access a website
Z. used a computer to play a game by yourself or with others

AA. used a computer to type business correspondence


## Section Two <br> Motive Selection and Rank of Media Activities

In the following section, please place a checkmark by each of the media you use for the listed activity, then rank only those media you have checked. Remember, check only those media that you use to do the listed activity and rank only those media you have selected.
47. The media I use when I have nothing better to do are (check as many as apply):

| A. Face to face conversation $\square$ | F. Telephone | $\square$ | K. Watch a videocassette |  |
| :--- | :--- | :--- | ---: | :--- |
| B. Write or read a letter | $\square$ | G. Movies (at the theater) | $\square$ | L. Use a computer |
| C. Books | $\square$ | H. Listen to pre-recorded music $\square$ | M. None |  |
| D. Newspaper | $\square$ | I. Listen to radio | $\square$ |  |
| E. Magazines | $\square$ | J. Watch television | $\square$ |  |

47A. Now rank the media you selected in terms of how important they are when you have nothing better to do. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have selected fewer than five, only rank those media

48. The media I use because they make me feel less lonely are (check as many as apply):
A. Face to face conversation
F. Telephone
K. Watch a videocassette
B. Write or read a letter
G. Movies (at the theater)
L. Use a computer
C. Books
H. Listen to pre-recorded music $\square$
M. None
D. Newspaper
I. Listen to radio
E. Magazines
J. Watch television

48A. Now rank the media you checked in terms of their ability to make you feel less lonely. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.

49. The media I use just because they are there are (check as many as apply):
A. Face to face conversation $\square$
F. Telephone
K. Watch a videocassette
B. Write or read a letter
G. Movies (at the theater)
L. Use a computer
C. Books
H. Listen to pre-recorded music $\square$
D. Newspaper
I. Listen to radio
E. Magazines
J. Watch television
M. None

49A. Now rank the media you checked that you use just because they are available. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.
$4^{\text {th }}$
$5^{\text {th }}$
$\qquad$
$3^{\text {rd }}$
50. The media I use because they relax me are (check as many as apply):
A. Face to face conversation $\square$
F. Telephone
K. Watch a videocassette
B. Write or read a letter
G. Movies (at the theater)
L. Use a computer
C. Books
H. Listen to pre-recorded music $\square$
D. Newspaper
I. Listen to radio
E. Magazines
J. Watch television
M. None

50A. Now rank the media you checked for their ability to relax you. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.

51. The media I use because they entertain me are (check as many as apply):
A. Face to face conversation
F. Telephone
K. Watch a videocassette
B. Write or read a letterG. Movies (at the theater)
L. Use a computer
C. Books
H. Listen to pre-recorded music $\square$
M. None
D. Newspaper
I. Listen to radio
E. Magazines
J. Watch television

51A. Now rank the media you checked in terms of their ability to entertain you. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.

52. The media I use to escape the reality of everyday life are (check as many as apply):
$\begin{array}{lllll}\text { A. Face to face conversation } \square & \text { F. Telephone } & \square & \text { K. Watch a videocassette } \\ \text { B. Write or read a letter } & \square & \text { G. Movies (at the theater) } & \square & \text { L. Use a computer } \\ \text { C. Books } & \square & \text { H. Listen to pre-recorded music } \square & \text { M. None } \\ \text { D. Newspaper } & \square & \text { I. Listen to radio } & \square & \end{array}$
E. Magazines $\quad \square \quad$ J. Watch television

52A. Now rank the media you checked in terms of their ability to help you escape the reality of everyday life. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.
$\qquad$
53. The media I use because they provide something to do when friends come over are (check as many as apply):
A. Face to face conversation $\square$
F. Telephone
K. Watch a videocassette
B. Write or read a letter
G. Movies (at the theater)
L. Use a computer
C. Books
H. Listen to pre-recorded music $\square$
D. Newspaper
I. Listen to radio
E. Magazines
J. Watch television

53A. Now rank the media you checked in terms of their ability to provide something to do when friends come over. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.

54. The media I use out of habit are (check as many as apply):
A. Face to face conversation $\square$
F. Telephone
K. Watch a videocassette
B. Write or read a letterG. Movies (at the theater)
L. Use a computer
C. Books
H. Listen to pre-recorded music $\square$
M. None
D. Newspaper
I. Listen to radio
E. Magazines
J. Watch television

54A. Now rank the media you checked because use of them is a habit, just something to do. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media

| $1^{\text {st }}$ | $\square$ |
| :--- | :--- |
| $2^{\text {nd }}$ | $\square$ |
| $3^{\text {rd }}$ | $\square$ |
| $4^{\text {th }}$ | $\square$ |
| $5^{\text {th }}$ | $\square$ |

55. The media I use to understand what goes on in the United States and the world are (check as many as apply):
A. Face to face conversation $\square$
F. Telephone
K. Watch a videocassette
B. Write or read a letter
G. Movies (at the theater)
L. Use a computer
C. Books
H. Listen to pre-recorded music $\square$
D. Newspaper
I. Listen to radio
E. Magazines
J. Watch television

55A. Now rank the media you have selected for their ability to help you understand what goes on in the United States and the world. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.
$1^{\text {st }}$
$2^{\text {nd }}$
$3^{\text {rd }}$
$4^{\text {th }}$
$5^{\text {th }}$ $\qquad$
56. The media I use because they pass the time away, particularly when I'm bored are (check as many as apply):
A. Face to face conversation $\square$
F. Telephone
K. Watch a videocassette
B. Write or read a letter
G. Movies (at the theater)
L. Use a computer
C. Books
H. Listen to pre-recorded music $\square$
D. Newspaper
I. Listen to radio
E. Magazines
J. Watch television

56A. Now rank the media you selected for their ability to pass the time away, particularly when you are bored. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.

57. The media I use to obtain useful information for daily life are (check as many as apply):
A. Face to face conversation
F. Telephone
K. Watch a videocassette
B. Write or read a letter $\square$ G. Movies (at the theater)
L. Use a computer
C. Books
H. Listen to pre-recorded music $\square$
M. None
D. Newspaper
I. Listen to radio
E. Magazines
J. Watch television

57A. Now rank the media you have selected for their ability to help you obtain useful information for daily life. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media

| $1^{\text {st }}$ |  |
| :--- | :--- |
| $2^{\text {nd }}$ | $\square$ |
| $3^{\text {rd }}$ | $\square$ |
| $4^{\text {th }}$ | $\square$ |
| $5^{\text {th }}$ |  |

58. The media I use because they are thrilling are (check as many as apply):

| A. Face to face conversation $\square$ | F. Telephone | $\square$ | K. Watch a videocassette |  |
| :--- | :--- | :--- | :--- | :--- |
| B. Write or read a letter | $\square$ | G. Movies (at the theater) | $\square$ | L. Use a computer |
| C. Books | $\square$ | H. Listen to pre-recorded music $\square$ | M. None |  |
| D. Newspaper | $\square$ | I. Listen to radio | $\square$ |  |
| E. Magazines | $\square$ | J. Watch television | $\square$ |  |

58A. Now rank the media you selected in terms of how thrilling they are. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.
$1^{\text {st }}$
$2^{\text {nd }}$
$3^{\text {rd }}$
$4^{\text {th }}$
$5^{\text {th }}$ $\qquad$
59. The media I use because they allow me to unwind are (check as many as apply):
A. Face to face conversation $\square$
F. Telephone
K. Watch a videocassette
B. Write or read a letter
G. Movies (at the theater)
L. Use a computer
C. Books
H. Listen to pre-recorded music $\square$
M. None
D. Newspaper
I. Listen to radio
E. Magazines
J. Watch television

59A. Now rank the media you selected for their ability to allow you to unwind. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.

60. The media I use when there is no one else to talk to or be with are (check as many as apply):
A. Face to face conversation
F. Telephone
K. Watch a videocassette
B. Write or read a letterG. Movies (at the theater)
L. Use a computer
C. Books
H. Listen to pre-recorded music $\square$
M. None
D. Newspaper
I. Listen to radio
E. Magazines
J. Watch television

60A. Now rank the media you selected in terms of how important they are when there is no one else to talk to or be with. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.

| $1^{\text {st }}$ | $\square$ |
| :--- | :--- |
| $2^{\text {nd }}$ | $\square$ |
| $3^{\text {rd }}$ | $\square$ |
| $4^{\text {th }}$ | $\square$ |
| $5^{\text {th }}$ | $\square$ |

61. The media I use to occupy my free time are (check as many as apply):

| A. Face to face conversation |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $\square$ | F. Telephone | $\square$ | K. Watch a videocassette |  |
| B. Write or read a letter | $\square$ | G. Movies (at the theater) | $\square$ | L. Use a computer |
| C. Books | $\square$ | H. Listen to pre-recorded music $\square$ | M. None |  |
| D. Newspaper | $\square$ | I. Listen to radio | $\square$ |  |
| E. Magazines | $\square$ | J. Watch television | $\square$ |  |

61A. Now rank the media you selected in terms of how important they are in occupying your free time. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.
$\qquad$
62. The media I use because they amuse me are (check as many as apply):
A. Face to face conversation $\square$
F. Telephone
K. Watch a videocassette
B. Write or read a letter
G. Movies (at the theater)
L. Use a computer
C. Books
H. Listen to pre-recorded music $\square$
D. Newspaper
I. Listen to radio
E. Magazines
J. Watch television
M. None

62A. Now rank the media you selected in terms of their ability to amuse you. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.

63. The media I use so I can talk with other people about events are (check as many as apply):
A. Face to face conversation $\square$
F. Telephone
K. Watch a videocassette
B. Write or read a letter
G. Movies (at the theater)
L. Use a computer
C. Books
H. Listen to pre-recorded music $\square$
M. None
D. Newspaper
I. Listen to radio
E. Magazines
J. Watch television

63A. Now rank the media you selected so that you can talk with other people about events. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.

64. The media I use because they help me learn things about myself and others are (check as many as apply):

| A. Face to face conversation $\square$ | F. Telephone | $\square$ | K. Watch a videocassette |  |
| :--- | :--- | :--- | :--- | :--- |
| B. Write or read a letter | $\square$ | G. Movies (at the theater) | $\square$ | L. Use a computer |
| C. Books | $\square$ | H. Listen to pre-recorded music $\square$ | M. None |  |
| D. Newspaper | $\square$ | I. Listen to radio | $\square$ |  |
| E. Magazines | $\square$ | J. Watch television | $\square$ |  |

64A. Now rank the media you selected for their ability to help you learn things about yourself and others. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.

| $1^{\text {st }}$ |  |
| :--- | :--- |
| $2^{\text {nd }}$ | $\square$ |
| $3^{\text {rd }}$ | $\square$ |
| $4^{\text {th }}$ | $\square$ |
| $5^{\text {th }}$ | $\square$ |

65. The media I use because they are exciting are (check as many as apply):
A. Face to face conversationF. Telephone
K. Watch a videocassette
B. Write or read a letter
G. Movies (at the theater)
L. Use a computer
C. Books
H. Listen to pre-recorded music $\square$
M. None
D. Newspaper
I. Listen to radio
E. Magazines
J. Watch television

65A. Now rank the media you selected for their ability to excite you. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.

| $1^{\text {st }}$ | $\square$ |
| :--- | :--- |
| $2^{\text {nd }}$ | $\square$ |
| $3^{\text {rd }}$ | $\square$ |
| $4^{\text {th }}$ | $\square$ |
| $5^{\text {th }}$ | $\square$ |

66. The media I use so I can get away from what I'm doing are (check as many as apply):
A. Face to face conversation $\square$
F. Telephone
K. Watch a videocassette
B. Write or read a letterG. Movies (at the theater)
L. Use a computer
C. Books
H. Listen to pre-recorded music $\square$
M. None
D. Newspaper
I. Listen to radio
E. Magazines
J. Watch television

66A. Now rank the media you selected for their ability to help you get away from what you are doing are. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.
$1^{\text {st }}$
$2^{\text {nd }}$
$3^{\text {rd }}$
$4^{\text {dt }}$
$5^{\text {th }}$

## Section Three

## Demographics

In the section below please answer the questions about yourself. This information will be used for academic purposes only. It will not be associated with you in any manner.
67. Age

| 1. $18-29$ years old | 4. $50-59$ years old |
| :--- | :--- |
| 2. $30-39$ years old | 5. $60-69$ years old |
| 3. $40-49$ years old | 6. 70 or more years old |

68. Race
69. White American
70. African American
71. Asian American
72. Native American
73. Hispanic/Latino American
74. Other ___ (please specify)
75. Gender
76. Female
77. Male
78. Education Level
79. Grade School
80. Some College
81. College graduate
82. High school graduate
83. Advanced degree(s)
84. Income Level

> 1. $\$ 0-19,999$ per year 2. $\$ 20,000-39,999$ per year
3. $\$ 40,000-59,999$ per year
4. $\$ 60,000$ or more per year
72. Place of Residence

|  | (City) |
| :--- | :--- |
| (County and State) |  |
| (Zip Code) |  |

73. Length of time in this place
74. 0-1 year
75. 6-10 years
76. 2-5 years
77. 10 or more years
78. Do you plan on moving from this place within the next five years?
79. Yes
80. No
1234
$\begin{array}{llllll}1 & 2 & 3 & 4 & 5 & 6\end{array}$

2
$\begin{array}{llllll}1 & 2 & 3 & 4 & 5 & 6\end{array}$
1334
-
75. How many children under 18 live in this household?
134

1. Zero
2. Two - four
3. One
4. Five or more
5. How do you receive your television signal?
123
6. By Antenna
7. By Cable
8. By Satellite

## APPENDIX D

CODEBOOK OF SURVEY QUESTIONNAIRE WITH COLUMNAR HEADINGS
(The codes in this section of the codebook correspond with the codes used as column headers on the spreadsheet. They are for Section One A - Media Use of the questionnaire)

## (A CHECKMARK ON THE QUESTIONNAIRE IN THE CORRESPONDING BOX MEANS THAT RESPONDENT HAS DONE THIS ACTIVITY DURING THE LAST WEEK.) (ON THE SPREADSHEET A CHECKMARK $=1$; A BLANK BOX $=0$ )

1. Which of the following activities have you done during the last week?

## CODE

## Interpersonal Media

Mass Media
F. BOOK
G. NATIONN
H. LOCALN
I. WEEKN
J. NATMAG
K. REGMAG
L. TRTDJOR
M. MOVIETH
N. PREREC
O. MAMRAD
P. TAMRAD
Q. MFMRAD
R. TFMRAD
S. PRERECV
T. VCRRT
U. BDTELEV
V. CABLTV
W. SATTV

| A. FACE | spoke with a person face to face | Interpersonal |
| :--- | :--- | :--- |
| B. LETTER | wrote a letter to or received a letter from someone | Interpersonal |
| C. HOME | spoke with a person on a home telephone | Interpersonal |
| D. BEEP | used a beeper or pager | Interpersonal |
| E. CELLU | spoke with another person on a cellular telephone | Interpersonal |

ACTIVITY

## MEDIA CLUSTER

Interpersonal
Interpersonal
Interpersonal
Interpersonal

Print
Print
Print
Print
Print
Print
Print
Video
Audio
Audio
Audio
Audio
Audio
Video
Video
Video
Video
Video

## Computer-mediated Communication

X. COMPEM
Y. COMPW
Z. COMPGA

AA. COMPBUSC
used a computer to send or receive e-mail
used a computer to access a website
used a computer to play a game by
yourself or with others
used a computer to type business correspondence
(The codes in this section of the codebook correspond with the codes used as column headers on the spreadsheet. They are for Section One B - Media Use of the questionnaire)
$1=$ Very often $2=$ Sometimes $3=$ Rarely 4=Very Rarely $\quad 5=$ Never
(ON THE QUESTIONNAIRE RESPONDENTS MUST SELECT ONE OF THE FIVE RESPONSES LISTED ABOVE.) (ON THE SPREADSHEET THE CORRESPONDING NUMBER IS PLACED IN THE CELL UNDER EACH COLUMNAR HEADING FOR EACH RESPONDENT.)

Motive -- To Relax
VIDEORL 2. How often do you watch television, the VCR or movies to relax?
FACERLX 3. How often do you have a personal conversation or speak on the telephone to relax?
PRINTRL 4. How often do you read magazines, books or newspapers to relax?
COMPTR 5. How often do you use a computer to relax?
AUDIORL 6. How often do you listen to the radio or recorded music to relax?

Motive -- For Companionship
VIDEOCM 7. How often do you watch television, the VCR or movies for companionship?
FACECM 8. How often do you have a personal conversation or speak on the telephone for companionship?

PRINTCM 9. How often do you read magazines, books or newspapers for companionship?
COMPCM 10. How often do you use a computer for companionship?
AUDIOC 11. How often do you listen to the radio or recorded music for companionship?

Motive -- Out of Habit
VIDEOHA 12. How often do you watch television, the VCR or movies out of habit?
FACEHA 13. How often do you have a personal conversation or speak on the telephone out of habit?
PRINTHA 14. How often do you read magazines, books or newspapers out of habit?
COMPHA 15. How often do you use a computer out of habit?
AUDIOHA 16. How often do you listen to the radio or recorded music out of habit?

Motive -- To Pass Time
VIDEOTIM 17. How often do you watch television, the VCR or movies to pass time?
FACETIM 18. How often do you have a personal conversation or speak on the telephone to pass time?
PRNTTIM 19. How often do you read magazines, books or newspapers to pass time?
COMPTIM 20. How often do you use a computer to pass time?
AUDIOTI
21. How often do you listen to the radio or recorded music to pass time?

Motive -- For Entertainment

| VIDEOEN | 22. How often do you watch television, the VCR or movies for entertainment? |
| :--- | :--- |
| FANCEE | 23. How often do you have a personal conversation or speak on the telephone for entertainment? |
| PRNTEN | 24. How often do you read magazines, books or newspapers for entertainment? |
| COMPEN | 25. How often do you use a computer for entertainment? |
| AUDOEN | 26. How often do you listen to the radio or recorded music for entertainment? |

Motive -- As a Topic of Conversation
VIDONAC 27. How often do you watch television, the VCR or movies to have something to talk about with others?

FACENA 2 8. How often do you have a personal conversation or speak on the telephone as a basis to talk with others?

PRNTNA 29. How often do you read magazines, books or newspapers to have something to talk about with others?

COMPNA 30. How often do you use a computer to have something to talk about with others?

| AUDONA | 31. How often do you listen to the radio or recorded music to have something to talk about with others? |
| :---: | :---: |
| Motive -- To Obtain Information |  |
| VIDOINF | 32. How often do you watch television, the VCR or movies to obtain information? |
| FACEINF | 33. How often do you have a personal conversation or speak on the telephone to obtain information? |
| PRNTINF | 34. How often do you read magazines, books or newspapers to obtain information? |
| COMPINF | 35. How often do you use a computer to obtain information? |
| AUDOINF | 36. How often do you listen to the radio or recorded music to obtain information? |
| Motive -- To be Stimulated |  |
| VIDOSTI | 37. How often do you watch television, the VCR or movies to be stimulated? |
| FACESTI | 38. How often do you have a personal conversation or speak on the telephone to be stimulated? |
| PRNTIST | 39. How often do you read magazines, books or newspapers to be stimulated? |

COMPSTI 40. How often do you use a computer to be stimulated?
AUDOSTI
41. How often do you listen to the radio or recorded music to be stimulated?

Motive -- To Escape Reality
VIDOREA 42. How often do you watch television, the VCR or movies to escape reality?
FACERE 43. How often do you have a personal conversation or speak on the telephone to escape reality?
PRNTRE 44. How often do you read magazines, books or newspapers to escape reality?
COMPRE
AUDORE
45. How often do you use a computer to escape reality?
46. How often do you listen to the radio or recorded music to escape reality?
(The codes in this section of the codebook correspond with the codes used as column headers on the spreadsheet. They are for Section two -- Media Repertoire of the questionnaire)
(ON THE QUESTIONNAIRE IN THE FIRST PORTION OF THE QUESTION THE RESPONDENT CAN CHECK AS MANY OF THE CORRESPONDING BOXES AS APPLY.) (ON THE SPREADSHEET A ONE IS PLACED UNDER EACH OF THE CORRESPONDING COLUMNAR HEADINGS THAT HAVE BEEN CHECKED ON THE QUESTIONNAIRE, AN EMPTY BOX IS LEFT BLANK ON THE SPREADSHEET.) (IN THE SECOND PORTION OF THE QUESTION THE RESPONDENT MUST RANK THE MEDIA THEY HAVE SELECTED, THEY ARE LIMITED UP TO THEIR TOP FIVE MEDIA SELECTIONS. EACH OF THE MEDIA SELECTED IS GIVEN A POINT VALUE WITH 5 POINTS BEING GIVEN TO A $1^{\text {ST }}$ RANK AND 1 POINT BEING GIVEN TO A $5^{\text {TH }}$ RANK.)
47. The media I use when I have nothing better to do are (check as many as apply):

| CODE | ACTIVITY |
| :--- | :--- |
| ACE47 | A. Face to face conversation |
| LETTER47 | B. Write or read a letter |
| BOOKS47 | C. Books |
| NEWSP47 | D. Newspaper |
| MAGA47 | E. Magazines |
| TELEPH47 | F. Telephone |
| MOVIE47 | G. Movies (at the theater) |
| PREMUS47 | H. Listen to pre-recorded music |
| RADIO47 | I. Listen to radio |
| TELEVN47 | J. Watch television |
| VIDEOC47 | K. Watch a videocassette |
| COMPTR47 | L. Use a computer |
| NONE47 | M. None |

47A. Now rank the media you checked in terms of how important they are when you have nothing better to do. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media

| CODE | RANK | POINTS |
| :--- | :--- | :--- |
| FIRST | $1^{\text {st }}$ | 5 |
| SECOND | $2^{\text {nd }}$ | 4 |
| THIRD | $3^{\text {rd }}$ | 3 |
| FOURTH | $4^{\text {th }}$ | 2 |
| FIFTH | $5^{\text {th }}$ | 1 |

48. The media I use because they make me feel less lonely are (check as many as apply):

| CODE | ACTIVITY |
| :--- | :--- |
| FACE48 | A. Face to face conversation |
| LETTER48 | B. Write or read a letter |
| BOOKS48 | C. Books |
| NEWSP48 | D. Newspaper |
| MAGA48 | E. Magazines |
| TELEPH48 | F. Telephone |
| MOVIE48 | G. Movies (at the theater) |
| PREMUS48 | H. Listen to pre-recorded music |
| RADIO48 | I. Listen to radio |
| TELEVN48 | J. Watch television |
| VIDEOC48 | K. Watch a videocassette |
| COMPTR48 | L. Use a computer |
| NONE48 | M. None |

48A. Now rank the media you checked in terms of their ability to make you feel less lonely. Write the corresponding letter of the medium that is most important in the blank marked 1st, the letter of the second most important media in the blank marked 2nd and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.

| CODE | RANK | POINTS |
| :--- | :--- | :--- |
| FIRST | 1st | 5 |
| SECOND | 2nd | 4 |
| THIRD | 3rd | 3 |
| FOURTH | 4 th | 2 |
| FIFTH | 5 th | 1 |

48. The media I use just because they are there are (check as many as apply):

| CODE | ACTIVITY |
| :--- | :--- |
| FACE49 | A. Face to face conversation |
| LETTER49 | B. Write or read a letter |
| BOOKS49 | C. Books |
| NEWSP49 | D. Newspaper |
| MAGA49 | E. Magazines |
| TELEPH49 | F. Telephone |
| MOVIE49 | G. Movies (at the theater) |
| PREMUS49 | H. Listen to pre-recorded music |
| RADIO49 | I. Listen to radio |
| TELEVN49 | J. Watch television |
| VIDEOC49 | K. Watch a videocassette |
| COMPTR49 | L. Use a computer |
| NONE49 | M. None |

49A. Now rank the media you checked that you use just because they are available. Write the corresponding letter of the medium that is most important in the blank marked 1st, the letter of the second most important media in the blank marked 2nd and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.

| CODE | RANK | P |
| :--- | :--- | :--- |
| FIRST | 1st | 5 |
| SECOND | 2nd | 4 |
| THIRD | 3rd | 3 |
| FOURTH | 4th | 2 |
| FIFTH | $5^{\text {th }}$ | 1 |

49. The media I use because they relax me are (check as many as apply):

| CODE | ACTIVITY |
| :--- | :--- |
| FACE50 | A. Face to face conversation |
| LETTER50 | B. Write or read a letter |
| BOOKS50 | C. Books |
| NEWSP50 | D. Newspaper |
| MAGA50 | E. Magazines |
| TELEPH50 | F. Telephone |
| MOVIE50 | G. Movies (at the theater) |
| PREMUS50 | H. Listen to pre-recorded music |
| RADIO50 | I. Listen to radio |
| TELEVN50 | J. Watch television |
| VIDEOC50 | K. Watch a videocassette |
| COMPTR50 | L. Use a computer |
| NONE50 | M. None |

50A. Now rank the media you checked for their ability to relax you. Write the corresponding letter of the medium that is most important in the blank marked 1st, the letter of the second most important media in the blank marked 2nd and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.

| CODE | RANK | POINTS |
| :--- | :--- | :--- |
| FIRST | 1 st | 5 |
| SECOND | 2nd | 4 |
| THIRD | 3rd | 3 |
| FOURTH | 4th | 2 |
| FIFTH | 5 th | 1 |

50. The media I use because they entertain me are (check as many as apply):

| CODE | ACTIVITY |
| :--- | :--- |
| FACE51 | A. Face to face conversation |
| LETTER51 | B. Write or read a letter |
| BOOKS51 | C. Books |
| NEWSP51 | D. Newspaper |
| MAGA51 | E. Magazines |
| TELEPH51 | F. Telephone |
| MOVIE51 | G. Movies (at the theater) |
| PREMUS51 | H. Listen to pre-recorded music |
| RADIO51 | I. Listen to radio |
| TELEVN51 | J. Watch television |
| VIDEOC51 | K. Watch a videocassette |
| COMPTR51 | L. Use a computer |
| NONE51 | M. None |

51A. Now rank the media you checked in terms of their ability to entertain you. Write the corresponding letter of the medium that is most important in the blank marked 1st, the letter of the second most important media in the blank marked 2nd and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.

| CODE | RANK | POINTS |
| :--- | :--- | :--- |
| FIRST | 1st | 5 |
| SECOND | 2nd | 4 |
| THIRD | 3rd | 3 |
| FOURTH | 4th | 2 |
| FIFTH | 5th | 1 |

51. The media I use to escape the reality of everyday life are (check as many as apply):

| CODE | ACTIVITY |
| :--- | :--- |
| FACE52 | A. Face to face conversation |
| LETTER52 | B. Write or read a letter |
| BOOKS52 | C. Books |
| NEWSP52 | D. Newspaper |
| MAGA52 | E. Magazines |
| TELEPH52 | F. Telephone |
| MOVIE52 | G. Movies (at the theater) |
| PREMUS52 | H. Listen to pre-recorded music |
| RADIO52 | I. Listen to radio |
| TELEVN52 | J. Watch television |
| VIDEOC52 | K. Watch a videocassette |
| COMPTR52 | L. Use a computer |
| NONE52 | M. None |

52A. Now rank the media you checked in terms of their ability to help you escape the reality of everyday life. Write the corresponding letter of the medium that is most important in the blank marked 1st, the letter of the second most important media in the blank marked 2nd and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.

| CODE | RANK | POINTS |
| :--- | :--- | :--- |
| FIRST | 1st | 5 |
| SECOND | 2nd | 4 |
| THIRD | 3rd | 3 |
| FOURTH | 4th | 2 |
| FIFTH | 5th | 1 |

52. The media I use because they provide something to do when friends come over are (check as many as apply):

CODE
FACE53
LETTER53
BOOKS53 ACTIVITY

NEWSP53
A. Face to face conversation

MAGA53
TELEPH53
MOVIE53
PREMUS53
RADIO53
TELEVN53
VIDEOC53
COMPTR53
NONE53
B. Write or read a letter
C. Books
D. Newspaper
E. Magazines
F. Telephone
G. Movies (at the theater)
H. Listen to pre-recorded music
I. Listen to radio
J. Watch television
K. Watch a videocassette
L. Use a computer
M. None

53A. Now rank the media you checked in terms of their ability to provide something to do when friends come over. Write the corresponding letter of the medium that is most important in the blank marked 1st, the letter of the second most important media in the blank marked 2nd and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.

| CODE | RANK | POINTS |
| :--- | :--- | :--- |
| FIRST | 1st | 5 |
| SECOND | 2nd | 4 |
| THIRD | 3rd | 3 |


| FOURTH | 4th |
| :--- | :--- |
| FIFTH | 5th |
| 53. The media I use out of habit are (check as many as apply): |  |
| CODE | ACTIVITY |
| FACE54 | A. Face to face conversation |
| LETTER54 | B. Write or read a letter |
| BOOKS54 | C. Books |
| NEWSP54 | D. Newspaper |
| MAGA54 | E. Magazines |
| TELEPH54 | F. Telephone |
| MOVIE54 | G. Movies (at the theater) |
| PREMUS54 | H. Listen to pre-recorded music |
| RADIO54 | I. Listen to radio |
| TELEVN54 | J Watch television |
| VIDEOC54 | K Watch a videocassette |
| COMPTR54 | L. Use a computer |
| NONE54 | M. None |

54A. Now rank the media you checked because use of them is a habit, just something to do. Write the corresponding letter of the medium that is most important in the blank marked 1st, the letter of the second most important media in the blank marked 2nd and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media

| CODE | RANK | POINTS |
| :--- | :--- | :--- |
| FIRST | 1st | 5 |
| SECOND | 2nd | 4 |
| THIRD | 3rd | 3 |
| FOURTH | 4th | 2 |
| FIFTH | 5th | 1 |

55. The media I use to understand what goes on in the United States and the world are(check as many as apply):

| CODE | ACTIVITY |
| :--- | :--- |
| FACE55 | A. Face to face conversation |
| LETTER55 | B. Write or read a letter |
| BOOKS55 | C. Books |
| NEWSP55 | D. Newspaper |
| MAGA55 | E. Magazines |
| TELEPH55 | F. Telephone |
| MOVIE55 | G. Movies (at the theater) |
| PREMUS55 | H. Listen to pre-recorded music |
| RADIO55 | I. Listen to radio |
| TELEVN55 | J. Watch television |
| VIDEOC55 | K. Watch a videocassette |
| COMPTR55 | L. Use a computer |
| NONE55 | M. None |

55A. Now rank the media you have selected for their ability to help you understand what goes on in the United States and the world. Write the corresponding letter of the medium that is most important in the blank marked 1st, the letter of the second most important media in the blank marked 2nd and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.

| CODE | RANK | POINTS |
| :--- | :--- | :--- |
| FIRST | 1 st | 5 |
| SECOND | 2 nd | 4 |


| THIRD | 3rd | 3 |
| :--- | :--- | :--- |
| FOURTH | 4th | 2 |
| FIFTH | 5 th | 1 |

58. The media I use because they pass the time away, particularly when I'm bored are (check as many as apply):

## CODE ACTIVITY

FACE56A. Face to face conversation
LETTER56 B. Write or read a letter
BOOKS56 C. Books
NEWSP56 D. Newspaper
MAGA56 E. Magazines
TELEPH56 F. Telephone
MOVIE56 G. Movies (at the theater)
PREMUS56 H. Listen to pre-recorded music
RADIO56 I. Listen to radio
TELEVN56 J. Watch television
VIDEOC56 K. Watch a videocassette
COMPTR56 L. Use a computer
NONE56
M. None

56A. Now rank the media you selected for their ability to pass the time away, particularly when you are bored. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.

| CODE | RANK | POINTS |
| :--- | :--- | :--- |
|  |  |  |
| FIRST | $1^{\text {st }}$ | 5 |
| SECOND | $2^{\text {nd }}$ | 4 |
| THIRD $3^{\text {rd }}$ |  | 3 |
| FOURTH | $4^{\text {th }}$ |  |
| FIFTH | $5^{\text {th }}$ | 2 |

59. The media I use to obtain useful information for daily life are (check as many as apply):

## CODE ACTIVITY

FACE57A. Face to face conversation
LETTER57 B. Write or read a letter
BOOKS57 C. Books
NEWSP57 D. Newspaper
MAGA57 E. Magazines
TELEPH57 F. Telephone
MOVIE57 G. Movies (at the theater)
PREMUS57 H. Listen to pre-recorded music
RADIO57 I. Listen to radio
TELEVN57 J. Watch television
VIDEOC57 K. Watch a videocassette

COMPTR57 L. Use a computer
NONE57 M. None
57A. Now rank the media you have selected for their ability to help you obtain useful information for daily life. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media

| CODE | RANK | POINTS |
| :--- | :--- | :--- |
| FIRST | $1^{\text {st }}$ | 5 |
| SECOND | $2^{\text {nd }}$ |  |
| THIRD $3^{\text {rd }}$ |  | 3 |
| FOURTH | $4^{\text {th }}$ |  |
| FIFTH | $5^{\text {th }}$ | 2 |

64. The media I use because they are thrilling are (check as many as apply):

## CODE ACTIVITY

FACE58A. Face to face conversation
LETTER58 B. Write or read a letter
BOOKS58 C. Books
NEWSP58 D. Newspaper
MAGA58 E. Magazines
TELEPH58 F. Telephone
MOVIE58 G. Movies (at the theater)
PREMUS58 H. Listen to pre-recorded music
RADIO58 I. Listen to radio
TELEVN58 J. Watch television
VIDEOC58 K. Watch a videocassette
COMPTR58 L. Use a computer
NONE58 M. None
58A. Now rank the media you selected in terms of how thrilling they are. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.
CODE RANK POINTS

| FIRST | $1^{\text {st }}$ |  | 5 |
| :--- | :--- | :--- | :--- |
| SECOND | $2^{\text {nd }}$ |  | 4 |
| THIRD $3^{\text {rd }}$ |  | 3 |  |
| FOURTH | $4^{\text {th }}$ |  | 2 |
| FIFTH | $5^{\text {th }}$ |  | 1 |

65. The media I use because they allow me to unwind are (check as many as apply):

## CODE ACTIVITY

FACE59A. Face to face conversation
LETTER59 B. Write or read a letter

| BOOKS59 | C. Books |
| :--- | :--- |
| NEWSP59 | D. Newspaper |
| MAGA59 | E. Magazines |
| TELEPH59 | F. Telephone |
| MOVIE59 | $\quad$ G. Movies (at the theater) |
| PREMUS59 | H. Listen to pre-recorded music |
| RADIO59 | I. Listen to radio |
| TELEVN59 | J. Watch television |
| VIDEOC59 | K. Watch a videocassette |
| COMPTR59 | L. Use a computer |
| NONE59 | M. None |

59A. Now rank the media you selected for their ability to allow you to unwind. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.

| CODE | RANK | PO |
| :--- | :--- | :--- |
|  |  |  |
| FIRST | $1^{\text {st }}$ |  |
| SECOND | $2^{\text {nd }}$ |  |
| THIRD $3^{\text {rd }}$ |  | 4 |
| FOURTH | $4^{\text {th }}$ |  |
| FIFTH | $5^{\text {th }}$ | 2 |
|  |  | 1 |

66. The media I use when there is no one else to talk to or be with are (check as many as apply):

## CODE ACTIVITY

FACE60A. Face to face conversation
LETTER60 B. Write or read a letter

| BOOKS60 | C. Books |
| :--- | :--- |
| NEWSP60 | D. Newspaper |
| MAGA60 | E. Magazines |

TELEPH60 F. Telephone
MOVIE60 G. Movies (at the theater)
PREMUS60 H. Listen to pre-recorded music
RADIO60 I. Listen to radio
TELEVN60 J. Watch television
VIDEOC60 K. Watch a videocassette
COMPTR60 L. Use a computer
NONE60 M. None

60A. Now rank the media you selected in terms of how important they are when there is no one else to talk to or be with. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.

## CODE RANK POINTS

| FIRST | $1^{\text {st }}$ | 5 |
| :--- | :--- | :--- |
| SECOND | $2^{\text {nd }}$ | 4 |


| THIRD $3^{\text {rd }}$ |  | 3 |  |
| :--- | :--- | :--- | :--- |
| FOURTH | $4^{\text {th }}$ |  | 2 |
| FIFTH | $5^{\text {th }}$ |  | 1 |

67. The media I use to occupy my free time are (check as many as apply):

## CODE ACTIVITY

FACE61A. Face to face conversation
LETTER61 B. Write or read a letter
BOOKS61
C. Books

NEWSP61 D. Newspaper
MAGA61 E. Magazines
TELEPH61 F. Telephone
MOVIE61 G. Movies (at the theater)
PREMUS61 H. Listen to pre-recorded music
RADIO61 I. Listen to radio
TELEVN61 J. Watch television
VIDEOC61 K. Watch a videocassette
COMPTR61 L. Use a computer
NONE61 M. None

61A. Now rank the media you selected in terms of how important they are in occupying your free time. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.

## CODE RANK POINTS

| FIRST | $1^{\text {st }}$ |  | 5 |
| :--- | :--- | :--- | :--- |
| SECOND | $2^{\text {nd }}$ |  | 4 |
| THIRD $3^{\text {rd }}$ |  | 3 |  |
| FOURTH | $4^{\text {th }}$ |  | 2 |
| FIFTH | $5^{\text {th }}$ |  | 1 |

68. The media I use because they amuse me are (check as many as apply):

CODE ACTIVITY
FACE62A. Face to face conversation
LETTER62 B. Write or read a letter
BOOKS62 C. Books
NEWSP62 D. Newspaper
MAGA62
E. Magazines

TELEPH62 F. Telephone
MOVIE62 G. Movies (at the theater)
PREMUS62 H. Listen to pre-recorded music
RADIO62 I. Listen to radio
TELEVN62 J. Watch television
VIDEOC62 K. Watch a videocassette
COMPTR62 L. Use a computer
NONE62 M. None

62A. Now rank the media you selected in terms of their ability to amuse you. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.

| CODE | RANK | POINTS |
| :---: | :---: | :---: |
| FIRST | $1^{\text {st }}$ | 5 |
| SECOND | $2^{\text {nd }}$ | 4 |
| THIRD $3^{\text {rd }}$ |  |  |
| FOURTH | $4^{\text {th }}$ | 2 |
| FIFTH | $5^{\text {th }}$ | 1 |

69. The media I use so I can talk with other people about events are (check as many as apply):

CODE ACTIVITY
FACE63A. Face to face conversation
LETTER63 B. Write or read a letter
BOOKS63 C. Books
NEWSP63 D. Newspaper
MAGA63 E. Magazines
TELEPH63 F. Telephone
MOVIE63 G. Movies (at the theater)
PREMUS63 H. Listen to pre-recorded music
RADIO63 I. Listen to radio
TELEVN63 J. Watch television
VIDEOC63 K. Watch a videocassette
COMPTR63 L. Use a computer
NONE63 M. None
63A. Now rank the media you selected so that you can talk with other people about events. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.

| CODE | RANK | PO |
| :--- | :--- | :--- |
|  |  |  |
| FIRST | $1^{\text {st }}$ | 5 |
| SECOND | $2^{\text {nd }}$ |  |
| THIRD $3^{\text {rd }}$ |  | 4 |
| FOURTH | $4^{\text {th }}$ |  |
| FIFTH | $5^{\text {th }}$ | 2 |
|  |  | 1 |

64. The media I use because they help me learn things about myself and others are (check as many as apply):

## CODE ACTIVITY

FACE64A. Face to face conversation
LETTER64 B. Write or read a letter
BOOKS64 C. Books
NEWSP64 D. Newspaper

| MAGA64 | E. Magazines |
| :--- | :--- |
| TELEPH64 | F. Telephone |
| MOVIE64 | G. Movies (at the theater) |
| PREMUS64 | H. Listen to pre-recorded music |
| RADIO64 | I. Listen to radio |
| TELEVN64 | J. Watch television |
| VIDEOC64 | K. Watch a videocassette |
| COMPTR64 | L. Use a computer |
| NONE64 | M. None |

64A. Now rank the media you selected for their ability to help you learn things about yourself and others. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.

| CODE | RANK | POINTS |
| :--- | :--- | :--- |
|  |  |  |
| FIRST | $1^{\text {st }}$ | 5 |
| SECOND | $2^{\text {nd }}$ | 4 |
| THIRD $3^{\text {rd }}$ |  | 4 |
| FOURTH | $4^{\text {th }}$ |  |
| FIFTH | $5^{\text {th }}$ | 2 |
| lin |  | 1 |

65. The media I use because they are exciting are (check as many as apply):

## CODE ACTIVITY

FACE65A. Face to face conversation
LETTER65 B. Write or read a letter
BOOKS65 C. Books
NEWSP65 D. Newspaper
MAGA65 E. Magazines
TELEPH65 F. Telephone
MOVIE65 G. Movies (at the theater)
PREMUS65 H. Listen to pre-recorded music
RADIO65 I. Listen to radio
TELEVN65 J. Watch television
VIDEOC65 K. Watch a videocassette
COMPTR65 L. Use a computer
NONE65 M. None
65A. Now rank the media you selected for their ability to excite you. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.
CODE RANK POINTS

| FIRST | $1^{\text {st }}$ |  | 5 |
| :--- | :--- | :--- | :--- |
| SECOND | $2^{\text {nd }}$ |  | 4 |
| THIRD $3^{\text {rd }}$ |  | 3 |  |


| FOURTH | $4^{\text {th }}$ | 2 |
| :--- | :--- | :--- |
| FIFTH | $5^{\text {th }}$ | 1 |

66. The media I use so I can get away from what I'm doing are (check as many as apply):

## CODE <br> ACTIVITY

FACE66A. Face to face conversation
LETTER66 B. Write or read a letter
BOOKS66 C. Books
NEWSP66 D. Newspaper
MAGA66 E. Magazines
TELEPH66 F. Telephone
MOVIE66 G. Movies (at the theater)
PREMUS66 H. Listen to pre-recorded music
RADIO66 I. Listen to radio
TELEVN66 J. Watch television
VIDEOC66 K. Watch a videocassette
COMPTR66 L. Use a computer
NONE66 M. None
66A. Now rank the media you selected for their ability to help you get away from what you are doing are. Write the corresponding letter of the medium that is most important in the blank marked $1^{\text {st }}$, the letter of the second most important media in the blank marked $2^{\text {nd }}$ and so on. If you have checked more than five (5) media only rank your top five choices. If you have checked fewer than five, only rank those media.
CODE RANK POINTS

| FIRST | $1^{\text {st }}$ | 5 |  |
| :--- | :--- | :--- | :--- |
| SECOND | $2^{\text {nd }}$ |  | 4 |
| THIRD $3^{\text {rd }}$ |  | 3 |  |
| FOURTH | $4^{\text {th }}$ |  | 2 |
| FIFTH | $5^{\text {th }}$ |  | 1 |

(The codes in this section of the codebook correspond with the codes used as column headers on the spreadsheet. They are for Section Three -- Demographics of the questionnaire)
(ON THE QUESTIONNAIRE THIS SECTION COLLECTS DEMOGRAPHIC INFORMATION ABOUT THE RESPONDENT. THERE ARE NINE QUESTIONS.)



[^0]:    *These media channels do not include channels used extensively for advertising purposes, such as; billboards, handbills, fliers, direct-mail pieces, etc. This is a limitation of the study that may be investigated in future studies but was not operationalized in this study because of methodological concerns

[^1]:    * The findings concerning the use of computer media activities in this study are very similar in nature to the conclusions reached by early research into the nature of radio adoption and usage in rural areas. These studies, overseen by Paul Lazarfeld's Bureau of Applied Social Research at Columbia University and the Office of Radio Research at Princeton University, found that in most instances people learn of and adopt new technologies (such as radio or computer media activities) in stages that are dictated by environmental factors.

