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ABSTRACT

This monograph contains a discussion of a telephone survey conducted to gain more knowledge about the job-related reading, functional reading, and leisure reading habits of a representative sample of adults from Anderson, Indiana. The discussion highlights survey results by demographic variables, reports specific analyses of survey items, and analyzes the amount of job reading, total reading, and free reading reported. Results reported indicate that (1) demographic variables such as race, income, and employment status have little predictive value for reading habits: (2) the gender of the reader slightly predicts reading habits and attitudes: (3) working women are maintaining their positive reading attitudes and habits: (4) males' main type of reading is job-related: (5) the major motivation for male reading is to get something done: (6) the amount of job related reading seems to be on the increase: and (7) there has been a change over the years among adults in the way they obtain information about reading materials, with advertising and browsing rivaling friends' recommendations. Appendixes include the Mann-Burgoyne Sociological Model for the Analysis of Leisure Book Reading: norming guidelines for the Mikulecky Behavioral Reading Attitude Measure and Stages of Krathwohl's Taxonomy: 1970 United States, Indiana, and Anderson, Indiana, census information: the telephone survey instrument: and a data analysis chart. (MKM)

monograph in language and reading studies

adult reading habits, attitudes and motivations: a cross-sectional study

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Indiana University's Language Education Departments initiated the Monographs in Language and Reading Studies to serve a number of purposes, including the publication of papers based on conference proceedings, research and development reports, and papers of special interest to teachers and other professionals working in the language education areas. In a reorganization of the School of Education, the departments of Applied Linguistics, English Education, Foreign Language Education, and Reading Education were confederated into a new unit—the Language Education Department. Each unit maintains its identity and at the same time participates in mutual programs, research and development, and service activities. The Monographs are an outcome of this confederation.

Monograph in Language and Reading Studies

Monographs in Teaching and Learning comprise series of monographs in a variety of disciplines. Each series is published on an irregular schedule by Indiana University School of Education. Articles are devoted to aspects of major current concern to educators in the respective fields and deal with theory, research, or practical application pertaining to all levels of practice.

Contents

Adult Reading Habits, Attitudes, and Motivations: Introduction and Rationale

Research on the state of reading has traditionally been limited to an examination of reading ability among school children or to the state of literacy/illiteracy among adults. Sporadically, over the past several decades, a few individuals have attempted to determine the reading preferences of the adult population as a whole (Parsons, 1923; Gray & Munroe, 1930; Waples, 1938; Link & Hopf, 1946; Gray & Rogers, 1956; Ennis, 1965; Sharon, 1973; Gallup, 1976; Yankelovich, Skelly, & White, 1978). However, little previous research has attempted to systematically examine a cross section of the adult population in terms of an extended understanding of reading habits that include:

Reading demands,
Reading ability,
Reading attitudes,
Major motivations for reading,
The relationship of personal reading to job reading, and
Places where adults seek information, materials, and help in relation to reading.

This study has attempted to develop, pilot, and use instruments and survey techniques to assess the various relationships of reading to the general adult population. More specifically the goals of this study have been

1. To establish a comparative population profile of reading attitudes as they appear in various levels of education, employment, and socioeconomic status in the adult population, and
2. To develop a profile of what types of reading habits occur with a number of adult population groups and to further examine motivations for reading or for not reading various types of material.

Seven specific research questions were examined by this study:

1. Have changes occurred in the total reading time of the adult population over the past 50 years?
2. Do adults' motivations for reading, attitudes toward reading, and reading habits differ dependent upon demographic variable considered?
3. Do adults' job-related reading habits differ dependent upon demographic variable considered?

4. To what extent are demographic variables useful in predicting total reading time, free reading time, job reading time, and attitude toward reading?
5. Do working women differ, as readers, from other women or from men who work?
6. Over the past 50 years have changes occurred in the locations where adults obtain reading materials and how they find out about new materials to read?
7. Do differences exist in where various adult groups will seek help for reading problems?

Information of this sort is increasingly important for a variety of reasons. Initially, and most apparently, educators need to more adequately address the adult population as a whole. Adult retraining needs increase yearly, the mean age of university student populations is rising, and ever-growing segments of the adult population are seeking needed information about our rapidly changing world. This implies increased use of print by adults and suggests a host of implications for teachers, program designers, and text publishers. Each of the above areas calls for clearer, more detailed information about the reading attitudes, habits, motivations, and abilities of the adult populations.

Less apparent, but equally important, is the fact that we need more information about adult reading habits and attitudes in light of research findings which suggest that adult reading habits strongly influence the reading abilities and habits of children (Fisher, 1962; Hanson, 1969). This concern is especially pressing in the face of survey results some of which portray large portions of the adult population as reading seldom and inadequately (Gallup, 1969, 1976; Meade, 1973; Yankelovich et al., 1978).

Since surveys ask questions in differing manners and often are commissioned by groups and industries with recognizable interests, interpretations of data differ somewhat. For example, careful analysis of the newer data from Gallup and Yankelovich et al. raises questions. Is the fact that 56% of the adult population claims to have read part of a book in the past month a positive or a negative finding (Gallup, 1976)? More careful analysis of the data reveals that large portions of the population may be merely looking in books, rather than completing them. The remaining 44% had not read in a book at all during the past month. A study commissioned by the Book Industry Study Group suggests that nearly 40% of the population reads only magazines and newspapers during the period of a year while the Gallup figures claim 84% look at part of a book during a year. Vague questions that differ from previous research questions and lack of follow-up data give rise to several apparent contradictions that are difficult to interpret.

A final reason for examining the reading profile of the adult population relates to the accountability aspect of education. As it now stands, most accountability and monitoring of the results of education stop at 12th grade. Little is known about the long term outcomes of education because the learning and reading habits of adults, the final products of our educational system, are rarely examined.

Aliteracy

Although dispute and occasional controversy occur over the degree of literacy in this country, we are a nation whose reading skills and abilitites among students seem to have improved over the past several decades. Tuinman, Rowls, and Farr (1976) in an overview of "then and now" studies, note a general improvement in literacy since the turn of the century. Tuinman et al. cite from the conclusion to an NEA Comparative Achievement study (1952) that "in fundamentals, today's pupils are superior to those of the past." Other "then and now" studies cited report, more cautiously, that students of the fifties and early sixties were reading at least as well as students of the less recent past.

The most recent results of testing today's students with a replica of a reading test used in 1944 show no decline in reading ability and several indications of gains among today's students (Fay & Farr, 1978).

Sharon (1973) reports that only 5% of the U.S. population cannot read in the English language. What does seem most clear is that charging this nation with illiteracy or even decreasing literacy is, in the words of Tuinman et al. (1976), "at best unscholarly and at worst dishonest."

However, this nation might be accused of "aliteracy." Even though most students who pass through our educational system are able to read to some degree, surveys indicate that declining numbers of individuals regularly choose to read or want to read. Though survey information varies widely on this issue and may be sometimes questionable, it consistently reflects a nation with a large number of intentional non-readers. Meade (1973) cites a Harris poll that indicates that only 26% of all adults read in a book during a 30-day period. More startling is the Gallup Poll report (1969) that 58% of the population indicate they have "never read, never finished" a book. A more recent Gallup poll (1976) with less stringent items suggests that slightly more than half of the adult population comes in regular contact with books. It is important to note that slightly fewer than half do not have regular contact with books. Another recent study commissioned by the Book Industry Study Group (Yankelovich et al., 1978) suggests that adults are doing more pleasure reading. Careful analysis of the data, however, reveals the same high percentage (nearly 50%) of adults doing little or no book reading. In brief, a review of long term trends reflects improved ability to read but a questionable amount of actual reading being done by the adult population of this country.

The available information describing adult readers is cursory, however. It is extremely difficult to determine from previous research what is "typical" in terms of the reading demands faced by adults. We know almost nothing about adult reading attitudes and motivations for reading. It is also very difficult to arrive at the perspective necessary to clearly identify substantial changes in the reading habits and patterns of adults.

Previous Adult Readership Studies

To achieve some semblance of perspective, it is necessary to examine the sporadic earlier studies of adult readership. Though the quality of early studies varies widely and random sampling is often lacking, the sketchy outlines of a

changing adult readership emerge from a handful of studies that span more than five decades.

As early as 1923, Rhey Boyd Parsons attempted to ascertain the general reading habits of adults. Parsons interviewed 314 adults in Chicago and neighboring communities concerning their reading habits. He found the average number of minutes spent a day reading books in 1923 was 27.7; reading magazines, 24.1; and reading newspapers, 41.2. This could be loosely construed as a total of about 93 minutes reading time per day. Average time per day given to reading by males was 98.9 minutes and by females 76.7 minutes. Of these adults, 53.2% said they read in books each day; 76.5% read in magazines; and 97.1% read in newspapers. Parsons also found "striking evidence of the fact that amount read varies with educational advantages." To summarize, adults daily spent about an hour and a half, on the average, reading, in order of most popular preference, newspapers, magazines, and books. The amount read was related to education level.

In 1930, William S. Gray and Ruth Munroe surveyed the reading habits of 100 adult residents of Hyde Park, Chicago, and of 170 residents of North Evanston, Illinois. They found adults reading, on the average, 90-plus minutes a day, a result similar to Parsons'. Newspapers and magazines were read extensively by all adults. Women tended to read more books than men, and the well-educated adult read more books than those with less education. A greater number of people obtained books by purchase than by any other means. Borrowing ranked next in importance. The public library was used by about 35% of the persons studied. Recommendations of friends was the most frequent (54%) reason given for reading a particular book. Book reviews were consulted by 29% of the persons studied. In conclusion Gray and Munroe state: "It is found that those who read most are, on the whole, those who have had the best education, the most inspiration at home and at school, and the best facilities for getting hold of books. They have done more reading in childhood" (p. 208).

The geographic locale of the next major survey of adult readership (Waples, 1934) remained the same, the Chicago area. Douglas Waples in a survey of approximately 6,850 residents of South Chicago during 1933-34, found several sources used by respondents to obtain publications. The categories selected, in rapidly diminishing amounts, were "'all others,' friends, subscriptions, newsstands, drug stores, public library, book stores, and rental library, and about equally to each sex with two exceptions. Unemployed men and unskilled females are supplied with most reading material from friends while professional men and women obtain most of their reading material from subscriptions" (p. 139). Waples' sample, which is considerably larger and better balanced than those of Parsons or Gray and Munroe, shows some differences in sources of reading material. Though borrowing from friends was still of high importance, the relative importance of bookstores or libraries as sources of reading material has dropped considerably. Waples suggests such a result may have been a reflection of the effects of the depression on adult reading habits.

In 1945 Henry C. Link and Harry Arthur Hopf conducted a national survey of the reading and book-buying habits of 4,000 adults. When adults were asked if they

had read a book yesterday, only 21% of the 4,000 respondents replied they had. This figure is 32% lower than Parsons' 1923 figure. Asked the amount of time they had spent reading books, magazines, and newspapers during the previous day, the average number of minutes spent by groups of differing educational levels were:

	Books	Magazines	Newspapers	Total
Grade School Education	4 min.	11 min.	32 min.	47 min.
High School Education	12 min.	20 min.	36 min.	68 min.
College Education	23 min.	26 min.	38 min.	87 min.

These results would seem to indicate that as of 1945 total reading time examined by education level increased by about 20 minutes for each educational level attained. Every group, including the college group, read below Parsons' 1923 average. It is understood that some of these differences may be attributable to sampling differences.

Based on income levels, Link and Hopf found 64% of the upper income group were active readers (defined in the study as those who had read a book yesterday or within the past month), 48% of the middle income group were active readers, and 36% of the lower income group were active readers. They found, however, that "education was a much more important factor influencing the readership of books than income level" (p. 62).

In addition, Link and Hopf found of the 1,982 active readers in their survey, 57% had borrowed their most recent book, 31% had bought, 11% reported it was a gift, and 24% did not know. The order of borrowing and purchasing reverses Gray's earlier findings. Link and Hopf found that proportions of those who borrowed and bought books remained stable across lower, middle, and upper income groups (p. 77). The most frequent reason given by active adult readers for reading their most recent book was that it had been recommended by a friend (p. 108). This last finding parallels Gray's 1930 finding.

Bernard Berelson in *The Library's Public*, written in 1949, summarized results from four studies done during 1946-48. At that time about 25-30% of the adult population read one or more books a month; about 60-70% read one or more magazines more or less regularly; about 85-90% read one or more newspapers more or less regularly (p. 6). The order of newspaper, magazine, and book remained a stable preference, though percentages seem lower. Berelson also mentioned a study done by the Survey Research Center of the University of Michigan in 1948 which found 48% of the adults surveyed read less than one book per year (p. 7).

An article on adult reading habits by Lester Asheim (1956) appeared in *The Fifty-fifth Yearbook of the National Society for the Study of Education*. Having reviewed several studies, he stated: "The first finding, which appears in study

after study, is that not much more than one-quarter of the adult population reads even as little as one book a month" (p. 8). From his review of studies of adult reading he also found,

1. A far greater portion of adults between 21 and 29 years of age than of adults over 50 years of age will be in the reader group.
2. More professional people and skilled workers than wage-earners or unskilled workers will be represented.
3. A higher percentage of persons in the upper than in the lower income groups will be readers.
4. Most importantly, Asheim stated, "We know that the readers are the ones with the most education. Education is the major correlate of reading" (p. 9).

Asheim also summarized what seemed to be known about book reading among adults as of 1955. Women read more fiction than men, but men read more books on business and public affairs. Women tended to do more "recreational" reading than men; men more work-related reading than women. In terms of total amount of book reading, "women read more, but men read more 'seriously'—for study, for reference, for vocational advancement" (p. 13).

Asheim's remarks are the first to really hint at adult motivation for reading. His clear distinctions between male and female readers tend to support traditional stereotypes. However, no attempt was made to examine previous research results to see if male/female differences held across all income, educational, and occupational groups.

In 1956, William S. Gray and Bernice Rogers did a study on the skills, reading interests, and reading purposes of mature readers. This study began to move the research on adult reading attitudes and habits in new directions. Studies that Gray and Rogers reviewed revealed that

> Not more than 10% of adults voluntarily seek serious, challenging reading material; that half or more of the adult population read little more than the daily newspaper, a few periodicals of mediocre value, and an occasional mystery book; that another 30-40 per cent limit their reading largely to immediate-rewarding reading. (p. 45)

Gray and Rogers believed that if educators better understood the interests, attitudes, and habits of mature readers, they could begin to cultivate these same qualities in less able readers.

Gray and Rogers attacked a majority of the stidues done up to that time on the basis that they "viewed the individual in a fractionalized manner in respect both to his reading behavior and to his characteristics as a person." They imposed "social class" as a frame of reference and from a review of the literature drew five tentative conclusions they felt should be checked carefully through further research:

1. Social role is a basic determiner of an individual's reading pattern.
2. Social role represents a constellation of intellectual, emotional, and social traits.

3. Of the characteristics composing social role, education seems the best predictor because it is most clearly and directly measurable.
4. Education does not have a direct causal relationship to reading pattern but is rather a clue to social role, which is more nearly the determiner.
5. Education stimulates the development of interests and skills. Expanding interests may demand greater skill and in turn stimulate still further growth. Thus, education becomes not only a determiner of social role but an outcome of it.

From this theoretical orientation, Gray and Rogers proceeded to complete in-depth interviews of 40 adults who worked in a large department store of a midwestern trading center with a population of about 160,000. Seven persons had educations beyond high school, 18 had some amount of high school education, and 15 persons an eighth-grade education or less. Gray and Rogers found that even though those interviewed included some college graduates, "low, rather than high, levels of maturity in reading characterize the Trader City [fictitious name] cases" (p. 166). Interestingly enough, they also found that all groups were equally enthusiastic or intense about the value of reading. Gray and Rogers observe that

> They tend to attach greater significance to reading than their actual use of it would seem to warrant. Whether this is due to a genuine respect for reading that prevails widely among all classes or to the desire to say the right thing in the interview is not clear in all cases. The interviewer was impressed, however, with the sincerity of the responses in most cases. (p. 168)

In addition they found the following relationships existed to a greater or lesser extent concerning one's "social participation" as an index of reading maturity:

1. Reading ability is more closely related to educational background than are reading interests and purposes.
2. Reading interests and purposes relate more closely with the degree to which an individual's world extends beyond his immediate environment.
3. Reading ability does limit the use an individual will make of reading. However, the development of proficient reading skills does not guarantee they will be used in adult life. One continues to use these skills only if their use aids in answering compelling needs of the individual.

In conclusions from the study, Gray and Rogers state that "the need is urgent for studies of the factors and conditions that are most favorable to the development of compelling motives for reading" (p. 245). They argue that motives for reading are important because they provide the inner drive "which contributes directly to growth in and through reading and leads ultimately to the establishment of mature types of reading behaviors" (p. 245).

In addition to the above work, in the 1960 edition of the *Encyclopedia of Educational Research*, Gray compared the amount of time spent reading newspapers, magazines, and books from both the Parsons (1923) and Link and Hopf (1946) studies with results from a 1952 study by Leo Bogart. From an analysis of the data Gray found that the time devoted to newspaper reading increased significantly

from 1923 to 1952 among readers having grade-school training only and those having a college education. However, Gray observed that across the three studies time devoted to magazine and book reading appeared to have decreased significantly for all groups. Gray stated that data "secured by other investigators support the assumption that the amount of time devoted to book reading, particularly hardbound books, continued to decrease until 1952" (p. 1092). Gray predicted, on the other hand, that the continued sale of paperback books would be accompanied by a material increase in the future in the total amount of time devoted to book reading. Work done by Ennis in 1965 tended to validate Gray's predictions and results of previous studies on adult readership.

In 1971, Amiel T. Sharon working with the Educational Testing Service studied the reading habits of a carefully randomized national sample of 5,067 adults. He found that "the average American adult who can read spends one hour and 46 minutes reading on a typical day. . . .The variability in reading time among adults, however, is great." Sharon's figures suggest a noticeable increase in reading time from Parsons' 1923 results and a still greater increase over the 1945 results of Link and Hopf. In addition, Sharon found that males read slightly more than females (133 minutes versus 101 minutes). Thirty-three percent of the subjects reported that they read at work and those who did tended to have a higher socioeconimic status than those who did not. Whites in the survey read almost twice as much in a day as blacks. This racial difference in total amount of reading time also existed between lower income whites and blacks. Seventy-three percent of the adults interviewed said they read or look at a newspaper each day; 39% reported reading magazines; 33%, books. These percentages appear to be lower than previous reports. This change suggests either differences in samples or perhaps the fact that a smaller number of people may be doing considerably more reading thereby bringing up the mean daily reading time.

In addition, the Sharon study noted that less than 1% of the adults surveyed reported difficulty with any type of material they had to read. Persons with much formal education tended to read more than persons with little or no formal education. In summary Sharon states,

> The not too startling conclusion. . . is that persons in white collar occupations who live in materially and educationally enriched environments spend more time reading and read a greater variety of material than those in blue collar occupations who are less affluent and have less formal education. (1973, p. 169)

The Sharon study neglected to examine attitudinal and motivational aspects of adult reading habits, so no comparisons can be made with earlier studies. What seems evident from the Sharon study is that, on the average, adults are reading more. This finding can perhaps be explained by an increase in job-related reading. Sharon reports clear differences, according to sex and race, in the amount of daily reading among respondents.

Results from two recent studies (Gallup, 1976; Yankelovich et al., 1978) have received conflicting interpretations from reading specialists and the media. One question raised concerns the way reading is defined in both studies, for example,

is glancing at a book really reading? A second criticism raised is that data from both studies seem to be presented in a fashion intended to throw positive light on book producers.

According to the Gallup poll (1976), 84% of the public answers yes to having read a book in part or whole within the past year; 56% report reading all or part of a book in the past month (p. 21). It should be noted that the question on the 1976 poll had been reworded from the 1969 question which asked, "Have you ever read, ever finished a book?" Comparison between results of the two Gallup surveys is almost impossible. Information to be gained from the new question is of more value to book sellers who are interested in the amount of material purchased rather than depth of reading. Both of the more recent studies point out the need for research initiated by those with no economic interest in survey results.

Given the above qualifications, the more recent Gallup data also suggests that although fiction was the type of book read most often (42%), newspaper reading is the most mentioned kind of reading. Gallup reports 66% of the population reads a newspaper every day; 5 reads one or more magazines per week (pp 25-26). In terms of number of books read per year, Gallup lists (p. 22):

No. of Books Read Per Year	Percent of Population
0	15%
1- 2	15%
3- 5	18%
6-10	15%
11-20	13%
21-29	5%
30+	15%
Can't Recall	4%

Gallup breaks down the sources from which people obtain books into several categories: Borrowed from friend accounts for the highest sources of books read with 37%; bookstores were next with 36%; and libraries were third with 27%; 15% of the people responded that they got their books from a book club (p. 26).

Yankelovich et al. (1978) report that the vast majority (94%) of adults (age 18 and older) in the U.S. population had read either books, magazines, or newspapers in the six months preceding May, 1978. In their study 55% of the population reported having read at least one book in the past six months; 39% reported reading only magazines and/or newspapers (p. 5).

Changing Habits Among Groups of Adult Readers

While there have been sporadic studies over the past five decades, none has looked for changes in the reading habits of various groups of adults. Several studies have reported that the daily reading time of women is less than that of men (Parsons, 1923; Sharon, 1973). After reviewing several studies, Asheim

(1956) wrote that women seemed to read more fiction than men, but men read more books on business and public affairs. While women did more recreational reading than men, men did more work-related reading. Asheim reported that in terms of book reading (note that this is not the same as total time spent reading daily), women read more but men read more serious material for study, reference, and vocational advancement. Gray and Rogers (1956) have hypothesized that social role is the major determining factor of adult reading attitudes.

Most recently Yankelovich et al. (1978) found men and women differ from one another in their typical profiles of involvement in leisure and work or school reading. Similar to Asheim's conclusions in the mid-1950's, these researchers found women to be predominantly leisure readers—65% engaged in leisure reading only (p. 31). In the area of leisure reading both sexes were found to be equally likely to be newspaper readers, but women were more likely than men to read books (either fiction or non-fiction) and magazines. Men, in contrast, were more likely than women to engage in reading for work or school. In particular, men were more frequent trade journal/newsletter readers than were women. Yankelovich et al. did not, however, perform a careful analysis of the reading habits of working women as a separate group. As women change social roles, one wonders if the above differences in reading habits between men and women still persist.

Similarly with growing racial equality, one wonders what differences continue to exist in the adult reading habits between blacks and whites. Sharon (1973) reported blacks read considerably less than whites regardless of income level. Particularly as educational and employment opportunities for blacks increase, one wonders to what extent such differences may be decreasing.

The studies previously cited rarely examined motivations for reading, even though motivation and variety of intent were repeatedly mentioned as important. Early observations by Gray and Rogers (1956) on the influence of social role and education on motivations for reading suggested questions to broaden studies of adult reading patterns, but those observations and suggestions have been largely ignored by researchers in the United States.

British researchers Peter H. Mann and Jacqueline L. Burgoyne (1969) have developed a heuristic model (see Appendix A) useful in examining the variety and intensity of motivations for reading, types of reading done most frequently, and ways of obtaining reading materials among various groups. They suggest that reasons for reading fall on a continuum from work-related or "utilitarian" reading to leisure or "personal" reading with "social" reading in the middle. Utilitarian reading is seen as being externally motivated and includes such materials as workbooks, texts, manuals, reference books, and home how-to-do-it books. Personal reading, on the other hand, is intrinsically motivated. It includes romances, mysteries, and detective stories: books persons tend to read once. In contrast to utilitarian books, which are bought and kept for reference, books for personal reading are borrowed from a friend, library, or purchased as paperbacks. The reading of such books is strictly for leisure and tends to reinforce one's attitudes and beliefs. In contrast social reading is status conferring. Such

books may be read and reread and are thought to lead to self-improvement. They include "good" fiction and non-fiction, most recommended in reviews by opinion leaders. Research needs to examine adult groups to determine profiles of motivation for reading. Such information is largely unavailable about adult readers even though its importance in the light of increasing adult literacy demands is obvious.

Lou Burmeister (1978) outlines a second group of reasons people may choose to read based on the work of Waples. These reasons include reading (a) for the instrumental effect or, in other words, to achieve a goal; (b) for the prestige effect; (c) to reinforce an attitude; (d) for the vicarious esthetic experience; or (e) for respite (p. 66-69). Models such as Burmeister's or that of Mann-Burgoyne suggest new ways of comparing the reading habits of various adult groups and of looking for changes in these habits over periods of time. Answers can be suggested to whether different adult groups read and model reading with different motivations.

Results from the recent Yankelovich et al. study (1978) suggest that perceptions of reading as a leisure activity predominate over work/school reading. These researchers found virtually all readers claim to engage in some type of leisure reading. Work or school-related reading nearly always occurred in combination with leisure reading. Almost no one claimed to read for work or school only.

Within the category of "readers," Yankelovich et al. found important differences between book readers and non-book readers with respect to key motivations for reading. While many book readers read for general knowledge, a pleasure orientation was found to be the key reading motivation of book readers. Non-book readers, defined as those who had not read a book in the past six months, did not share in the pleasure motivation. Their primary orientation for reading was to acquire general knowledge. Other findings also underscored the importance of book reading and more sustained reading in general. Women (who were more prone to be book readers than men) primarily mentioned "pleasure" as the main reason for reading, while men were relatively more interested in general or specific knowledge. Consistently heavy readers were most often motivated by pleasure. In contrast, general knowledge was the primary reading motivation of those who claimed to be reading lesser amounts as time progressed.

Role of Attitude and Modeling

The reading habits of adults may affect children. This possibility was raised by Fisher in a 1962 article summarizing previous research on the volume, interests, and tastes of adult readers. He stated, "In light of. . . the findings of innumerable research projects it would appear more profitable for those interested in 'Why Johnny Can't Read,' to begin concerning themselves with 'Why Daddy Doesn't Read.'" Hanson (1969) found, indeed, parental reading habits were a greater predictor than socioeconomic status of children's success with reading in school. A study of low-income families' reading habits and their effect on children's reading progress found that reading in the home correlated positively with less TV watched, increased library usage, and greater ownership of books (Lamme & Olstead, 1977).

Smith, Smith, and Mikulecky (1978) suggest a vicious circle may exist. A student with poor reading models (parents, older siblings) tends to read less well than other students. Extra help received by such a student often does not include work either on his or her reading habits and attitudes or on his or her reading skills. This student frequently leaves school with negative reading attitudes and habits that influence younger siblings and the next generation (see Figure 1). The authors state, "More emphasis on reading scores cannot break this cycle, but emphasis on ability and on reading attitudes and habits might be able to do it" (p. 77). Presently, however, little is known about adults' attitudes toward reading or how these attitudes might be improved to provide better models for children and thus break this cycle.

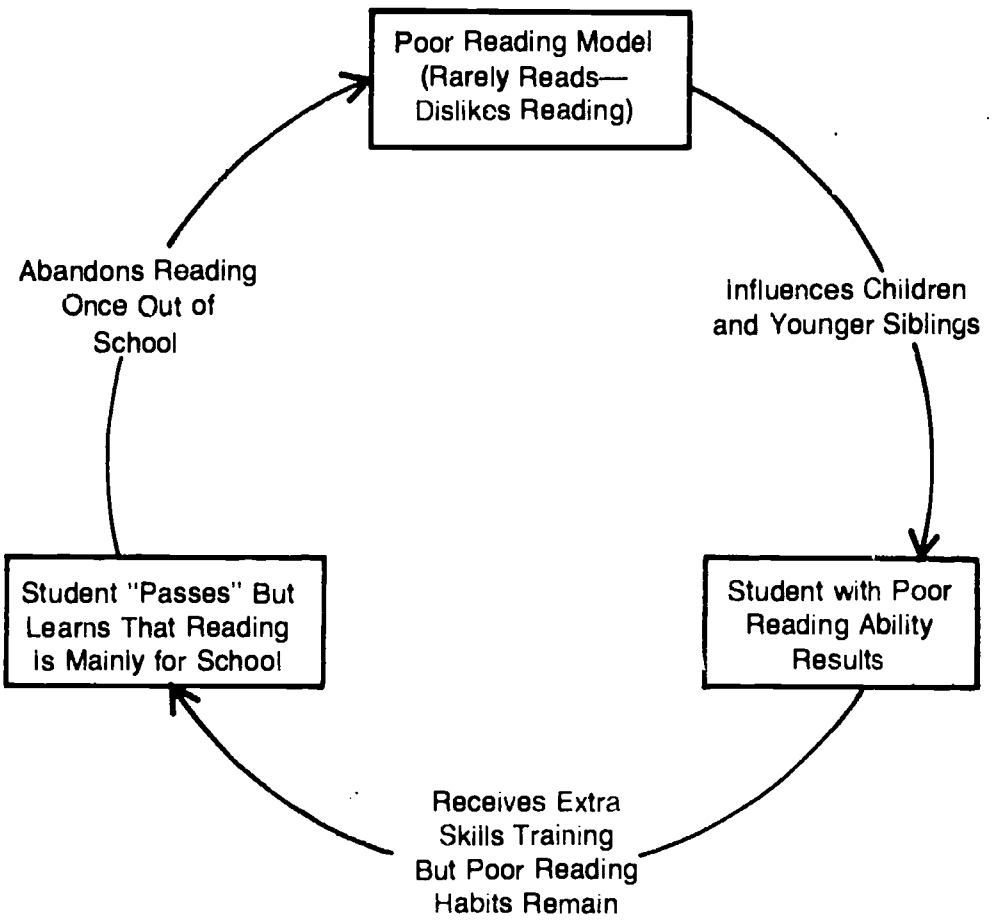


Figure 1. A vicious circle: Nonreaders produce nonreaders.

Encouraging new methods for measuring attitude are making research in the measurement of reading attitudes and motivations more feasible. Hovland and Rosenberg in *Attitude Organization and Change* (1960), after analyzing research which attempts to chart attitudes, suggest attitudes have three basic components—cognitive, affective, and behavioral. Adequate attitude measurement must attempt to tap each component. While Hovland and Rosenberg

(1960) attempted to define the components of attitude, Krathwohl, Bloom, and Masia (1964) developed a classification of attitude development based on the most thorough existing examination of relevant educational/psychological literature and research. Krathwohl's taxonomic classification postulates a hierarchical series of stages or an attitude continuum through which individuals pass in the development of their attitudes.

Taking into account the Hovland-Rosenberg tri-component model of attitude and the stages of Krathwohl's *Taxonomy of the Affective Domain*, Mikulecky (1976) designed and validated the Mikulecky Behavioral Reading Attitude Measure (MBRAM) appropriate for use with mature readers. A pool of 40 items, each of which was designed to reflect a specific Krathwohl sub-stage, and the components of the Hovland-Rosenberg model, was reduced to 20 items after considering the evaluations of a panel of judges familiar with Krathwohl's taxonomy and after an item analysis that eliminated all items that correlated at r=.600 or less with the sum of items reflecting the Krathwohl stage appropriate to each item. The measure established concurrent validity with existing formal attitude measures and correlated more highly than other measures with several informal indicators of reading attitude. Test-retest reliability was established at .91. In addition, the scale established empirically the hierarchical validity of Krathwohl's stages. The MBRAM was administered and normed on 1,750 subjects ranging from seventh grade through college-adult.

Job-Related Reading

Most research into adult reading habits has not examined the amount of job-related reading per se. Sharon (1973) is an exception; he reported a median of 61 minutes spent per day on job-related reading. Comparisons of total reading time from Sharon's study to those of Parsons (1923) or Gray and Munroe (1930) seem to suggest that the amount of reading by adults has increased. One might speculate that greater job reading demands have caused this increase.

Nor have studies of functional literacy provided much information about job reading habits and demands. Such studies have traditionally focused on minimum reading requirements for jobs. They usually ignore amounts of job-related reading, the extent to which one consults books about problems on the job, or comfort with job-related reading demands. Weber (1975), in contrast, has argued that reading demands of jobs have not increased but are being used as an excuse to keep blacks from being hired. What is needed is research to determine the real relationship between literacy competence and literacy demands at levels above the minimum.

Sticht (1975) has begun to develop better methods of defining job literacy. However, his work has been limited to military settings and needs to be transferred and compared to civilian populations and to occupations that represent a wider variety of social levels. In summary, research in the areas of both adult reading habits and functional literacy has had little if anything to say about job-related reading above minimum levels. What is needed is knowledge about adults' actual attitudes and habits toward job-related reading and a clearer understanding of the real reading demands of various occupations.

Conclusion

Over the past 50 years there seem to have been some important changes in adult reading habits. While the reading ability of the nation's population seems to be on the rise, several studies have resulted in conflicting interpretations of adult literacy levels and reading habits in everyday life. Amounts of total reading per day seem to be increasing with the gap between the amounts done by men and women perhaps decreasing. Education rather than income has repeatedly been shown to be the best indicator of adult reading habits. Gray and Rogers have called the research in the area of adult reading habits fragmentary and have hypothesized that social role is the main determiner of adult reading habits.

Reading studies have found modeling to be an important factor in the development of children's reading habits. Such results suggest the heightened importance of adult reading attitudes and motivations in relation to social status and role.

Possible increases in job reading, suggested by increases in overall daily amounts of reading, make urgent the need for further knowledge on the exact status of job reading demands and distributions. In the past, studies of adult reading habits have dealt little, if at all, with job reading. Research in the area of functional literacy, to date, also has provided little insight. Needed is knowledge about job reading habits and demands above minimum levels.

Method

Target city for this study was Anderson, Indiana. The 1970 Census Bureau information on Anderson's distribution of race, income, and education closely approximates national distributions of these variables. For example, in 1970 blacks composed 11.2% of the U.S. population and 9.4% of the Anderson population. The national percentage of those who had completed four years of college was 10.7%; the Anderson percentage, 7.3%. This information plus Anderson's balance of industry, service occupations, institutions of higher education, and participation in "typical" American phenomena (labor disputes, teacher/school board conflicts, suburban/urban governmental concerns) identified the city as representative of the nation. More detailed census information is available in Appendix C.

Sampling Technique and Population

Four hundred and fifty survey participants were chosen through a standardized sampling technique developed for research in the social sciences and used extensively by the broadcasting industry to ensure random telephone survey samples (Baldwin, Greenberg, Reeves, Thornton, & Wakshlag, 1975). Briefly, this sampling technique involved collecting copies of all telephone books from the community. In Anderson this included use of both the *Anderson City Directory* and the *Anderson College Directory*. First the number of pages of listings was determined and multiplied by the number of columns per page to find the total number of columns. The total number of columns was then divided by the desired sample size to determine what is called the "skip interval." The column with which

to start was determined by drawing a number out of a hat; after this, every nth number of very nth column, determined by the skip interval, was selected. To determine which number in the nth column was selected, the length of the column was measured. For each inch of the column's length, a number was placed in a hat. A number was then drawn, for example 2 inches. Now in every nth column determined by the skip interval it was the name 2 inches down that was selected each time. If the name so identified was a business, one selected the first residential listing that followed and recorded it.

Following the generation of names of possible survey respondents, a maximum of five attempts were made to interview an adult, 18 or more years of age, residing at each address/phone number on the list. All initial calls were made between the hours of 4 p.m. and 10 p.m. If no contact was made on the first attempt, each of the four succeeding attempts were made at different times and on different days of the week. If no contact was made after five attempts, the residence was dropped from the study. Names were also dropped if telephone lines had been disconnected and new numbers were not available or if callers refused to participate in the survey.

Of the original list of 450 names, 284 persons (63%) actually completed the survey. For telephone research, this is considered a respectable rate of return. Reasons given by the 166 persons not completing the survey from most frequent to least frequent were refusal to participate (64%), telephone number disconnected (14%), no contact made (13%), telephone number changed (5%), and no adult available (2%), and other (2%).

Telephone Survey Design

The telephone survey (Appendix D) was pilot tested in Bloomington, Indiana, using the subject compilation procedure outlined above. One hundred telephone numbers were selected and called. Forty-seven persons actually completed the pilot survey. In the pilot study most items, other than the Mikulecky Behavioral Reading Attitude Measure (Mikulecky, 1976) allowed for open-ended responses. Results from the pilot study allowed the researchers to generate typical item foils on reading motivation, materials, etc. for items on the final survey form. For example, the foils "from advertisements, from suggestions of friends or relatives, from libraries, from browsing books, from teachers, from other sources" were developed from pilot study responses to the open-ended statement, "The ways I find out about new things to read are. . . ." Also as a result of the pilot study, items that demonstrated low discrimination ability were dropped.

All phone interviewers were trained and monitored during both the pilot and final studies. Interviews were to be cordial but not too friendly. Subjects began the survey immediately after cursory explanation of purpose. Completion of the telephone interview, on the average, took 15 to 20 minutes.

Items 1-20 of the final telephone survey consisted of the Mikulecky Behavioral Reading Attitude Measure. Items 21-39 dealt with the areas of reading motivation, reading interests, reading material choice, and material source. Items 40-44 were designed to gather demographic information. Finally, items 45 and 46

solicited self-assessed daily reading time on the job and self-assessed total reading time during the day.

Survey items were designed so that individual items could be later combined to construct the following variables:

1. Variety of motivation—constructed from items 26-30 which measured the five most typical motivations for reading. If a person responded to one of these five items with a rating of 1, 2, or 3, indicating the motivation is "unlike me," no point was awarded. If a person rated an item with a 4 or 5, the subject was given 1 point. Thus a person with many reasons for reading could score as high as five points.
2. Intensity of motivation—constructed from a person's responses to questions 26-30. The response ratings a person gave to each of these items were summed to provide an index of total intensity of motivation. Thus a person could have an intensity of motivation as low as 5 or as high as 25.
3. Self-perceived reading ability—constructed by summing a person's response ratings to questions 25, 38, and 39 which survey one's overall perception of his or her own reading ability, comprehension, and rate. A person with a low self-perceived reading ability could score as low as 3; a person with a high self-perceived reading ability could score up to 15.
4. Attitude toward reading—constructed by summing a person's response ratings on the 20 items of the Mikulecky Behavioral Reading Attitude Measure. Thus a person with an extremely poor attitude toward reading might score as low as 20 while a person with a very positive attitude toward reading might score as high as 100. (See Appendix B.)

In addition, the survey attempted to ascertain indicative information about the extent of discomfort with job-related reading, the extent to which reading was used to solve job problems, and the extent to which previous education was perceived as being valuable for current work. Sticht (1975) has examined these relationships to some depth with selected armed services personnel in lower level jobs. Items 22-24 of the survey provide indicative information about these topics among a cross-section of civilian adults.

Items 26-30, which survey motivations for reading, have already been mentioned above. These items were developed, in part, to correspond to motivations for reading described in a "Sociological Model for the Study of Book Reading" (see Appendix A) developed by Mann and Burgoyne (1969). Their model suggests reading motivations are primarily utilitarian, social, or personal. Items 26-30 were designed to compile motivations from the Mann-Burgoyne model and most frequent other motivations derived from the pilot study. In addition the Mann-Burgoyne model postulates a variety of types of reading material and sources for obtaining reading material that theoretically fluctuate depending on the socio-economic status and education of the reader. Items 32-37 survey readers' first and second most frequent choices of reading materials, sources for obtaining reading materials, and sources of help for reading difficulties.

In summary then, 450 adult subjects were randomly selected from a demographically representative midwestern city to participate in a telephone survey of adult reading habits and motivations. Standardized survey techniques enabled the researchers to complete survey interviews with 284 (63%) of the original randomly selected sample. These individuals, during a 15-minute telephone survey, responded to items designed to tap general attitude toward reading, factors related to job reading, motivations for reading, sources of reading material and reading aid, self-perceived reading ability, and time spent reading daily both on and off the job. In addition information on respondents' sex, race, education, income, and employment status were gathered for later demographic analysis of data.

Procedure and Data Analysis

Statistical analysis of the data generated by this survey was performed in three stages. A preliminary stage was to break down the data into its basic distributional characteristics. This first stage provided not only descriptive statistics for each item in the form of central tendency (mean, standard deviation, etc.) but also provided a base from which to confirm the random sampling. Each subject was asked to provide information on the demographic variables of sex, race, family income level, amount of education completed, and work status. Using a FREQUENCIES sub-program from the Statistical Program for the Social Sciences (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975), the subject population was analyzed by percentage frequencies for each sub-group of the demographics. Results were compared (see **Part 1** in Results section) with existing census results from the 1970 U.S., Indiana, and Anderson populations to establish the representative nature of the sample population.

The second stage of data analysis was to examine by the demographic variables the variance of all survey items assessing reading habit, ability, interest, attitude, and all the items assessing job reading and job satisfaction. Analysis of variance (ANOVA) was performed to discover significant ($p<.05$) F ratios for the various demographic sub-groups on these target variables. When significant F ratios were identified using a one way analysis of variance, the independent variables were further examined using *post hoc* Scheffé pair-wise comparisons ($p<.05$) to determine which sub-group mean contributed to the significance (see **Part 2** in Results section).

A third stage of data analysis examined specific questions arising from the analysis of the second stage. Examples of such specific questions were: What significant differences emerge in adult reading habits among groups of different employment status? When women's reading habits are examined by employment status do any significant differences emerge? Again ANOVA was performed with subsequent *post hoc* Scheffé pair-wise comparisons. In addition, multiple linear regression techniques were used in an attempt to identify, in an inferential sense, what contributed to or shared significant variance with the variables of reading attitude and habit. This statistical technique provided an examination of the effects of the various demographic and motivational variables on the dependent variables of attitude toward reading, intensity of motivation for reading, total reading time, job reading time, and free reading time. Furthermore,

this technique indicated the relative magnitude of each independent variable as it "explained" the variance it shared with the dependent variable. To compute the above analysis (see **Part 3** in Results section) a one way analysis of variance procedure and regression procedure were employed.

Results

The report of survey results is divided into three parts. Part 1 highlights survey results by demographic variables. Percentages of survey respondents by sex, race, education, family income, and employment status are given and compared to 1970 census information for the United States, Indiana, and Anderson. Part 2 reports specific analysis of particular survey items plus results of the constructed variables of attitude toward reading (MBRAM score), variety of motivations, intensity of motivation, and self-perceived reading ability. Additionally the analysis of amount of job reading, total reading, and free reading is given. Part 3 reports the analysis of specific further questions that arose from the analysis completed in Part 2.

Part 1. Highlights of Survey Results by Demographic Variables

Demographic variables by sex. (Table 1 on p. 63) There were more female (58%) than male (42%) respondents to the survey. Compared with 1970 U.S., Indiana, and Anderson census data, the percentage of male respondents was six to seven percentage points lower than national, state, or city norms, and the percentage of females was five to six percentage points higher. The number of male and female respondents with family incomes of $10,000-$20,000 per year was nearly the same (20%) and above $20,000 per year was nearly the same (15%). A large proportion of the males in the survey were employed full time (75%). The women were split about equally between those who worked full time (31%) and those who worked as housewives (31%). The remaining women worked part time, were students, retired, or unemployed. Though the male/female percentage split is slightly skewed toward females, both groups accurately reflect the larger population on most of these demographic variables.

Demographic variables by race. (Table 2 on p. 64) Of the survey respondents 92.3% (n=262) were white and 7.0% (n=20) were black. These proportions closely match Indiana census figures on race which were 93.1% white and 6.9% black in 1970. Survey figures also were close to 1970 national figures (88.8% white; 11.2% black) and Anderson figures (90.6% white; 9.4% black). Of the white respondents 87% had received high school diplomas and 55% had obtained some post-high school education. Nearly 23% had been graduated from college and 8% had pursued graduate work. In comparison, 70% of black respondents had received high school diplomas. Correspondingly, 55% of blacks also had received post-high school training, but only 15% had received college degrees, and 5% had done graduate work. The greatest number of both whites (39%) and blacks (45%) reported family incomes between $10,000-$20,000 per year. For whites, 32% of the families earned more than $20,000 yearly, while 15% of black families earned in that range. Of white respondents, 49% were employed full time while 60% of black respondents were employed full time. This

is explained in part by the fact that 18% of white women claimed to be full-time housewives while only 10% of black women were housewives.

Demographic variables by education. (Table 3 on p. 65) Of the survey respondents, 85.6% had received high school diplomas or some post-high school training. Of these 22.6% also had completed at least four years of college. Both these sets of figures are higher than national, state, or Anderson 1970 census information. For example, according to the 1970 national census data, 52.3% of the U.S. population 25 years of age and older had completed four years of high school and only 10.7% had completed four years of college. Only part of this gap in percentages can be explained by the general increase in education level of the population since 1970. In terms of income and education the most typical category of survey respondents (15%) had some post-high school training but less than a four-year college education and earned between $10,000-$20,000 per year. The second most typical category of respondents (13%) stopped with high school educations and earned between $10,000-$20,000 per year. In terms of employment and education the most typical respondents (16%) had some post-high school training short of a college degree and were employed full time. The second most typical category (15%) possessed only high school diplomas and worked full time.

Demographic variables by income. (Table 4 on p. 66) Family incomes of between $10,000-$20,000 per year were most common (39%). A population breakdown by other income categories revealed 4.6% of the respondents' families were earning less than $3,000 per year; 6.0% earning $3,000-$5,000 per year; 13.8% earning between $5,000-$10,000 per year; and 30.2% over $20,000 per year. It is difficult to compare these percentages to the 1970 U.S., Indiana, and Anderson census figures on income because of differences in data gathering techniques related to income. While it would seem that survey respondents earned higher incomes than typical in 1970, this finding is not unusual considering the roughly 54% total inflation rate between 1971 and 1977.

Demographic variables by employment status. (Table 5 on p. 67) Most male survey respondents (75%) worked full time. About an equal number of women (31%) worked full time or were employed as housewives (31%). The largest percentage of both whites (49%) and blacks (60%) were employed full time. The most typical educational level of those who worked full time was some post-high school but not college education (33%) followed closely by high school educations only (30%). High school educations also typified those employed part time, housewives, and those who were unemployed. The largest group of retired persons had less than high school education. Those respondents who worked full time most typically reported family incomes between $10,000-$20,000 per year (44%) followed closely by those earning more than $20,000 per year (38%).

Part 2. Selected Item Examination

An analysis of variance by sex, race, education, family income, and employment status was completed for all survey items having equal interval scales and for the constructed variables of attitude toward reading (MBRAM score), variety of motivations, intensity of motivation, self-perceived reading ability, amount of

job-related reading, total reading, and free reading. When appropriate, *post hoc* tests of significance ($p<.05$) between groups were made. For those items not having equal interval scales, percent of those selecting each possible item response is reported. When it was thought the full-time student group might be confounding results for particular demographic variables, this group was removed, and a second analysis of variance with *post hoc* Scheffé tests of pairwise comparisons between groups was completed.

Item 21—Reading a great deal about some topics. (Table 6 on p. 68) Respondents were asked if they read a great deal about some topics when they were young. No significant differences were found in respondents' answers based on sex, race, education, family income, or employment. Mean responses for all groups leaned toward the "like me" pole of a five-point "unlike me" to "like me" scale.

Item 22—Reading demands of one's job. (Table 7 on p. 69) When persons were asked if the reading demands of their jobs made them feel uncomfortable (housewives were asked whether household responsibilities requiring reading made them feel uncomfortable), there were no significant differences between respondents' answers based on sex or income. Most persons answered either "very unlike me" (1 on the scale) or "unlike me" (2 on the scale). However, differences at the $p<.001$ level were found based on race. Blacks felt significantly more uncomfortable about reading demands on the job than did whites.

Additional significant differences at the $p<.05$ level were found between groups based on schooling. Those persons having less than a high school education were most uncomfortable about job-related reading (mean 2.25). Interestingly, persons with high school diplomas and those who had pursued graduate (post-baccalaureate) work felt equally comfortable with their job-related reading demands (mean 1.59). College graduates, who had stopped with their bachelor degrees, were somewhat less comfortable (mean 1.64). Respondents with post-high school educations but no college degrees were even less comfortable (mean 1.78). In a follow-up analysis of the survey data, full-time students were removed from the respondent pool to avoid their possible skewing effect. After this was done, analysis of variance and later *post hoc* Scheffé tests ($p<.05$) revealed respondents with less than high school educations to be more uncomfortable with job reading demands than were college students with no graduate training.

By occupation, full-time students felt least comfortable about reading demands. They were followed by the full-time employed. Those who were employed part time or who were unemployed felt the most comfort in relation to reading demands of their jobs or job-like tasks. While significant differences did exist ($p<.01$) between groups on some demographic variables, one should remember that no groups indicated severe difficulty with job-related reading.

Item 23—Going to books or manuals for information about problems on the job. (Table 8 on p.70) In relation to this item the mean scores of all groups except those with less than a high school education were between 3.0 and 4.0 on a

five-point Likert-type scale. Interestingly no significant differences were found for the demographic variables of race, education, family income, or employment status. Sex was the only demographic variable for which significant difference ($p<.05$) was found. Men reported going to books or manuals for information about problems on the job more than women did. When the student group was removed from the respondent pool and *post hoc* Scheffé tests of the pair-wise comparison between the sexes were completed, this difference remained significant ($p<.05$).

Non-parametric Spearman's rho correlation was computed between the variables "going to books for information" about problems on the job and "comfort with reading demands of one's job." The correlation was only -.043 which suggests virtually no relationship between these two variables.

Item 24—Value of school learning to one's work and life. (Table 9 on p. 71) When asked how valuable what one learned in school has been to one's work and in one's life, no significant differences ($p<.05$) among respondents were found based on sex, race, education, income, and employment status. Mean responses again leaned toward the "like me" pole of a five-point scale, usually between three and four points. Differences revealed slight statistical significance ($p<.10$), between groups based on sex, however, with women finding their schooling slightly more valuable, and between groups based on employment status with those retired or working as housewives being most satisfied with the usefulness of their schooling. Those facing direct educational demands on the job or in school were less satisfied than those with fewer imposed educational demands.

Item 25—As a reader, you consider yourself. . . . (Table 10 on p. 72) In this item related to self-perceived reading ability, significant differences were found among groups based on education level ($p<.001$). A small increase in the mean score was typical for each educational level achieved. It should be noted, however, that even the mean score of those having less than a high school education was "average." Only those who had pursued graduate (post-baccalaureate) work had a mean score of "above average."

When the student group was removed and analysis of variance with *post hoc* Scheffé tests performed, the analysis revealed that those with high school educations or less felt less confident about their abilities as readers than those with college diplomas or graduate work ($p<.05$).

Item 26—You read to find out how to get something done. (Table 11 on p. 73) Sex was the only demographic variable for which significant differences ($p<.05$) were found on this item. Males reported doing reading significantly more often than females did to find out how to get something done. Even when the student group was removed and analysis of variance with *post hoc* Scheffé tests of pair-wise comparisons completed men read significantly more often than women to find out how to get something done ($p<.05$).

Item 27—You read to keep up with what's going on. (Table 12 on p. 74) No significant differences were found between or among groups on any demo-

graphic variable for this item. The mean scores of all groups tended toward the "like me" side of a five-point Likert scale.

Item 28—You read to discuss what you have read with friends. (Table 13 on p.75) Sex was the only demographic variable for which significant differences were found on this item ($p<.01$). Women read significantly more often to discuss with others than did men. Men apparently discuss less what they have read with others and are less frequently motivated to read for this reason than are women. This finding remained the same when the student group was removed and analysis of variance with *post hoc* Scheffé tests of pair-wise comparisons between the two groups were completed ($p<.05$).

Item 29—You read for relaxation and personal enjoyment. (Table 14 on p.76) Interestingly, there were no significant differences between or among groups based on race, education, or income for this item. Significant differences were found at the $p<.001$ level for the variables of sex and employment status. Female respondents reported reading significantly more often for relaxation and enjoyment than male respondents. This difference existed even when the student group was removed and analysis of variance with *post hoc* Scheffé tests of pair-wise comparisons were completed ($p<.05$). In terms of employment status, those who were housewives, or retired reported reading the most for relaxation and enjoyment. They were followed in descending order by part-time workers and the unemployed. Full-time workers and students read least for personal enjoyment.

Item 30—You read to study for personal and occupational advancement. (Table 15 on p. 77) Significant differences were found on this item for the variables of education ($p<.01$) and employment status ($p<.001$). Those who had completed some post-high school education, but not college, reported reading the most for personal and occupational advancement. This group was followed by the college and graduate-work groups whose mean scores differed from each other by only .01 of a point. Interestingly, while those with less than a high school education read little for advancement, the group who had high school educations read the least for personal and occupational advancement. When students were removed, analysis of variance with *post hoc* Scheffé tests of pair-wise comparisons revealed that those respondents who were high school graduates read significantly less for personal or occupational advancement than those with some post-high school education ($p<.05$).

Based on employment status it was the students who reported reading most for personal and occupational advancement, as one might expect. Those who worked part time had the second highest mean score followed sequentially by full-time workers and housewives. Apparently those who read most for personal and occupational advancement are those who perceived that they had the most to gain from reading. While the retired read little for personal and occupational advancement, it was the unemployed who reported reading the least for this reason. Unemployed persons seemed not to view reading as a means to employment. One also should note that no significant differences ($p<.05$) were found on this item according to sex, race, and family income.

Item 31—The main types of reading I do are (first choice). . . .(Table 16 on p. 78) The most frequent first choice for main types of reading among survey respondents was about equally divided among magazine, newspaper, and light book reading with a few noted exceptions. The largest number of males (25%) reported job-related reading as the main type of reading they did with magazine reading being the second most frequent first choice. Women on the other hand, more rarely reported job-related reading as their main type (6%). They most frequently selected newspapers (28%) or light books (27%). While magazines, newspapers, and light books were most frequently main types of reading, job-related reading rose with educational level, family income, and employment status. In relation to race the majority of first choices for both whites and blacks, in order of preference, were newspapers and magazines.

Item 32—The main types of reading I do are (second choice). . . . (Table 17 on p.79) To more thoroughly ascertain reading preferences, respondents were asked to indicate both a first choice and a second choice. Survey respondents' most frequent second choice for main types of reading material was again divided about equally among magazines, newspapers, and light book reading. Male responses on the second choices were more similar to female answers, indicating that magazine, newspaper, and light book reading were popular second choices for men after job-related reading. As a second choice, job-related reading declined with higher levels of schooling, family income, and employment status indicating that while job-related reading may have been an important first choice, newspaper, magazine, and light book reading were strong second choices. The majority of second choices for both whites and blacks were, in order of preference, magazines and newspapers.

Item 33—The way I get most of my reading materials is (first choice). . . . (Table 18 on p.80) Regardless of which demographic variable was used, survey respondents indicated that stores were their primary way of getting reading material. In most instances subscriptions or book clubs were the second most frequent first choice. Two exceptions were noted. For respondents reporting family incomes over $20,000 per year, the largest number (43%) reported getting most of their reading material from subscriptions or book clubs, while stores were their second most frequent choice (31%). Student choices for the primary source of reading materials were divided equally between libraries and stores.

Item 34—The way I get most of my reading material is (second choice). . . . (Table 19 on p. 81) Results from respondents' indication of second choices for obtaining reading materials seemed to further substantiate results from Item 33 above. Again, regardless of which demographic variable was used, stores and subscriptions or book clubs were the most popular sources of reading materials.

Item 35—The ways I find out about new things to read are (first choice). . . . (Table 20 on p.82) Suggestions from others as a way to find out about new things to read was the first choice of the largest number of respondents regardless of which demographic variable was used. The second most frequent choice was to find out about new reading materials through advertising. The third most frequent choice was browsing. This finding remained true across most demographic

variables. Clearly libraries and teachers were not the first ways respondents found out about new materials to read. In fact only 3% of the respondents said they found out about new reading materials from libraries.

Item 36—The ways I find out about new things to read are (second choice). . . . (Table 21 on p. 83) Across most demographic groups, respondents' choices for the second most frequent way to find new materials to read were divided rather evenly among advertisements, suggestions, and browsing. Again libraries and teachers were last in the second choices given by respondents as ways to find out about new materials to read. Only 6% of the respondents selected teachers as their second way of finding out about new things to read.

Item 37—If I had trouble reading, I would go first for help to. . . . (Table 22 on p. 84) When asked where they would first go for help if they had trouble reading, the largest group of men (24%) reported "no one." In contrast, the largest number of women (22%) reported they would go to a school, followed closely by 21% of the women who said they would go to a doctor. Whites most frequently would seek help from a school (21%) then from a doctor (20%). An additional 20% reported they would seek help from no one. Nearly equal percentages (25%) of blacks reported that they would seek out a teacher or friend/relative followed closely by going to a school (20%). Interestingly no blacks reported they would seek out a doctor if they were having trouble reading. Persons who had completed college or graduate work reported that they would most frequently see a doctor if they were having trouble with reading (43% and 36%, respectively). Those with less than a high school education reported most often (26%) that they would seek help from a teacher. For the income groups earning less than $10,000 yearly, no clear preference for source of reading help emerged. Those with family incomes of between $10,000-$20,000 per year most frequently chose "no one" (21%) followed by "a school" (20%). Respondents earning more than $20,000 per year reported most often that they would seek help from a school (28%) or a doctor (24%). In terms of employment, those working full time said they would seek help from a school (24%), a doctor (19%), or no one (19%). Although percentages varied for the unemployed, retired, and housewives, the item choices of school, doctor, and no one received about equally divided percentages.

Item 38—Compared to others your age, your understanding of things you read is. . . . (Table 23 on p. 85) The mean scores for all groups on this item fell between "average" to "about average." All groups felt their understanding of what they read was at least average compared with others their same age. As one might expect, beyond this general finding, there were significant differences among groups based on education ($p<.001$). With each higher educational level achieved respondents felt more confident about their reading ability compared with others their same age. The student group was removed and analysis of variance with *post hoc* Scheffé tests of pair-wise comparisons were completed. Results revealed that those who did not complete high school, as well as those who ended their formal education with their high school graduation, were significantly less confident of their reading comprehension than those with more education ($p<.05$). Differences between the respondents based on sex were

significant to a low degree ($p<.10$). Men felt slightly more confident about their level of understanding compared with others their age than did women.

Item 39—Compared to other people your age, your rate or speed of reading is . . . . (Table 24 on p.86) Significant differences between respondents' answers to this item were found for all demographic variables but employment status. As might be expected, differences based on education were most significant ($p<.001$). Respondents felt increasingly confident about their reading rates compared to others their age with each educational level achieved. When the student group was removed and analysis of variance with *post hoc* Scheffé tests of pair-wise comparisons completed, results showed that those with less than high school educations felt significantly less self-assured of their reading rate than did those with post-high school, college, or graduate educations ($p<.05$).

Differences significant at the $p<.05$ level were found for the variable of sex. Women felt more confident about their reading rate compared to others their same age than did men. However, when students were removed from the respondent pool, analysis of variance revealed *no* significant differences in rate between sexes.

Variety of motivation. (Table 25 on p.87) The variable variety of motivation was constructed from items 26-30 which measured the five most typical motivations for reading. A previous pilot study had established these motivations as (a) to find out how to get something done, (b) to keep up with what's going on, (c) to discuss what one has read with friends, (d) to relax and attain personal enjoyment, and (e) to study for personal or occupational advancement. Survey respondents who indicated that a particular motivation for reading accurately described them (scores of 3 to 5 on a five-point scale) received 1 point for that particular motivation for reading. Those who indicated that a motivation did not describe them (score of 1 or 2 on a five-point scale) received 0 points. The variable "variety of motivation" was constructed by summing the total number of reading motivations credited to a respondent. Thus scores could range from 0, no motivations for reading, to 5, a very wide variety of motivations. Significant differences ($p<.05$) were found between men and women, with women having the greater variety of motivations for reading. No significant differences in variety of motivations were found for the variables of race, education, family income, or employment status.

Intensity of motivation. (Table 26 on p. 88) The variable "intensity of motivation" was constructed by summing the response ratings a person gave to items 26-30. Scores could range from a very low intensity of motivation (5 points) to a high intensity of motivation (25 points). No significa t differences of motivation intensity were found in relation to any of the demographic variables. Only the difference in intensity of motivation scores between men and women showed any slight degree of statistical significance ($p<.10$) with women's scores being higher.

Self-perceived reading ability. (Table 27 on p. 89) Self-perceived reading ability was constructed by summing a person's responses to items 25, 38, and 39

which asked respondents to self-rate general reading ability, reading comprehension, and rate compared with others of the same age. One could score as low as 3, indicating a poor self- perceived reading ability to as high as 15, indicating a very high self-perceived reading ability. Significant differences ($p<.001$) were found among respondents of various educational levels. There was a steady rise in mean self-perceived reading ability with each educational level achieved. When the student group was removed, analysis of variance with *post hoc* Scheffé tests of pair-wise comparisons of various groups revealed that respondents with high school educations or less indicated significantly less confidence in their self-perceived reading ability than those respondents with some post-high school training, a completed four-year college degree, or graduate educations ($p<.05$). Differences between various income groups on self-perceived reading ability were also significant ($p<.05$). These differences were largely due to the high score of the $3,000-$5.000 per year group. When full-time students were removed from the pool, no significant differences on self-perceived ability remained for any income group. No significant differences in self-perceived reading ability were found for the variables of sex, race, or employment status.

Attitude toward reading (MBRAM score). (Table 28 on p. 90) A respondent's attitude-toward-reading score was based on the sum of his answers to items 1-20, the MBRAM instrument (possible socres were a low of 20 and a high of 100 points). Differences between the attitude-toward-reading scores of men and women were significant at the $p<.001$ level, with women having more positive attitudes toward reading. Women's attitudes toward reading remained significantly more positive than men's even when the student group was removed and an analysis of variance with *post hoc* Scheffé tests between the two groups was completed ($p<.05$). Differences significant at the $p<.05$ level were found among persons of different educational levels. Mean reading attitude scores rose steadily with educational level achieved. However, when the student group was removed, analysis of variance with *post hoc* Scheffé tests ($p<.05$) revealed no significant reading attitude differences in pair-wise comparisons of the various groups.

Significant differences ($p<.05$) were found between persons of various family income levels. The mean total attitude score of those with family incomes over $20,000 per year was highest. In contrast, the mean total attitude score of those with family incomes between $10,000-$20,000 was lower than that of all other groups. As might be expected, when the student group was removed analysis of variance revealed no significant differences among various income groups.

Significant differences ($p<.01$) were found between persons of various employment statuses. Mean total attitude scores were highest for the unemployed, followed by part-time workers, and then by housewives. Only the mean total attitude score for students was below that of full-time workers. No significant differences were found among respondents' total reading attitude scores compared by race.

Time spent on job-related reading. (Table 29 on p. 91) Item 46 of the survey asked respondents to estimate the number of minutes they spent each day doing

job-related reading. The mean number of minutes reported on job-related reading per day was 73; the median, 31. Analysis of variance gave evidence of statistically significant differences ($p<.01$) between and among groups of various educational levels. When the student group was removed, analysis of variance revealed differences significant at $p<.05$. *Post hoc* Scheffé tests revealed no significant differences in pair-wise comparisons of the various groups, however. The mean score for number of minutes spent on job-related reading was highest for those who had pursued graduate work (102 minutes per day). This score was followed closely by those with post-high school but not college educations (98 minutes per day); then, by those with college degrees (70 minutes per day). Differences significant at the $p<.001$ level were found between groups of various employment statuses. Students spent the greatest number of minutes per day doing job-related reading (mean of 133 minutes per day), followed by those working full time (mean of 86 minutes per day), and then by those working part time (mean of 79 minutes per day). No significant differences in amount of job-related reading were found for the variables of sex, race, or family income level. When non-parametric Spearman's rho correlation was computed between job-related reading time and comfort with reading demands of one's job, the correlation was only .068. This suggests that there is virtually no relationship between these two variables.

Total time spent reading. (Table 30 on p. 92) When survey respondents were asked to estimate their total reading time per day (item 47), the average time was 158 minutes. Significant differences were found based on educational level achieved ($p<.01$) and employment status ($p<.001$) for this item.

Persons having pursued graduate work spent the most time reading per day (mean of 203 minutes). Interestingly, respondents who had completed some post-high school training but not college were second with a mean total of 184 minutes. Respondents who had completed college were third with a mean total of 154 minutes. This is a mean drop of approximately 30 minutes between the post-high school and college degree groups. Interestingly, those persons with only high school diplomas read on the average about 10 minutes less per day than college graduates. Those with less than a high school education reported spending 112 minutes per day reading or, again, about 30 minutes less than high school graduates. When the student group was removed, however, and an analysis of variance with *post hoc* Scheffé tests of pair-wise comparison was completed among the various groups, the only significant difference to remain was between the less-than-high-school and graduate groups with the less-than-high-school group doing significantly less reading per day ($p<.05$).

In relation to employment status, respondents who were students had the highest mean score (226 minutes) for total reading time per day. Part-time employees, who were the second highest group (mean score 174 minutes per day), read 52 minutes a day less than students. Those employed full time were third (mean score of 157 minutes per day) and read 17 minutes a day less than part-time employees. Full-time employees read only 7 minutes more a day than retired persons. Housewives and unemployed read the least per day (both mean scores of 116 minutes). The mean score for both these groups represented about a

40-minute drop from the total number of minutes spent reading per day by full-time employees. Significant differences were not found for total reading time based on sex, race, or family income.

Time spent on free reading. (Table 31 on p. 93) Free reading time was constructed by subtracting time spent on job-related reading from total reading time. It should be emphasized that no significant differences on free reading time were found for the demographic variable of education. Nor were differences found for the variables of race or family income. Significant differences were found for the variable of sex ($p<.001$). Women's mean score for time spent on free reading (98 minutes per day) was 25 minutes higher than men's free reading time (73 minutes per day). When the student group was removed, the mean number of minutes per day for men and women varied by no more than 2 minutes from each group's previous mean. When *post hoc* Scheffé tests were performed without the student group, the significant differences ($p<.05$) remained.

Significant differences also were found based on employment status ($p<.01$). Retired persons had the highest mean score for free reading (123 minutes per day) followed next by the unemployed who spent 7 minutes less a day on free reading. Part-time employees (mean score 95 minutes per day) and students (mean score 93 minutes per day) spent about equal amounts of time each day on free reading. Housewives spent 87 minutes a day on free reading, and full-time employees spent the least time (mean score 71 minutes per day); in other words, persons employed full time spent, on the average, 53 minutes less a day on free reading than retired persons spent.

Part 3. Analysis of Specific Questions

After the above item analysis was completed, it was decided to further analyze the data in order to answer four more specific questions. These questions related to adults' reading attitudes and habits by (a) collapsed family income groups, (b) employment status, (c) sex and employment status, and finally (d) multiple regression analysis of demographic variables to determine the degree to which adult reading attitudes and habits can be explained.

If family income is collapsed into three levels, what variables remain significant? (Table 32 on p. 94) Statistical analysis of variance was completed for various family income levels by the variables utilized in this study. For convenience and comparative purposes, family income was collapsed into a low income family group ($0 to 10,000, 26%), a middle family income group ($10,000 to 20,000, 42%), and a high family income group ($20,000 and more, 32%).

Analysis of variance gave evidence of statistically significant differences among income groups in educational level achieved ($p<.01$), self-perceived reading ability ($p<.05$), and one's confidence as a reader ($p<.05$). *Post hoc* Scheffé tests revealed significant differences in pair-wise comparisons for the variable of education with the high income family group having achieved significantly greater levels of education than the low income family group. *Post hoc* Scheffé tests revealed significant differences in pair-wise comparisons for the variable of education with the high income family group having achieved significantly greater

levels of education than the low income family group. *Post hoc* Scheffé tests also revealed significant differences for the variable of self-perceived reading ability. Those in the low income family group had lower perceptions of their own ability than those in the high income family group. Differences among groups were not significant when *post hoc* Scheffé tests of pair-wise comparisons were completed for Item 25 concerning one's confidence as a reader. However, less stringent t tests revealed that the low and middle income groups felt significantly less confident about their ability as readers than did the high income group.

Among the three income groups no significant differences were found on amoung of job reading, amount of total reading, amount of free reading, variety of motivations for reading, intensity of motivation for reading, attitude toward reading (MBRAM score), reading a great deal about some topics when young, the value of school learning, comfort with reading demands on the job, or use of books for information to solve problems on the job. Though large standard deviations precluded statistical significance, the largest income group ($10,000-$20,000) consistently achieved the lowest mean scores in total reading time, job reading time, and attitude toward reading. This same group reported the motivation of "reading to get something done" as more predominant than any other group. Middle class adults seem to read less and then mainly for utility. Still, with the lack of statistical significance, it seems reasonable to conclude that family income is not a good indicator of adult reading habits. Differences by income are few and are mainly related to education level and self-perceived ability.

The important result to note, however, is the lack of significant differences on variables for which one might have thought analysis of variance would reveal statistically significant differences among income groups. Wealthy, middle class, and poor adults seem to read about the same amounts and for the same motivations. Furthermore, the sameness is not explained by students inhabiting lower income levels. When students are removed, the lack of significant differences persists. This is a surprising finding.

What significant differences in adult reading habits emerge among groups of different employment status? (Table 33 on p. 95) Statistical analysis of variance of indicators of adult reading habits by various employment status groups was completed. This analysis gave evidence of significant differences among groups for amount of job related reading ($p<.001$), total reading ($p<.001$), free reading ($p<.01$), attitude toward reading as measured by the MBRAM ($p<.01$), comfort with reading demands on the job ($p<.05$), reading for relaxation and enjoyment ($p<.001$), and reading for personal or occupational advancement ($p<.001$).

Post hoc Scheffé tests ($p<.05$) of pair-wise comparisons identified significant differences between groups on several of these measures. The unemployed, retired, and housewives did significantly less job-related reading than those employed full time, part time, or as students. Since the unemployed and retired were jobless, the result is expected. Housewives did significantly less total reading per day than students, and those employed full time did significantly less

free reading per day than the retired. Students read significantly less than housewives for relaxation and personal enjoyment. Basically, the *post hoc* tests revealed that the statistically significant F ratios can be explained by logically anticipated differences among groups. Workers do more job reading than non-workers. Students read more than housewives; the retired do much more free reading than any other group. Housewives seem to read for relaxation and pleasure more than students do.

Much more surprising in the data analysis were the areas that revealed *no* significant differences between groups. Even though there were significant F ratios on attitude toward reading, comfort with reading demands on the job, and reading for personal or occupational advancement, *post hoc* Scheffé tests did not reveal significant differences in pair-wise comparisons between and among groups for these items. Less rigorous t tests ($p<.05$) revealed that the reading attitude scores of students and full-time workers were significantly lower than all others. The unemployed, part-time workers and housewives had the most positive attitudes toward reading. The t tests also revealed that students and part-time workers read significantly more often than all others for personal and occupational advancement.

When women's reading habits are examined by employment status, do significant differences emerge? (Table 34 on p. 96) Few significant differences in reading habits between employment status groups emerged when the entire sample was analyzed. However, earlier analysis had revealed many significant differences in reading habits between men and women. For this reason, an additional effort was made to separate women's and men's habits in relation to their employment status. Of particular interest was whether there were major differences among women according to their employment status. Such results might indicate, for example, that the reading habits of full-time employed women were more like those of men that those of non-employed women. On the other hand, such analysis might reveal that even when analysis of variance by employment status is completed, women's reading habits are quite alike regardless of their employment status and, as previously found, significantly different from men's reading habits.

Analysis of variance among women by employment status gave evidence of statistically signficant differences in amount of job-related reading ($p<.001$). However, *post hoc* Scheffé tests revealed no significant differences in pair-wise comparisons of the various groups. Less rigorous t tests did give evidence of significant differences ($p<.05$) between working women (full time and part time) and non-employed women (housewives, unemployed, and retired). This finding basically translates to the fact that employed women seem to do slightly more job reading than non-employed women. The differences were expected and matched the pattern demonstrated by analysis of the total group data. The fact that there is only a slight difference between job reading of employed and non-employed women is surprising.

Analysis of variance also gave evidence of statistically significant differences in the use of reading for personal and occupational advancement ($p<.01$). Again

post hoc tests revealed no significant differences between various employment status groups of women.

When men's reading habits are examined by employment status, do significant differences emerge? (Table 35 on p. 97) When analysis of variance was completed for male respondents only, in relation to their employment status, only three significant differences emerged. These were in amounts of job reading ($p<.01$), total reading time ($p<.05$), and reading to find out how to get something done ($p<.05$). *Post hoc* Scheffé tests of pair-wise comparisons revealed significant differences only on the amount of job-related reading. Male retirees did significantly less job-related reading than male students. This is not an unusual finding. The important result revealed by these statistical analyses is that men generally in relation to their employment status are surprisingly far more like each other than different in their reading habits. With the exception of retirees, men read about the same amounts and for the same reasons whether they are students, fully or partly employed, or even unemployed.

To what extent can an adult's reading habit and attitude be explained by sex, race, family income, and educational level attained? Multiple regression equations were computed using adult reading habits and attitudes as the dependent variables and demographic data as the independent variables. Table 36 lists the shared variance of each independent demographic variable as it explains each dependent variable. The analysis determined the extent that demographic variables such as sex, race, educational level attained, and family income level are able to predict or explain reading attitude, job-related reading time, total reading time, free reading time, and intensity of motivation for reading. In addition, the table includes the total additive shared or explained variance which is the percent of variance of the dependent variable that can be "shared" or "explained" by the independent variables (i.e., sex, race, family income, and attained education level). Examination of the table reveals that 17.4% of the variance in the subjects' attitudes toward reading can be explained by the independent demographic variables. This means, however, that 82.6% of the variance present in our subjects' reading attitudes is unexplained. In brief, information of a demographic nature is of small use in making predictions about adults' attitude toward reading. Assumptions based on such demographic information are likely to be incorrect and more likely the result of prejudice than observation.

This lack of research support for using demographic variables in predicting reading attitude is even more apparent when we examine other dependent variables such as job-related reading time, total reading time, free reading time, or intensity of motivation for reading. Regression analysis reveals that only 11.4% of the variance of job-related reading is explained by the demographic variables. Moreover, demographic variables explain at most only 6.1% of the variance for total reading time, free reading time or intensity of motivation for reading. It seems that for predicting reading attitude and habits of adults, knowledge about an individual's attained educational level, family income, sex, or race is not particularly helpful.

These results place in a new perspective the results of earlier studies (e.g., Parsons, 1923; Gray & Munroe, 1930; Gray & Rogers, 1956; Sharon, 1973) which suggest that education, income, or social role are highly significant demographic variables explaining adult reading habits. In all cases, single demographic variables explained less than 10% of the variance of adults' reading habits and attitudes and less than 18% in total combination.

Discussion of Changes

The discussion of results from this study is organized around specific questions designed to examine the nature of changes that have occurred in adult reading attitudes and habits over the past 50 years. Attention focuses particularly on changes in the relation of sex, race, education, family income, and employment status to variables of adult reading attitudes and habits.

Have amounts of reading done by various groups of adults changed over the past 54 years?

In the following chart are summarized some of the changes that have occurred in amounts of reading done by adults since 1923. Gaps in the chart reflect one of the problems with previous research on adult reading habits: researchers have not consistently asked questions in such a way that data can be easily compared. For example, none of the studies prior to Sharon's attempted to assess amount of job-related reading.

Comparisons of Studies of Adult Reading
1923-Present

Study	Amount of Job-Related Reading (min. per day)		Average Total Reading Time (min. per day)				
	Mean	Median	W	B	Males	Females	Total Gr.
The current study	73	31	158	142	150	164	158
Sharon (1973)	30	61	113	61	113	101	105
Link & Hopf (1946)	--	--	---	--	---	---	68
Gray & Munroe (1930)	--	--	---	--	---	---	904
Parsons (1923)	--	--	---	--	99	77	93

From the table certain trends seem to be emerging. Except for the decline in total reading time reported by the 1946 Link and Hopf study, there seems to be an increase in adults' total reading time per day. This increase emerges despite the influence of television.

Of even greater interest perhaps is the trend toward equivalence in amounts of reading done per day by blacks and whites, males and females. In 1971 Sharon

found whites read almost twice as much as blacks. Results of this study, however, indicated that while the average number of minutes spent reading per day by whites was slightly more than blacks, analysis of variance did not reveal the difference to be statistically significant.

In 1923 Parsons reported that, on the average, men read 22 minutes more per day than women. In 1971 Sharon found the gap narrowing. On the average men were reading 12 minutes more per day than women, an amount that was not statistically significant. The current study found the gap may have closed, with women, on the average, reading slightly more than men (164 minutes per day as compared to 150 minutes per day). Even when the student group was removed, analysis of variance gave no evidence of statistically significant differences in total reading time between men and women.

Have motivations or purposes for reading changed?

In 1930 Gray found that women read more books than men. After reviewing several studies, in 1956 Asheim reported that women tended to read more fiction than men, but men read more books on business and public affairs. Women did more recreational reading and men more work-related reading. While "women read more. . . men read more 'seriously'—for study, for reference, for vocational advancement." Results of the recent Yankelovich et al. study (1978) would concur with Asheim's general finding. The current study also indicates that people's motivations for reading have remained generally unchanged over the years. Asked about the main type of reading they do, the largest group of men indicated "job-related." The largest group of women, on the other hand, selected newspapers, followed very closely by novels.

Gray reported from 40 case studies done in 1956 that intensity of motivation toward reading remained consistently high regardless of the demographic variable considered. Results from the current study, which involved a much larger, carefully randomized number of subjects (N=284), further confirm this finding. No significant differences in intensity of motivation toward reading were found when groups were compared by sex, race, education, family income, or employment status. The possibility of students affecting particular economic classes ($3,000-$10,000) was examined. It was speculated that the inclusion of students in the lower socioeconomic groups might be confounding the results. When the data were examined with the students removed, the lack of significant differences on motivation remained. Gender of reader was the only demographic variable demonstrating any degree of significant differences in overall reading motivation. This difference achieved significance only at the $p<.10$ level and cannot be construed to be particularly significant. These results complement a finding from the Yankelovich et al. (1978) study that attitudinal factors are relatively more important than demographic factors in distinguishing heavier from lighter volume book readers.

This finding has several implications for educators. If statistically significant differences in intensity of motivation cannot be found for various adult groups, it follows that there is no support for patronizing attitudes toward adults of low

socioeconomic status. Poor people are as motivated to read as the rich, blacks as motivated as whites, the uneducated as motivated as the educated. Though individuals may have different reasons for reading and differing abilities, the intensity and variety of motivations are the same for most groups. For example, survey results suggest a middle class respondent may read more often than others to get something done, a woman may read more often than a man for pleasure, and a retiree may read for different reasons than a student. The fact remains, however, that intensity and variety of motivation is present and about equal for most groups. A teacher can find a reason and a motivation for reading among individuals of any group.

To what extent do groups of adults differ in their attitudes toward reading?

In 1962 Fisher suggested, after reviewing a large body of research on adult reading attitudes, that if in fact modeling was an important influence on the development of children as readers, researchers ought to investigate why some adults clearly have better reading habits and attitudes than others. Seven years later, in 1969, Hanson did a research study along such a vein. He found that parents' modeling and attitudes toward reading were better indicators of a child's possible success in school than was socioeconomic status. In a recent study of low-income families' reading habits and children's progress in reading, Lamme and Olstead (1976) found that reading in the home correlated positively with less TV watched, increased library usage, and more ownership of books.

Keeping in mind the possible importance of adult reading on children, one might ask what seems to typify adults with high or low attitudes toward reading. In the current study results indicated that men as a group had poorer total reading attitudes than women ($p<.001$). Men also had a significantly narrower variety of motivations for reading than women ($p<.005$). In particular men read less for relaxation and personal enjoyment than did women ($p<.001$), but more to find out how to get something done ($p<.05$). Those adults employed full time or as students also read less for relaxation and personal enjoyment than did other groups according to employment status. The unemployed, the retired, and housewives read quite often for relaxation and enjoyment. In addition, significant differences in total reading attitudes existed between groups on employment status. As groups those employed full time or as students had the poorest attitudes toward reading.

A possible explanation for higher reading attitudes among some groups is a selectivity factor: groups more able to select their own reading material appear to have higher attitudes toward reading. Groups who would tend to read only required material (students and full-time employees) had lower attitudes toward reading. The clear exception to this generalization were employed women who somehow managed to read for pleasure and occupation and therefore retained more positive attitudes toward reading.

Have differences between the reading habits of men and women changed?

Total reading time. In the past some studies have reported that men's total reading time per day was more than women's (Parsons, 1923). In 1971 Sharon found no significant differences between the daily total reading time of men and

women. The gap in total reading time was narrowing, although the actual mean score of men was still higher than that of women. This study found indications that this gap may have closed or even reversed. Although the study revealed no statistically significant differences by sex in total reading time, indications of a reverse tendency were found with women reading, on the average, 13 minutes more per day than men. Therefore it seems that in terms of total amount of time spent reading per day any differences existing between the sexes are minimal.

Job reading time. Job reading was defined as reading done to perform one's job whether the job was full time or part time, housewife or student. Interestingly no significant differences were found between men and women in relation to the amount of time spent daily on job-related reading. Apparently women do as much job-related reading as men; however, unlike men, the largest group of women did not select job-related reading as their main type of reading.

Free reading time. Free-reading time was computed by subtracting job reading time from total reading time. Analysis of variance revealed that women did significantly more free reading than men ($p<.001$). The average number of minutes spent by women in free reading each day was 98; the average for men, 67—a difference of 31 minutes per day. Even when the student group was removed, this finding remained.

It seems apparent that some interesting trends and changes in adult reading habits are emerging. In 1923 men clearly read more than women. Since few women at that time were in the work force one might hypothesize that most of their reading was what this study terms free reading. In fact several previous studies have indicated women did more novel reading than men and men more job-related reading than women. This study found the gap in total reading time between men and women had closed and that women were doing as much job-related reading as men. On the other hand, the current study revealed significant differences in the amount of free reading done by men and women. Apparently men continue to read more for job-related reasons than for pleasure. Having entered the work force, women are doing as much job-related reading as men, which accounts for the increase in their total amount of reading per day. Women, however, are maintaining the amounts of free reading they had done previously.

Types of reading. In the past, research has shown that men do more serious reading than women. This study found that men did read more frequently to get something done than did women ($p<.05$). Women, on the other hand, read significantly more for relaxation and pleasure ($p<.001$) and to discuss their reading with friends ($p<.01$) than did men. Women's choices for main types of reading were overwhelmingly newspapers, magazines, and light books, while men's were clearly job-related reading. The study indicates that major differences still exist in relation to the types of reading chosen by men and women.

Variety of motivations, intensity of motivation, and general attitude toward reading. In this study women were found to have a greater variety of motivations for reading than men. On the other hand the intensity of motivation for reading

was the same for both groups, but for men the intensity stemmed from fewer motivations and for women the intensity stemmed from the sum of a greater variety of motivations. Women also had significantly more positive ($p < .001$) overall attitudes toward reading than men. It would be reasonable to assume that these differences in variety of motivations for reading and general attitude toward reading between men and women is related to the type of reading choices made by each group.

Do working women differ, as readers, from other groups?

If women's reading habits as a group are different from men's in several ways, one might wonder if the differences were caused only by those women who were retired, unemployed, or housewives. Perhaps differences between the reading habits of men and women diminish when the comparison is with women who are employed full time.

Significant differences were found among women of various employment status for the variables of amount of job-related reading and total reading time per day. *Post hoc* t tests revealed that women who were employed full and part time did more job-related reading than did those who were retired, unemployed or housewives. This finding is similar to the Yankelovich et al. (1978) study which found that women (without children) who are employed full time are more likely to be book readers than are women (also without children) who do not work. In addition, the present study revealed that the amount of job-related reading done by full-time employed women (mean of 95 minutes per day) was higher than that of their male counterparts (mean of 83 minutes per day). Employed women's total reading time was also higher than their male counterparts by about 30 minutes per day.

Though working women did slightly more job reading and total reading than their non-employed women counterparts, there appear to be no significant differences among various groups of women in the areas of reading motivation and attitude. All groups of women demonstrated comparably high scores on measures of reading motivation, intensity, variety, and general attitude toward reading. This finding suggests that working women read as much or more than their male counterparts while still maintaining more positive motivations and attitudes toward reading.

The majority of the findings suggest that women's reading preferences have not changed in the past 50 years. Stereotypes of women doing more newspaper, magazine, and novel reading and having more positive attitudes toward reading seem to be confirmed. A new phenomena, however, seems to be emerging in the form of the working woman who reads 30 minutes a day more than her male counterpart and maintains positive attitudes toward a wide variety of reading material. This type of woman seems to have encompassed the best of both worlds.

Have changes occurred in the relationship of race to adult reading habits?

Sharon found in his 1971 study that whites spent twice as much time as blacks reading each day. He found that differences between blacks and whites existed

regardless of income levels. In contrast, this study uncovered no significant differences between the reading habits of blacks and whites except on comfort with job-related reading in which blacks reported more discomfort. The blacks had similar variety and intensity of motivations for reading, attitudes toward reading, and self-perceived abilities as whites. They valued school learning equally and spent as much time as whites on job-related reading, free reading, and total reading. It should be noted that while the number of black respondents in the study closely reflected the percentage of blacks in the U.S., Indiana, and Anderson, according to 1970 census data, no large urban ghettos were polled. The lack of data from such areas might explain some of the differences between the Sharon study and the current study among lower socioeconomic group respondents, but does not explain the differences between studies among middle and upper socioeconomic group respondents.

It seems reasonable to conclude from this study that differences in reading habits according to race become less as educational levels achieved by both groups become more equal.

One might speculate that black adults' lack of comfort with job-related reading may be a function of affirmative action programs. It is conceivable that changes in affirmative action over the past decade may have helped narrow the reading gap between races while thrusting more black adults into new job situations where reading demands create more discomfort. Such a speculation must, of course, remain only a speculation until more extensive research is performed.

Have changes occurred in the relationship of educational level to adult reading habits?

As far back as 1923 Parsons found a relationship between educational level achieved and amount of reading done by adults. Gray and Munroe in their 1930 survey of suburban Chicago residents drew the same conclusion. Link and Hopf in 1946 found education to be a better predictor of readership of books than income level. Asheim, after reviewing several studies, reached a similar conclusion in a 1956 article of the *Fifty-Fifth Yearbook of the National Society for the Study of Education.*

Gray and Rogers in their 1956 study of maturity in reading hypothesized that social role was a basic determiner of the reading pattern of an individual. They stated that "social role" seems the most likely indicator of the reading participation pattern. Results from their in-depth interviews of 40 adults, however, showed that education was more closely related to reading competence than it was an indicator of reading interests and purposes.

Sharon's (1973) national study of 5,067 adults again confirmed that education was related to amount of time spent reading and variety of materials read. Sharon did not, however, pursue, on a larger scale, findings of Gray and Rogers that, while education was a good predictor of reading achievement, it was not a good predictor of reading interests and purposes.

Most previous studies have made statements about the relationship of education to reading based upon unrepresentative samples and researcher observation.

Gray and Rogers used only 40 adults. The present study used a larger, more carefully randomized sample, carefully designed attitude instrumentation, and more thorough statistical analysis to examine the relationship of education to adult reading habits. The relationship of education to adult reading habit was examined with two separate analyses. The first analysis examined the variance of responses to determine if level of education completed revealed significant differences in amounts of job reading, total reading, free reading, variety and intensity of motivations for reading, attitude toward reading, and a number of other variables. The second analysis of variance removed respondents who were currently students because it was hypothesized that the student life style might tend to confound results. For both levels of analyses, analysis of variance with *post hoc* Scheffé tests of pair-wise comparisons revealed statistical significant differences ($p<.05$) among the various educational groups for amount of total reading, self-perceived ability, comfort with job-related reading demands, and reading for personal or occupational advancement. The only differences between levels of analyses were the *post hoc* Scheffé tests without the students did not give evidence of significant differences in amount of job reading or attitude toward reading for various educational groups. Of additional interest is that at neither level of analysis did significant differences exist in intensity of motivation for reading.

Overall results from this study substantiate and extend observations of previous researchers on the relationship of education to adult reading habits. Education is more important than income and more important than race in determining adult reading habits. However, education is not a good predictor of intensity of motivation for reading.

Have changes occurred in the relationship of family income level to adult reading habits?

Link and Hopf (1946) found income to be less important than education as a factor influencing the readership of books. Other researchers (Fisher, 1962; Gray & Rogers, 1956) have written profiles of adult reading habits based on low, medium, and high income groups suggesting, in contrast, that income is a good predictor of reading attitudes and habits.

In this study analysis of variance by income of various measures gave evidence of significance only for educational level achieved ($p<.01$), self-perceived reading ability ($p<.05$), one's confidence as a reader ($p<.05$), and attitude toward reading ($p<.05$). *Post hoc* Scheffé tests of pair-wise comparisons between groups revealed that those in the high family income group had achieved statistically greater educational levels than those in the low family income group. Also those in the high family income group had significantly more positive self-perceived reading abilities than those in the low family income group.

A second analysis of variance was done with the student group removed since it was hypothesized that this group might be confounding results of the $0-$10,000 family income group. Analysis of variance by income without the students gave evidence of significant differences based only on education ($p<.01$). The other significant differences disappeared.

None of these findings seem particularly startling. Of greater interest perhaps is those measures of adult reading habits for which there were no significant differences in relation to income. These measures included amount of job reading, total reading, free reading, variety and intensity of motivations for reading, comfort with job reading demands, going to books for information about problems on the job, and the value of school learning to one's life. Though some researchers (Fisher, 1962; Gray & Rogers, 1956) have offered income as a predictor of reading habit, it seems more appropriately a predictor of education and self-perceived ability. All other aspects of reading habit seem unaffected by income. In general results from this study confirm Link and Hopf's finding that income is a less important factor than education as an influence on adult reading attitudes and habits. It would seem that composite profiles of adult reading habits based on socioeconomic status alone ought to be read with caution.

Have changes occurred in adults' job-related reading habits?

In 1973 Sharon reported adults median reading time on the job to be 61 minutes per day. In the current study the median job-related reading time was 31 minutes per day; the mean, 73 minutes per day. Before estimating job reading time, respondents were requested to consider all memos, letters, and advertisements confronted on the job. This resulted in an extremely wide range of job reading times reported and may explain the disparity in mean and median scores as compared to the mean and median scores reported by Sharon.

No identifiable groups in the current study reported real discomfort with on the job reading demands. As a matter of fact, all groups reported feeling reasonably comfortable. Blacks, however, reported significantly ($p<.001$) more discomfort with job-related reading than whites. This is really a matter of degree rather than of quality. Blacks were comfortable but less so than whites.

The most realistic perspective on this item is to examine the percentage of respondents experiencing reading discomfort. In 1971 Sharon reported less than 1% of respondents experiencing reading difficulties. The findings of the current study reveal 11.6% of the respondents reporting discomfort with job-related reading demands. The data suggest a possible increase distributed lightly across all groups in discomfort with job-related reading demands. This increase in discomfort would seem to coincide with the increase in total amount of reading since Sharon's study.

In terms of going to books for information about problems on the job, this study found the mean for all groups except those with less than a high school education tended toward the "like me" side of a five-point Likert scale. Significant differences were found for the demographic variable of sex ($p<.05$). Men reported going to books or manuals for information about problems on the job more than women did. Even when the student group was removed this difference remained.

As a means of further analysis of relationship, selected survey items were examined for correlation to other items (Spearman's rho). In this study the correlation between time spent on job-related reading and comfort with the reading demands of one's job was low (.068). So also was the correlation

between going to books for information about problems on the job and comfort with the reading demands of one's job (-.043). Apparently one's comfort or discomfort with job-related reading demands has little influence on the amount of time one spends reading on the job or whether one seeks answers to problems on the job from books or manuals.

Have changes occurred in where adults get reading material?

In 1930 Gray and Munroe found the most frequent way of obtaining reading material was to purchase it or, second, to borrow it. Three years later, during the height of the depression, Waples found people secured reading materials from (1) "all others," (2) friends, (3) subscriptions, (4) newsstands, (5) drug stores, (6) public libraries, (7) bookstores, and (8) rental libraries. Link and Hopf, in 1946, found that about 57% of 1,982 active readers had borrowed their latest book, followed by 31% who had bought theirs. One must remember Link and Hopf were considering only where one's latest book had been obtained. The most recent Gallup report (1976) found persons most frequently obtained books by borrowing from a friend (37%), buying at a bookstore (36%), checking out from the library (27%), and purchasing through a book club (15%).

As in Gray and Munroe's 1930 study, respondents to the current study most typically replied that stores were their primary source of reading materials. Subscriptions or book clubs were generally second with one notable exception. Respondents with family incomes of more than $20,000 per year most typically reported subscriptions or book clubs were the source of most of their reading materials, followed by stores as the second most common source. Economic advantage seems to allow these respondents to experience a convenient and frequent influx of new reading materials into their homes.

Have changes occurred in how adults find out about new materials to read?

In 1930 Gray and Munroe found respondents learned most frequently of new books to read through friends (54%) and book reviews (29%). Waples in 1938 again found that friends were frequent recommenders of books. In the current study "friends" per se was not a response choice; however, "suggestions from others," a similar choice, was the most frequent answer of survey respondents regardless of demographic variable. Interestingly, "advertising" was respondents' second most frequent way to find out about new reading materials, with "browsing" the third choice. It would seem that in the past 35 years advertising has become a new persuasive force influencing what people choose to read. Recommendations of friends, however, as in the past, remain the greatest influence on adults' choices of reading material.

Where are adults most likely to seek help for reading problems?

Previous studies have not examined this question. The answer is important, however, as adult retraining needs increase. The results indicate that groups of adults in relation to various demographic variables would consult distinctly different sources for help with a reading problem. Men would most frequently seek help from no one. The data would suggest that men most typically do not want to admit difficulties with reading to anyone. Women, on the other hand, would most

frequently enlist the aid of a school or a doctor. When examined by race, whites, in about equal percentages, would first seek help from no one, a school, or a doctor. In contrast, blacks indicated they would first seek the help of a teacher or a friend/relative followed by going to a school. No blacks reported they would seek out a doctor.

It is impossible to determine whether these racial differences are the result of more blacks feeling economically unable to consult doctors, more blacks trusting teachers, or more blacks viewing reading difficulties as educational rather than physical. Respondents of both races who had completed college or graduate work said they would most typically consult a doctor. Well-educated adults seem to view any reading problems they might have as having physical causes. Those with less than a high school education, in comparison, most frequently reported they would seek help from no one or from a school. Clearly these persons do not view their reading problems as having physical causes. Many of these adults, it seems, would prefer to ignore a reading problem or are embarrassed to seek help. Interestingly, those with family incomes between $10,000-$20,000 per year would most typically seek help from no one or from a school while those earning more than $20,000 per year would first seek help from a doctor or a school. It would seem respondents with higher income levels could more readily seek the aid of more expensive outside sources. This fact seems especially evident when one notes that there were no clear preferences of sources of help for those earning less than $10,000.

It seems apparent that adult preferences in sources for help with reading difficulties vary a great deal and that there are clear differences based upon sex, education, income, and race. Adult education and retraining needs to examine the population it will serve before offering information about reading assistance. For some populations, physicians and optometrists may be able to provide referral service while for others the schools and neighborhood groups might meet the need. For many males, advertising may be needed to break through the "no one" choice pattern. Since adults identify a variety of remedies and sources of help with reading problems, adult educators and social agencies need to be aware of the whole spectrum of sources for adult referrals.

Conclusions and Observations

The data collected and analyzed in this survey of adult reading habits and attitudes lead to a number of conclusions, observations, and speculations. Though each of these has been touched on in the results and the discussion sections, a compilation and re-emphasis at this point should prove useful.

The overwhelming conclusion concerning the relationship of adult reading habits to demographic variables such as race, income, and employment status is that demographic variables are not useful as predictors of reading habit. Even educational level, a traditionally effective predictor of reading competence, is only mildly effective as a predictor of adult reading habits. The majority of the explanation for an individual's reading patterns and habits must reside with factors other than membership in an easily classifiable demographic group. The only demo-

graphic group to prove individually effective as a predictor of adult reading habit and attitude was the gender of the reader.

Even though gender demonstrated a small degree of effectiveness as a predictor of reading habit, it must be noted that previous gaps between the average reading time of men and women appear to have closed. The same equivalence appears to be true for the reading times of black and white readers in the survey sample. There were a few significant differences between demographic groups on variables related to motivations for reading. Readers across demographic categories showed no significant differences in their motivations for reading. The main differences that emerge tend to be between males and females.

A significant finding along these lines has to do with the fully employed women. They do significantly more job-related reading than do fully employed males. For most employment groups who faced required job reading, reading attitude appeared to be low. Reading attitude was high among retirees, housewives, and the unemployed who faced no required reading. Fully employed women, however, appear to be able to do more required job-related reading, while at the same time doing more free reading and maintaining high attitude toward reading. This is an encouraging finding in light of the impact of parental reading models on the future reading success of children. Working women are maintaining their positive reading attitudes and habits.

A less encouraging corollary to this observation is the fact that males' main type of reading is "job-related" and the major motivation for male reading is "to get something done." Societal changes seem to be thrusting upon males a greater participation in the child rearing role. This greater participation in child rearing in light of the more negative male reading habits and attitudes could have implications for negatively influencing children's reading success. Further study in this area is clearly necessary.

The survey item results dealing with job reading suggest some changes since the early seventies. The amount of job-related reading seems to be on the increase though cross-study comparisons are difficult to make. It also appears that the percentage of adults experiencing discomfort in the face of job reading demands is small, but on the increase. This discomfort appears to be spread across all education and income categories rather than be concentrated in a single category.

This study detected a change among adults in sources of information about reading material. Recommendations from friends has remained the top source of information about reading materials over the past 50 years, but advertising and browsing at book covers have appeared as new and prevalent alternate sources of information about new materials. This information suggests a need for research on the effects of these new dissemination patterns. Such research should be completed by impartial groups rather than by marketing departments of the book publishing industry.

A final observation to be made about the study results concerns responses to items concerning sources for reading help. In light of increased occupation retraining and increased reading demands, it seems clear that adults are likely to need help in improving reading efficiency if not in improving more basic reading skills. Survey results suggest different segments of the adult population are likely to seek that reading aid from widely different sources. For example, the wealthy consult physicians for reading help while the less wealthy contact schools. Men tend to seek help from no one while blacks avoid physicians and optometrists. Adult educators need to do more detailed population studies if the services they offer are to reach the adults who need them.

References

Asheim, L. What do adults read? *Adult reading, The fifty-fifth yearbook of the National Society for the Study of Education.* Chicago: University of Chicago Press, 1956.

Baldwin, T. F., Greenberg, B. S., Reeves, B., Thornton, L., & Wakshlag, J. *An ascertainment handbook for public broadcasting facilities.* Office of Communications Research Corporation, 1975.

Berelson, B. *The library's public.* New York: Columbia University Press, 1949.

Berelson, B., Bradshaw, F. R., & Waples, D. *What reading does to people.* Chicago: University of Chicago Press, 1940.

Burmeister, L. *Reading strategies for middle and secondary school teachers* (2nd ed.). Reading, Mass.: Addison-Wesley, 1978.

Cook, W. D. *Adult literacy education in the United States.* Newark, Del.: International Reading Association, 1977.

Farr, R., & Fay, L. *Then and now: Reading achievement in Indiana (1944-45 and 1976).* Bloomington, Ind: Indiana University School of Education, 1978.

Fay, L. In perspective. *Secondary reading: Theory and application.* Monograph in Language and Reading Studies. Bloomington, Ind.: Indiana University School of Education Publications Office, 1978.

Fisher, J. A. The volume, interests and tastes of adult readers. In E. P. Bliesmer & R. C. Staiger (Eds.), *Problems, programs, and projects in college-adult reading, eleventh yearbook of the National Reading Conference.* Milwaukee, Wis.: The National Reading Conference, 1962.

Ennis, P. H. *Adult book reading in the United States: A preliminary report* (National Opinion Research Center Rep. No. 105). Chicago: National Opinion Research Center, 1965.

Gallup, G. *The Gallup poll.* New York: American Institute of Public Opinion, 1969.

Gallup Organization Inc. *The role of libraries in America.* Frankfort, Ky.: Department of Library and Archives, 1976.

Gray, W. S. Sociology of reading. *Encyclopedia of educational research* (3rd ed.). (C. W. Harris, Ed.) New York: Macmillan, 1960, 1088-1096.

Gray, W. S., & Leary, B. E. *What makes a book readable*. Chicago: University of Chicago Press, 1935.

Gray, W. S., & Munroe, R. *The reading interests and habits of adults*. New York: Macmillan, 1930.

Gray, W. S., & Rogers, B. *Maturity in reading*. Chicago: University of Chicago Press, 1956.

Hanson, H. S. The impact of home literacy environment on reading attitude. *Elementary English*, 1969, *46*, 17-24.

Hovland, C., & Rosenberg, M. J. (Eds.). *Attitude organization and change*. New Haven: Yale University Press, 1960.

Krathwohl, D., Bloom, R. B., & Masia, B. (Eds.). *Taxonomy of educational objectives: The affective domain*. New York: McKay, 1964.

Lamme, L., & Olstead, P. *Family reading habits and children's progress in reading*. Paper presented at the annual meeting of the International Reading Association, Miami Beach, May 2-6, 1977. (ERIC Documents Reproduction No. ED 138 963)

Lazarsfeld, P. F., & Kenda, P. L. *Radio listening in America*. New York: Prentice-Hall, 1948.

Link, H. C., & Hopf, H. *People and books*. New York: Book Industry Committee of the Book Manufacturers' Institute, 1946.

Mann, P. H., & Burgoyne, J. L. *Books and reading*. London: Andre Deutsch Limited, 1969.

Meade, E. L. Reading: The first R—A point of view. *Reading World*, 1973, *12*, 169-180.

Mikulecky, L. J. *The developing, field testing and initial norming of a secondary/adult level reading attitude measure that is behaviorally oriented and based on Krathwohl's taxonomy of the affective domain*. Unpublished doctoral dissertation. University of Wisconsin-Madison, 1976.

Newman, D. K. Learning without earning. *Change*, March 1978, 38-43.

Nie, N. H., Hull, C. H., Jenkins, J. G., Steinbrenner, K., & Bent, D. H. *Statistical package for the social sciences* (2nd ed.) New York: McGraw-Hill, 1975.

Parsons, R. B. *A study of adult reading*. Unpublished master's dissertation. University of Chicago, 1923.

Roos, E. Literature in the junior high. *English Journal*, 1955, *44*, 141.

Sharon, A. What do adults read? *Reading Research Quarterly*, 1973-74, *9*(2), 148-169.

Smith, C., Smith, S., & Mikulecky, L. *Teaching reading in secondary school content subjects*. Chicago: Holt, Rinehart, & Winston, 1978.

Sticht, T. G. (Ed.). *Reading for working: A functional literacy*. Alexandria, Va.: Human Resources Research Organization, 1975.

Tuinman, J., Rowls, M., & Farr, R. Reading achievement in the United States: Then and now. *The Journal of Reading*, 1976, *19*, 455-464.

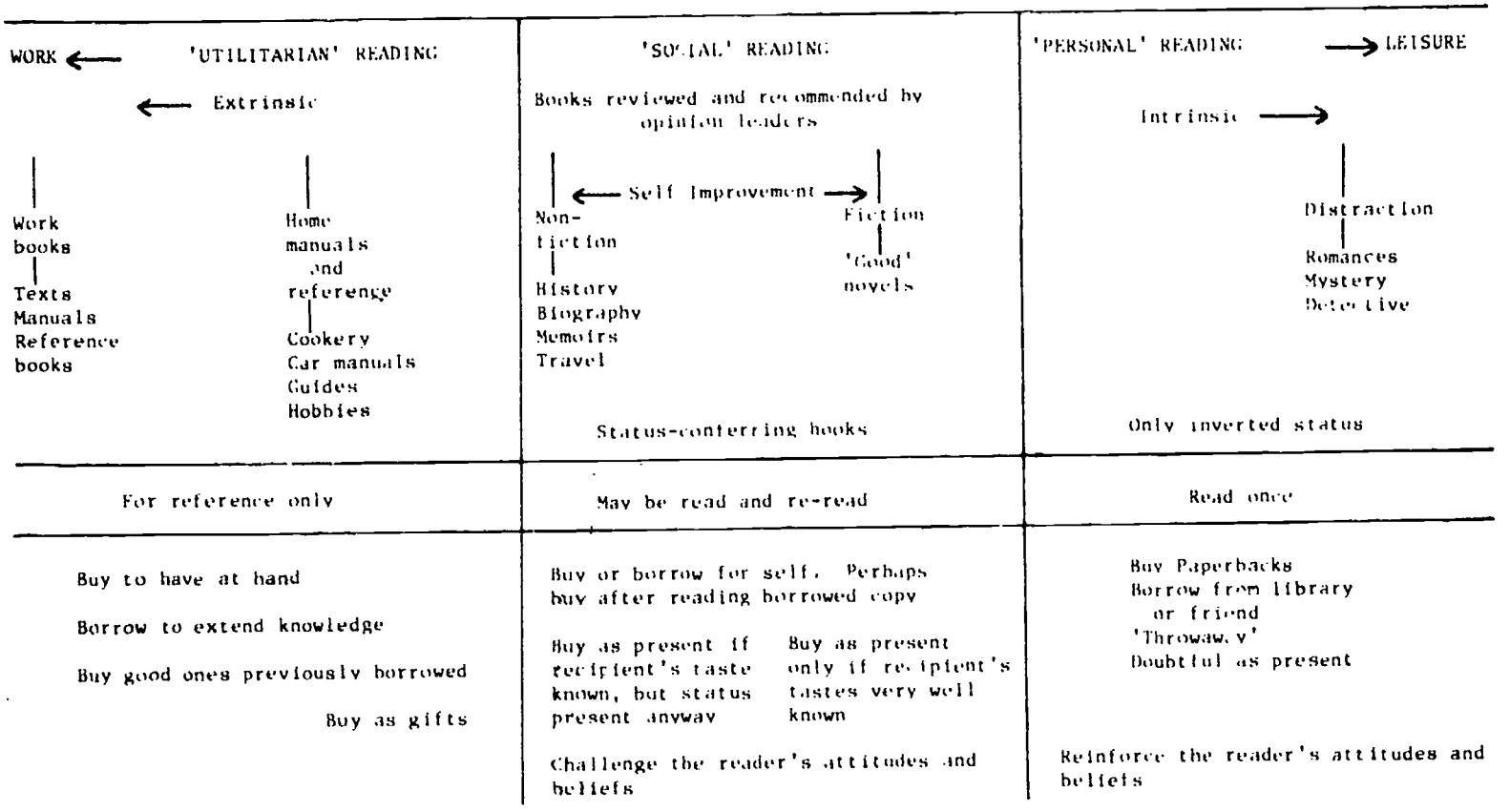
Waples, D. *People and print* Chicago: University of Chicago Press, 1936.

Waples, D., & Tyler, R. W. *What people want to read about.* Chicago: University of Chicago Press, 1931.

Weber, R. M. Adult illiteracy in the United States. In Carol & Chall (Eds.), *Toward a literate society.* New York: McGraw-Hill, 1975.

Yankelovich, Skelly, & White *Excerpt of selected findings from the consumer study on reading and book purchasing.* The Book Industry Study Group, 1978.

Appendix A
Mann-Burgoyne Sociological Model for the Analysis of Leisure Book Reading



Reproduced from *Books and Reading* (p. 68) by Mann and Burgoyne, published by Andre Deutsch (copyright, Peter H. Mann, 1969).

Appendix B
Norming Guidelines for the Mikulecky Behavioral Reading Attitude Measure and Stages of Krathwohl's Taxonomy as Reflected by Mikulecky Behavioral Reading Attitude Measure

Norming Guidelines for the Mikulecky Behavioral Reading Attitude Measure

(Jr. and Sr. High School Populations in Urban, Suburban, and Rural Settings)

Level	Urban				Suburban				Rural			
	N	Mean	Range	S.D.	N	Mean	Range	S.D.	N	Mean	Range	S.D
Jr.	127	55.93	27-90(63)	12.11	276	59.60	25-98(73)	14.53	182	60.81	22-92(70)	13.91
Sr.	332	55.24	20-90(70)	12.51	144	58.29	24-95(71)	15.55	190	59.28	29-97(68)	15.17

Attitude Bands for Junior and Senior High School by Location

Attitude Level	Urban		Suburban		Rural	
	Jr. High	Sr. High	Jr. High	Sr. High	Jr. High	Sr. High
Above Average	66-100	62-100	68-100	67-100	69-100	68-100
Average	53-65	59-61	52-67	50-66	54-68	52-67
Below Average	20-52	20-48	20-51	20-49	20-53	20-51

Stages of Krathwohl's Taxonomy as Reflected by Mikulecky Behavioral Reading Attitude Measure Items

Stage I (Attending) of the taxonomy is reflected by items 1,3,5,7. Each items provides from 1 to 5 points. A perfect score at this stage would be 4 items x 5 points = 20 points. A student can be said to have attained a stage if he/she has 75% of the possible points at that stage. By interpreting items and stages, a deeper understanding of a student's reading attitude is possible.

Krathwohl Stages	Items (1-5 points possible each item)	Criterion Score (75 percent of possible points)
I. Attending: The individual is generally aware of reading and tolerant of it.	1,3,5,7	15 pts.
II. Responding: The individual is willing to read under certain circumstances. He or she begins to choose and occasionally enjoy reading.	11,14,16	11 pts.
III. Valuing: the individual begins to accept the worth of reading as a vlaue to be preferred and even to extend to others.	13,15,17,18,19 20	23 pts.
IV. Organization: For the individual, reading is part of an organized value system and is so habitual that it is almost "instinctive."	9,10,12	11 pts.
V. Characterization: For the individual, reading is so much a part of life that both the reader and others see reading as crucial to this person.	2,4,6,8	15 pts.

Appendix C
1970 U.S., Indiana, and Anderson Census Information

Anderson, Indiana, was chosen as the target city for the current study because of its close correlation to national normal standards. The following 1970 census information clearly indicates this similarity and validates the selection.[1]

Population Percentages

	Female	Male	White	Black	18/over	65/over
USA	51.3%	48.7%	88.8%	11.2%	65.6%	9.9%
IND.	51.3%	48.7%	93.1%	6.9%	64.4%	9.5%
AND.	52.3%	47.7%	90.6%	9.4%	66.1%	9.6%

In relation to percentages of each sex, of each race, of citizens 18 years of age and over, and 65 years of age and over, census figures reveal Anderson to be representative of both Indiana and the U.S. at large. Note the number of blacks in Anderson (9.4%).more closely reflects the percentage of blacks in the U.S. (11.2%) than does the state of Indiana (6.9%).

Anderson data for median age, birth rate, and death rate are again similar to state and national figures.

Age, Birth, Death Comparison

	Total Pop.	Median Age	Birth Rate	Death Rate	25/over
USA		28.3 yrs.	17.5 (per 1000)	9.5 (per 1000)	109,899,359
IND.	5,193,669	27.3 yrs.	17.9 (per 1000)	9.6 (per 1000)	2,746,414
AND.	70,853	27.8 yrs.	20.2 (per 1000)	9.8 (per 1000)	37,873

The median number of years of schooling for adults age 25 and over in Anderson is close to what the census figures show for Indiana and the U.S. The percentage of persons who have less than a total of five years of schooling is lower for both Anderson and Indiana than the percentage figure for the nation. At the other end of the scale, the number of persons in both Anderson and Indiana who have completed four years of college is fewer than the national average. Anderson, Indiana and U.S. percentages for those 25 years of age and above who have completed four years of high school are similar. At first glance these figures may seem low; however, one must remember that it was only in 1940 that "for the first time more than half (51%) of the 17 year-olds (in the U.S.) completed high school" (Fay, 1978). This group of adults in 1970 was 47 years of age. From this perspective these census figures for all adults age 25 and older, which show that only about 50% have completed high school, seem more reasonable.

[1] The census information was obtained from U.S. Bureau of the Census, *County and City Data Book, 1972* (A Statistical Abstract Supplement) U.S. Government Printing Office, Washington, D.C., 1973.

School Years Completed: Adults Age 25+

	Median	Less than 5	4 years high school	4 years college
USA	12.1 yrs.	5.5%	52.3%	10.7%
IND.	12.1 yrs.	3.2%	52.9%	8.3%
AND.	12 yrs.	3.5%	50.2%	7.3%

In Anderson there were somewhat fewer persons earning less than $5,000 than were earning less than that amount on the national scale in 1970. Additionally, there were also fewer persons earning more than $25,000 a year in Anderson compared to national figures. One must remember that while the figures show Anderson income figures to be quite representative of both Indiana and the country as a whole in 1970, such city, state, and national percentages have changed greatly with the roughly 54% inflation rate between 1971 and 1977.

Income

	<3,000	3,000-4,999	5,000-9,999	10,000-14,000	15,000-24,000	>25,000
USA	10.3%	10.0%		26.6%	16.0%	4.6%
IND.	7.8%	8.4%	34.1%	30.4%	15.9%	3.5%
AND.	7.0%	8.5%	35.9%	29.3%	17.0%	2.4%

The median income for all families in Anderson was very close to both Indiana and national averages. While whites in Anderson had median incomes very close to national norms, blacks in Anderson obtained median incomes somewhat higher than national norms.

Median Income

	All Families	White	Black	Per Capita Money Income
USA	$9,586	$ 9,957	$6,063	$3,119
IND.	$9,966	$10,096	$7,904	$3,070
AND.	$9,811	$ 9,983	$7,983	$3,237

Appendix D
Telephone Survey

Hello—

My name is . . . . . , and I'm working with Dr. Larry Mikulecky of the School of Education, Indiana University. We're doing a telephone survey concerning adult reading habits. The information from this survey will be used to help make changes in adult education programs at all levels and the programs of some high schools. (Are you over 18?) If you don't mind, I'd appreciate a few minutes of your time to ask you some questions about your reading habits. If you wish, the results of the survey will be made available to you when it is completed.

The first series of questions describes people in a variety of situations. For example, listen to this description:

> You receive a book for a Christmas present. You start the book, but decide to stop halfway through.

If that description is very like you, I want you to give the description a score of 5. If the description isn't like you at all, if it is *very* unlike you, give it a score of 1. If the description is unlike you, give it a score of 2; if it is between being unlike you and like you, give it a score of 3; if the description is like you, give it a score of 4.

So what score would you give the following description? (Reread from above.)

(Repeat scores and point meanings for the first few items.)

Okay, the next item is . . . (begin survey):

1. You walk into the office of a doctor or dentist and notice that there are magazines set out.

   Very unlike me 1 2 3 4 5 Very like me

2. People have made jokes about your reading in unusual circumstances or situations.

   Very unlike me 1 2 3 4 5 Very like me

3. You are at a shopping center where you've been several times. Someone comes up to you and asks you where books and magazines are sold. You are able to tell the person where to find them.

   Very unlike me 1 2 3 4 5 Very like me

4. You feel very uncomfortable because emergencies have kept you away from reading for a couple of days.

   Very unlike me 1 2 3 4 5 Very like me

5. You are waiting for a friend in an airport or supermarket and find yourself leafing through the magazines and paperback books.

   Very unlike me 1 2 3 4 5 Very like me

6. If a group of acquaintances would laugh at you for always being buried in a book you'd know it's true and wouldn't mind much at all.

   Very unlike me 1 2 3 4 5 Very like me

7. You are tired of waiting to see the dentist, so you start to page through a magazine.

   Very unlike me 1 2 3 4 5 Very like me

8. People who are regular readers often ask your opinion about new books.

   Very unlike me 1 2 3 4 5 Very like me

9. One of your first impulses is to "look it up" whenever there is something you don't know or whenever you are going to start something new.

   Very unlike me 1 2 3 4 5 Very like me

10. Even though you are a very busy person, there is somehow always time for reading.

    Very unlike me 1 2 3 4 5 Very like me

11. You've finally got some time alone in your favorite chair on a Sunday afternoon. You see something to read and decide to spend a few minutes reading just because you feel like it.

    Very unlike me 1 2 3 4 5 Very like me

12. You tend to disbelieve and be a little disgusted by people who repeatedly say they don't have time to read.

    Very unlike me 1 2 3 4 5 Very like me

13. You find yourself giving special books to friends or relatives as gifts.

    Very unlike me 1 2 3 4 5 Very like me

14. At Christmas time, you look into the display window of a bookstore and find yourself interested in some books and uninterested in others.

    Very unlike me 1 2 3 4 5 Very like me

15. Sometimes you find yourself so excited by a book that you try to get friends to read it.

    Very unlike me 1 2 3 4 5 Very like me

16. You've just finished reading a story, and you settle back for a moment to sort of enjoy and remember what you've just read.

    Very unlike me 1 2 3 4 5 Very like me

17. You *choose* to read non-required books and articles fairly regularly (a few times a week).

    Very unlike me 1 2 3 4 5 Very like me

18. Your friends would not be at all surprised to see you buying or borrowing a book.

    Very unlike me 1 2 3 4 5 Very like me

19. You have just gotten comfortably settled in a new city. Among the things you plan to do are to check out the library and the bookstores.

    Very unlike me 1 2 3 4 5 Very like me

20. You've just heard about a good book but haven't been able to find it. Even though you're tired, you look for it in one more book store.

    Very unlike me 1 2 3 4 5 Very like me

21. When you were young, you read a great deal about some topics.

    Very unlike me 1 2 3 4 5 Very like me

22. The reading demands of your job (or household responsibilities if a housewife) make you feel uncomfortable.

    Very unlike me 1 2 3 4 5 Very like me

23. You often go to books or manuals for information about problems on your job.

    Very unlike me 1 2 3 4 5 Very like me

24. What you learned in school has been very valuable in your work and in your life.

    Very unlike me 1 2 3 4 5 Very like me

25. As a reader, you consider yourself to be (1) Poor, (2) Below Average, (3) Average, (4) Above Average or (5) Excellent.

    1 2 3 4 5

Now, I am going to ask you to rate from Very Unlike You to Very Like You, on a scale from 1 to 5, your reasons for reading.

26. You read—to find out how to get something done.

    Very unlike me 1 2 3 4 5 Very like me

27. You read—to keep up with what's going on.

    Very unlike me 1 2 3 4 5 Very like me

28. You read—to discuss what you have read with friends.

    Very unlike me 1 2 3 4 5 Very like me

29. You read—for relaxation and personal enjoyment.

    Very unlike me 1 2 3 4 5 Very like me

30. You read—to study for personal and occupational advancement.

Very unlike me 1 2 3 4 5 Very like me

31. The main types of reading I do are:

&

32. (Check off their main types. First choice: 31. Second choice: 32.)

a. Job-related reading
b. Light book reading
c. Magazines
d. Newspapers
e. Textbook reading
f. Other (be sure to specify in notes)

33. The way I get most of my reading material is. . . .

&

34. (Check off main sources. First choice: 33. Second choice: 34.)

a. From subscriptions and book clubs
b. to borrow from friends and relatives
c. as gifts
d. from the library
e. from stores
f. other (be sure to specify in notes)

35. The ways I find out about new things to read are. . . .

&

36. (Check off top two ways. Primary way: 35. Second way: 36.)

a. from advertisements
b. suggestion from friends and relatives
c. from libraries
d. from browsing books
e. from teachers
f. other

37. If I had trouble reading, I would go first for help to. . . . (Check off answer.)

a. A church or community organization.
b. A friend or relative.
c. A library.
d. A school (high school, university or other).
e. A teacher (present or former).
f. No one, I'd try to work it out on my own.
g. A doctor or optometrist.
h. Other.

38. Compared to other people your age, your understanding or comprehension of things you read is (1) Poor, (2) Below Average, (3) Average, (4) Above Average, (5) Excellent.

1 2 3 4 5

39. Compared to other people your age, your rate or speed of reading is (1) Poor, (2) Below Average, (3) Average, (4) Above Average, (5) Excellent.

1 2 3 4 5

40. Sex
1.=M
2.=F

41. Race
1. White
2. Black
3. Spanish
4. Oriental
5. American Indian
6. Other

42. Family Income
1. Under $3,000 per year
2. $3,000-$5,000 per year
3. $5,000-$10,000 per year
4. $10,000-$20,000 per year
5. $20,000 and above

43. Employment status
1. Work full time
2. Work part time
3. Housewife
4. Unemployed
5. Student
6. Retired

44. How much schooling have you finished?
1. Less than high school
2. High school
3. Some post high school
4. College
5. Graduate work

45. I have enrolled in the following number of classes (adult education or college) since leaving school:

0 1 2 3 4 5 or more 6 (still in school)

46. During a usual day the amount of time I spend reading (books, letters, memoranda, pamphlets, reports, etc.) for my job is:

Record answer in minutes
2 hours (120 minutes)
3 hours (180 minutes)
4 hours (240 minutes)
5 hours (300 minutes)
6 hours (360 minutes)
7 hours (420 minutes)
8 hours (480 minutes)

47. During a usual day, the *total* amount of time I spend reading (job non-job) is:

Record answer in minutes
2 hours (120 minutes)
3 hours (180 minutes)
4 hours (240 minutes)
5 hours (300 minutes)
6 hours (360 minutes)
7 hours (420 minutes)
8 hours (480 minutes)

Appendix E
Data Analysis

Table 1
Population Description: Each Demographic Variable by Sex

	N=M			N=F		
	N	%TOT*	%GR	N	%TOT	%GR
Race						
W	109	38.4	92.4	153	53.9	92.2
B	8	2.8	6.8	12	4.2	7.2
O	1	.4	.8	1	.4	.6
Total'	118	41.6	100.0	166	58.5	100.0
Education						
<H.S.	14	5.0	11.9	27	9.5	16.3
H.S.	34	12.0	28.8	54	19.0	32.5
Post H.S.	42	14.8	35.6	29	17.3	29.5
College	16	5.6	13.6	26	9.2	15.7
Grad.	12	4.2	10.2	10	3.5	6.0
Total	118	41.6	100.0	166	58.5	100.0
Family Income						
<3,000	2	.7	1.7	11	3.9	6.6
3-5,000	4	1.4	3.4	13	4.6	7.8
5-10,000	9	3.2	7.6	30	10.6	18.1
10-20,000	56	19.7	47.5	56	19.7	33.7
>20,000	41	14.4	34.7	45	15.8	27.1
N.R.	6	2.1	5.1	11	3.9	6.6
Total	118	41.5	100.0	166	58.5	100.0
Employment						
FT	89	31.3	75.4	52	18.3	31.3
PT	4	1.4	3.4	16	5.6	9.6
HW	0	0	0	49	17.3	30.0
UN	1	.4	.8	8	2.8	4.8
STU	17	6.0	14.4	19	6.7	11.5
RET	7	2.5	5.9	22	7.7	13.3
Total	118	41.6	100.0	166	58.4	100.0

*Percentage of the total group.

'Percentage of each category, e.g., White, or grad., or >20,000, or full time employed.

Table 2
Population Description: Each Demographic Variable by Race

	N=W			N=B			N=O		
	N	%TOT*	%GR*	N	%TOT	%GR	N	%TOT	%GR
Sex									
M	109	38.4	41.6	8	2.8	40.0	1	.4	50.0
F	153	53.9	58.4	12	4.2	60.0	1	.4	50.0
Total	262	92.3	100.0	20	7.0	100.0	2	.8	100.0
Education									
<H.S.	34	12.0	13.0	6	2.1	30.0	1	.4	50.0
H.S.	85	29.9	32.4	3	1.1	15.0	0	0	0
Post H.S.	82	28.9	31.3	8	2.8	40.0	1	.4	50.0
College	40	14.1	15.3	2	.7	10.0	0	0	0
Grad.	21	7.4	8.0	1	.4	5.0	0	0	0
Total	262	92.3	100.0	20	7.1	100.0	2	.8	100.0
Family Income									
<3,000	10	3.5	3.8	2	.7	10.0	1	.4	50.0
3-5,000	15	5.3	5.7	2	.7	10.0	0	0	0
5-10,000	35	12.3	13.4	3	1.1	15.0	1	.4	50.0
10-20,000	103	36.3	39.3	9	3.2	45.0	0	0	0
>20,000	83	29.2	31.7	3	1.1	15.0	0	0	0
N .	16	5.6	6.1	1	.4	5.0	0	0	0
Total	262	92.2	100.0	20	7.2	100.0	2	.8	100.0
Employment									
FT	129	45.4	49.2	12	4.2	60.0	0	0	0
PT	19	6.7	7.3	0	0	0	1	.4	50.0
HW	47	16.5	17.9	2	.7	10.0	0	0	0
UN	9	3.2	3.4	0	0	0	0	0	0
STU	30	10.6	11.5	5	1.8	25.0	1	.4	50.0
RET	28	9.9	10.7	1	.4	5.0	0	0	0
Total	262	92.3	100.0	20	7.1	100.0	2	.8	100.0

*Percentage of the total group.

•Percentage of each category, e.g., white, or grad., or $20,000+, or full time employed.

Table 3
Population Description: Each Demographic Variable by Education

	N=<H.S.			N=H.S.			N=Post H.S.			N=College			N=Grad.		
	N	%TOT*	%GR+	N	%TOT	%GR	N	%TOT	%GR	N	%TOT	%GR	N	%TOT	%GR
Sex															
M	13	5.0	32.5	34	12.0	38.6	42	14.8	46.2	16	5.6	38.1	12	4.2	54.5
F	27	9.5	67.5	54	19.0	61.4	49	17.3	53.8	26	9.2	61.9	10	3.5	45.5
Total	40	14.5	100.0	88	31.0	100.0	91	32.1	100.0	42	14.8	100.0	22	7.7	100.0
Race															
W	33	11.6	82.5	85	29.9	96.6	82	28.9	90.1	40	14.1	95.2	21	7.4	95.5
B	6	2.1	15.0	3	1.1	3.4	8	2.8	8.8	2	.7	4.8	1	.4	4.5
O	1	.4	2.5	0	0	0	1	.4	1.1	0	0	0	0	0	0
Total	40	14.1	100.0	88	31.0	100.0	91	32.1	100.0	42	14.8	100.0	22	7.8	100.0
Family Income															
-3,000	4	1.4	10.0	5	1.8	5.7	2	.7	2.2	2	.7	4.8	0	0	0
3-5,000	5	1.8	12.5	6	2.1	6.8	3	1.1	3.3	3	1.1	7.1	0	0	0
5-10,000	9	3.2	22.5	10	3.5	11.4	13	4.6	14.3	2	.7	4.8	5	1.8	22.7
10-20,000	13	4.6	30.0	38	13.4	43.2	42	14.8	46.2	9	3.2	21.4	10	3.5	45.5
-?0,000	6	2.1	15.0	23	8.1	26.1	26	9.2	28.6	24	8.5	57.1	7	2.5	31.8
N.R.	4	1.4	10.0	6	2.1	6.8	5	1.8	5.5	2	.7	4.8	0	0	0
Total	41	14.5	100.0	88	31.0	100.0	91	32.2	100.0	42	14.9	100.0	22	7.8	100.0
Employment															
FT	16	5.6	40.0	43	15.1	48.9	46	16.2	50.5	22	7.7	52.4	14	4.9	63.6
PT	0	0	0	9	3.2	10.2	6	2.1	6.6	3	1.1	7.1	2	.7	9.1
HW	7	2.5	17.5	24	8.5	27.3	7	2.5	7.7	9	3.2	21.4	2	.7	9.1
UN	2	.7	5.0	4	1.4	4.5	2	.7	2.2	1	.4	2.4	0	0	0
STU	5	1.8	12.5	2	.7	2.3	25	8.8	27.5	3	1.1	7.1	0	0	0
RET	10	3.5	25.0	6	2.1	6.8	5	1.8	5.5	4	1.4	9.5	4	1.4	18.2
Total	40	14.1	100.0	88	31.0	100.0	91	32.1	10	42	14.9	100.0	22	7.7	100.0

*Percentage of the total group.

+Percentage of each category, e.g., white, or grad., or $20,000+, or full time employed.

Table 4
Population Description: Each Demographic Variable by Family Income

	N=<3,000			N=3-5,000			N=5-10,000			N=10-20,000			N=>20,000		
	N	%TOT*	%GR*	N	%TOT	%GR	N	%TOT	%GR	N	%TOT	%GR	N	%TOT	%GR
Sex															
M	2	.7	15.4	4	1.4	23.5	9	3.2	23.1	56	19.7	50.0	41	14.4	47.7
F	11	3.9	84.6	13	4.6	76.5	30	10.6	76.9	56	19.7	50.0	45	15.8	52.3
Total	13	4.6	100.0	17	6.0	100.0	39	13.8	100.0	112	39.4	100.0	86	30.2	100.0
Race															
W	10	3.5	76.9	15	5.3	88.2	35	12.3	89.7	103	36.3	92.0	83	29.2	96.5
B	2	.7	15.4	2	.7	11.8	3	1.1	7.7	9	3.2	8.0	3	1.1	3.5
O	1	.4	7.7	0	0	0	1	.4	2.6	0	0	0	0	0	0
Total	13	4.6	100.0	17	6.0	100.0	39	13.8	100.0	112	39.5	100.0	86	30.3	100.0
Education															
H.S.-	4	1.4	30.8	5	1.8	29.4	9	3.2	23.1	13	4.6	11.6	6	2.1	7.0
H.S.	5	1.8	38.5	6	2.1	35.3	10	3.5	25.6	38	13.4	33.9	23	8.1	26.7
Post H.S.	2	.7	15.4	3	1.1	17.6	13	4.6	33.3	42	14.8	37.5	26	9.2	30.2
College	2	.7	15.4	3	1.1	17.6	2	.7	5.1	9	3.2	8.0	24	8.5	27.9
Grad.	0	0	0	0	0	0	5	1.8	12.8	10	3.5	8.9	7	2.5	8.1
Total	13	4.6	100.0	17	6.1	100.0	39	13.8	100.0	112	39.5	100.0	86	30.4	100.0
Employment															
FT	1	.4	7.7	5	1.8	29.4	18	6.3	46.2	60	21.1	53.6	51	18.0	59.3
PT	1	.4	7.7	1	.4	5.9	3	1.1	7.7	10	3.5	8.9	5	1.8	5.8
HW	3	1.1	23.1	2	.7	11.8	6	2.1	15.4	17	6.0	15.2	15	5.3	17.4
UN	1	.4	7.7	0	0	0	1	.4	2.6	3	1.1	2.7	3	1.1	3.5
STU	4	1.4	30.8	3	1.1	17.6	3	1.1	7.7	15	5.3	13.4	9	3.2	10.5
RET	3	1.1	23.1	6	2.1	35.3	8	2.8	20.5	7	2.5	6.3	3	1.1	3.5
Total	13	4.8	100.0	17	6.1	100.0	39	13.8	100.0	112	39.5	100.0	86	30.5	100.0

*Percentage of the total group.

*Percentage of each category, e.g., white, or grad., or $20,000+, or full time employed.

Table 5
Population Description: Each Demographic Variable by Employment Status

	N=FT			N=PT			N=HW			N=UN			N=STU			N=RET		
	N	%TOT*	%GR*	N	%TOT	%GR	N	%TOT	%GR	N	%TOT	%GR	N	%TOT	%GR	N	%TOT	%GR
Sex																		
M	89	31.3	63.1	4	1.4	20.0	0	0	0	1	.4	11.1	17	6.0	47.2	7	2.5	24.1
F	52	18.3	36.9	16	5.6	80.0	49	17.3	100.0	8	2.8	88.9	19	6.7	52.8	22	7.7	75.9
Total	141	49.6	100.0	20	7.0	100.0	49	17.3	100.0	9	3.2	100.0	36	12.7	100.0	29	10.2	100.0
Race																		
W	129	45.4	91.5	19	6.7	95.0	47	16.5	95.9	9	3.2	100.0	30	10.6	83.3	28	9.9	96.6
B	12	4.2	8.5	0	0	0	2	.7	4.1	0	0	0	5	1.8	13.9	1	.4	3.4
O	0	0	0	1	.4	5.0	0	0	0	0	0	0	1	.4	2.8	0	0	0
Total	141	49.6	100.0	20	7.1	100.0	49	17.2	100.0	9	3.2	100.0	36	12.8	100.0	29	10.3	100.0
Education																		
<H.S.	16	5.6	11.3	0	0	0	7	2.5	14.3	2	.7	22.2	5	1.8	14.3	10	3.5	34.5
H.S.	43	15.1	30.5	9	3.2	45.0	24	8.5	49.0	4	1.4	44.4	2	.7	5.7	6	2.1	20.7
Post H.S.	46	16.2	32.6	6	2.1	30.0	7	2.5	14.3	2	.7	22.2	25	8.8	71.4	5	1.8	17.2
College	22	..7	15.6	3	1.1	15.0	9	3.2	18.4	1	.4	11.1	3	1.1	8.6	4	1.4	13.8
Grad.	14	4.9	9.9	2	.7	10.0	2	.7	4.1	0	0	0	0	0	0	4	1.4	13.8
Total	141	49.5	100.0	20	7.1	100.0	49	17.4	100.0	9	3.2	100.0	35	12.4	100.0	29	10.2	100.0
Family Income																		
<3,000	1	.4	.7	1	.4	5.0	3	1.1	6.1	1	.4	11.1	4	1.4	11.1	3	1.1	10.3
3-5,000	5	1.8	3.5	1	.4	5.0	2	.7	4.1	0	0	0	3	1.1	8.3	6	2.1	20.7
5-10,000	18	6.3	12.8	3	1.1	15.0	6	2.1	12.2	1	.4	11.1	3	1.1	8.3	8	2.8	27.6
10-20,000	60	21.1	42.6	10	3.5	50.0	17	6.0	34.7	3	1.1	33.3	15	5.3	41.7	7	2.5	24.1
>20,000	51	18.0	36.2	5	1.8	25.0	15	5.3	30.6	3	1.1	33.3	9	3.2	25.0	3	1.1	10.3
N.R.	6	2.1	4.3	0	0	0	6	2.1	12.2	1	.4	11.1	2	.7	5.6	2	.7	6.9
Total	141	49.7	100.0	20	7.2	100.0	49	17.3	100.0	9	3.2	100.0	36	12.8	100.0	29	9.8	100.0

*Percentage of the total group.

*Percentage of each category, e.g., white, or grad., or $20,000+, or full time employed.

Table 6
Results of Analyses of Variance and *post hoc* Scheffé Tests of I21 by Each Demographic Variable

I21. When you were young, you read a great deal about some topics.
(very unlike me) 1 2 3 4 5 (very like me)

All Cases	N	Mean	S.D.	F-Ratio	*Post Hoc* Test of Significance
Sex					
M	118	3.91	1.44	.1754	Not Significant
F	166	3.98	1.32		
Race					
W	262	3.92	1.38	.65	Not Significant
B	20	4.20	1.20		
O	2	5.0	0		
Education					
Less Than High School	40	3.70	1.59	.68	Not Significant
High School	88	3.86	1.38		
Post High School	91	4.03	1.34		
College	42	4.14	1.26		
Graduate Work	22	4.05	1.25		
Family Income					
Less Than 3,000	13	3.62	1.45	1.0052	Not Significant
3-5,000	17	3.41	1.54		
5-10,000	39	4.15	1.23		
10-20,000	112	3.99	1.37		
Greater Than 20,000	86	4.00	1.35		
No Response	17	3.71	1.53		
Employment					
Full Time	144	3.96	1.42	.74	Not Significant
Part Time	26	4.05	1.28		
Housewife	49	3.73	1.40		
Unemployed	9	4.56	.88		
Student	36	3.83	1.40		
Retired	29	4.10	1.23		

*p<.05
**p<.01
***p<.001

Table 7
Results of Analyses of Variance and *post hoc* Scheffe Tests of I22 by Each Demographic Variable

I22. The reading demands of your job (or household responsibilities requiring reading if housewife) make you feel uncomfortable.
(very unlike me) 1 2 3 4 5 (very like me)

All Cases	N	Mean	S.D.	F-Ratio	F Test of Significance
Sex					
M	118	1.81	1.20	.3549	Not Significant
F	166	1.73	1.17		
Race					
W	262	1.68	1.11	6.59	***
B	20	2.70	1.56		
O	2	3.5	0		
Education					
Less Than High School	40	2.25	1.56	2.675	*
High School	88	1.60	.99		
Post High School	91	1.78	1.19		
College	42	1.64	1.07		
Graduate rk	22	1.59	.96		
Family Income					
Less Than 3,000	13	2.23	1.64	.9774	Not Significant
3-5,000	17	1.94	1.20		
5-10,000	39	1.79	1.13		
10-20,000	112	1.73	1.16		
Greater Than 20,000	86	1.63	1.03		
No Response	17	2.06	1.64		
Employment					
Full Time	141	1.70	1.21	2.07	*
Part Time	20	1.50	.83		
Housewife	49	1.65	1.09		
Unemployed	9	1.56	.88		
Student	36	2.44	1.36		
Retired	29	1.66	1.01		

*p<.05
**p<.01
***p<.001

Table 8
Results of Analyses of Variance and *post hoc* Scheffé Tests of I23 by Each Demographic Variable

I23. You often go to books or manuals for information about problems on your job. (very unlike me) 1 2 3 4 5 (very like me)

All Cases	N	Mean	S.D.	F-Ratio	*Post Hoc* Test of Significance
Sex					
M	118	3.68	1.56	5.33	*
F	166	3.23	1.61		
Race					
W	262	3.43	1.62	.1622	Not Significant
B	20	3.25	1.55		
O	2	4.00	0		
Education					
Less Than High School	40	2.98	1.66	1.54	Not Signific
High School	88	3.28	1.67		
Post High School	91	3.65	1.53		
College	42	3.52	1.60		
Graduate Work	22	3.64	1.50		
Family Income					
Less Than 3,000	13	3.15	1.57	1.52	Not Significant
3-5,000	17	3.41	1.62		
5-10,000	39	3.05	1.64		
10-20,000	112	3.56	1.52		
Greater Than 20,000	86	3.58	1.62		
No Response	17	2.71	1.86		
Employment					
Full Time	141	3.50	1.67	.68	Not Significant
Part Time	20	3.80	1.44		
Housewife	49	3.31	1.62		
Unemployed	9	3.11	1.76		
Student	36	3.42	1.38		
Retired	29	3.07	1.60		

*p<.05
**p<.01
***p<.001

Table 9
Results of Analyses of Variance and *post hoc* Scheffé Tests of I24 by Each Demographic Variable

I24. What you learned in school has been valuable in your work and in your life. (very unlike me) 1 2 3 4 5 (very like me)

All Cases	N	Mean	S.D.	F-Ratio	*Post Hoc* Test of Significance
Sex					
M	118	3.85	1.38	3.62	Not Significant
F	166	4.14	1.19		
Race					
W	262	4.03	1.28	1.06	Not Significant
B	20	4.0	1.26		
O	2	2.5	0		
Education					
Less Than High School	40	3.90	1.46	.78	Not Significant
High School	88	3.92	1.28		
Post High School	91	4.00	1.33		
College	42	4.26	.89		
Graduate Work	22	4.27	1.32		
Family Income					
Less Than 3,000	13	3.69	1.32	.34	Not Significant
3-5,000	17	4.18	1.42		
5-10,000	39	4.03	1.33		
10-20,000	112	4.07	1.25		
Greater Than 20,000	86	3.94	1.28		
No Response	17	4.12	1.27		
Employment					
Full Time	141	3.93	1.35	1.92	Not Significant
Part Time	20	3.80	1.28		
Housewife	49	4.29	1.14		
Unemployed	9	3.78	1.72		
Student	36	3.78	1.18		
Retired	29	4.52	.99		

*p<.05
**p<.01
***p<.001

Table 10
Results of Analyses of Variance and *post hoc* Scheffé Tests of I25 by Each Demographic Variable

I25. As a reader, you consider yourself to be
(poor) 1 2 3 4 5 (excellent)

All Cases	N	Mean	S.D.	F-Ratio	*Post hoc* Test of Significance
Sex					
M	118	3.39	.75	1.32	Not Significant
F	166	3.49	.75		
Race					
W	262	3.47	.76	.80	Not Significant
B	20	3.25	.64		
O	2	3.50	0		
Education					
Less Than High School	40	3.10	.81	11.14	***
High School	88	3.22	.63		
Post High School	91	3.56	.70		
College	42	3.74	.77		
Graduate Work	22	4.05	.65		
Family Income					
Less Than 3,000	13	3.23	.73	1.53	Not Significant
3-5,000	17	3.47	.80		
5-10,000	39	3.31	1.00		
10-20,000	112	3.38	.71		
Greater Than 20,000	86	3.60	.67		
No Response	17	3.59	.62		
Employment					
Full Time	141	3.33	.77	1.59	Not Significant
Part Time	20	3.45	.83		
Housewife	49	3.61	.70		
Unemployed	9	3.44	.73		
Student	36	3.61	.64		
Retired	29	3.55	.78		

*p<.05
**p<.01
***p<.001

Table 11
Results of Analyses of Variance and *post hoc* Scheffé Tests of I26 by Each Demographic Variable

I26. You read to find out how to get something done.
(very unlike me) 1 2 3 4 5 (very like me)

All Cases	N	Mean	S.D.	F-Ratio	Post Hoc Test of Significance
Sex					
M	118	4.14	1.13	4.85	*
F	166	3.82	1.29		
Race					
W	262	3.94	1.22	.37	Not Significant
B	20	4.15	1.46		
O	2	3.5	0		
Education					
Less Than High School	40	3.90	1.28	.49	Not Significant
High School	88	3.97	1.26		
Post High School	91	4.00	1.16		
College	42	3.76	1.36		
Graduate Work	22	4.18	1.14		
Family Income					
Less Than 3,000	13	3.77	.93	2.11	Not Significant
3-5,000	17	3.71	1.26		
5-10,000	39	3.72	1.17		
10-20,000	112	4.15	1.12		
Greater Than 20,000	86	4.01	1.26		
No Response	17	3.29	1.79		
Employment					
Full Time	141	4.03	1.25	1.35	Not Significant
Part Time	20	4.10	.91		
Housewife	49	4.06	1.265		
Unemployed	9	3.11	1.54		
Student	36	3.83	1.08		
Retired	29	3.72	1.33		

*p<.05
**p<.01
***p<.001

Table 12
Results of Analyses of Variance and *post hoc* Scheffé Tests of I27 by Each Demographic Variable

I27. You read to keep up with what's going on.
(very unlike me) 1 2 3 4 5 (very like me)

All Cases	N	Mean	S.D.	F-Ratio	Post Hoc Test of Significance
Sex					
M	118	4.17	1.02	.05	Not Significant
F	165	4.20	1.12		
Race					
W	261	4.17	1.09	.44	Not Significant
B	20	4.45	.998		
O	2	4.0	0		
Education					
Less Than High School	40	4.20	1.16	.92	Not Significant
High School	88	4.23	1.10		
Post High School	90	4.11	1.09		
College	42	4.05	1.08		
Graduate Work	22	4.55	.80		
Family Income					
Less Than 3,000	13	4.15	.90	.198	Not Significant
3-5,000	17	4.06	1.39		
5-10,000	39	4.10	.91		
10-20,000	112	4.17	1.15		
Greater Than 20,000	86	4.26	1.01		
No Response	17	4.06	1.56		
Employment					
Full Time	141	4.22	1.04	1.30	Not Significant
Part Time	20	4.45	.89		
Housewife	49	4.00	1.32		
Unemployed	9	4.11	1.54		
Student	16	3.89	1.08		
Retired	29	4.41	.98		

*p< .05
**p< .01
***p .001

Table 13
Results of Analyses of Variance and *post hoc* Scheffe Tests of I28 by Each Demographic Variable

128. You read to discuss what you have read with friends.
(very unlike me) 1 2 3 4 5 (very like me)

All Cases	N	Mean	S.D.	F-Ratio	*Post Hoc* Test of Significance
Sex					
M	118	3.03	1.30	7.98	**
F	166	3.48	1.33		
Race					
W	262	3.27	1.33	.97	Not Significant
B	20	3.70	1.34		
O	2	2.50	0		
Education					
Less Than High School	40	3.17	1.58	1.07	Not Significant
High School	88	3.16	1.29		
Post High School	91	3.52	1.29		
College	42	3.17	1.29		
Graduate Work	22	3.41	1.30		
Family Income					
Less Than 3,000	13	3.00	1.35	.82	Not Significant
3-5,000	17	3.59	1.50		
5-10,000	39	3.49	1.23		
10-20,000	112	3.25	1.35		
Greater Than 20,000	86	3.34	1.25		
No Response	17	2.88	1.65		
Employment					
Full Time	141	3.29	1.32	1.37	Not Significant
Part Time	20	3.25	1.29		
Housewife	49	3.08	1.32		
Unemployed	9	3.11	1.90		
Student	36	3.22	1.15		
Retired	29	3.85	1.41		

*p<.05
**p<.01
***p<.001

Table 14
Results of Analyses of Variance and *post hoc* Scheffé Tests of I29 by Each Demographic Variable

I29. You read for relaxation and personal enjoyment.
(very unlike me) 1 2 3 4 5 (very like me)

All Cases	N	Mean	S.D.	F-Ratio	Post Hoc Test of Significance
Sex					
M	118	3.75	1.43	42.56	***
F	166	4.62	.798		
Race					
W	262	4.28	1.15	.86	Not Significant
B	20	4.00	1.56		
O	2	4.00	0		
Education					
Less Than High School	40	4.30	1.18	.25	Not Significant
High School	88	4.31	1.19		
Post High School	91	4.18	1.23		
College	42	4.29	1.09		
Graduate Work	22	4.41	1.14		
Family Income					
Less Than 3,000	13	4.38	.87	.94	Not Significant
3-5,000	17	4.65	.86		
5-10,000	39	4.28	1.12		
10-20,000	112	4.10	1.29		
Greater Than 20,000	86	4.35	1.11		
No Response	17	4.35	1.32		
Employment					
Full Time	141	4.01	1.36	5.67	***
Part Time	20	4.55	.69		
Housewife	49	4.80	.54		
Unemployed	9	4.44	.88		
Student	36	3.92	1.23		
Retired	29	4.76	.79		

*p< .05
**p< .01
***p< .001

Table 15
Results of Analyses of Variance and *post hoc* Scheffé Tests of I30 by Each Demographic Variable

I30. You read to study for personal and occupational advancement.
(very unlike me) 1 2 3 4 5 (very like me)

All Cases	N	Mean	S.D.	F-Ratio	*Post Hoc* Test of Significance
Sex					
M	118	3.70	1.48	2.40	Not Significant
F	166	3.42	1.51		
Race					
W	262	3.48	1.52	1.55	Not Significant
B	20	4.15	1.35		
O	2	4.5	0		
Education					
Less Than High School	40	3.35	1.61	4.52	**
High School	88	3.07	1.51		
Post High School	91	3.98	1.40		
College	42	3.67	1.34		
Graduate Work	22	3.68	1.67		
Family Income					
Less Than 3,000	13	3.69	1.65	.50	Not Significant
3-5,000	17	3.24	1.48		
5-10,000	39	3.41	1.65		
10-20,000	112	3.61	1.52		
Greater Than 20,000	86	3.62	1.41		
No Response	17	3.18	1.70		
Employment					
Full Time	141	3.55	1.53	4.93	***
Part Time	20	3.80	1.20		
Housewife	49	3.29	1.56		
Unemployed	9	2.67	1.66		
Student	36	4.44	.81		
Retired	29	2.90	1.70		

*p<.05
**p<.01
***p<.001

Table 16

Subject Responses to I31. The main types of reading I do are. . . (First Choice) by Demographic Variables

	Job Related			Light Book			Magazines			Newspapers			Textbooks			Religious			Other		
	N	%TOT*	%GR†	N	%TOT	%GR	N	%TOT	%GR	N	%TOT	%GR	N	%TOT	%GR	N	%TOT	%GR	N	%TOT	%GR
Sex																					
M	30	10.6	75.0	16	5.6	26.7	27	9.5	44.3	18	6.3	28.1	20	7.0	60.6	3	1.1	17.6	4	1.4	44.4
F	10	3.5	25.0	44	15.5	73.3	34	12.0	55.7	46	16.2	71.9	13	4.6	39.4	14	4.9	82.4	5	1.8	55.6
Total	40	14.1	100.0	60	21.1	100.0	61	21.5	100.0	64	22.5	100.0	33	11.6	100.0	17	6.0	100.0	9	3.2	100.0
Race																					
W	38	13.4	95.0	58	20.4	96.7	55	19.4	90.2	59	20.8	92.2	28	9.9	84.8	15	5.3	88.2	9	3.2	100.0
B	1	.4	2.5	2	.7	3.3	5	1.8	8.2	5	1.8	7.8	5	1.8	15.2	2	.7	11.8	0	0	0
O	1	.4	2.5	0	0	0	1	.4	1.6	0	0	0	0	0	0	0	0	0	0	0	0
Total	40	14.2	100.0	60	21.1	100.0	61	21.6	100.0	64	22.6	100.0	33	11.7	100.0	17	6.0	100.0	9	3.2	100.0
Education																					
<H.S.	6	2.1	15.0	4	1.4	6.7	10	3.5	16.4	14	4.9	22.2	2	.7	6.1	4	1.4	23.5	0	0	0
H.S.	6	2.1	15.0	25	8.8	41.7	21	7.4	34.4	22	7.8	34.9	3	1.1	9.1	9	3.2	52.9	2	.7	22.2
Post H.S.	12	4.2	30.0	18	6.4	30.0	19	6.7	31.1	14	4.9	22.2	24	8.5	72.7	1	.4	5.9	3	1.1	33.3
College	8	2.8	20.0	9	3.2	15.0	8	2.8	13.1	9	3.2	14.3	3	1.1	9.1	2	.7	11.8	3	1.1	33.3
Grad.	8	2.8	20.0	4	1.4	6.7	3	1.1	4.9	4	1.4	6.3	1	.4	3.0	1	.4	5.9	1	.4	11.1
Total	40	14.0	100.0	60	21.2	100.0	61	21.5	100.0	63	22.2	100.0	33	11.8	100.0	17	6.1	100.0	9	3.3	100.0
Family Income																					
<3,000	1	.4	2.5	2	.7	3.3	3	1.1	4.9	4	1.4	6.3	2	.7	6.1	1	.4	5.9	0	0	0
3-5,000	0	0	0	5	1.8	8.3	2	.7	3.3	5	1.8	7.8	2	.7	6.1	2	.7	11.8	1	.4	11.1
5-10,000	7	2.5	17.5	8	2.8	13.3	6	2.1	9.8	11	3.9	17.2	3	1.1	9.1	3	1.1	17.6	1	.4	11.1
10-20,000	18	6.3	45.0	24	8.5	40.0	27	9.5	44.3	16	5.6	25.0	18	6.3	54.5	5	1.8	29.4	4	1.4	44.4
>20,000	12	4.2	30.0	19	6.7	31.7	20	7.0	32.8	22	7.7	34.4	6	2.1	18.2	5	1.8	29.4	2	.7	22.2
N.R.	2	.7	5.0	2	.7	3.3	3	1.1	4.9	6	2.1	9.4	2	.7	6.1	1	.4	5.9	1	.4	11.1
Total	40	14.1	100.0	60	21.2	100.0	61	21.5	100.0	64	22.5	100.0	33	11.6	100.0	17	6.2	100.0	9	3.3	100.0
Employment																					
FT	34	12.0	85.0	26	9.2	43.3	35	12.3	57.4	28	9.9	43.8	8	2.8	24.2	6	2.1	35.3	4	1.4	44.4
PT	2	.7	5.0	6	2.1	10.0	6	2.1	9.8	5	1.8	7.8	0	0	0	0	0	0	1	.4	11.1
HW	0	0	0	12	4.2	20.0	13	4.6	21.3	14	4.9	21.9	1	.4	3.0	7	2.5	41.2	2	.7	22.2
UN	0	0	0	4	1.4	6.7	1	.4	1.6	4	1.4	6.3	0	0	0	0	0	0	0	0	0
STU	2	.7	5.0	4	1.4	6.7	3	1.1	4.9	3	1.1	4.7	24	8.5	72.7	0	0	0	0	0	0
RET	2	.7	5.0	8	2.8	13.3	3	1.1	4.9	10	3.5	15.6	0	0	0	4	1.4	23.5	2	.7	22.2
Total	40	14.1	100.0	60	21.1	100.0	61	21.6	100.0	64	22.6	100.0	33	11.7	100.0	17	6.0	100.0	9	3.2	100.0

*Percentage of the total group. †Percentage of each category, e.g., white, or grad, or $20,000+, or full time employed.

Table 17

Subject Responses to I32. The main types of reading I do are. . . (Second Choice) by Demographic Variables

	Job Related			Light Book			Magazines			Newspapers			Textbooks			Religious			Other		
	N	%TOT*	%GR+	N	%TOT	%GR	N	%TOT	%GR	N	%TOT	%GR	N	%TOT	%GR	N	%TOT	%GR	N	%TOT	%GR
Sex																					
M	9	3.2	60.0	20	7.1	35.1	33	11.8	37.1	43	15.4	55.8	6	2.1	46.2	[illegible]	.7	18.2	[illegible]	[illegible]	[illegible]
F	6	2.1	40.0	37	13.2	64.9	56	20.0	62.9	34	12.1	44.2	7	2.5	53.8	[illegible]	3.2	81.8	[illegible]	[illegible]	[illegible]
Total	15	5.3	100.0	57	20.3	100.0	89	31.8	100.0	77	27.5	100.0	13	4.6	100.0	[illegible]	3.9	100.0	18	[illegible]	[illegible]
Race																					
W	15	5.4	100.0	55	19.6	96.5	80	28.6	89.9	69	24.4	89.6	11	3.9	84.6	11	3.9	100.0	[illegible]	[illegible]	[illegible]
B	0	0	0	1	.4	1.8	9	3.2	10.1	7	2.5	9.1	[illegible]	.7	15.4	0	0	0	[illegible]	[illegible]	[illegible]
O	0	0	0	1	.4	1.8	0	0	0	1	.4	1.3	0	0	0	0	0	0	[illegible]	[illegible]	[illegible]
Total	15	5.4	100.0	57	20.4	100.0	89	[illegible]	100.0	77	27.3	100.0	13	[illegible]	100.0	11	3.9	100.0	18	[illegible]	[illegible]
Education																					
<H.S.	0	0	0	5	1.8	8.8	10	3.6	11.4	16	5.7	20.8	4	4	30.8	[illegible]	.7	[illegible]	[illegible]	[illegible]	[illegible]
H.S.	4	1.4	26.7	22	7.9	38.6	22	7.9	25.0	28	10.0	36.4	1	.4	7.7	3	1.1	[illegible]	[illegible]	[illegible]	[illegible]
Post H.S.	8	2.9	53.3	18	6.5	31.6	30	10.8	34.1	21	7.5	27.3	6	2.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
College	1	.4	6.7	8	2.9	14.0	14	5.0	15.9	10	3.6	13.0	[illegible]	.7	15.4	3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Grad.	2	.7	13.3	4	1.4	7.0	12	4.3	13.6	2	.7	2.6	0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total	15	5.4	100.0	57	20.5	100.0	88	31.6	100.0	77	27.5	100.0	13	[illegible]	100.0	11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Family Income																					
<3,000	2	.7	13.3	2	.7	3.5	3	1.1	3.4	5	1.8	6.5	0	0	0	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3-5,000	0	0	0	3	1.1	5.3	5	1.8	5.6	3	1.1	3.9	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5-10,000	1	.4	6.7	8	2.8	14.0	11	3.9	12.4	7	2.5	9.1	5	[illegible]	38.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10-20,000	6	2.1	40.0	22	7.7	38.6	37	13.0	41.6	33	11.6	42.9	3	1.1	23.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20,000	6	2.1	40.0	18	6.3	31.6	27	9.5	30.3	25	8.8	32.5	4	1.4	30.8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
N.R.	0	0	0	4	1.4	7.0	6	2.1	6.7	4	1.4	5.2	0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total	15	5.3	100.0	57	20.0	100.0	89	31.4	100.0	77	27.2	100.0	13	[illegible]	100.0	11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Employment																					
FT	9	3.2	60.0	26	9.3	45.6	39	13.9	43.8	46	16.4	59.7	7	2.5	53.8	3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
PT	4	1.4	26.7	3	1.1	5.3	5	1.8	5.6	0	0	0	[illegible]	.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HW	1	.4	6.7	15	5.4	26.3	15	5.4	16.9	12	4.3	15.6	[illegible]	[illegible]	[illegible]	3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
UN	0	0	0	2	.7	3.5	4	1.4	4.5	2	.7	2.6	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
STU	1	.4	6.7	8	2.9	14.0	15	5.4	16.9	9	3.2	11.7	1	.4	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
RET	0	0	0	3	1.1	5.3	11	3.9	12.4	8	2.9	10.4	1	.4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total	15	5.4	100.0	57	20.5	100.0	89	31.8	100.0	77	27.5	100.0	13	4.8	100.0	11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

*Percentage of the total group.

+Percentage of each category, e.g., white, [illegible]

Table 18

Subject Responses to I33. The way I get most of my reading material is. . . (First Choice) by Demographic Variables

	Subscriptions and Bookclubs			Borrow			Gifts			Library			Stores			Other		
	N	%TOT*	%GR'	N	%TOT	%GR	N	%TOT	%GR	N	%TOT	%GR	N	%TOT	%GR	N	%TOT	%GR
Sex																		
M	41	14.5	43.6	5	1.8	25.0	3	1.1	37.5	17	6.0	43.6	44	15.5	38.6	8	2.8	100.0
F	53	18.7	56.4	15	5.3	75.0	5	1.8	62.5	22	7.8	56.4	70	24.7	61.4	0	0	0
Total	94	33.2	100.0	20	7.1	100.0	8	2.9	100.0	39	13.8	100.0	114	40.2	100.0	8	2.8	100.0
Race																		
W	91	32.2	96.8	17	6.0	85.0	8	2.8	100.0	36	12.7	92.3	102	36.0	89.5	7	2.5	87.5
B	3	1.1	3.2	3	1.1	15.0	0	0	0	2	.7	5.1	11	3.9	9.6	1	.4	12.5
O	0	0	0	0	0	0	0	0	0	1	.4	2.6	1	.4	.9	0	0	0
Total	94	33.3	100.0	20	7.1	100.0	8	2.8	100.0	39	13.8	100.0	114	40.3	100.0	8	2.9	100.0
Education																		
H.S.	11	3.9	11.8	3	1.1	15.0	0	0	0	4	1.4	10.3	21	7.4	18.4	0	0	0
H.S.	36	12.8	38.7	7	2.5	35.0	2	.7	25.0	8	2.8	20.5	32	11.3	28.1	3	1.1	37.5
Post H.S.	23	8.2	24.7	9	3.2	45.0	2	.7	25.0	16	5.7	41.0	39	13.9	34.2	2	.7	25.0
College	16	5.7	17.2	0	0	0	1	.4	12.5	9	3.2	23.1	14	5.0	12.3	2	.7	25.0
Grad.	7	2.5	7.5	1	.4	5.0	3	1.1	37.5	2	.7	5.1	8	2.8	7.0	1	.4	12.5
Total	93	33.1	100.0	20	7.1	100.0	8	2.9	100.0	39	13.8	100.0	114	40.3	100.0	8	2.9	100.0
Family Income																		
1,000	2	.7	2.1	0	0	0	1	.4	12.5	3	1.1	7.7	7	2.5	6.1	0	0	0
5,000	3	1.1	3.2	2	.7	10.0	1	.4	12.5	5	1.8	12.8	5	1.8	4.4	0	0	0
5,000	7	2.5	7.4	5	1.8	25.0	2	.7	25.0	8	2.1	15.4	17	6.0	14.9	2	.7	25.0
10,000	32	11.0	34.4	5	1.8	25.0	2	.7	25.0	14	5.0	35.9	55	19.4	48.2	3	1.1	37.5
20,000	37	13.0	39.4	7	2.5	35.0	2	.7	25.0	11	3.9	28.2	27	9.5	23.7	2	.7	25.0
20	8	2.8	8.5	1	.4	5.0	0	0	0	4	1.4	10.3	3	1.1	2.6	1	.4	12.5
Total	93	33.1	100.0	20	7.1	100.0	8	2.9	100.0	39	13.8	100.0	114	40.4	100.0	8	2.9	100.0
[illegible]																		
FT	49	17.4	52.1	10	3.5	50.0	1	.4	12.5	8	2.8	20.5	66	23.4	57.9	7	2.5	87.5
PT	9	3.2	9.6	1	.4	5.0	1	.4	12.5	4	1.4	10.3	5	1.8	4.4	0	0	0
HM	17	6.0	18.1	2	.7	10.0	5	1.8	62.5	8	2.8	20.5	17	6.0	14.9	0	0	0
RS	6	2.1	6.4	1	.4	5.0	0	0	0	0	0	0	2	.7	1.8	0	0	0
OT	3	1.1	3.2	6	1.8	30.0	1	.4	12.5	14	4.9	35.9	14	4.9	12.3	0	0	0
KS	10	3.5	10.6	2	.7	10.0	0	0	0	5	1.8	12.8	10	3.5	8.8	1	.4	12.5
Total	94	33.2	100.0	20	7.1	100.0	8	2.9	100.0	39	13.7	100.0	114	40.2		8	2.9	100.0

*Percentage of the total group. 'Percentage of each category, e.g., white, or grad . . . or full time employed.

Table 19

Subject Responses to I34. The way I get most of my reading material is. . . (Second Choice) by Demographic Variables

	Subscriptions and Book Clubs			Borrow			Gifts			Library			Stores			Other		
	N	%TOT*	%GR*	N	%TOT	%GR	N	%TOT	%GR	N	%TOT	%GR	N	%TOT	%GR	N	%TOT	%GR
Sex																		
M	26	9.7	37.1	18	6.7	38.3	4	1.5	30.8	15	5.6	42.9	37	13.8	41.5	8	3.0	57.1
F	44	16.4	62.9	29	10.8	61.7	9	3.4	69.2	20	7.5	57.1	52	19.4	58.4	6	2.2	42.9
Total	70	26.1	100.0	47	17.5	100.0	13	4.9	100.0	35	13.1	100.0	89	33.2	100.0	14	5.2	100.0
Race																		
W	59	22.0	84.3	46	17.2	97.9	13	4.9	100.0	32	11.9	91.4	84	31.3	94.4	13	4.9	92.9
B	9	3.4	12.9	1	.4	2.1	0	0	0	3	1.1	8.6	5	1.9	5.6	1	.4	7.1
O	2	.8	2.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	70	26.2	100.0	47	17.6	100.0	13	4.9	100.0	35	13.0	100.0	89	33.2	100.0	14	5.3	100.0
Education																		
H.S.	9	3.4	12.9	10	3.7	21.3	1	.4	7.7	7	2.6	20.0	6	2.2	6.8	3	1.1	21.4
H.S.	19	7.1	27.1	14	5.2	29.8	5	1.9	38.5	9	3.4	25.7	32	12.0	36.4	4	1.5	28.6
Post H.S.	21	7.9	30.0	15	5.6	31.9	5	1.9	38.5	13	4.9	37.1	30	11.2	34.1	3	1.1	21.4
College	14	5.2	20.0	5	1.9	10.6	1	.4	7.7	3	1.1	8.6	14	5.2	15.9	2	.7	14.3
Grad.	7	2.6	10.0	3	1.1	6.5	1	.4	7.7	3	1.1	8.6	6	2.2	6.8	2	.7	14.3
Total	70	26.2	100.0	47	17.5	100.0	13	5.0	100.0	35	13.1	100.0	88	32.8	100.0	14	5.3	100.0
Family Income																		
1,000	4	1.4	5.7	2	.7	4.3	0	0	0	2	.7	5.7	4	1.4	4.5	1	.4	7.1
5,000	3	1.1	4.3	4	1.4	8.5	1	.4	7.7	1	.4	2.9	6	2.1	6.7	1	.4	7.1
10,000	11	3.9	15.7	9	3.2	19.1	3	1.1	23.1	4	1.4	11.4	10	3.5	11.2	1	.4	7.1
10-20,000	30	10.6	42.9	16	5.6	34.0	3	1.1	23.1	19	6.7	54.3	29	10.2	32.6	7	2.5	50.0
20,000	20	7.0	28.6	13	4.6	27.7	5	1.8	38.5	8	2.8	22.9	33	11.6	37.1	4	1.4	28.6
N.R.	2	.7	2.9	3	1.1	6.4	1	.4	7.7	1	.4	2.9	7	2.5	7.9	0	0	0
Total	70	24.7	100.0	47	16.6	100.0	13	4.8	100.0	35	12.4	100.0	89	31.3	100.0	14	5.1	100.0
Employment																		
FT	41	15.1	58.6	19	7.1	40.4	4	1.5	30.8	13	4.9	37.1	41	15.3	46.1	11	4.1	78.6
PT	3	1.1	4.3	6	2.2	12.8	0	0	0	6	2.2	17.1	5	1.9	5.6	0	0	0
HW	12	4.5	17.1	11	4.1	23.4	3	1.1	23.1	4	1.5	11.4	18	6.7	20.2	1	.4	7.1
UN	2	.7	2.9	1	.4	2.1	0	0	0	2	.7	5.7	4	1.5	4.5	0	0	0
STU	6	2.2	8.6	8	3.0	17.0	3	1.1	23.1	6	2.2	17.1	10	3.7	11.2	1	.4	7.1
RET	6	2.2	8.6	2	.7	4.3	1	.4	7.7	4	1.5	11.4	11	4.1	12.4	1	.4	7.1
Total	70	26.0	100.0	47	17.5	100.0	13	4.8	100.0	35	13.0	100.0	89	33.2	100.0	14	5.3	100.0

*Percentage of the total group. †Percentage of each category, e.g., white, or grad., or $20,000+, or full time employed.

Table 20

Subject Responses to I35. The ways I find out about new things to read are. . . (First Choice) by Demographic Variables

	Advertisements			Suggestions			Libraries			Browsing books			Teachers			Other		
	N	%TOT*	%R	N	%Tot	%R	N	%TOT	%R	N	%Tot	%R	N	%Tot	%R	N	%TOT	%R
Sex																		
M	33	11.7	38.4	44	15.6	39.3	2	.7	25.0	27	9.6	51.9	7	2.5	58.3	5	1.8	41.7
F	53	18.8	61.6	68	24.1	60.7	6	2.1	75.0	25	8.9	48.1	5	1.8	41.7	7	2.5	58.3
Total	86	30.5	100.0	112	39.7	100.0	8	2.8	100.0	52	18.5	100.0	12	4.3	100.0	12	4.3	100.0
Race																		
W	79	28.0	91.9	106	37.6	94.6	7	2.5	87.5	50	17.7	96.2	8	2.8	66.7	10	3.5	83.3
B	6	2.1	7.0	6	2.1	5.4	0	0	0	2		3.8	4	1.4	33.3	2	.7	16.7
O	1	.4	1.2	0	0	0	1	.4	12.5	0	0	0	0	0	0	0	0	0
Total	86	30.5	100.0	112	39.7	100.0	8	2.9	100.0	52	18.4	100.0	12	4.2	100.0	12	4.2	100.0
Education																		
<H.S.	10	3.6	11.6	18	6.4	16.1	0	0	0	6	2.1	11.8	4	1.4	33.3	0	0	0
H.S.	30	10.7	34.9	36	12.8	32.1	2	.7	25.0	16	5.7	31.4	0	0	0	4	1.4	33.3
Post H.S.	22	7.8	25.6	41	14.6	36.6	4	1.4	50.0	17	6.0	33.3	5	1.8	41.7	2	.7	16.7
College	16	5.7	18.6	13	4.6	11.6	2	.7	25.0	6	2.1	11.8	2	.7	16.7	3	1.1	25.0
Grad.	8	2.8	9.3	4	1.4	3.6	0	0	0	6	2.1	11.8	1	.4	8.3	3	1.1	25.0
Total	86	30.6	100.0	112	39.8	100.0	8	2.8	100.0	51	18.1	100.0	12	4.3	100.0	12	4.3	100.0
Family Income																		
<3,000	4	1.4	4.7	5	1.8	4.5	1	.4	12.5	3	1.1	5.8	0	0	0	0	0	0
3-5,000	3	1.1	3.5	10	3.5	8.9	0	0	0	2	.7	3.8	0	0	0	1	.4	8.3
5-10,000	12	4.2	14.0	13	4.6	11.6	2	.7	25.0	8	2.8	15.4	2	.7	16.7	2	.7	16.7
10-20,000	32	11.3	37.2	45	15.8	40.2	1	.4	12.5	18	6.3	34.6	8	2.8	66.7	8	2.8	66.7
>20,000	29	10.3	33.7	33	11.6	29.5	2	.7	25.0	18	6.3	34.6	2	.7	16.7	1	.4	8.3
N.R	6	2.1	7.0	6	2.1	5.4	2	.7	25.0	3	1.1	5.8	0	0	0	0	0	0
Total	86	30.3	100.0	112	39.4	100.0	8	2.9	100.0	52	18.3	100.0	12	4.2	100.0	12	4.2	100.0
Employment																		
FT	41	14.5	47.7	58	20.6	51.6	1	.4	12.5	27	9.6	51.9	6	2.1	50.0	7	2.5	58.3
PT	7	2.5	8.1	6	2.1	5.4	2	.7	25.0	1	.4	1.9	0	0	0	1	.4	8.3
HW	21	7.4	24.4	19	6.7	17.0	2	.7	25.0	5	1.8	9.6	0	0	0	2	.7	16.7
UN	5	1.8	5.8	1	.4	.9	0	0	0	2	.7	3.8	1	.4	8.3	0	0	0
STU	3	1.1	3.5	18	6.4	16.1	2	.7	25.0	8	2.8	15.4	5	1.8	41.7	0	0	0
RET	9	3.2	10.5	10	3.5	8.9	1	.4	12.5	6	2.1	11.5	0	0	0	2	.7	16.7
Total	86	30.5	100.0	112	39.7	100.0	8	2.9	100.0	52	18.4	100.0	12	4.3	100.0	12	4.3	100.0

*Percentage of the total group   Percentage of each category, e.g., white, or grad., or $20,000+, or full time employed.

Table 21

Subject Responses to I36. The ways I find out about new things to read are. . . (Second Choice) by Demographic Variables

	Advertisements			Suggestions			Libraries			Browsing Books			Teachers			Other		
	N	%TOT*	%CR*	N	%TOT	%CR	N	%TOT	%CR	N	%TOT	%CR	N	%TOT	%CR	N	%TOT	%CR
Sex																		
M	29	11.3	43.9	20	7.8	29.4	10	3.9	47.6	25	9.8	36.8	7	2.7	46.7	7	2.7	41.2
F	37	14.5	56.1	48	18.8	70.6	11	4.3	52.4	43	16.8	63.2	8	3.1	53.3	10	3.9	58.8
Total	66	25.8	100.0	68	26.6	100.0	21	8.2	100.0	68	26.6	100.0	15	5.8	100.0	17	6.6	100.0
Race																		
W	63	24.6	95.5	62	24.2	91.2	19	7.4	90.5	62	24.2	91.2	14	5.5	93.3	15	5.9	88.2
B	2	.8	3.0	6	2.3	8.8	2	.8	9.5	6	2.3	8.8	0	0	0	2	.8	11.8
O	1	.4	1.5	0	0	0	0	0	0	0	0	0	1	.4	6.7	0	0	0
Total	66	25.8	100.0	68	26.5	100.0	21	8.2	100.0	68	26.5	100.0	15	5.9	100.0	17	6.7	100.0
Education																		
<H.S.	9	3.5	13.8	7	2.7	10.3	7	2.7	33.3	9	3.5	13.2	1	.4	6.7	2	.8	11.8
H.S.	24	9.4	36.9	22	8.6	32.4	3	1.2	14.3	20	7.8	29.4	3	1.2	20.0	6	2.4	35.3
Post H.S.	17	6.7	26.2	25	9.8	36.8	5	2.0	23.8	25	9.8	36.8	9	3.5	60.0	2	.8	11.8
College	8	3.1	12.3	11	4.3	16.2	4	1.6	19.0	10	3.9	14.7	1	.4	6.7	3	1.2	17.6
Grad.	7	2.7	10.8	3	1.2	4.4	2	.8	9.5	4	1.6	5.9	1	.4	6.7	4	1.6	23.5
Total	65	25.4	100.0	68	26.6	100.0	21	8.3	100.0	68	26.6	100.0	15	5.9	100.0	17	6.8	100.0
Family Income																		
<3,000	1	.4	1.5	4	1.6	5.9	4	1.6	19.0	3	1.1	4.4	1	.4	6.7	0	0	0
3-5,000	4	1.6	6.1	2	.7	2.9	1	.4	4.8	6	2.1	8.8	1	.4	6.7	1	.4	5.9
5-10,000	11	3.9	16.7	12	4.2	17.6	2	.7	9.5	7	2.5	10.3	2	.7	13.3	3	1.1	17.6
10-20,000	28	9.9	42.4	25	8.8	36.8	5	1.8	23.8	26	9.2	38.2	7	2.5	46.7	7	2.5	41.2
20,000	17	6.0	25.8	2	7.4	30.9	9	3.2	42.9	23	8.1	33.8	4	1.4	26.7	5	1.8	29.4
N. R.	5	1.8	7.6	4	1.4	5.9	0	0	0	3	1.1	4.4	0	0	0	1	.4	5.9
Total	66	23.8	100.0	68	23.9	100.0	21	7.5	100.0	68	24.1	100.0	15	5.4	100.0	17	6.2	100.0
Employment																		
FT	33	12.9	50.0	28	10.9	41.2	10	3.9	47.6	32	12.5	47.1	5	2.0	33.3	9	3.9	52.9
PT	3	1.2	4.5	8	3.1	11.8	2	.8	9.5	5	2.0	7.4	0	0	0	1	.4	5.9
—	16	6.3	24.2	14	5.5	20.6	2	.8	9.5	13	5.1	19.1	2	.8	13.3	2	.8	11.8
UN	0	0	0	5	2.0	7.4	1	.4	4.8	2	.8	2.9	0	0	0	1	.4	5.9
RET	5	2.0	7.6	5	2.0	7.4	4	1.6	19.0	10	3.9	14.7	8	3.1	53.3	2	.8	11.8
RET	9	3.5	13.6	8	3.1	11.8	2	.8	9.5	6	2.3	8.8	0	0	0	2	.8	11.8
Total	66	25.9	100.0	68	26.6	100.0	21	8.3	100.0	68	26.5	100.0	15	5.9	100.0	17	7.1	100.0

*Percentage of the total group. 'Percentage of each category, e.g., white, or grad., or $20,000+, or full time employed.

Table 22

Subject Responses to I37. If I had trouble reading, I would go first for help to. . . by Demographic Variables

	Church-Community Org.			Friend-Relative			Library			School			Teachers			No One			Doctor			Other		
	N	%TOT*	%GR*	N	%TOT	%GR	N	%TOT	%GR	N	%TOT	%GR	N	%TOT	%GR	N	%TOT	%GR	N	%TOT	%GR	N	%TOT	%GR
Sex																								
M	0	0	0	17	6.0	51.5	14	5.0	41.2	22	7.8	37.9	12	4.3	37.5	28	10.0	50.0	19	6.8	35.8	4	1.4	57.1
F	8	2.8	100.0	16	5.7	48.5	20	7.1	58.8	36	12.8	62.1	20	7.1	62.5	28	10.0	50.0	34	12.1	64.2	3	1.1	42.9
Total	8	2.8	100.0	33	11.7	100.0	34	12.1	100.0	58	20.6	100.0	32	11.4	100.0	56	20.0	100.0	53	18.9	100.0	7	2.5	100.0
Race																								
W	8	2.8	100.0	28	10.0	84.8	29	10.3	85.3	54	19.2	93.1	27	9.6	84.4	53	18.9	94.6	53	18.9	100.0	7	2.5	100.0
B	0	0	0	5	1.8	15.2	3	1.1	8.8	4	1.4	6.9	5	1.8	15.6	3	1.1	5.4	0	0	0	0	0	0
O	0	0	0	0	0	0	2	.8	5.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	8	2.8	100.0	33	11.8	100.0	34	12.2	100.0	58	20.6	100.0	32	11.4	100.0	56	20.0	100.0	53	18.9	100.0	7	2.5	100.0
Education																								
H.S.	4	1.4	50.0	6	2.1	18.2	4	1.4	11.8	5	1.8	8.6	10	3.6	31.3	3	1.8	9.1	5	1.8	9.4	0	0	0
H.S.	3	1.1	37.5	13	4.6	39.4	12	4.3	35.3	15	5.4	25.9	7	2.5	21.9	22	7.9	40.0	12	4.3	22.6	3	1.1	42.9
Post H.S.	0	0	0	9	3.2	27.3	13	4.6	38.2	27	9.6	46.6	10	3.6	31.3	20	7.1	36.4	10	3.6	18.9	1	.4	14.2
[illegible]e	0	0	0	4	1.4	1 1	4	1.4	11.8	9	3.2	15.5	3	1.1	9.4	4	1.4	7.3	18	6.5	34.0	0	0	0
[illegible]rad.	1	.4	12.5	1	.4	3.0	1	.4	2.9	2	.7	3.4	2	.7	6.3	4	1.4	7.3	8	2.9	15.1	3	1.1	42.9
Total	8	2.9	100.0	33	11.7	100.0	34	12.1	100.0	58	20.7	100.0	32	11.5	100.0	55	19.6	100.0	53	19.0	100.0	7	2.6	100.0
Family Income																								
[illegible],000	0	0	0	1	.4	3.0	5	1.8	14.7	1	.4	1.7	2	.7	6.3	4	1.4	7.1	0	0	0	0	0	0
5-5,000	1	.4	12.5	1	.4	3.0	3	1.1	8.8	4	1.4	6.9	2	.7	6.3	4	1.4	7.1	1	.4	1.9	1	.4	14.3
5-10,000	2	.7	25.0	5	1.8	15.2	6	2.1	17.6	5	1.8	8.6	5	1.8	15.6	7	2.5	12.5	8	2.8	15.1	1	.4	14.3
10-20,000	3	1.1	37.5	14	4.9	42.4	11	3.9	32.4	22	7.7	37.9	18	6.3	56.3	23	8.1	41.1	18	6.3	34.0	2	.7	28.6
20,000	2	.7	25.0	10	3.5	30.3	7	2.5	20.6	24	8.5	41.4	4	1.4	12.5	16	5.6	28.6	21	7.4	39.6	2	.7	28.6
S.R.	0	0	0	2	.7	6.1	2	.7	5.9	2	.7	3.4	1	.4	3.1	2	.7	3.6	1	.4	1.9	1	.4	14.3
Total	8	2.9	100.0	33	11.7	100.0	34	12.1	100.0	58	20.5	100.0	32	11.3	100.0	56	19.7	100.0	53	18.7	100.0	7	2.5	100.0
Employment																								
FT	4	1.4	50.0	21	7.5	63.6	11	3.9	32.4	33	11.7	56.9	11	3.9	34.4	27	9.6	48.2	27	9.6	50.9	5	1.8	71.4
PT	1	.4	12.5	2	.7	6.1	4	1.4	11.8	4	1.4	6.9	1	.4	3.1	5	1.8	8.9	3	1.1	5.7	0	0	-
HM	1	.4	12.5	5	1.8	15.2	9	3.2	26.5	9	3.2	15.5	5	1.8	15.6	2	.7	12.5	12	4.3	22.6	0	0	0
US	1	.4	12.5	1	.4	3.0	2	.7	5.9	1	.4	1.7	1	.4	3.1	0	0	0	3	1.1	5.7	0	0	0
SP	0	0	0	2	.7	6.1	3	1.1	8.8	5	1.8	8.6	12	4.3	37.5	11	3.9	19.6	3	1.1	5.7	0	0	0
RE	1	.4	12.5	2	.7	6.1	5	1.8	14.7	6	2.1	10.3	2	.7	6.3	6	2.2	10.7	5	1.8	9.4	2	.7	28.6
Total	8	3.0	100.0	33	11.8	100.0	34	12.1	100.0	58	20.6	100.0	32	11.5	100.0	56	19.9	100.0	53	19.0	100.0	7	2.5	100.0

*Percentage of the total group. Percentage of each category, e.g., white, 12 grade, or $ 5,000+, or full time employed.

Table 23
Results of Analyses of Variance and *post hoc* Scheffe Tests of I38 by Each Demographic Variable

I38. Compared to other people your age, your understanding or comprehension of things you read is (poor) 1 2 3 4 5 (excellent)

All Cases	N	Mean	S.D.	F-Ratio	Post Hoc Test of Significance
Sex					
M	117	3.59	.68	3.13	Not Significant
F	166	3.45	.62		
Race					
W	261	3.51	.65	43	Not Significant
B	20	3.55	.69		
O	2	3.0	0		
Education					
Less Than High School	39	3.08	.48	16.61	***
High School	88	3.26	.56		
Post High School	91	3.69	.66		
College	42	3.83	.66		
Graduate Work	22	3.86	.35		
Family Income					
Less Than 3,000	13	3.15	.69	1.60	Not Significant
3-5,000	17	3.53	.62		
5-10,000	39	3.38	.85		
10-20,000	112	3.47	.61		
Greater Than 20,000	86	3.63	.67		
No Response	17	3.47	.72		
Employment					
Full Time	151	3.53	.64	.81	Not Significant
Part Time	20	3.60	.598		
Housewife	49	3.45	.65		
Unemployed	9	3.33	.71		
Student	56	3.56	.73		
Retired	29	3.31	.89		

*p< .05
**p<.01
***p< .001

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Table 24
Results of Analyses of Variance and *post hoc* Scheffé Tests of I39 by Each Demographic Variable

I39. Compared to other people your age, your rate or speed of reading is (poor) 1 2 3 4 5 (excellent)

All Cases	N	Mean	S.D.	F-Ratio	Post Hoc Test of Significance
Sex					
M	116	3.16	.84	4.09	*
F	166	3.36	.80		
Race					
W	260	3.29	.82	2.84	*
B	20	3.15	.75		
O	2	2.0	0		
Education					
Less Than High School	39	2.79	.95	8.34	***
High School	88	3.10	.71		
Post High School	91	3.44	.82		
College	41	3.56	.74		
Graduate Work	22	3.64	.58		
Family Income					
Less Than 3,000	13	2.92	.76	2.15	Not Significant
3-5,000	17	3.53	.94		
5-10,000	39	3.08	1.01		
10-20,000	112	3.15	.77		
Greater Than 20,000	86	3.42	.83		
No Response	17	3.41	1.06		
Employment					
Full Time	141	3.22	.85	.08	Not Significant
Part Time	20	3.30	.66		
Housewife	49	3.27	.84		
Unemployed	9	3.33	.71		
Student	36	3.278	.94		
Retired	29	3.276	1.07		

*p<.05
**p<.01
***p<.001

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Table 25
Results of Analyses of Variance and *post hoc* Scheffé Tests of Variety of Motivation by Each Demographic Variable

All Cases	N	Mean	S.D.	F-Ratio	Post hoc Test of Significance
Sex					
M	118	3.13	1.24	5.58	*
F	166	3.47	1.18		
Race					
W	262	3.30	1.22	.91	Not Significant
B	20	3.75	1.07		
O	2	3.0	0		
Education					
Less Than High School	40	3.22	1.17	1.26	Not Significant
High School	88	3.23	1.21		
Post High School	91	3.47	1.20		
College	42	3.14	1.30		
Graduate Work	22	3.68	1.17		
Family Income					
Less Than 3,000	13	3.08	1.12	.29	Not Significant
3-5,000	17	3.29	1.10		
5-10,000	39	3.28	1.10		
10-20,000	112	3.36	1.17		
Greater Than 20,000	86	3.40	1.30		
No Response	17	3.12	1.54		
Employment					
Full Time	141	3.28	1.20	.59	Not Significant
Part Time	20	3.40	1.27		
Housewife	49	3.39	1.11		
Unemployed	9	2.78	1.56		
Student	36	3.36	1.29		
Retired	29	3.52	1.21		

*p<.05
**p<.01
***p<.001

Table 26
Results of Analyses of Variance and *post hoc* Scheffé Tests
of Intensity of Motivation by Each Demographic Variable

All Cases	N	Mean	S.D.	F-Ratio	*Post hoc* Test of Significance
Sex					
M	118	18.81	3.55	2.81	Not Significant
F	166	19.52	3.52		
Race					
W	262	19.13	3.55	1.0017	Not Significant
B	20	20.46	3.52		
O	2	18.50	0		
Education					
Less Than High School	40	18.92	3.85	1.50	Not Significant
High School	88	18.73	3.55		
Post High School	91	19.74	3.48		
College	42	18.93	3.43		
Graduate Work	22	20.23	3.[illegible]		
Family Income					
Less Than 3,000	13	19.00	2.92	.78	Not Significant
3-5,000	17	19.24	3.47		
5-10,000	39	19.00	2.93		
10-20,000	112	19.28	3.36		
Greater Than 20,000	86	19.57	3.70		
No Response	17	17.76	5.39		
Employment					
Full Time	141	19.09	3.56	.85	Not Significant
Part Time	26	[illegible]	3.03		
Housewife	49	19.22	3.34		
Unemployed	[illegible]	17.[illegible]	5.77		
Student	36	19.[illegible]	3.27		
Retired	29	19.66	3.[illegible]		

*p<.05
**p<.01
***p<.001

Table 27

Results of Analyses of Variance and *post hoc* Scheffé Tests of Self-Perceived Reading Ability by Each Demographic Variable

All Cases	N	Mean	S.D.	F-Ratio	Post Hoc Test of Significance
Sex					
M	118	10.05	1.98	1.20	Not Significant
F	166	10.30	1.83		
Race					
W	262	10.23	1.93	1.09	Not Significant
B	20	9.95	1.32		
O	2	8.5	0		
Education					
Less Than High School	40	8.82	1.96	13.87	***
High School	88	9.58	1.47		
Post High School	91	10.69	1.83		
College	42	11.05	1.89		
Graduate Work	22	11.55	1.18		
Family Income					
Less Than 3,000	13	9.31	1.75	2.41	*
3-5,000	17	10.53	2.12		
5-10,000	39	9.77	2.37		
10-20,000	112	10.01	1.70		
Greater Than 20,000	86	10.65	1.73		
No Response	17	10.47	2.18		
Employment					
Full Time	141	10.09	1.85	.298	Not Significant
Part Time	20	10.35	1.63		
Housewife	49	10.33	1.86		
Unemployed	9	10.11	1.83		
Student	36	10.44	1.90		
Retired	29	10.14	2.39		

*p<.05
**p<.01
***p<.001

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Table 28

Results of Analyses of Variance and *post hoc* Scheffé Tests of Attitude Toward Reading (MRRAM Score) by Each Demographic Variable

All Cases	N	Mean	S.D.	F-Ratio	Post Hoc Test of Significance
Sex					
M	118	65.02	14.15	33.58	***
F	166	74.47	13.10		
Race					
W	262	70.78	14.36	.43	Not Significant
B	20	67.90	14.22		
O	2	65.50	0		
Education					
Less than High School	40	66.87	12.13	2.48	*
High School	88	68.69	15.79		
Post High School	91	71.07	14.19		
College	42	73.71	13.34		
Graduate Work	22	77.09	11.13		
Family Income					
Less Than 3,000	13	69.38	12.72	2.79	*
3-5,000	17	70.12	13.37		
5-10,000	39	71.69	10.76		
10-20,000	112	69.26	15.23		
Greater Than 20,000	86	73.85	12.89		
No Response	17	60.94	19.46		
Employment					
Full Time	141	68.38	15.75	3.008	**
Part Time	20	75.45	11.80		
Housewife	49	74.96	11.45		
Unemployed	9	78.67	17.33		
Student	36	67.81	11.57		
Retired	29	71.10	12.26		

*p<.05
**p<.01
***p<.001

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Table 29
Results of Analyses of Variance and *post hoc* Scheffé Tests
of Job-Related Reading Time by Each Demographic Variable

All Cases	N	Mean (minutes per day)	S.D.	F-Ratio	*Post Hoc* Test of Significance
Sex					
M	118	83.26	93.15	2.15	Not Significant
F	166	65.81	102.66		
Race					
W	262	73.80	99.94	1.205	Not Significant
B	20	54.25	83.72		
O	2	165.00	0		
Education					
Less Than High School	40	35.25	86.19	3.16	**
High School	88	59.43	96.83		
Post High School	91	97.80	106.24		
College	42	70.12	86.25		
Graduate Work	22	101.59	97.53		
Family Income					
Less Than 3,000	13	76.15	114.64	.52	Not Significant
3-5,000	17	78.82	161.68		
5-10,000	39	86.41	114.79		
10-20,000	112	67.95	91.02		
Greater Than 20,000	86	77.62	84.24		
No Response	17	45.00	96.92		
Employment					
Full Time	141	86.24	107.98	8.17	***
Part Time	20	78.75	77.08		
Housewife	49	28.98	51.38		
Unemployed	9	1.67	5.00		
Student	36	132.92	103.00		
Retired	29	27.41	79.38		

*p< .05
**p< .01
***p< .001

Table 30
Results of Analyses of Variance and *post hoc* Scheffé Tests
of Total Reading Time Per Day by Each Variable

All Cases	N	Mean (minutes per day)	S.D.	F-Ratio	*Post Hoc* Test of Significance
Sex					
M	118	150.13	100.97	.98	Not Significant
F	166	163.70	122.14		
Race					
W	262	158.42	112.37	1.95	Not Significant
B	20	142.25	124.84		
O	2	270.00	0		
Education					
Less Than High School	40	111.62	108.48	3.54	**
High School	88	143.58	109.67		
Post High School	91	184.29	119.10		
College	42	154.17	99.999		
Graduate Work	22	203.18	110.30		
Family Income					
Less Than 3,000	13	160.77	133.26	1.45	Not Significant
3-5,000	17	210.00	182.17		
5-10,000	39	175.51	132.64		
10-20,000	112	142.90	101.98		
Greater Than 20,000	86	163.31	96.22		
No Response	17	137.35	117.24		
Employment					
Full Time	141	157.13	126.95	4.50	***
Part Time	20	174.00	113.70		
Housewife	49	116.43	65.33		
Unemployed	9	116.67	86.75		
Student	36	2[illegible].25	96.37		
Retired	29	[illegible]0.17	103.57		

*p<.05
**p<.01
***p<.001

Table 31

Results of Analyses of Variance and *post hoc* Scheffé Tests of Free Reading Time Per Day by Each Demographic Variable

All Cases	N	Mean	S.D.	F-Ratio	Scheffé Test of Significance
Sex					
M	115	73.43	46.25	9.83	***
F	166	97.89	74.23		
Race					
W	262	87.74	60.76	.93	Not Significant
B	20	88.00	109.897		
O	2	105.00	0		
Education					
Less Than High School	40	76.38	54.37	.42	Not Significant
High School	88	84.15	52.89		
Post High School	91	86.48	97.92		
College	42	84.05	61.54		
Graduate Work	22	101.59	55.92		
Family Income					
Less Than 3,000	13	84.62	71.25	1.95	Not Significant
3-5,000	17	131.18	89.07		
5-10,000	49	89..	72.50		
10-20,000	112	74.96	75.82		
Greater Than 20,000	95	85.70	57.84		
No Response	17	92.35	75..9		
Employment					
Full Time	141	70.89	68.28	3.3.	**
Part Time	26	9..25	60.33		
Housewife	49	87.65	65.05		
Unemployed	9	11..00	86.17		
Student	36	94.33	80.35		
Retired	29	122.76	76.78		

*p .05
**p .01
***p .001

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Table 32
Summary Results of ANOVA and *post hoc* Tests of Significance of Collapsed Income ($0-10, 10-20, 20+) by Selected Variables

(N=284, d.f. within group 278)

Variable	F-Ratio	F-Prob.	Scheffé*
Job Reading Time	0.5151	0.5980	
Total Reading Time	2.5304	0.0816	
Free Reading Time	0.4931	0.6113	
Variety of Motivations	0.3154	0.7298	
Intensity of Motivation	0.4472	0.6399	
Attitude Toward Reading (MBRAM)	2.7723	0.0643	
Self-Perceived Reading Ability	4.2077	0.0159	$0-10<$20+
I21. When you were young you read a great deal about some topics	0.2174	0.8048	
I22. Reading demands of your job make you feel uncomfortable	1.2019	0.3023	
I23. You often go to books for information about problems on your job.	1.7458	0.1765	
I24. What you learned in school has been very valuable	0.2519	0.7775	
I25. As a reader, you consider yourself to be	3.0438	0.0493	
I26. You read to find out how to get something done	2.8423	0.0601	
I27. You read to keep up with what is going on	0.4015	0.6697	
I28. You read to discuss what you have read with friends	0.3676	0.6928	
I29. You read for relaxation and personal enjoyment	1.7480	0.1761	
I30. You read to study for personal or occupational advancement	0.4123	0.6626	
I38. Compared to others your age, your understanding or comprehension is	2.7819	0.0637	
I39. Compared to others your age, your rate or speed of reading is	2.8437	0.0600	

Means and S.D. available for each item in Tables 6-31.

*All Scheffé tests at the .05 level.

Table 33
Summary Results of ANOVA and *post hoc* Tests of Significance of Employment Status by Selected Variables

(N=284, d.f. within group 278)

Variable	F-Ratio	F-Prob.	Scheffé*
Job Reading Time	8.1716	0.0000	UN, RET, HW< FT, PT, STU
Total Reading Time	4.5033	0.0006	HW<STU
Free Reading Time	3.3423	0.0006	FT<RET
Variety of Motivations	0.5879	0.7093	
Intensity of Motivation	0.8532	0.5131	
Attitude Toward Reading (MBRAM)	3.0078	0.0116	
Self-Perceived Reading Ability	0.2983	0.9136	
I21. When you were young you read a great deal about some topics	0.7409	0.5934	
I22. Reading demands of your job make you feel uncomfortable	2.9702	0.0125	
I23. You often go to books for information about problems on your job.	0.6777	0.6407	
I24 What you learned in school has been very valuable	1.9222	0.0907	
I25. As a reader, you consider yourself to be	1.5851	0.1643	
I26. You read to find out how to get something done	1.3523	0.2425	
I27. You read to keep up with what is going on	1.3025	0.2630	
I28. You read to discuss what you have read with friends	1.3693	0.2359	
I29. You read for relaxation and personal enjoyment	5.6710	0.0001	STU<HW
I30. You read to study for personal or occupational advancement	4.9321	0.0002	
I38. Compared to others your age, your understanding or comprehension is	0.8060	0.5462	
I39. Compared to others your age, your rate or speed of reading is	0.0789	0.9954	

Means and S.D. available for each item in Tables 6-31.

*All Scheffé tests at the .05 level.

Table 34
Summary Results of ANOVA and *post hoc* Tests of Significance of Employment Status (Women Only) by Selected Variables

(N=284, d.f. within group 160)

Variable	F-Ratio	F-Prob.	Scheffé*
Job Reading Time	4.9706	0.0003	
Total Reading Time	3.3893	0.0061	HW<STU
Free Reading Time	1.1087	0.3579	
Variety of Motivations	0.5608	0.7299	
Intensity of Motivation	0.9783	0.4328	
Attitude Toward Reading (MBRAM)	1.0820	0.3724	
Self-Perceived Reading Ability	0.4868	0.7858	
I21. When you were young you read a great deal about some topics	0.8532	0.5141	
I22. Reading demands of your job make you feel uncomfortable	1.3767	0.2359	
I23. You often go to books for information about problems on your job.	0.8642	0.5066	
I24. What you learned in school has been very valuable	1.1812	0.3207	
I25. As a reader, you consider yourself to be	0.9423	0.4553	
I26. You read to find out how to get something done	0.9642	0.4415	
I27. You read to keep up with what is going on	0.9552	0.4471	
I28. You read to discuss what you have read with friends	1.8560	0.1050	
I29. You read for relaxation and personal enjoyment	1.1784	0.3221	
I30. You read to study for personal or occupational advancement	4.0909	0.0016	RET<STU
I38. Compared to others your age, your understanding or comprehension is	0.2395	0.9445	
I39. Compared to others your age, your rate or speed of reading is	0.5057	0.7717	

Means and S.D. available for each item in Tables 6-31.

*All Scheffé tests at the .05 level.

Table 35
Summary Results of ANOVA and *post hoc* Tests of Significance of Employment Status (Men Only) by Selected Variables

(N=284, d.f. within group 113)

Variable	F-Ratio	F-Prob.	Scheffé*
Job Reading Time	3.9363	0.0050	RET<STU
Total Reading Time	3.0207	0.0208	UN<ALL
Free Reading Time	1.9776	0.1027	UN<ALL
Variety of Motivations	1.0166	0.4020	
Intensity of Motivation	2.0540	0.0915	
Attitude Toward Reading (MBRAM)	0.5938	0.6678	
Self-Perceived Reading Ability	0.2329	0.9194	
I21. When you were young you read a great deal about some topics	1.0506	0.3845	
I22. Reading demands of your job make you feel uncomfortable	2.0618	0.0905	
I23. You often go to books for information about problems on your job.	1.1053	0.3576	
I24. What you learned in school has been very valuable	2.6372	0.0376	
I25. As a reader, you consider yourself to be	0.8154	0.5179	
I26. You read to find out how to get something done	2.7379	0.0322	
I27. You read to keep up with what is going on	0.6534	0.6257	
I28. You read to discuss what you have read with friends	1.7924	0.1352	
I29. You read for relaxation and personal enjoyment	1.9799	0.1023	
I30. You read to study for personal or occupational advancement	1.9537	0.1064	
I38. Compared to others your age, your understanding or comprehension is	1.8504	0.1241	
I39. Compared to others your age, your rate or speed of reading is	0.6991	0.5942	

Means and S.D. available for each item in Tables 6-31.

*All Scheffé tests at the .05 level.

Table 36
Summary Results of Linear Regression Statistical Analysis on a Set of Dependent Variables as Explained by the Independent Demographic Variables

		DEMOGRAPHIC VARIABLES				
		Sex	Race	Income	Education	Total
DEPENDENT VARIABLES	Reading Attitude	9.9%	0.5%	2.4%	4.5%	17.4%
	Job Reading	3.1%	0.1%	7.5%	0.6%	11.4%
	Total Reading	0.1%	0.2%	0.001%	5.9%	6.1%
	Free Reading	2.8%	0.5%	0.1%	0.5%	3.9%
	Intensity of Motivation	1.1%	0.6%	1.0%	1.3%	4.1%