A COMPARATIVE STUDY OF THE EFFECTS OF LIVING HABITS UPON RADIO LISTENING HABITS

Thesis for the Degree of M. A.
MICHIGAN STATE COLLEGE

Roger B. Hamlin
1950

This is to certify that the

thesis entitled

"The Effect of Living Habits on Listening Habits"

presented by

Roger B. Hamlin

has been accepted towards fulfillment
of the requirements for

Master of Arts degree in Speech, Dramatics and Radio Education

Joe A Callaway
Major professor

Date May 25, 1950

O-169

A COMPARATIVE STUDY
OF THE
EFFECTS OF LIVING HABITS UPON
RADIO LISTENING HABITS

by

ROGER B. HAMLIN

A THESIS

Submitted to the School of Graduate Studies of Michigan
State College of Agriculture and Applied Science
in partial fulfillment of the requirements
for the degree of

MASTER OF ARTS

Department of Speech, Dramatics, and Radio Education

1950

CONTENTS

ACKNOWLEDGMENTS

Grateful acknowledgment is made to Dr. Melvin Springer, Mathematics Department, Michigan State College, for his infinite patience and generous assistance in working out the statistical analyses of the findings of this thesis. The project was followed with careful concern by Dr. Springer, and it was only after thorough testing of the findings that results were established as significant or chance relationships.

Mr. William Kohler, Editor of Sponsor Magazine, New York City, originally suggested the possibility of a survey of the effect of living habits upon radio listening habits. The writer is indebted to Mr. Kohler for the original suggestions that prompted this thesis.

Mr. Joseph Calaway, Director of Radio Education, Michigan State College, has been a valuable guide and source of information in assembling the material, and it is to him that much of the credit for the "faith to persist" is due.

Dr. Donald Hayworth and Mr. James Tintera of the Department of Radio, Speech, and Dramatics of Michigan State College have aided in reading the thesis and offering helpful suggestions and corrections.

Chapter 1.

INTRODUCTION

Chapter 1.

INTRODUCTION

The measurement of public preference for radio programs has long been an accomplished science. Thanks to Hooper rating and other kindred analysts of public opinion, it is now possible to determine the stage of popularity or decline of any program on the air. Accordingly, much waste of money and public interest has been avoided. It has also been a great boon to advertisers supporting such programs to know when their broadcasts were being accepted and to what extent such programs compare with others in popular acceptance.

However, little concern has been given to the question of what kinds of programs appeal to different types of individuals. People do not listen abstractedly merely for the sake of listening; people of all walks and climes are apt to be selective. Their selections, it might reasonably be assumed, may be determined by their backgrounds and their characteristic manner of life, frequently referred to as "their mental set."[1] Hypothetically, people who have little education might prefer programs that require little thought or reflection. Assumedly, people of higher income brackets might be

---

[1] Matthew N. Chappell, & C. E. Hooper, Radio Audience Measurement, Stephan Daye, New York, 1944, p. 26.

inclined to favor programs of a more literate or classical level, such as classical music, discussions and forums, and drama of the more thoughtful nature. It might be conjectured that people of a low socio-economic level would favor programs such as the "soap opera", "give-away", or raucous comedy. But these are merely assumptions drawn from observable data found in other social phenomena in the world around us.

Accordingly, the purpose of this research shall be to conduct a study of a representative metropolitan city to determine the measure and the manner in which living habits affect listening habits. Are people predisposed to listen to certain types of programs because of their manner of living, or is listening purely an individual matter subject to human personality variations, as varied and complex and unpredictable as human genes? If individual differences and personal conditioning are the sole determinants of individual listening, then Hooper rating of programs would undoubtedly convey the obvious answer as to what should be presented on the air. But if people listen to different radio programs because of their living habits, it might then prove profitable to offer programs on the basis of the social complexion of an area or community. In this study we shall attempt to answer this problem by posing the following questions:

I. In regard to such programs as classical or semi-classical music, hillbilly music, dance music, mystery dramas, serious dramas, serial dramas (soap operas), comedy, variety shows, shopping programs, discussions and forums, give-away programs, and religious devotional programs, how do the following react:

A. Church-Goers.

B. People of varying degrees of education, such as college graduates, high school graduates, grammar school graduates only.

C. People of different occupational levels, such as the professional, the white-collar, and the laboring groups.

D. People of different-size families, such as the family of two adults without children, the family with one child, and the family with two or more children.

E. People of varying incomes, such as incomes of $5000 or above, of $3000 to $5000, of $2000 to $3000, and those of $2000 or below.

II. What may be learned about the individual tuning habits from the Radio Diaries left for a week in each home that was interviewed? Such a study shall seek to investigate the following:

A. Is there a tendency toward greater selectivity in choosing programs, varying between the college graduate, the student of high school level, and the grammar school graduate?

B. Is dial-hopping more prevalent in one group than in another (i.e. in the college, high school or grammar school group)?

C. Is there a tendency to follow a regular listening pattern throughout the week? In which group is this more prevalent: college, high school, or grammar school level?

D. What is the average number of listening hours for all classes and groups? In which is this the greatest or least, the higher educational levels as compared with the lower?

III. For the purpose of commercial interest in advertising, an attempt was made to determine the amount of public acceptance or rejection of radio advertising. A study of similar nature, conducted by Clifford Kirkpatrick in 1933, in the city of Milwaukee, revealed a great public distaste and even hostility toward radio advertising, which the writer assumed might be more or less expressive of public

reaction to radio advertising at large.[2] The questionairre employed in the present research has attempted to investigate the matter of public reaction to radio advertising. Accordingly, it has been asked which group gives greater acceptance or rejection to radio advertising, the higher or lower educational level, or the higher or lower income level. How many radio listeners have been influenced in their buying by radio advertising? In which group is the influence greater?

It is hoped that such a survey may reveal the extent to which listening is influenced by the personal living habits of a people. Can a living pattern for a city or community be correlated with a listening pattern? Would certain living habits naturally predispose toward definite programs? Is it possible to build a suitable program based upon the social composition of an area? These are the questions this thesis will attempt to answer.

---

[2] Clifford Kirkpatrick, "Report of a Research into the Attitudes and Habits of Radio Listeners," Webb Book Publising Company, St. Paul, Minnesota, 1933, p. 43.

Chapter 2.

METHODS

Chapter 2

METHODS

Selection of the Sample to be Measured

In conducting a study of this kind, it was thought advisable to choose a population for study that would yield the typical levels of society representative of all classes and conditions at large, and which would at the same time offer a population large enough for accurate study.

Lansing, Michigan, appeared to have the desired characteristics for such a study. A city of thirty thousand home units, there is to be found in this metropolis people of all vocations and educational levels in sufficient numbers to make random sampling possible.

Lansing is an industrial city, the home of Oldsmobile, Reo, and Motor Wheel manufacturing companies, as well as other small factories. It would thus afford large numbers of homes that would be typical of industrial workers' opinions.[3] At the same time it is a college city, with Michigan State College on its eastern border. A good share of the faculty and student body reside in the Lansing city area.[4]

---

[3] 36,470 industrial workers. (Lansing Labor Market.)

[4] 3,725 faculty members and students. (Estimate, Michigan State College Student Housing Office. No official figure.)

Being the capital city of the state, Lansing would offer an interesting cross-section of state employees, consisting of office workers, politicians and specialists.[5]

Determination of the Kind of Sample to Use

The relation between sample size and statistical reliability presented a problem. How large a sample would be representative enough to yield accurate data? Reliable opinions secured advised that a smaple of five hundred would be sufficient.[6]

Further, the problem developed as to what kind of sample should be used. The choice lay between the pure random sample or a stratified random sample. Obviously, the pure random sample would be too large and impractical for such a survey. Hence, it was determined to use the stratified random sample.

A map of the city was procured from the Chamber of Commerce, revealing every street, road, and alley, and clearly defining the city limits. It wasdeemed advisable to limit the study to the primary metropolitan area, which would exclude the city of East Lansing, the town of Pottersville, and the newly-populated environs of the city beyond the city limits.

The map of the city was then divided proportionately into thirteen districts, an arbitrary zoning for convenience,

---

[5] 5,200 state employees in Metropolitan Area.

[6] Mr. William Kohler, Editor of Sponsor Magazine; Mr. Joseph Calloway, Director of Radio Education, Michigan State College.

since little data could be secured as to political wards or other city divisioning. It was then determined, after stratifying the population into thirteen districts, to take an approximate two percent sample from each of the thirteen districts, an aggregate sample of 500 at the most.

The City Directory was used for reference, revealing every street in the city, every house, its occupant, and his occupation. By use of such reference, homes were chosen at random from each of the thirteen districts.

Securing the Information

The method chosed for securing the desired information was the use of the personal interviewer, who employed a questionnaire and left a Radio Diary in each home for a period of one week.

It was thought that the personal interview would offer a more accurate approach to the problem of securing personal opinions. Telephone calls are often hasty and impersonal, affording the person interviewed little time for recall or reflection. Questionnaires mailed to homes or individuals frequently fail to give accurate results, in that the matter of personal responsibility or interest is often lacking when one is not answerable to any particular party, or concerned with the results, or compensated for the trouble of filling out the answers to the questions.

Accordingly, it was planned that each of the 500 homes would be personally interviewed. A form letter was sent to each home three days in advance of the interview, informing

the family that the interviewer would call at the resident's convenience on a specific day. The letter explained that the information sought would offer helpful information to the radio industry at large; also, that the project was being conducted with the endorsement and approval of the Department of Radio, Speech, and Dramatics of Michigan State College, and was signed by the Director of Radio Education.

These letters, sent to the various homes whose names had been chosen at random from the city directory, provided a cordial ingress to the home. The interviewer was politely received, and time generously given to answer the questions on the questionnaire.

The interviewer had a double motive in his visit; He had to secure the desired information necessary for the questionnaire; and he had to establish enough confidence and interest on the part of the resident to persuade him to cooperate in keeping a Radio Diary for one week, in which the person would accurately record the hour and time of radio listening for his entire household. At the end of the week, the interviewer returned to collect the Diary and confirm the answers given on the questionnaire. Almost without exception, answers were thoughtfully and cheerfully given.

The questions directed by the interviewer were beamed at the family at large, rather than at individual members. Inquiry was usually prefaced with the explanation that it was desirable to know what the usual practice of the household was. Though individual members of a family might differ in their choice of programs, it was assumed that there is a general preference pattern in the home. The home that eschews mystery and "long-hair" music consistently, tunes it out. Notwithstanding the fact that some protesting member of the family may like it, and from time to time listen to it, in the realm of averages, it was assumed that that home does not customarily tune to mystery stories or symphonic music.

Likewise, it has been assumed that the highest educational level attained in the home will profoundly influence the members of that home. Educational levels may vary in the family composition, but where it is found that one or two members have had college training, or high school education, or other training, there may be found a corresponding influence in program choice. Thus, it was thought advisable to conduct the interviews entirely on the basis of the opinion and practice of family units, rather than on individual preferences.

Individual interviewing was conducted for a period of over a year, from June, 1948 to September, 1949. Each interview averaged from fifteen to twenty minutes spent in the home, with an additional five to ten minutes upon the return of the interviewer to collect and confirm the Diary. As the project was such a protracted one, involving an extended period, careful concern was given to the disposing of a representative number of the Diaries throughout the summer listening season as well as the winter listening season.

Chapter 3.

STATISTICAL ANALYSIS

Chapter 3.

STATISTICAL ANALYSIS

SIGNIFICANCE

The term *significant* with its various applications is a statistical term that we shall be using extensively throughout this thesis. When any result is referred to as *significant* or *not significant*, it is implied that the pertinent data has been subjected to a statistical analysis which has revealed the probability that the result occurred from chance alone; only when this probability is less than 0.01 will the result be termed *significant*.

A word of caution, however, may be in order at this point. One cannot conclude that a percentage difference is significant simply because it is larger than another percentage difference which is known to be significant, for the size of the respective samples that are being compared may give a deceptive appearance to the percentage difference. For example, in the educational classifications, it was found that the difference in percentages of high school and college people listening to dance music was 9.5%; this difference was found to be

significant. Again, the difference in percentages of college and grammar school people listening to the soap operas is 13.1%. Now, one is tempted to conclude that since the aforementioned difference of 9.5% is significant, the larger difference of 13.1% is also significant. This would necessarily follow if the results in both instances were based on samples of the same size; but if the samples are not of the same size in both cases, it may well be that the difference of 13.1% is not significant, while the smaller difference is. Such is the case in the example just cited.

STATISTICAL ANALYSIS

The purpose of a statistical analysis of this survey is to determine whether a person's living habits have a significant effect upon his listening habits. The problem is essentially one of testing percentages. For example, we may wish to know whether church-goers as a whole tend to listen to classical music more than non-church-goers. We select two random samples, one of church-goers and the other of non-church-goers from the city of Lansing. For the sample of 210 church-goers, 141 (or 67%) listen to classical music; whereas only 105 (or 45.3%) of the sample of 232 non-church-goers listen to classical music. Now, did this difference in percentages occur

purely as the result of chance, or did it occur because the percentage of church-goers on the whole who listen to classical music is actually greater than the percentage of non-church-goers who listen to it?

Before attempting to answer this question, we must

1. Decide at what level of significance we shall work.
2. Determine the probability that the difference arose from chance alone.

It was decided to work at the one percent level of significance as is commonly done. That is, if the probability that a given result is due to chance alone is 0.01 or greater, we shall concede that this result may well be accounted for on the basis of chance alone. But if the probability that a given result is due to chance alone is less than 0.01, we shall not regard this result as something that has occurred by chance.

To determine the probability that the difference in percentages arose purely by chance, we make use of the fact that the sampling distribution of differences of percentages based on large samples is very nearly normal. That is, if we draw repeatedly pairs of random samples of n_1 and n_2 items from two populations in both of which the percentage is p, and if we compute the difference in sample percentages for each pair of sample, the distribution of these differences in sample per-

centages will be approximately normal (provided n_1 and n_2 are large) with mean 0 and standard deviation $\sigma_{p_1-p_2}=\sqrt{\frac{pq}{n_1}+\frac{pq}{n_2}}$ where $q=1-p$. It is our knowledge of this sampling distribution which enables us to make an accurate estimate of the probability that the differences in two sample percentages arose from chance. Just how this can be done can best be explained by means of an example.

Consider the aforementioned example involving church-goers and non-church-goers. Here we have a random sample of 210 church-goers, 67.1% of whom listen to classical music; and a random sample of 232 non-church-goers, of whom 45.3% listen to classical music. Thus, $n_1 = 210$, $p_1 = 67.1\%$, $n_2 = 233$, $p_2 = 45.3\%$. We wish to determine the probability that this difference in percentages, (namely, 21.8%) resulted from chance. Let us assume that it did; i.e., we assume that these two samples were taken from two populations, A and B, in which the percentages are the same, say p. Now, we do not know the value of p; we make the best estimate of p on the basis of the sample values, p_1 and p_2.

This estimate is

$$\frac{n_1 p_1 + n_2 p_2}{n_1 + n_2} = \frac{141+105}{443} = 0.557$$

Recall that for pairs of samples drawn from A and B, the distribution of percentage differences is very nearly normal

(since n_1 and n_2 are large) with mean zero and standard deviation

$$\sigma_{p_1-p_2} \approx \sqrt{\frac{pq}{n_1} + \frac{pq}{n_2}} = \sqrt{\frac{(0.557)(0.443)}{210} + \frac{(0.557)(0.443)}{232}} = 0.048$$

Consequently, for any two random samples drawn from A and B, the probability that the difference in sample percentages, $p_1 - p_2$, will be numerically greater than $2.58\ \sigma_{p_1-p_2}$ (≈ 0.124) is represented by the areas of the tails of the normal curve in Fig. 1 and is equal to 0.01, as found from a table of areas for the standard normal curve.

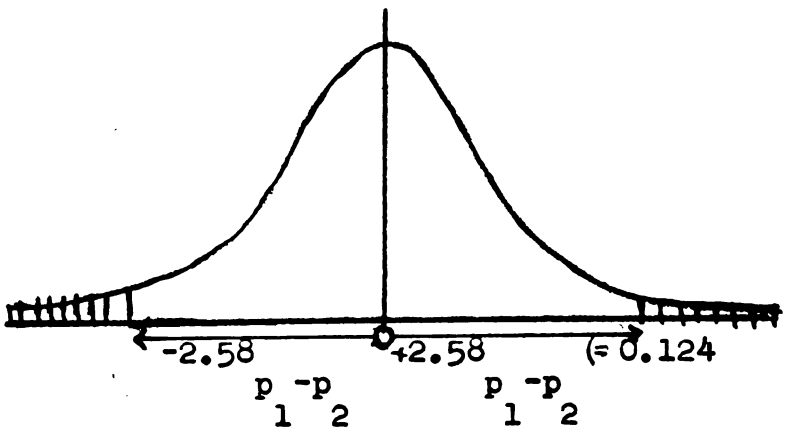

Fig. 1

Now, for the two samples of church-goers and non-church-goers, $p_1 - p_2 \approx 0.218 \approx 4.54\sigma_{p_1-p_2}$. That is, $p_1 - p_2 > 2.58\sigma_{p_1-p_2}$, so that the probability that this difference in percentages arose from chance alone is much less than 0.01 (actually, the probability is about 0.000004).

We conclude therefore, that the two samples very probably came from populations with different percentages. Or, more specifically, we conclude that the percentage of population A listening to classical music is different from the percentage of population B, where populations A and B consist of all church-goers and non-church-goers respectively, in the city of Lansing. We are not absolutely certain that our conclusion is correct; we may, in fact, be wrong. But the probability that we are wrong is less than 0.01 (in this case, the probability that we err is about 0.000004).

EDUCATION

Education appears to have a significant influence upon a person's listening preferences with regard to the following categories: classical music, dance music, hillbilly music, drama, discussions and forums.

Classical Music.

The percentage of high school people who listen to classical music is not significantly greater than the percentage of grammar school people who listen. However, the percentage of college people who listen to classical music is significantly greater than the percentage of high school or grammar school people.*

Dance Music.

There is no significant difference between the number of grammar school people who listen to dance music and the number of high school people. From our data, we cannot tell definitely whether significantly more grammar school people listen than college people. The observed differences in the said percentages is 17.2; the probability that this difference is due to chance alone is almost exactly 0.01. Hence, we cannot really tell whether there is or is not a significant difference in the two percentages. However, since the

---

* People with grammar school, high school, and college education, respectively.

difference in the percentages of high school and college people who listen is significant, one would expect the differences in the percentages of grammar school and college people to be significant also. But in order to make a definite decision, one should repeat the experiment several times.

The significant difference occurs between the high school and the college level. It was found that 64.1% of the high school people listen to dance music as compared with 54.6% of the college group.

Hillbilly Music.

There is no significant difference between the percentage of grammar school and high school people who listen to hillbilly music. This cannot be said of the high school and the college groups, for it was found that a significantly greater percentage of high school people listen to hillbilly music than college, and a significantly greater number of grammar school people listen to hillbilly music than college people.

Drama.

There is no significant difference in listening preference for drama between either the grammar school and the high school groups or between the high school and college groups. However, the difference between the percentage of grade school and the percentage of college people who listen to drama is highly significant.

This would indicate that there is a gradual increase in preference for the drama from the grammar school group to the college group.

Discussions and Forums.

There was no significant difference between the preferences of high school and grammar school groups for discussions and forums. Likewise, there was no significant difference between the percentage of high school and percentage of college people who listen to discussions and forums. The real difference occurred between the grammar school and college groups; 23.1% of the former listen to discussions and forums as compared with 43.8% of the latter. Again, the growth in preference for discussions and forums from the grammar school group to the college group was gradual.

EDUCATION

TYPE OF PROGRAM	GRAMMAR (Percent)	HIGH SCHOOL (Percent)	COLLEGE (Percent)
Classical Music	35.9	44.9	63.1
Dance Music	71.8	64.1	54.6
Hillbilly Music	28.8	26.3	12.4
Religious Devotions	41.0	29.5	25.4
Mystery Stories	47.4	50.9	56.9
Comedy	56.4	52.1	56.2
Drama	41.0	52.1	64.6
Soap Operas	34.6	30.8	21.5
Quiz Programs	71.1	58.1	63.8
Discussions & Forums	23.1	31.6	43.8
Shopping Programs	31.5	28.9	18.0
Variety Shows	51.6	54.9	51.6

DIFFERENCES IN PERCENTAGES EDUCATION LEVELS

(Asterisk indicates significant difference in percentages)

TYPE OF PROGRAM	Difference High School Grade School	Difference High School College	Difference College Grade School
Classical Music	9.0	18.2*	27.2*
Dance Music	7.7	9.5*	17.2*
Hillbilly Music	2.5	13.9*	16.4*
Religious Devotions	11.5	4.1	15.6
Mystery Stories	3.5	6.0	9.5
Comedy	4.3	4.1	0.2
Drama	11.1	12.5	23.6*
Soap Operas	3.8	9.3	13.1
Quiz Programs	13.0	5.7	7.3
Discussions & Forums	8.5	12.2	20.7*
Shopping Programs	2.6	10.9	13.5
Variety Shows	2.8	3.3	0.5

INCOME

The influence of income upon a person's listening preference is evident in choice of music and religious devotions.

Classical Music.

In preference for classical music, there is a difference between the lowest income group and the highest, but not between any other categories. There is an appreciable difference here, as is evidenced by the fact that only 42.9% of the low-income group listen to classical music, whereas 71.2% of the highest-income group listen to it.

Hillbilly Music.

A difference exists between the lowest-income group and the highest, with 33.3% of the lowest-income group listening to hillbilly music as compared to 12.8% of the highest-income group. Again, there is no difference in the other categories.

Dance Music.

All income groups reacted equally favorably to this type of music.

Religious Devotions.

The significant difference again appears between the lowest and the highest-income groups, with a gradual declension in preference between the successive groups, so that the highest-income group emerges with the significantly smaller percentage favoring religious devotions.

Discussions and Forums.

Again, there is a significant difference between the lowest and the highest income groups. The percentage of the highest-income group listening to discussions and forums is significantly greater than the percentage of the lowest-income group.

In all other categories, other than choice of music and religious devotions, income range appears to exert little influence of significance.

INCOME

TYPE OF PROGRAM	$2000 (Percent)	$2-3000 (Percent)	$3-5000 (Percent)	Above $5000 (Percent)
Classical Music	42.9	57.0	55.3	71.2
Dance Music	51.0	56.0	52.4	57.4
Hillbilly Music	33.3	22.6	24.5	12.8
Religious Devotions	58.8	47.1	42.3	35.7
Mystery Stories	37.2	51.2	58.3	50.0
Comedy	40.5	47.7	43.8	48.8
Drama	50.0	65.1	56.2	61.3
Soap Operas	26.2	31.4	34.0	18.8
Quiz Programs	61.9	61.6	63.8	65.0
Discussions and Forums	38.1	46.5	38.7	57.5
Shopping Programs	33.3	33.3	25.2	16.2
Variety Shows	48.0	50.0	57.5	54.2

Group I - $2000 and Under
Group II - Between $2000 and $3000
Group III - Between $3000 and $5000
Group IV - $5000 and Above

(Asterisk indicates significant difference in percentages.)

TYPE OF PROGRAM	Difference in Percentages for II and I	Difference in Percentages for III and II	Difference in Percentages for IV and III	Difference in Percentages for IV and I
Classical Music	14.1	1.7	15.9	28.3*
Dance Music	5.0	3.6	5.0	6.4
Hillbilly Music	10.7	1.9	11.7	20.5*
Religious Devotions	11.7	4.8	6.6	23.1*
Mystery Stories	14.0	7.1	8.3	12.8
Comedy	7.2	3.9	5.0	8.3
Drama	15.1	8.9	5.1	11.3
Soap Operas	5.2	2.6	15.2	7.4
Quiz Programs	0.3	2.2	1.2	3.1
Discussions & Forums	8.4	7.8	18.8*	19.4
Shopping Programs	0.0	8.1	8.0	17.1
Variety Shows	2.0	7.5	3.2	6.2
Radio Advertising	0.7	6.9	3.1	3.1

FAMILY SIZE

The size of the family was found to have no significant influence on the type of program preferred.

SIZE OF FAMILY

TYPE OF PROGRAM	Husband, Wife, 2 or more children (Percent)	Husband, Wife, 1 child (Percent)	Husband, Wife (Percent)
Classical Music	45.6	40.4	42.8
Dance Music	61.1	56.7	63.6
Hillbilly Music	25.0	19.2	19.5
Religious Devotions	44.6	47.1	41.0
Mystery Stories	55.4	60.6	50.9
Comedy	54.2	61.5	53.8
Drama	46.4	54.8	54.3
Morning or Afternoon Serials (Soap Operas)	33.3	35.6	34.1
Quiz Programs	71.4	75.0	66.1
Discussions & Forums	35.7	39.4	40.5
Shopping Programs	20.8	26.0	22.5
Variety Shows	55.4	64.4	55.5

Group I - Husband & Wife
Group II - Husband, Wife & 1 Child
Group III - Husband, Wife, 2 or more children

TYPE OF PROGRAM	Difference in Percentages for II and I (Percent)	Difference in Percentages for III and II (Percent)	Difference in Percentages for III and I (Percent)
Classical Music	2.4	15.2	2.8
Dance Music	6.9	4.4	2.5
Hillbilly Music	0.3	5.8	5.5
Religious Devotions	6.1	2.5	3.6
Mystery Stories	9.7	5.2	4.5
Comedy	7.7	7.7	0.4
Drama	0.5	8.4	7.9
Soap Operas	1.5	2.3	0.8
Quiz Programs	8.9	3.6	5.3
Discussions & Forums	1.1	3.7	4.8
Shopping Programs	3.5	5.2	1.7
Variety Shows	8.9	9.0	0.1

OCCUPATIONAL LEVELS

Listeners were divided occupationally into three categories: Laborers, White Collar and Professional.

The Laborers include all factory workers, artisans of all kinds producing goods either in a factory or private enterprise, bus drivers, taxi drivers, tavern keepers, electricians, plumbers, storekeepers, etc.

The White Collar refers to salesmen, accountants, business men, etc., where the individual labor is more apt to involve mental skills, personalities, and public relations.

The Professional includes the lawyer, doctor, druggist, nurse, underwriter, minister, and teacher.

OCCUPATIONAL LEVELS

Occupation has a significant influence upon preferences for classical music, quiz programs, discussions and forums, and drama.

Classical Music.

A significantly higher percentage of professional people listen to classical music than White Collar people. The trend toward classical music is gradual from the laboring people to the professional group, to the extent that the differences in percentages for the Laborer and White Collar group is not significant; whereas the difference in percentages for the Laboring and Professional classes is highly significant.

Quiz Programs.

Again, as we progress from the laboring group to the professional group, the preference for Quiz Programs gradually increases; so gradual is this increase that it is not noticed until we compare the laboring with the professional class. Such a comparison reveals that a significantly greater number of professional people listen to Quiz Programs.

Discussions and Forums.

With discussions and forums the trend is similar to that of classical music, inasmuch as the percentage difference is

noticeable until we compare Professional with White Collar groups. The percentage difference for these two groups is significant, as is also the difference in percentages for laboring and professional groups.

Drama.

A significantly higher percentage of professional people listen to drama than white collar people. Again, the trend is gradual from the laboring people to the professional group.

OCCUPATIONAL LEVELS

TYPE OF PROGRAM	PROFESSIONAL (Percent)	WHITE COLLAR (Percent)	LABORER (Percent)
Classical Music	76.8	42.5	35.7
Dance Music	57.1	55.9	55.0
Hillbilly Music	10.7	19.7	21.3
Religious Devotions	42.9	44.1	47.0
Mystery Stories	67.9	58.3	56.2
Comedy	60.7	63.0	53.4
Drama	73.2	46.5	45.0
Soap Operas	25.0	35.4	35.3
Quiz Programs	83.9	70.1	63.9
Discussions & Forums	69.6	37.0	43.4
Shopping Programs	17.9	31.5	29.3
Variety Shows	58.9	58.3	51.8

OCCUPATIONAL LEVELS

(Asterisk indicates significant difference in percentages.)

TYPE OF PROGRAM	Differences in White Collar & Laborer Percentages	Differences in Professional and White Collar Percentages	Differences in Professional and Laborer Percentages
Classical Music	6.8	34.3*	41.1*
Dance Music	0.9	1.2	2.1
Hillbilly Music	1.6	9.2	10.6
Religious Devotions	2.9	1.2	4.1
Mystery Stories	2.1	9.6	1.7
Comedy	9.6	2.3	7.3
Drama	1.5	26.7*	28.2*
Soap Operas	0.1	10.4	10.3
Quiz Programs	6.2	13.8	20.0*
Discussions & Forums	6.4	32.6*	26.2*
Shopping Programs	2.2	13.6	11.4
Variety Shows	6.5	0.6	7.1

RELIGION

It would seem that church attendance has little effect upon one's preference for radio programs, with the exception of classical music, religious devotions and quiz programs. It was found that church-going people are more apt to listen to classical music, religious devotions and quiz programs than are non-church-goers. This conclusion was reached after a statistical analysis of the data revealed that the percentage of church-going people who listen to the aforementioned programs was significantly greater than the percentage of non-church-goers.

RELIGION

TYPE OF PROGRAM	NO CHURCH (Percent)	CHURCH-GOER (Percent)
Classical Music	45.3	67.1
Dance Music	56.0	54.3
Hillbilly Music	21.6	18.2
Religious Devotions	36.4	55.6
Mystery Stories	55.6	50.9
Comedy	43.0	48.8
Drama	56.2	60.3
Soap Operas	33.5	27.6
Quiz Programs	67.8	78.6
Discussions & Forums	40.2	45.3
Shopping Programs	26.5	25.8
Variety Shows	59.6	55.7

RELIGION

(Asterisk indicates significant difference of percentage)

TYPE OF PROGRAM	Difference in percentages of church-goers and non-church-goers.
Classical Music	21.8*
Dance Music	1.7
Hillbilly Music	3.4
Religious Devotions	19.2*
Mystery Stories	4.7
Comedy	5.8
Drama	4.1
Soap Operas	5.9
Quiz Programs	10.8*
Discussions & Forums	5.1
Shopping Programs	0.7
Variety Shows	3.9

REACTIONS TO RADIO ADVERTISING

(Educational Levels)

	GRAMMAR (Percent)	HIGH SCHOOL (Percent)	COLLEGE (Percent)
LISTENS TO RADIO ADVERTISING	43.0	46.8	32.7
BUYING IS INFLUENCED	25.3	27.2	24.7
CAN NAME PRODUCT	16.5	18.3	15.3

A significantly greater percentage of people with high school education listen to radio advertising than college people. In the matter of listening to radio advertising there was little difference in percentage between grammar school and high school.

No significant difference in percentage was found between the educational levels in buying influenced or the ability to name a product. It is worthy of remark that a very small percentage of all educational levels is influenced by the radio advertising, according to the listeners' testimony. The actual test was applied when it wasrevealed that a still smaller percentage of each of the levels was able to actually name a product.

REACTIONS TO RADIO ADVERTISING

(Income Levels)

	$2000 OR LESS (Percent)	$2-3000 (Percent	$3-5000 (Perc.)	$5000, Above (Percent)
LISTEN TO RADIO ADVERTISING	38.1	38.8	31.9	35.0
BUYING IS INFLUENCED	19.0	30.2	17.0	18.8

The percentage of people in the $2-3000 income bracket whose buying is influenced by radio advertising is significantly greater than the percentage of people influenced in the $3-5000 group. This was the only group in which any significant difference was recognized.

RADIO DIARY ANALYSES

Definition of Terms

1. Selective or Not Selective

In determining whether a listener is Selective or Not Selective in his tuning habits, the following criteria shall be used: If the person gives evidence of listening to the same station for extended periods of two or three hours, as a regular practice throughout the day and throughout the week as an average, such a person's listening shall be considered "Not Selective."

However, the person who tunes to a station for several hours, but who does not do this as a consistent practice throughout the week, shall not be considered Not Selective.

The person who is Selective in his tuning will turn from a program to the station of his choice, without following the same station for three or four hours. It is anticipated that seldom can one be selective in his choice and focus his attention on one radio station for three or four hours at a time.

2. Dial Hopping

Dial Hopping by definition refers to the practice of moving from one station to another consistently throughout

the recorded week's period of listening, remaining with one station not more than a half hour at a time as a usual practice.

3. Regular Listening Pattern

Regular Listening Pattern refers to a systematized practice of following the same programs, or listening to the same stations at regular hours, consistently throughout the recorded seven-day period of listening.

4. Total Number of Hours

The Total Number of Hours may refer to the total hours of radio listening for seven days, as recorded in the Radio Diary.

RADIO DIARY ANALYSIS

	GRAMMAR SCHOOL (Percent)	HIGH SCHOOL (Percent)	COLLEGE (Percent)
SELECTIVE LISTENERS	80.0	61.7	63.8
FOLLOWS A LISTENING PATTERN	27.3	36.2	39.0
DIAL HOPPER	27.8	16.6	34.3

There is no significant difference in percentage between the several educational levels in selective listening. Though it appears that 80% of the grammar school people are selective, it must be pointed out that the sample of the grammar school people was of such size, in comparison with the samples for the high school and college listeners, that statistically there is no significance to this high percentage.

RADIO DIARY ANALYSIS

AVERAGE NUMBER OF LISTENING HOURS PER WEEK FOR EDUCATIONAL LEVELS

HIGH SCHOOL	34.0 hours per week
GRAMMAR SCHOOL	24.0 hours per week
COLLEGE	31.8 hours per week
AVERAGE FOR COMBINED GROUPS	32.17 hours per week

Actually, there is no statistical significance between the average number of listening hours of each of the educational groups. There appears to be a difference of note between the grammar school group and the college group, but it is not significant at the 1% level. If we use the 5% level of judging this difference, it is barely significant.

RADIO DIARY ANALYSIS

SUNDAY LISTENING

(Morning, Afternoon, and Evening)

It was found that significantly more people with high school education than grammar school education engage in Sunday morning listening.

In the afternoon listening it was evident that significantly more high school people listen than grammar school, and significantly more college people engage in Sunday afternoon listening than grammar school people.

The same high percentage for evening listening was evident among the high school group again. It was found, for instance, that a significantly greater percentage of high school people listen Sunday evening than do grammar school people. Similarly, a significantly greater number of high school people listen Sunday evening than do the college group. There is a correspondingly significant greater number of college people who listen Sunday evening than grammar school people.

There was no significant difference in the percentages of high school and college people who do not listen on Sundays. However, there was a sharply significant difference between the number of high school people and grammar school people who do not listen Sundays.

RADIO DIARY ANALYSIS

Sunday Listening

(Morning, Afternoon and Evening)

	MORNING	AFTERNOON	EVENING	NO SUNDAY LISTENING
GRAMMAR SCHOOL	14.0	11.7	18.7	6.4
HIGH SCHOOL	43.9	42.1	63.2	19.3
COLLEGE	18.7	30.4	35.7	14.0

RADIO DIARY ANALYSIS

SEASONAL DIFFERENCE IN SUNDAY LISTENING

	MORNING	AFTERNOON	EVENING	NO SUNDAY LISTENING
November to May	38.0	40.9	64.3	16.4
June to October	35.7	40.4	50.9	22.8

Chapter 4.

CONCLUSIONS

Chapter 4

CONCLUSIONS

Are people predisposed to listen to certain types of programs because of their manner of life, or is listening purely an individual matter subject to human personality variations as variable, complex, and unpredictable as human genes?

From the study conducted, it would appear that living habits have much less influence upon radio listening than might be presumed. This study revealed that radio listening is influenced by income, education, occupation, and church attendance.

The effect of income is revealed in one's choice of music. In the number of those who listen to classical music, there is to be found a significant difference between the people of the lowest and the highest incomes, the higher percentage of those listening to classical music appearing among the highest income people.

Similarly, with hillbilly music there is an observable difference between the lowest and the highest income levels.

Income influence may be seen in one's choice of religious devotions. The greater percentage of those listening to religious devotions may be found among those in the lowest income bracket. That is, there are significantly more people in the lowest income bracket who listen to religious devotions than in the highest income bracket.

In otner than these categories, income influenced listening preference very little.

Quiz programs were found to rate very high with all income levels. Hillbilly music, soap operas, and shopping programs rate consistently low with all income groups.

It was also found that education exerts an influence upon one's choice of music, drama, discussions and forums. More high school people listen to dance music than college people. Similarly, a greater number of grammar school p people listen to hillbilly music than college people.

Little difference in the number who listen to serious drama could be observed between the high school and the grammar school levels. Yet there is a recognizable difference in the percentages of grammar school people who listen

to drama, and the percentages of college people who listen. Here again, we see a gradual increase in percentage from the grammar school through the high school level, reaching the higher percentage at the college level. This would, of course, indicate that college people, and people of wider education, would be more apt to listen to drama, though serious drama is nonetheless accepted at all levels.

In preference for discussions and forums, education plays a part, apparently, in influencing the college level. Little difference in percentage was found between the grammar school and the high school groups.

People's choice for classical music tends to vary with occupational levels. It was found that professional people prefer classical music more than do white collar people. There is to be found a gradual increase in preference for classical music, as one proceeds from the laboring group through the white collar group to the professional. While the difference in increased percentages between the several groups is not significant itself, there is at the top a significant difference between the number of professional people who listen to classical music and the number of laboring people who listen to it. Likewise, in the choice

for quiz programs, the professional group shows a significantly greater percentage over the laboring groups of those who prefer this type of program. The same is true in the matter of listening to discussions and forums. Here again, the professional class prefer this kind of program more than do the laboring class.

It was found that church attendance influences people in their choice of classical music, religious devotions and quiz programs. The church attenders showed a marked preference for classical music, religious devotions and quiz programs. While quiz programs are significantly popular at all levels, it was apparent here that there is an even greater preference for quiz progbams among people who regularly attend church than among people wo do not.

Contrary to expectations,[7] it was found that the size of a family has no significant influence upon the choice of type of programs.

---

[7] Matthew N. Chappel and C. E. Hooper, "Radio Audience Measurement", Stephen Daye, New York, 1944, p.35.

The public's reaction to radio advertising offered a surprising conclusion. The public at large professes not to take radio advertising too seriously. An average of 33.8% admit listening to radio advertising. Remarks such as, "Oh, I listen - - - of course - - - like I listen to the ticking of the clock on the wall; I know it's there," were typical of the answers received, which varied from mild disdain and indignation to tolerant acceptance of what was believed to be necessary in order to pay for the programs that are enjoyed. It was found that 21.2% admitted that their buying had been influenced by radio advertising. It must be remarked here that there is a significantly greater percentage of people whose buying is influenced in the $2000 to $3000 income group than in any other income group.

Further, considering the reaction to advertising in the educational levels, it was found that a significantly greater number of people of high school level listen to radio advertising than do college or grammar school people.

The analyses of the Radio Diaries evidenced that a high percentage of listeners are Selective. That is, they do not tune to the same station for three or four hours at a time. Similarly, a characteristically low percentage

follow a listening pattern consistently through the week. An average percentage of only 34.1% follow a regular listening pattern. Dial hopping is not too common, except among the college level. Here it was found that a significantly greater number of college people than high school people are "dial hoppers."

Sunday listening practices revealed that people of high school level conprise the greater part of the listening audience on Sunday morning, afternoon and evening. It was also shown that a significantly greater number of college people listen Sunday evening than do people with grammar school education.

Though we may not attach any statistical significance to it, the Diary nonetheless revealed the fact that people of high school education probably listen the greater number of hours a week. Grammar school people listen 24 hours; college people 31.8; high school people, 34.

One is led to conclude that living habits exert little influence upon listening habits except in the type of programs that require thought and appreciation based upon training and background. Quiz programs in particular seem to by-pass all these limitations, as do dance music, comedy,

variety shows, and drama. Programs featuring hillbilly music, soap operas and shopping programs are unpopular at most levels.

It is evident that there are certain programs that provide a common denominator for reaching all levels. One can be reasonably assured that quiz programs, dance music, mystery stories, and drama will be accepted at most levels.

The extent to which radio listening is affected by background and manner of living is a question that is very difficult to determine. Outside of the few areas affected by living, indicated in this study, there is the wide general field of human interest yet to be fully exploited. It remains for the genius to find that common denominator of human appreciation that will extend to all levels of mankind. Certainly, from this study it may be supposed that programs appealing to the higher (so-called) cultural forms of life, programs requiring reflection and background, programs requiring the effort of thought, are not going to reach the average man. Pro-

grams for entertainment will always be popular; yet it remains for the person devising a program to develop that which interests in an area where thought and appreciation are not the requisite for its enjoyment, but are nonetheless to be included in its high edifying quality.

Chapter 5

APPENDIX

Michigan State College

Dept. of Radio Speech and Dramatics

East Lansing

Dear Sir or Madam:

Mr. Roger Hamlin will call at your home for a brief interview. Mr. Hamlin is a member of the faculty of Written and Spoken English at Michigan State College and is doing research work in the field of radio.

Mr. Hamlin's study will require the careful consideration of all of us. Any help by way of information that you may offer him will be greatly appreciated.

Your name has been chosen from some 90,000 in the city of Lansing in an effort to make a cross-section study of the city. The report of Mr. Hamlin's findings will be published.

Cordially yours,

Joe A. Callaway

Joe A. Callaway
Director of Radio Education

5785)

THE QUESTIONNAIRE

When arranging this survey, it wasthougnt advisable to ask a number of questions that mignt offer data for further studies in correlating living habits with radio listening habits. Thus it may be seen that only certain questions referring to education, income, size of family, church attendance and occupation have actually been used in this thesis. It is anticipated that the additional information gained in the questionnaire will offer invaluable material for further studies.

QUESTIONNAIRE

This is a radio survey being conducted by Mr. Roger Hamlin of Michigan State College, in collaboration with the Department of Radio, Speech & Dramatics of Michigan State College, and Sponsor Magazine, New York City. Any information that you give will enable us to make a complete and accurate study of this city. Do not feel obligated to sign your name or reveal your identity.

1. Do you have a radio in your car? _____

2. Do you use your radio frequently when driving? _____

3. Do you tune your car radio to programs regularly? _____

4. What do you read? Newspaper____ Magazines? ____ Novels? ____Others____?

5. Does family spend evenings together at home?_____

6. Last school attended _____ (Grammar, High, etc.)

7. When do you retire? _____ Keep regular hours?_____

8. Do you attend a church? No____ Yes ____ If so, how often _____

9. Approximate valuation of property? _____

0. What do you do on Sundays? Drive ____ Walk ____Attend movie ____ Read ____

   Sleep____ Church____ Visit____ Listen to radio ____Housework____

1. Family consists of:

   Self _____ Husband and Wife _____

   Number of children _____ Inlaws _____

2. What do you do for relaxation when tired?

3. Do you own a car?_____ Kind _____ Year _____

4. Occupation _____

5. Male _____ Female _____

6. What do you ordinarily do evenings? Listen to radio?_____ Newspapers _____

   Cards_____ Rest_____ Drive car _____Lodges or clubs_____ Other_____

7. Estimated income bracket:

   $2000____ $2000 to $3000____ $3000 to $5000____ Above ____

8. Do you play golf, ball, bowl, or any other sports? _____

9. Do you rent a home? _____

0. Do you live in a rented room? _____

1. Do you own your own home? _____

(5786)

22. Do you engage in any community work, such as Parent Teachers, lodges, clubs, etc.? _____

23. Would you buy a television set if price were lowered within your means? _____

24. Have you ever seen a television show? _____

25. Do you own a television set? _____

26. How many people do you know who have television sets? _____

27. Do you know what "F M" (Frequency Modulation) is? _____

28. Do you own an "F M" set? _____

LISTENING HABITS

(Check type of program you prefer when you listen to radio)

News

1. Sports _____
2. Newscaster (New reporter) _____
3. News Commentator (Comments on the news) _____

Music

1. Hillbilly music or cowboy songs _____
2. Dance music _____
3. Semi-classicial or classical music _____
4. Symphony orchestras _____

Plays

1. Morning or afternoon serials such as "soap operas" _____
2. Serious dramas _____
3. Mystery stories _____
4. Comedy _____

Various

1. Shopping programs, comments or advice to housewives _____
2. Quiz programs _____
3. Variety shows _____
4. Discussions and forums such as Town Hall Meeting of the Air, etc. _____
5. Religious Devotionals _____
6. Others _____

Do you listen to commerical advertisements on the air? _____

Do you feel that radio advertising has influenced your buying? _____

If there any product you use or prefer because of radio advertising? _____

If so, can you name a few? _____

_____

_____

How do you prefer to get the day's news? Newspaper? _____ Radio _____ Both _____

(5786)

RADIO DIARY

CHECK SPACES INDICATING HOURS
RADIO IS IN USE

RADIO SURVEY
CONDUCTED BY MR. ROGER HAMLIN
MICHIGAN STATE COLLEGE

	WILS	WJIM	WJR	WWJ	WKAR	Other
6 :00						
:15						
:30						
:45						
7 :00						
:15						
:30						
:45						
8 :00						
:15						
:30						
:45						
9 :00						
:15						
:30						
:45						
10 :00						
:15						
:30						
:45						
11 :00						
:15						
:30						
:45						
12 :00						
:15						
:30						
:45						
1 :00						
:15						
:30						
:45						
2 :00						
:15						
:30						
:45						
3 :00						
:15						
:30						
:45						
4 :00						
:15						
:30						
:45						
5 :00						
:15						
:30						
:45						
6 :00						
:15						
:30						
:45						
7 :00						
:15						
:30						
:45						
8 :00						
:15						
:30						
:45						
9 :00						
:15						
:30						

	WILS	WJIM	WJR	WWJ	WKAR	Other
6 :00						
:15						
:30						
:45						
7 :00						
:15						
:30						
:45						
8 :00						
:15						
:30						
:45						
9 :00						
:15						
:30						
:45						
10 :00						
:15						
:30						
:45						
11 :00						
:15						
:30						
:45						
12 :00						
:15						
:30						
:45						
1 :00						
:15						
:30						
:45						
2 :00						
:15						
:30						
:45						
3 :00						
:15						
:30						
:45						
4 :00						
:15						
:30						
:45						
5 :00						
:15						
:30						
:45						
6 :00						
:15						
:30						
:45						
7 :00						
:15						
:30						
:45						
8 :00						
:15						
:30						
:45						
9 :00						
:15						
:30						
:45						

	WILS	WJIM	WJR	WWJ	WKAR	Other
6 :00						
:15						
:30						
:45						
7 :00						
:15						
:30						
:45						
8 :00						
:15						
:30						
:45						
9 :00						
:15						
:30						
:45						
10 :00						
:15						
:30						
:45						
11 :00						
:15						
:30						
:45						
12 :00						
:15						
:30						
:45						
1 :00						
:15						
:30						
:45						
2 :00						
:15						
:30						
:45						
3 :00						
:15						
:30						
:45						
4 :00						
:15						
:30						
:45						
5 :00						
:15						
:30						
:45						
6 :00						
:15						
:30						
:45						
7 :00						
:15						
:30						
:45						
8 :00						
:15						
:30						
:45						
9 :00						
:15						
:30						

	WILS	WJIM	WJR	WWJ	WKAR	Other
6 :00						
:15						
:30						
:45						
7 :00						
:15						
:30						
:45						
8 :00						
:15						
:30						
:45						
9 :00						
:15						
:30						
:45						
10 :00						
:15						
:30						
:45						
11 :00						
:15						
:30						
:45						
12 :00						
:15						
:30						
:45						
1 :00						
:15						
:30						
:45						
2 :00						
:15						
:30						
:45						
3 :00						
:15						
:30						
:45						
4 :00						
:15						
:30						
:45						
5 :00						
:15						
:30						
:45						
6 :00						
:15						
:30						
:45						
7 :00						
:15						
:30						
:45						
8 :00						
:15						
:30						
:45						
9 :00						
:15						
:30						

	WILS	WJIM	WJR	WWJ	WKAR	Other
6 :00						
:15						
:30						
:45						
7 :00						
:15						
:30						
:45						
8 :00						
:15						
:30						
:45						
9 :00						
:15						
:30						
:45						
10 :00						
:15						
:30						
:45						
11 :00						
:15						
:30						
:45						
12 :00						
:15						
:30						
:45						
1 :00						
:15						
:30						
:45						
2 :00						
:15						
:30						
:45						
3 :00						
:15						
:30						
:45						
4 :00						
:15						
:30						
:45						
5 :00						
:15						
:30						
:45						
6 :00						
:15						
:30						
:45						
7 :00						
:15						
:30						
:45						
8 :00						
:15						
:30						
:45						
9 :00						
:15						
:30						

	WILS	WJIM	WJR	WWJ	WKAR	Other
6 :00 :15 :30 :45						
7 :00 :15 :30 :45						
8 :00 :15 :30 :45						
9 :00 :15 :30 :45						
10 :00 :15 :30 :45						
11 :00 :15 :30 :45						
12 :00 :15 :30 :45						
1 :00 :15 :30 :45						
2 :00 :15 :30 :45						
3 :00 :15 :30 :45						
4 :00 :15 :30 :45						
5 :00 :15 :30 :45						
6 :00 :15 :30 :45						
7 :00 :15 :30 :45						
8 :00 :15 :30 :45						
9 :00 :15 :30 :45