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An Analytical Study of Children's Radio Listening Interest, Habits and Attitudes

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AN ANALYTICAL STUDY

OF

CHILDREN'S RADIO LISTENING INTERESTS, HABITS AND ATTITUDES

by

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Submitted in Partial Fulfilment of the Requirements for the Degree of Master of Arts in the Department of Psychology

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INTRODUCTION

June 30, 1946 was unique from an educator's point of view. The radio, the press, and every conceivable means of communication had been pressed into service to prepare the American public and the world at large for one of the greatest scientific experiments ever undertaken by man. In this group were, without doubt, many boys and girls of elementary school age, with interest heightened and curiosity sharpened by weeks of anxious waiting. Though the reception was generally poor due to static conditions and many older members of the group lost interest, these children were not satisfied till the announcer declared the "job" finished.

We are not so much interested here in the drama of this spectacular event as in the simple fact of what was going on. People of all ages and from all whlks of life were given occasion to witness an event in detail as it transpired many miles away, due to the MIRACLE OF RADIO. Time and space were annihilated and they experienced at first hand something about which, before the days of radio, only a small fraction of people would have become informed and that perhaps weeks or months later. The rest would have been satisfied with a hazy and distorted picture of the event, acquired through

conversation and hearsay. The children, too, perhaps would have "overheard" something about it. If it made history, they would have had opportunity to acquire this part of their education when new textbooks in school would offer it.

This is but one of the many typical examples that could be cited, featuring the radio as a central factor in the setting of an educational situation. From dawn till midnight, more than nine hundred stations, aligned in over four coast-to-coast networks and twenty-five regional networks[1], cover the nation daily with broadcasts of every description, supplying information on topics of general as well as special interest, providing entertainment by the best professional talent according to the demands of the public taste, and bringing the rich cultural heritage of Western civilization to practically every individual of our nation's population. The phrase from Shakespeare, "All the world is a stage", assumes a new meaning in our day. The radio has moved this stage into nearly every home of the country, and we see enacted on it a cross-section of the life and thought of our time.

In the history of education, the invention of the printing press has stood for almost five hundred years

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1. Woefel and Tyler, Radio And The School, vii.

without a rival in importance. The decisive role that the printed page has played in developing the political, social, and economic forces which have shaped our present day institutions is beyond the possibilities of the human imagination. Consequently, the reading skill has always been regarded as the major "tool" in the equipment necessary for the acquisition of an education. Today, the radio and its related fields, e.g., television, etc., confront us with a new system of communication which may, perhaps, far outrival the press in time to come.

We need but think of such terms as "propaganda ministers" and the "war of nerves" of World War II days to get an idea of radio's possibilities of molding thought and unleashing forces for action.[2] Who could envision a crushed Germany rise from ruin and defeat to such furious heights of revenge and plunder in such a short span of time, or a democracy like the United States, totally un-

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2. H.B.Summers, Radio Censorship, p. 13. (Excerpt from an address before the Second National Conference on Educational Broadcasting, December 1, 1937, by Dr. James Rowland Angell. Congressional Record, Vol. 82, Pt. 3. pp. 577-578.)

"...No one can question the unparalleled influence which the radio exercises over public opinion, public taste, and public attitudes. It is a platitude, but no less true for that reason, that the world has never known any agency of comparable importance for the direction and control of human relations. No one familiar with the use which been made of radio in the dictatorship-controlled countries abroad can fail to realize the ghastly power which this device exercises when used for malign and sinister purposes."

prepared for war in 1941, launch the stupendous "war effort" which culminated in V.E. and V.J. Days in 1945, without this new system of communication?

The importance of critical and discriminative listening is thus established by the simple fact of present day environment.[3] Critical and discriminative listening as well as listening comprehension are matters of growth and development. Guidance on the part of the teacher is, therefore, just as necessary in the development of these skills as it is in the development of other abilities and skills, e.g., the reading skills. That means not only that the teacher will set up standards of discrimination, but that he must know just what abilities constitute good listening, their order of development, and the environmental circumstances which promote their growth.[4]

Radio's lack of status in the educational world, the lack of guidance in out-of-school listening on the part of both, parent and teacher, the type of programs generally available, and the lag of interest in the effective use of the radio, point to the fact that its possibilities are not fully appreciated. For several decades teachers have witnessed a new form of activity, viz., radio listening, assume increasingly wider proportions, but its mean-

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3. Woefel and Tyler, Radio and the School, pp. 285-289.

4. Althea Beery, "Listening Activities in the Elementary School", The Elementary English Review, Vol. XXIII (February, 1946), pp. 69-79.

ing has not been grasped.

CHAPTER I

THE PROBLEM

The Problem and Purpose of this Study.

The problem of this thesis is to make an analytical study of children's radio listening interests, habits, and attitudes, in grades five to eight in the Public Schools of Omaha, by a determination of their reactions to radio and to the different types of broadcast material, and by an evaluation of their reasons for listening; to note how the different groups, viz., the sex, the economic, the age-grade, and the ability groups differ among themselves and how they deviate from the general pattern of the whole; and if possible, to discover some of the underlying causes for such differences.

Timeliness of this Study

Psychology, as the study of human behavior, is giving increasingly more recognition to the desires and emotions as determinants of conduct. The spoken word[5,6] and its psychological setting, have been demonstrated through the years to make a much more intimate and powerful appeal to the emotions than cold print. Therefore, the current interest in listening activities would seem to be a belated one.

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5. H. B. Summers, loc. cit.

6. Gustav LeBon, The Crowd, Book III.

Delimitation of the Problem

Limitations were inherent in the approach to this study. This was a survey type of investigation and for that reason no effort was made to gather information relative to the problem which could be obtained better by a controlled experiment. Grades five to eight were selected because a reasonable degree of reading facility was thought necessary to insure reliability in the collection of data by means of the questionnaire.

Definition of Terms

Regular listener, a person whose listening has become so habituated that he listens to a particular program each time it is on the air, unless special obstacles interfere.

Regular listening, listening characteristic of a "regular listener."

Occasional listener, a person whose listening to a particular program is motivated by special interest in the program, but whose listening has not reached the degree of constancy characteristic of a "regular listener." Children who checked their listening to programs in the column of the questionnaire with the heading, "Listen Sometimes", are regarded as "occasional listeners".

Occasional listening, listening, characteristic of an "occasional listener."

Explanation of Symbolism

Π, proportion in the supply used as an estimate of the population's parameter. It is the mean proportion or the mean percentage of the sample.

p, the percentage in one of the sub-groups of the sample.

σ_p, the standard deviation, or standard error of p.

t, the difference between the mean proportion, Π, and the percentage of the sub-group, given in terms of standard errors.

The Statistical Method Employed

The formula for finding σ_p is:

$$\sigma_p = \sqrt{\frac{\Pi(1-\Pi)}{N}}$$

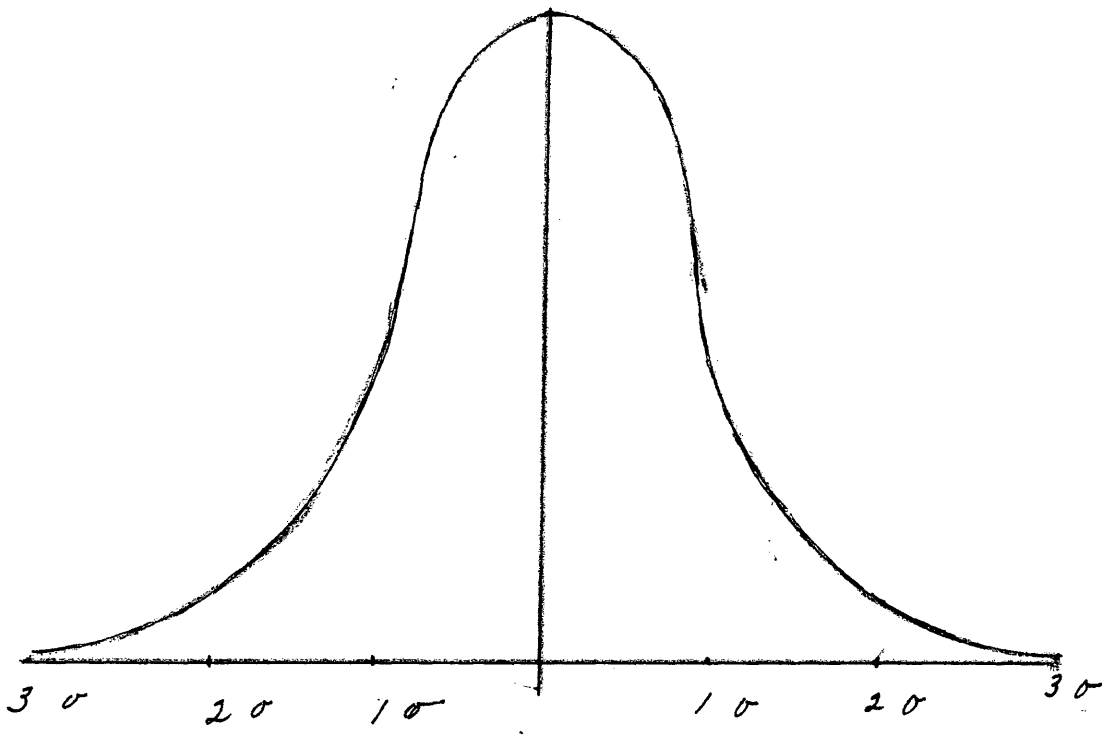
The formula for finding t is:

$$t = \frac{\Pi - p}{\sigma_p}$$

In case of large samples, e.g., the various sub-groups of this study, a difference is regarded as statistically significant when it has reached the magnitude of 1.96 standard errors.

CHART I

NORMAL CURVE OF STANDARD ERRORS



CHAPTER II

PROCEDURE IN THE COLLECTION OF DATA

Development of a Tentative Questionnaire

The questionnaire used for the collection of data upon which this thesis is based, was developed during the summer of 1945. A number of children in grades five to eight were interviewed in the city parks to find out what specific items were most revealing about their radio listening activity. About fifty children in this oral interview stated that listening to the radio was one of their leading, if not their leading diversion in the home; that they listened mostly for entertainment but that they also listened to acquire information. Each boy or girl gave his or her list of favorite radio programs and a brief explanation of what each thought attracted them to listen to any given program. This list finally included almost the whole gamut of radio offerings, so that it became difficult to select items which should be included in the questionnaire.

Examination of the material collected showed that the younger boys in the group liked the adventure serials, while the older boys concentrated on the mystery type of program. The girls in general preferred the musical programs and the plays. The comedies and the quiz shows

ranked high with all groups. Listening to the news and to speeches by famous people, e.g., the President of the United States were given mostly as examples of serious listening or listening for information.

Organization of the Tentative Questionnaire

In studying the material for organization into the questionnaire, it became evident that it quite logically grouped itself into three divisions, viz., Reactions to the Radio, Programs of Special Interest, and Reasons for Listening. After this tentative questionnaire was formulated, it was given a trial in an oral interview with a number of boys and girls of the required ages in the city parks. The purpose of administering the questionnaire orally was to test it for ambiguity of statement and to find out whether it covered the children's interests as fully as could be expected.

Testing the Reliability of the Tentative Questionnaire

After a few minor changes were made, this questionnaire[1] was subjected to a test of reliability by having children enrolled in grades five to eight in the summer school at South High fill it out twice, allowing an interval of one week to intervene between the two try-outs. One hundred one children responded the first time and ninety-nine the second time. In pairing the papers, it

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1. See Appendix A

was discovered that only eighty-nine matched. Irregular attendance accounted for the lack of pairing among the rest.

The eighty-nine questionnaires which paired were tested for correlation. The correlation test, it may be objected, is used primarily for continuous data by statisticians. This is readily admitted. It is used here merely as a support for reliability.

The ten questions on page one of the questionnaire yielded a coefficient of correlation of .97. With eight degrees of freedom, a larger value of correlation could be reached in less than one chance in a hundred from uncorrelated populations.[2,3] This then would indicate a high positive correlation. But even a perfect correlation would not necessarily prove that all the children had responded in the same manner on the two try-outs of the questionnaire. Shifting about of answers could take place without disturbing the correlation as long as the balance was maintained.

It was also tried for a test of differences.[4] The mean difference was only 3 points. The t score was 1.54, which shows that such a difference is not significant since it can be reached from the same population as often as fifteen times in one hundred chances.[5]

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2. G.W.Snedecor, Statistical Methods, p. 149
3. See Appendix A
4. See Appendix A
5. G.W.Snedecor, op. cit., p. 65

For a final check, the papers were paired and checked for differences among the low scores. This was found to be very low. Questions #7 and #8 had scored lowest. Question #7 showed nine differences out of the possible eighty-nine and question #8 showed seven differences out of the same number.

The second part of the questionnaire was likewise tested for correlation. The first column, "Listen Regularly", yielded a correlation coefficient of .89 while the second column, "Listen Frequently," showed a correlation coefficient of .75 and the third column, "Listen Occasionally", came out with .73 as its coefficient of correlation. This showed that while the first column was satisfactory, the reliability of the remaining two columns was not safe enough for this study. Examination of the paired papers showed that a uniform consistency of marking prevailed in the first column but that some confusion had entered into the work in the other two columns.

Revision of the Questionnaire

The questionnaire was revised. The first page was retained almost as it was. Instead of ten questions, sixteen were included to cover the interests of the children more fully. The free-response questions on the tentative questionnaire and subsequent interview work had given information which was regarded as significant for this study and therefore should be included in the final ques-

tionnaire. The second page, providing a check list of radio programs, was simplified to include a dual-choice-check, indicating whether listening was "Regular" or "Sometimes", instead of the former triple-choice-check.

A third page was added to the questionnaire to find out why children listened to particular programs. The most popular programs as indicated (in the) by the scores of the tentative questionnaire when it was given for the test of reliability, were listed on this page with reasons given for listening. These reasons had already been given quite completely in the oral interviews; question # 12 of the tentative questionnaire also furnished information on this point. In addition to giving vital information about listening, this list would at the same time serve as a check for self-consistency of the results obtained, since all of the programs listed on this page were already included in the check list on the second page.

Reliability of the Final Questionnaire

Each page of the revised questionnaire was then subjected to a test for reliability by having fifty children enrolled in grades five to eight in Zion Lutheran School fill it out two times with one week intervening between the try-outs. The first page showed a coefficient of correlation of .96, the second page, column one, "Regular Listening", .93, and column two, "Listen Sometimes", .82 , and the third page showed .92 as its coefficient of cor-

relation.[6,7] These correlation coefficients all passed the 1% level of significance. Examination of the paired papers showed a uniform consistency of marking between the two try-outs.

The Questionnaire given for Collection of Data

In may 1946, the questionnaire was given for collection of data. Distribution among the schools selected was effected through the Office of City Superintendent of Public Instruction. From this office, the questionnaire was delivered to the principals of these schools who asked the teacher of the grade concerned to have the children answer the questionnaire under her personal supervision. Uniform conditions of administration were sought. Pupils were allowed to ask the teacher for help if it was needed but they were not permitted to consult with each other during the time of filling out the questionnaire. This was done as a measure to safeguard the reliability of the results obtained.

Objections could be raised against the fact that different teachers supervised each grade and that conditions prevailing during the time of administration could not be uniform. This is freely admitted, but it was the best that could be achieved under the circumstances and comparison of papers in any grade warrant

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6. See Appendix A, Tables IV-VIII for correlation tests, and the Final Questionnaire.

7. See G. W. Snedecor, op. cit., p. 149, for probability levels of correlation coefficients.

no conclusion whatever of any external influence bearing upon the work.

Size of the Sample

Although 1500 questionnaires had been distributed, 1371 or approximately 91 per cent were returned. A check with the attendance department showed that approximately 12,000 pupils were enrolled in the public and denominational schools of the city in the grades under consideration. The sample then would constitute nearly 11 per cent of the total population. Off hand, this might be said to be a large sample size when many research studies are made with a 3 per cent sample or less. It should be remembered that the degree of accuracy of a sample is dependent primarily upon two factors, viz., its size and the degree of its being representative of its universe. Albert B. Blankenship,[8] in discussing the relation of the size of a sample to the degree of its accuracy says, ".... increased size of sample reduces errors of chance, increased representativeness of the sample reduces errors of bias." Size of sample here does not refer to the proportion which the sample bears in relation to its universe but to the actual number of cases in the sample.

How many cases should a sample include to be accurate within 5 per cent in 95 times out of 100 chances? Accuracy within two standard errors or the 95 per cent probabili-

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8. Consumer and Opinion Research, p. 113.

ty limits is considered reasonably accurate for the usual survey.[9] This number in the size of a sample is found by the application of Brown's formula:[10,11]

$$N = \frac{4pq}{(z_0)^2}$$

If 10 per cent or 90 per cent of the respondents are expected to reply with a categorical "yes" or "no" then the number that the sample must contain is calculated:

$$N = \frac{4(10 \times 90)}{25} \quad \text{or } 144$$

If 50 per cent would reply, the number in the sample would be calculated:

$$N = \frac{4(50 \times 50)}{25} \quad \text{or } 400$$

Therefore, to be accurate within the limit of 5 per cent or better in all cases, the sample should have 400 specimen to maintain the 95 per cent probability level. A smaller sample would mean that accuracy could not be

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9. Albert B. Blankenship, op. cit., p. 115

10. Ibid p. 119

11. H. C. Link, "How Many Interviews are Necessary for Results of a Certain Accuracy?" Journal Of Applied Psychology, 1937, 21, pp. 1-17.

maintained within the 5 per cent limit.

A response of 50 per cent within the accuracy limit of 9 per cent at the 95 per cent probability level would require:

$$N = \frac{4(50 \times 50)}{81}$$ or 123 specimen in the sample.

The reader may wonder why the sample for this study should have 1371 specimen. It should be remembered that this number must be divided into five economic groups of unequal size, four age-grade groups of equal size, and five ability groups whose size would be determined by data on intelligence quotients of subjects available from surveys made in previous years. It should also be remembered that the distribution becomes increasingly less as the extremes of the intelligence scale are approached.

The present sample may be considered adequate if the accuracy limits are allowed to extend from 2.8 per cent to 9 per cent which are the limits of the whole sample and of the smallest of the economic groups, respectively. The ability groups with comparatively much smaller number of subjects are not included in this estimate.

Representativeness of the Sample

It has already been stated that errors of bias can be reduced only by increased representativeness of the

sample. This increased representativeness of the sample may be obtained by "controlled" or "stratified" sampling. Smith and Duncan describe the advantage of stratified sampling thus:[12]

> The significance of stratified, or representative, random sampling is that it reduces sampling errors. It makes use of knowledge of correlation between the variable which is being studied and one or more other variables which are correlated with this variable and about which information is available. By using this correlation it diminishes the extent of the chance fluctuations.

The fact that the children, who were the subjects of this investigation, were enrolled in grades five to eight of the public schools and that they gave their age, grade, and sex in response to the questionnaire stratified the sample according to age and sex variables.

An equal distribution was therefore assigned to the grades and also to the sexes, thus allowing 25 per cent of the sample for each of the four grades, and about 50 per cent of the sample for each sex.

The other variable, viz., the economic level of the community in which they lived and in which their school was located, was known from studies which Dr. Sullenger, Head of the Department of Sociology of the University of Omaha, made.[13]

The criteria for classification of these economic

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12. Smith and Duncan, Sampling Statistics and Applications, p. 184.

13. T. Earl Sullenger, An Ecological Study of Omaha, pp. 1-54

CRITERIA FOR ECONOMIC GROUPS

Used in Psychological Corporation Studies

Criterion	A. Economic Group	B Economic Group	C Economic Group	D Economic Group	E Economic Group
TYPE OF HOME	Large one-family, 8 or more rooms with garage for one, frequently two cars. Usually two or more bathrooms.	Moderate size one-family houses, some of the best two family and duplex homes, moderately expensive apartment houses.	Small one-family houses fairly well kept, many two-family houses and older cheaper apartments.	Run down one-family houses, poor two-family, and tenements.	Shanty
Occupation of Heads of Families	Executive and successful professional people.	Average professional people and bulk of the better paid white collar jobs. Few highly paid skilled mechanics and craftsmen. Retail Store owners.	Skilled workers in trades and factory, police and firemen in many cities, truck drivers and poorly paid white collar jobs.	Unskilled labor, janitors, and many unskilled and poorly paid factory workers.	Unemployed, and irregular workmen. Many negro sections.
Automobiles	90 to 95% own one or more. (Midwest nearly 100%)	60 to 80% own one, a few own two old-or less expensive cars.	40 to 70% own one.	20 to 40% own one, frequently an old one, 6 to 10 years old.	None
Refrigerator	95 to 100% have one or more.	60 to 80% have one.	40 to 70% have one.	10 to 30% have one	None
Telephone	Almost 100% have one	70 to 90% have one	20 to 80% have one.	10 to 30% have one	None

levels are those set up by the Psychological Corporation of America. According to this classification, there are five economic groups, A, B, C, D, and E, which follow the normal curve of distribution. Group A would therefore include 10 per cent of the sample; Group B, 20 per cent; Group C, 40 per cent; Group D, 20 per cent; and Group E, 10 per cent.

Ability groups were added by selecting questionnaires answered by children classified on the basis of intelligence quotients on file in the Department of Psychology of the University of Omaha, obtained from surveys made in 1945 and 1946. The tests used in these surveys were the Pintner Durost Mental Ability Tests, and since the average standard deviation for these tests is given as approximately seventeen I.Q. points,[14] this figure was used to determine the I.Q. range of each group. Ability Group C was thus made to include boys and girls with I.Q.'s ranging from 92 to 108; Group B, 109 to 125; Group A, 126 and upward; Group D, 75 to 91; and Group E, 74 and under.

Stratified sampling was thus attempted on the basis of four variables, viz., sex, economic level, age-grade level, and ability level.

The Sampling Design and Questionnaire Returns

It has already been said that of the 1500 question-

14. Pintner Durost, Mental Ability Tests, Manual of Interpretation, p. 10

naires distributed, 1371 or approximately 91 per cent were returned. The question remains whether the proportions in the sampling design were maintained to keep it representative of the population investigated. This question is vital. Albert B. Blankenship, in discussing the representativeness of the sample says:[15]

> The nature of the sample is tremendously more important than its mere size. Many surveys have been inaccurate because of the inadequacy of their cross-sections. No known survey has ever gone wrong because of the number of questionnaires collected.

L. V. Koos, stressing the desirability of a full count in the returns of a questionnaire study, emphasizes the same point;[16]

> What makes it vital to have practically the full count in all these instances is the danger that failure to respond is prompted by some factor of selection - selection that militates against the representativeness of findings or conclusions drawn.

In checking over the number of returns in each strata of the population sampled, it was found that the proportions of the sampling design had been maintained quite closely. Table I gives the exact number of returns from each strata, and Table II shows a comparison of the proportions in the sampling design and the proportions of the questionnaire returns.

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15. Op. Cit. p. 110

16. The Questionnaire in Education, p. 133.

TABLE I. DISTRIBUTION OF THE QUESTIONNAIRS IN THE SEX, ECONOMIC AND AGE-GRADE GROUPS

Economic Groups	Grade-Sex					
	8	7	6	5	Totals of Economic Gr.	
	*B - G	B - G	B - G	B - G	B - G	Both Sexes
A	14-24	14-21	16-20	19-18	63-83	146
B	36-34	34-34	39-35	41-26	150-129	279
C	82-99	92-95	73-86	32-36	280-316	596
D	31-37	33-30	15-13	41-26	120-106	226
E	18-23	14-16	13-14	7-17	52-72	124
	181 217	187 198	156 168	141 123	665 706	
Totals	398	385	324	264		1371

* Key: B, boys; G, girls.

TABLE II. COMPARISON OF STRATIFIED SAMPLE RETURNS WITH THEIR PRE-ESTABLISHED PROPORTIONS

Group	Sex		Economic					Grade			
	*B	*G	A	B	C	D	E	8	7	6	5
Proportions in the Design	50%	50%	10%	20%	40%	20%	10%	25%	25%	25%	25%
Proportions in the Return	48.5%	51.4%	10%	20%	43%	16%	9%	29%	26%	23%	19%

* Key: B, boys; G, girls.

It will be noticed that only the age-grade groups did not adhere to the pre-established pattern. The seventh and eighth grades showed a greater return than their quotas allowed, while the fifth and sixth grades showed proportionately less. Examination of the returns from each school showed that two schools had failed to carry out the instructions given. Instead of administering the questionnaires to the fifth, sixth, seventh, and eighth grades, they had omitted the fifth grade and had given them only to the sixth, seventh, and eighth grades, dividing those intended for the fifth grade between the seventh and eighth grades. Another school did not return the questionnaires given to the sixth grade.[17]

It should, therefore, be remembered in the interpretation of the results that a small bias may exist in the age-grade groups. In what direction this bias would be operative can hardly be determined. It is quite safe to say that the results obtained will be more nearly representative of the seventh and eighth grade level than of the fifth and sixth grade level.

The results of the questionnaire were reduced to percentages to facilitate group comparison. They will be presented in tabular form. However, where the point under discussion needs clarification, other methods of presentation will be used, e.g., charts, etc.

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17. Infra, p. 34

CHAPTER III

GENERAL REACTIONS TO THE RADIO

Listening Time

The time spent in listening to the radio averaged approximately three hours per individual of all of the respondents who reported as daily listeners. About 12 per cent of those who answered the questionnaire reported as not listening daily. To what extent this number listened was left undetermined by the questionnaire. The range with most individuals in any group extended from one hour to five hours of daily listening.

Differences in Listening Time

Table III shows the mean listening time of the sex, economic, age-grade, and the ability groups. The means given in this table are means of means with the exception of those of the ability groups. The means of the sex groups were obtained by finding the means of the forty means of the grades in the sample. Since four grades in each of ten schools constituted the sample, and each grade was divided into a boy and girl group, eighty means were obtained altogether, forty means for each sex.

In the case of the schools which had failed to give[1] returns for the fifth and sixth grades, means were obtained by calculating a separate mean for colored and

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1. Supra, p. 20

TABLE III. STATISTICAL DESCRIPTION OF THE LISTENING TIME OF THE SUB-GROUPS IN THE SAMPLE

	GROUPS										
	Sex		Economic					Grade			
	B	G	A	B	C	D	E	8	7	6	5
Mean	2.83	3.20	2.66	3.10	3.14	2.88	3.25	3.20	3.14	2.83	2.8
S. D.	.594	.64	.27	.34	.59	.448	.79	.35	.65	.83	.35
S_x	.094	.101	.095	.12	.208	.157	.28	.11	.205	.265	.11

	Ability				
	A	B	C	D	E
Mean*	2.57	2.51	3.05	3.09	1.82
S. D?	1.50	1.93	1.90	2.28	1.12
S_x	.38	.309	.283	.37	.97

* The means in this table are means of means excepting those in the ability groups which are the means of each group's distribution.

white children.

The standard deviation for the distribution of the means in the girls' group was .64 which shows that 68 per cent of the distribution will be found within the limits of plus .64 and minus .64 of the mean of the distribution. Since the mean was 3.20 hours of listening time, 68 per cent of the means of the forty grades will be found within the 3.20±.64 limit or between 2.56 and 3.84 hours of listening time.

The standard error of the mean of the means in the girls' group was .101. Allowing 2.02 standard errors for[2] the 95 per cent confidence limits with 39 degrees of freedom, the chances are 95 out of 100 that the mean will not change by more than .204 points. In other words, the true mean of the population may be expected to be within the limits of 2.996 and 3.404 hours.

The standard deviation of the distribution of the distribution of the forty means in the boys' group was .594. This shows that 68 per cent of the means were concentrated around the mean of these means within the limits of plus .594 and minus .594 or between 2.236 and 3.424 hours of listening time.

The standard error of the mean of the means in the boys' group was .094. Allowing 2.02 standard errors for the 39 degrees of freedom,[3] the chances are 95 out of

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2. G. W. Snedecor, op. cit., p.65

3. Loc. cit.

100 that the mean of the means will not change by more than .189 points. The true mean of the population may, therefore, be quite safely assumed to lie within the limits of 2.64 and 3.019 hours of listening time.[4]

Do the means of the two sex groups differ significantly? The answer to this question was found by applying the test for differences.[5] The difference between the means was .37 hour. The standard error of the difference between the means was found to be .138. Hence,

$$t = \frac{.37}{.138} \text{ or } 2.6$$

The probability level of such a difference occurring in the same population would be one chance out of 100.* This may, therefore, be regarded as a significant difference. The conclusion is that the girls listen more than the boys do.

Economic Differences in Listening Time

The means in the economic groups were found by taking the means of each sex of each grade in each of the economic groups. This totaled eight means for each economic group or forty for all five of the groups.

The mean for Group A was found to be 2.665 hours of listening time. The standard deviation of the distribution of the means around the mean .27. In other words, 68 per cent of the means in the distribution were found to be with-

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4. See Table I, Appendix B

5. See Table II, Appendix B

* G. W. Snedecor, op. cit. p. 65

in the limits of 2.39 to 2.93 hours of listening time. Only two of the means were found outside of this limit.

The standard error of the mean was .095. Allowing 2.36 standard errors for seven degrees of freedom[6] the chances are 95 out of 100 that the mean of the means in Group A will not change more than .224 points. The true mean of the population of Group A may safely be estimated to lie within the limits of 2.44 to 2.889 hours of listening time.

The mean of the means in Economic Group B was 3.105 hours of listening time. The standard deviation of the distribution of these means around the mean was .34. This indicates that 68 per cent of the means in the distribution lie within the limits of 3.106±.34.

The standard error of the mean was .12. For seven degrees of freedom[7] the 95 per cent probability level requires 2.36 standard errors as its limits. This would be .283 hour. Therefore, the true mean of the population of Group B may safely be estimated to fall between 2.77 and 3.34 hours of listening time.

The means of Economic Group C averaged 3.143 hours of listening time. The standard deviation of the distribution was .59; therefore, 68 per cent of the means in the distribution will fall between 2.553 and 3.733 hours.

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6. Loc. cit.

7. Loc. cit.

The standard error of the mean of Group C was .208 hour. Allowing 2.36 standard error for seven degrees of freedom[8] the mean of the population may be assumed to lie within 2.65 and 3.63 hours of listening time. There are only 5 chances out of 100 that it be outside of this limit.

In Economic Group D, the mean of the means was 2.88 hours. The standard deviation of the distribution was .446 hours. Therefore, 68 per cent of the means in the distribution were concentrated within the limits of 2.43 and 3.326 hours.

The standard error of the mean was .157. Again allowing for seven degrees of freedom[9] which requires 2.36 standard errors, the mean of the population is estimated to be within the limits of 2.43 and 3.32 hours of listening time.

The mean of Economic Group E was 3.256 hours. The standard deviation of the distribution was .7937 hours. Hence, 68 per cent of the distribution was included in the limits of 2.46 to 4.049 hours.

The standard error of the mean was .28. Again, allowing 2.36 standard errors for seven degrees of freedom on[10] the 95 per cent probability level, the mean of the population may be expected to be within the limits of 2.59 and 3.916 hours.

The mean of the five means of the five economic groups

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8. Loc. cit.

9. Loc. cit.

10. Loc. cit.

was calculated to be 3.011 hours of listening time for the individuals in the sample who were classed as daily listeners and who constituted approximately 88 per cent of the entire sample. This agrees almost exactly with the mean of the 80 means in the sex groups which was 3.015 hours.

Is there a significant difference among the means of the economic groups? When more than two groups are tested for differences, the analysis of variance technique is used.[11] It is a comparison of the mean squares of the groups with the mean squares of the individuals in the groups. If the two mean squares are the same, the variance ratio, or F, is equal to one, and no difference is said to exist between the groups. In the test for differences among the economic groups, the problem resolved itself into the following equation:[12]

$$F = \frac{.446}{.2744} \text{ or } 1.62$$

Although there is a difference here, it is not large enough to be called a significant difference. The probability of occurrence has not reached the 5 per cent level.[13]

Age-Grade Differences in Listening Time

The means in the age-grade groups are identical with

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11. G. W. Snedecor, op. cit. pp. 214-227.

12. See Appendix B, Table III, for calculation of the test.

13. G. W. Snedecor, op. cit. pp. 222-225, Table 10.7

the forty means in the economic groups; their arrangement, however, is based upon grade distinction. There are ten means in each group, representing the two sexes in each of the five economic levels.

The mean for the eighth grade Group was 3.202 hours. The standard deviation of the distribution was .35. Therefore, approximately 68 per cent of the means in the distribution were concentrated around the mean.

The standard error of the mean was.11; hence, if 2.26 standard errors are allowed for nine degrees of freedom,[14] the mean of the population may be assumed to be within the $3.202 \pm .248$ limits of probability.

The seventh grade mean was 3.147 hours of listening time. The standard deviation of the distribution of the means around this mean was .65; therefore, from 2.49 to 3.79 hours describe the limits of 68 per cent of the distribution.

The standard error of the mean was .205. Allowing 2.26* standard errors for nine degrees of freedom, the true mean of the population may be expected to fall within the limits of 2.68 and 3.61 hours of listening time.

The mean of the sixth grade was 2.83 hours, and the standard deviation of the distribution was .839. Therefore, 68 per cent of the means in this group will be concentrated within the limits of $2.83 \pm .839$.

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14. Ibid., p. 65

* Loc. cit.

The standard error of the sixth grade mean was .265. Allowing 2.26 standard errors for nine degrees of freedom,[15] the mean of the population may be estimated to lie within the limits of 2.83 .5989 or between 2.23 and 3.428 hours of listening time.

The standard deviation of the fifth grade distribution was .352; therefore, 68 per cent of the means in this group will be included in the limits of 2.857±.352 hours.

The standard error of the mean was .11; again allowing 2.26 standard errors for nine degrees of freedom,[16] the mean of the population may be expected to lie between 2.609 and 3.105 hours.

Again the question arises: Is there a significant difference among the age-grade groups? The calculations for the analysis showed:[17]

$$F = \frac{.362}{.3441} \text{ or } 1.052$$

The probability level has not reached the 95 per cent confidence limit. The differences are, therefore, not regarded as significant.

Ability Differences in Listening Time

It would perhaps be misleading to discuss the mean listening time of the ability groups without emphasizing

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15. Loc. cit.

16. Loc. cit.

17. See Appendix B, Table IV, for calculations of the test.

the fact that the means of these groups are not means of means but merely the means of individuals constituting each group. Furthermore, since the distribution of the ability groups does not follow that of the normal curve for reasons to be explained later,[18] comparisons will show bias to the extent that these groups lack representativeness of the population and should, therefore, not be made directly.

Table III gives the mean of each group. Groups C and D show very close approximation of the mean of the entire sample, while Groups A, B, and E, show diversions from it, Group E considerably so. It should be noted that Group E had only 10 individuals in the sample, while Group A had 17, and Groups B, C, and D, each had 45.

Broadly interpreted, these means seem to indicate that listening is most extensive in the middle groups and that it decreases as the extremes of the ability scale are approached.

Planned Program of Listening

Although 87.88 per cent of all respondents listened daily, as many as 96.85 per cent had definite programs to which they listened. This would seem to indicate that approximately 97 per cent of the entire sample were regular listeners and that the margin of non-listeners of the population investigated may narrow down to 3 per cent. This figure speaks eloquently for the universality of radio's appeal. This very high percentage of regular listeners is

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18. Infra, p. 57

TABLE IV. RESPONSES OF 1371 RESPONDENTS ON PART I OF THE QUESTIONNAIRE

	Yes	No
1. Do you listen to the radio every day?	87.88%	11.88%
2. Do you have any particular programs to which you listen whenever you can?	96.85%	3.20%
3. Do you listen with other members of your family to any particular program?	87.09%	12.40%
4. Do you discuss radio programs with your parents or friends	73.66%	25.96%
5. Are you a member of a "Listening Group"?	34.93%	62.50%
6. Do you have a regular period in school devoted to listening to the radio?	59.88%	40.00%
7. Do you enjoy educational broadcasts?	79.79%	19.25%
8. Do you like "musical" broadcasts better than "non-musical" broadcasts?	53.97%	46.00%
9. Do you like classical music, such as symphony concerts, better than popular or dance music?	25.96%	71.97%
10. Would you rather hear a story over the radio than read it?	82.49%	16.70%
11. Do you remember better what you hear over the radio than what you read?	68.92%	31.04%
12. Is your sleep sometimes disturbed by what you hear on the radio?	24.07%	75.78%
13. Do you listen to the speeches of the President of the United States?	68.78%	29.75%
14. Do you listen to the news broadcast daily?	60.98%	38.22%
15. Do you listen to special sports events, such as football or hockey games?	71.12%	28.08%
16. Do you think that the radio has helped you to understand better what you read about and see in the world today?	93.28%	5.03%

further substantiated by the number of "regular listeners" to many of the programs listed in the second part of the questionnaire, as well as by the average time spent in listening daily to the radio. Through proper guidance and careful selection of broadcast material, radio's possibilities as an educational force is practically unlimited.

Family Listening

87.09 per cent of the respondents listened with other members of the family. In many cases, e.g., where only one radio is in the home, simple necessity may bring about such a situation. However, interest begets interest, and when interest is as high as the foregoing figures indicate, it may quite safely be assumed that common interests have been developed among members of the same family. These common interests may be the result of parental guidance or of the child's interest arousing parental participation, or of both.

Listening Groups

34.93 per cent of all children who answered the questionnaire claimed membership in Listening Groups. Listening Groups are usually conducted by a Radio Council to promote desirable habits of listening. According to a report from the president of the Omaha Radio Council, this Council does not conduct Listening Groups for children. The question must have been understood to mean other groups.

It may be argued that family group listening was understood by the question. The large discrepancy between the

number who reported as listening with the family and the 34.93 per cent to this question of membership in a Listening Group, however, would tend to reject such a conclusion.

In re-examining the questionnaires, it was found that Group Listening was concentrated in a few schools. A check with the chairman of the Teachers' Committee on Radio revealed that Listening Groups were organized in some schools by the teachers.

Since not all the schools were included in this survey the 34.93 per cent can hardly be considered as a true mean of the total population, but it must be accepted as biased to the extent that schools in which Listening Groups had been organized were or were not covered by the questionnaire.

Radio Listening Period in School

59.88 per cent of the respondents reported that they were given the opportunity of having a regular radio listening period in school. Table V gives the results of the questionnaire from each grade in each school.

Analysis shows that the following grades in their respective schools had a definite schedule of radio listening:

Dundee,	Grades,	5,-,7,8.
Rose Hill	"	5,-,-,8.
Yates	"	5,-,7,8.
Lincoln	"	5,6,7,8.
Benson West	"	-,6,7,8.
Franklin	"	5,-,7,8.
Druid Hill	"	-,-,-,8.
Howard Kennedy	"	5,6,-,-.

Twenty-one grades out of the total number listened to

TABLE V. RESPONSES HOWING SCHOOLS HAVING REGULAR LISTENING PROGRAM

School	Grades							
	VIII		VII		VI		V	
	Yes	No	Yes	No	Yes	No	Yes	No
Dundee	34	1	34	1	2	34	37	0
Rose Hill	37	5	1	32	3	33	28	0
Yates	34	1	35	0	5	29	39	0
Lincoln	30	2	31	1	37	0	30	0
Benson West	59	4	57	0	38	0		
Park	0	56	35	22	0	44		
Franklin	26	0	29	10	10	29	35	4
Druid Hill	38	0	1	32			8	28
Highland	3	27	0	29	1	26	0	35
Lake	8	32	0	31				
Howard Kenedy					25	2	21	3

the radio regularly in school and presumably under the guidance of the teacher.

Educational Programs

79.79 per cent of the respondents enjoyed educational programs. Just what was understood by the term "educational programs" is hard to say. Evidently it was understood to include more than broadcasts on specific topics from the courses of study in the schools. Perhaps any broadcast of an informational, cultural, or religious type was understood by the term. In fact, if it is interpreted broadly, it may be thought to include all that the radio offers. However, it should not be interpreted so broadly here in view of the fact that 93.65 per cent claimed that the radio had helped them to understand more fully the world in which they live. The latter figure evidently refers to the total benefits of radio listening. In other words, there were approximately 23 per cent of the children who did not say that they liked educational broadcasts and yet claimed that the radio had helped them to understand better what they read about and see in the world today.

Since it cannot be definitely determined what the respondents understood by the term "educational programs" the 79.79 per cent may, perhaps, be regarded as being more indicative of why they listened rather than it is of the type of program to which they listened.

Musical Programs vs. Non-musical Programs

53.97 per cent of the pupils preferred musical programs to non-musical programs. This figure roughly estimates the appeal of the musical type of program. It does not necessarily mean that the musical program stands equal chances with any other program but rather that with about one-half of the listeners, music holds a decided advantage.

This figure also does not mean that one-half of the listeners do not listen to musical broadcasts, or that this group is devoid of musical appreciation. They have merely declared themselves as favoring non-musical broadcasts.

Related to the question of program preference was the one, "Do you like classical music, such as symphony concerts, better than popular or dance music?" Only 26.96 per cent answered affirmatively; 71 per cent replied in the negative. From this it is quite clear that popular music is in demand. This is perhaps due to the fact that the radio is often shared with older members of the family who listen to popular music as a means for relaxation, and being exposed to it, the children will naturally learn to appreciate it.

Listening vs. Reading

82.49 per cent of the subjects in the investigation preferred to listen to a story over the radio to reading it. Making a snap judgment, the reader might conclude that the reason for such a situation would be that listening is the easier of the two methods, that many children in the grades under consideration have as yet not fully mastered the

mechanics of reading, and for that reason find it difficult to get the thought from the printed page. Under such circumstances, listening would offer a short cut to knowledge of the material since it would only require attention to the spoken word. This may be true in some cases, but it would hardly be an explanation of why 82 per cent of the 1371 children in this investigation prefer listening to a story to reading it.

Granted that the 82 per cent of these children found that listening was the more effective method, other factors, besides reading skill, or lack of it, must enter into the picture to make it so. Dr. Carver[19] made a "Study of the Conditions Influencing the Relative Effectiveness of Visual and Auditory Presentation". In reporting his findings, he summarizes the results in relation to four experimental variables:

> 1. Difficulty of the material. The effectiveness of auditory presentation tends to vary inversely with the difficulty of the material presented.
>
> 2. Type of material. The effectiveness of auditory presentation is limited to meaningful material, and tends to be superior for subject matter that is concrete and serial in nature.
>
> 3. Mental functions. If other conditions are kept constant, the mental functions of recognition, verbatim recall, and suggestibility seem more effectively aroused in listening; whereas critical attitudes and discriminative comprehension are favored by reading....
>
> 4. Educational background. The higher the

19. M. E. Carver, A Study of Conditions Influencing the Relative Effectiveness of Visual and Auditory Presentation. In summary form: Cantril and Allport, The Psychology of Radio, p. 159.

> cultural level of the listener the greater his ability to profit from auditory presentation.

To what extent these four factors bear upon the problem here is hard to say. It would seem that factors # 2 and # 3 would be of foremost importance.

68.92 per cent of the pupils claimed that they remember better what they hear over the radio than what they read. This of course is merely a subjective opinion on a problem that requires an experimental inquiry before it can be accepted as a fact. However, factor # 3 of those given in Dr. Carver's report gives some evidence to justify such an opinion.

Woefel and Tyler cite an experiment conducted by Irving L. Cohen which throws added light upon the point under discussion:[20]

> In a doctoral investigation, Irving L. Cohen worked with several hundred school children in New York City to determine the relative effectiveness of silent reading and radio listening in the recall of facts, both immediately following the experience and after a period of three weeks. The results of reading versus listening were inconclusive. For no grade was there a significant difference between the reading and the listening group.

This does not, however, prove that the 66 per cent of the children who thought listening was more effective than reading, were wrong in their opinion. Much depends upon the individual concerned and the nature of the subject matter in question. To quote from Dr. Lazarsfeld:

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20. Woefel and Tyler, Radio and the School, p. 29

> For every study that shows that the ear is more receptive, another study can be quoted which shows the same advantage to the eye. The truth seems to be that the physiological means of perception is of itself only of small importance in the communication of ideas; what counts is the situation in which the communication occurs,- the reading and listening habits of the respondents and the character of the subject matter in question.[21]

The subject matter in question here was a story, and Dr. Carver[22] had found auditory presentation superior to visual presentation with subject matter of a concrete and serial in nature. The fact of individual differentiation is further substantiated by the differences that showed up on this question in the ability groups and in the economic groups, in this study. We may, therefore, regard the 68 per cent who thought that listening was more effective than reading to be correct in their opinion.

Sleep Disturbances and Radio Listening

24.07 per cent reported that their sleep was sometimes disturbed by what they had heard over the radio. This is quite in line with the findings of Cantril and Allport. To quote:[23]

> About one-third of the children say they lie awake in bed thinking of things they have heard over the radio. One-third dream of radio plots.

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21. P. F. Lazarsfeld, Radio and the Printed Page, p. 199.

22. Supra, p. 37

23. Cantril and Allport, op. cit. p. 34.

The preponderance of listening to mystery, murder, and adventure stories[24] perhaps explains why this is so. This points to the need of guidance in matters of program selection and time of listening.

Listening to the President

The question as to whether the respondents listened to the speeches of the President of The United States was asked because this type of listening activity was given by many of the children during interviews when the questionnaire was formulated as a form of listening to serious broadcasts or broadcasts of an informational character. It should also be remembered that at the time when the questionnaire was given our country was still at war and interest in the President's reports on the state of the Union was at a high level. 68.78 per cent of the respondents listened to his speeches.

Cantril and Allport[25] quote the preferences of children, ranging in age from ten to fourteen years, for programs coming to them in school. Of the seven types of programs listed, talks by famous men and women ranked fifth from the top and third from the bottom. It would seem that 68.78 per cent of listeners to the President's speeches would be fairly well in line with this ranking.

Broadcast of the News

60.98 per cent of the pupils listened to the broadcast of the news. This figure is very close to the number

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24. Infra, P. 65

25. Cantril and Allport, op. cit., p. 64.

who reported as having a regular period of radio listening in school. Since the teaching of current events has become a part of the curriculum of almost every school, may we not assume that the radio was used for this particular purpose in those schools where radio listening was a part of the school program? If it was not used directly as a medium of instruction, then perhaps, sufficient interest may have been developed so that the children made voluntary use of the radio to hear the news broadcast. Of course, this interest in the news over the radio may have had its origin in untold and varying circumstances, each case being a law unto itself.

Levenson[26] reports that three trends are discernible in the development of children's programs for leisure-time listening. One of these is a specially designed newscast for children. He says:

> The Mutual Network tried the Junior Newscaster which, although it met with a good deal of approval, was discontinued after thirteen weeks. Station WSAI, Cincinnati, has presented such a program each school day in the late afternoon. Several other stations are now presenting this type of program for home listening. Evidence is fast accumulating to indicate that the news period for children is here to stay, at least on a local basis.

The 61 per cent is highly indicative of children's desire for serious listening as was also shown by the 68.78 per cent of listeners to the previous question. What this interest could develop into if the opportunity

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26. William Levenson, Teaching Through Radio, p. 383.

for it would be improved, can well be imagined. This again shows that the radio has its proper in the field of education. Proper adaptation, however, to its purposes in this field must still be achieved.

Broadcast of Special Sports Events

71.18 per cent listened to the broadcast of special sports events, such as football and hockey games. This shows that children in general are interested in sports and that they use the radio to a great extent to follow their interest. It is of interest here to note that 10 per cent more of the children listened to the broadcast of sports events than to the broadcast of the news. That does not mean that this 10 per cent does not concern itself with the news. The daily papers, as well as the radio, cover both, the news and sports events. The radio is perhaps used more for sports events because it is the better medium of the two for this particular purpose. Dr. Lazarsfeld writes:[27]

> The greater the interest in a given subject matter, the more strongly will people prefer the medium which gives them the fuller report of the topic under discussion. For example, the more people were interested in current events the more they preferred the newspapers to the radio as a source of news....On the other hand, the more people were interested in baseball, the more they preferred to listen to the play-by-play description of the game over the radio, than to read a summary in the newspaper.

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27. P. F. Lazarsfeld, op. cit., p. 147.

This high percentage of listeners to play-by-play descriptions of sports events points to the educational advantages of the radio in on-the-spot announcements.

The Value of Radio Listening

Of the entire sample, 93.65 per cent believed that the radio had helped them to understand better and more fully the world in which they live. The time spent in daily listening, the range of broadcast material in type to which listening is done, the effects of radio listening in stimulating discussion, creating new interests, etc., — all considered, should add up to something.

Levenson, in summarizing the findings of W. L. Gottenberg in a questionnaire survey made in 1940, states that 90 per cent of the 963 children included in the investigation believed that they had acquired information.[28] This may be thought to be almost identical with the findings of this inquiry if allowance is made for considerable difference in time and locality of the two investigations.

In summing up the benefits of radio listening, Sidney L. Pressey states:[29]

> ....In total the radio is the most extraordinary instrument for entertainment, education, and propaganda ever devised. Data regarding radio listening should be of significance to every teacher.

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28. W. Levenson, op. cit., p. 355

29. Pressey and Robinson, Psychology and the New Education, p. 135.

TABLE VI. SIGNIFICANCE OF DIFFERENCES BETWEEN THE SEX GROUPS

Question No.	II	Sex	p	II-p	σ_p	$\frac{II-p}{\sigma_p} = t^*$
		B	.8496	.0292	.01265	2.3
**1.	.8788	G	.9065	.0277	.01228	2.25
		B	.7000	.0366	.01714	2.13
4.	.7366	G	.7719	.0353	.0165	2.13
		B	.7563	.0416	.01558	2.67
7.	.7979	G	.8512	.0503	.01508	3.33
		B	.493	.0467	.0197	2.37
8.	.5397	G	.5835	.0438	.019	2.3
		B	.8224	.1106	.0175	6.32
15.	.7118	G	.6076	.1042	.017	6.12

1. Do you listen to the radio every day?
4. Do you discuss radio programs with your parents or friends?
7. Do you enjoy educational programs?
8. Do you like "musical" broadcasts better than "non-musical" broadcasts?
15. Do you listen to special sports events, such as football or hockey games?

* See page 3 for explanation of symbolism and method for finding differences.

** Numbers here refer to questions of the same number in Part I of the questionnaire, and given here beneath the table.

Sex Differences

Table VI shows how the sexes differed on five of the sixteen questions in Part I of the questionnaire. Although there were differences also on the eleven other questions, those differences were not included in this table because the differences were not large enough to be called significant differences. As has been stated, only those differences are regarded significant in the interpretation of the statistics in this thesis which have reached the magnitude of 1.96 standard errors or a probability of occurring five times in one hundred chances from the same population. Therefore, it is assumed that if the difference is as large or larger than 1.96 standard errors, the populations from which the samples were drawn, must be different unless one of the five chances in one hundred has resulted.

Looking at table VI, it will be noted that the girls differed above the mean and the boys below it on four of the questions while the situation was reversed on the other one question. It is therefore concluded that more girls than boys listen to the radio every day, that the girls likewise discuss programs more with their parents or friends than the boys do. More girls than boys enjoy educational programs and again more girls than boys prefer musical broadcasts to non-musical broadcasts. However, more boys listen to the broadcast of special sports events than girls.

Listening to sports events brought out the greatest difference between the sexes. Over 21 per cent more boys

than girls listened to football games, hockey games, or other sports events. The boys differed approximately 6 standard errors above the mean while the girls differed 6 standard errors below the mean. This shows that the boys are more interested in sports as a listening activity than the girls are.

Differences of the Economic Groups

On the question, "Do you have any particular programs to which you listen whenever you can?", Economic Group D ranked 3.27 standard errors below the mean. This difference must be regarded as inconclusive because no trend was indicated by differences in the other groups.

Significant differences showed up on the question, "Do you discuss radio programs with your parents or friends?" Group A ranked 2.53 standard errors above the mean, Group B, 3.32 standard errors below the mean, Group C, 1.97 standard errors above the mean, while Group D and E differed below the mean, though their differences were not large enough to be called significant differences. Again, these differences must be regarded as inconclusive because no trend was indicated by the differences.

The question of membership in a Listening Group brought out significant differences in all groups. The standard error of the difference from the mean in each group was:

Group A ------- 3.12 above
Group B ------- 3.67 below
Group C ------- 5.48 above
Group D ------- 4.18 below
Group E ------- 2.50 below

Since no definite trend was established by the differences, other factors than economic must have been operative to bring about these differences. As has already been stated, a check with the chairman of the Teacher' Committee on Radio showed that Listening Groups had been organized in some schools on the initiative of the teachers. A re-check of the questionnaires brought out that Listening Groups were concentrated in the Dundee, Lincoln, and Benson West Schools, which represent the A and C Economic Groups of this study, and which were found to be significantly above the mean.

The economic groups showed a definite trend of differences on the use of the radio in the schools. Group A, B, and C were above the mean and Groups D and E were decidedly below the mean. All of the differences were statistically significant, with the exception of Group B, which, nevertheless, was in line with the trend. This seems to indicate that increasingly more use is made of the radio as a means of education in schools as you go from the lower economic residential areas to the higher economic residential areas.

On the question of preference of musical broadcasts to non-musical broadcasts, the economic groups again differed consistently. Group A and B were significantly below the mean while Groups C, D, and E were above the mean, Group E being significantly so. The trend was upward from the higher to the lower economic groups.

On the question of preference of classical music to popular music, only Groups C and B showed significant dif-

ferences from the mean. These differences must be regarded as inconclusive because no trend was established by the remaining groups.

A pattern of significant differences resulted among the economic groups on reactions to the question of preference of hearing a story over the radio to reading it. The trend was upward from the higher economic groups to the lower. Group A and B were significantly below the mean while Groups C, D, and E were above it. This same trend of differences existed among the ability groups as will be noted later.

Related to the foregoing question and emphasizing its import was the one following it: "Do you remember better what you hear over the radio than what you read?". In both, the economic as well as in the ability groups the same pattern of differences was observed. Economic Group A and also Group B were significantly below the mean while Groups C and D were above the mean, Group D being significantly so. Group E was slightly below the mean. The trend of differences was upward from the higher to the lower economic groups. This may be indicative of a difference in reading ability. Paul F. Lazarsfeld writes:[30]

> For a very skilled reader,... reading has definite advantages. In the first place, it is more efficient for the skilled reader in terms of time. In reading, the reader fixes his own rhythm and rate of speed; in listening, the broadcaster, not the listener, determines the pace.

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30. P. F. Lazarsfeld, op. cit., p. 139.

> The skilled reader reads more rapidly than the broadcaster speaks; consequently, he can cover a given amount of material in a shorter time by reading than by listening. Reading for the skilled reader is also a more flexible method for obtaining what he wants. He can choose the portion of the printed page to which he cares to give attention; if he wishes, he can scan the printed material. But he cannot scan a radio broadcast.

It should also be remembered that what the radio offers is intended for the public at large. Highly skilled readers are often interested in detailed and specialized reading material. Consequently, they have to resort to reading to get what they want.

On the question of listening to the speeches of the President of the United States, Group B differed significantly below the mean while Groups C and E ranked significantly above the mean. Groups A and D fell below the mean but not significantly so. These differences remain inconclusive because no trend was established by the differences.

Listening to the broadcast of special sports events brought out important differences among the economic groups. Group A ranked significantly above the mean and Group E ranked decidedly below the mean. These extremes of the economic groups show a difference in range of about 30 per cent. Groups B and C were slightly above the mean and Group D was slightly below it. The large difference between the extremes is perhaps indicative of a difference in degree of interest in sports events.

The question as to whether the radio had helped the the children to understand better the world in which they live brought out no conclusive differences. Group B and Group C differed statistically from the mean. Group B was 4.46 standard errors below the mean and Group C was 2.99 standard errors above it. The other groups differed so slightly that no trend was indicated.

The reader is referred to Table VI in Appendix B for a full statistical description of the significance of differences among the economic groups on Part I of the questionnaire. Only those questions are treated in the table which showed a significant difference in one or more of the groups.

To sum up the findings as to differences among the economic groups on Part I of the questionnaire, Table VII presents the questions which brought out conclusive differences. These are regarded as conclusive differences because a definite trend was indicated by these differences.

TABLE VII. CONCLUSIVE DIFFERENCES AMONG THE ECONOMIC GROUPS

* Question No.	II	Group	p	II-p	σ_p	$\frac{II-p}{\sigma_p} = t$
		A	.7328	.1340	.0405	3.30
		B	.6451	.0463	.0293	1.58
		C	.7164	.1176	.02	5.88
		D	.2345	.3643	.0325	11.20
6.	.5988	E	.4354	.1534	.044	3.71
		A	.3767	.1630	.0415	3.95
		B	.4802	.0595	.0298	1.99
		C	.5704	.0307	.0203	1.51
		D	.5442	.0045	.0331	.13
8.	.5397	E	.7096	.1699	.0447	3.80
		A	.7260	.0989	.0314	3.14
		B	.7705	.0544	.0227	2.39
		C	.8422	.0173	.0155	1.11
		D	.8849	.0600	.0252	2.38
10.	.8249	E	.6709	.0460	.0341	1.46
		A	.5753	.1139	.0383	2.99
		B	.5878	.1014	.0276	3.67
		C	.7197	.0305	.0189	1.61
		D	.8146	.1254	.0307	4.08
11.	.6892	E	.6774	.0118	.0415	.28
		A	.8424	.1306	.0374	3.49
		B	.7245	.0127	.0270	.47
		C	.7130	.0012	.0183	.06
		D	.7039	.0079	.0300	.26
15.	.7118	E	.5403	.1715	.0406	4.22

6. Do you have a regular period in school devoted to listening to the radio?

8. Do you like "musical" broadcasts better than "non-musical" broadcasts?

10. Would you rather hear a story over the radio than read it?

11. Do you remember better what you hear over the radio than what you read?

15. Do you listen to special sports events such as football or hockey games?

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* The numbers here refer to the questions of the same number in Part I of the questionnaire, and given beneath this table for the reader's convenience.

Age-grade Differences

The seventh and the eighth grades differed significantly from the mean on the question of listening with other members of the family. The eighth grade ranked 2.37 standard errors below the mean while the seventh grade ranked 2.85 standard errors above the mean. The sixth grade was below the mean but not significantly so, while the fifth grade was approximately on the mean. These differences must be regarded as inconclusive since no trend was indicated.

Conclusive differences came out among the grades on the question of discussion of programs with parents or friends. The seventh and the eighth grades were above the mean while the fifth and the sixth grades were below the mean. However, only in the seventh grade was the difference from the mean significant.

Large statistical differences resulted on the question of having a regular radio listening period in school. The fifth and the eighth grades ranked significantly above the mean, while the sixth and the seventh grades ranked below the mean, the sixth grade with a very large standard error. the conclusion is that the opportunity for radio listening in schools is not uniform among the grades.

Conclusive differences resulted on the question of preference of musical broadcasts to non-musical broadcasts. The seventh and the eighth grades were statistically above the mean while the fifth and the sixth grades were significantly below the mean. This trend through the grades seems to indi-

cate that preference for musical programs is a matter of development. Perhaps this is so because appreciation of music grows as its meaning becomes more intelligible to the maturing child's mind and emotions. Perhaps singing, rhythm exercises, and the hearing of tonal combinations have awakened its nature to the beauty in music so that it begins to feel a satisfaction in the various forms of musical expression. By the time that the sixth grade is reached, about 50 per cent of the children prefer listening to music to any other broadcast material.

Cantril and Allport[31] write, after analyzing Lumley's list of adult listeners' preferences:

> Overlooking the differences of age and sex and considering the radio audience as one large undifferentiated group, it is clear that music heads the list of preferences, with other forms of entertainment following in favor. Broadcasts of serious subjects are less popular.

Consistent differences resulted among the grades on the question of preference of classical music to popular music. The seventh and the eighth grades were significantly below the mean while the fifth and the sixth grades were significantly above the mean. This seems to indicate that children in their choice of music begin with classical music and learn to like popular music as they advance through the grades.

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31. Cantril and Allport, op. cit., p. 89.

In survey made as recently as 1946, Lazarsfeld and Reed found that popular music and dance music programs were in far greater demand by the adult listening audience than classical music programs.[32]

On the question of preference of hearing a story over the radio to reading it, the seventh and the eighth grades differed only slightly from the mean. The sixth grade was significantly below the mean while the fifth grade was significantly above the mean. The differences were not conclusive because no trend was established among the grades.

Important differences resulted on the question of sleep disturbances caused by listening to the radio. The seventh and the eighth grades were below the mean, the eighth grade being significantly so, while the fifth and the sixth grades were above the mean, the fifth grade being significantly so. This can readily be understood when the fact is considered that this same trend of differences was found among the grades in listening to the Youth and Adventure Serials, programs charged with action and suspense, e.g., Jack Armstrong, or the crime and murder dramatizations, e.g., Gangbusters etc.

Conclusive differences resulted on the question of listening to the speeches of the President of the United States. The eighth grade showed a significant difference

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32. Lazarsfeld and Reed, The People Look at Radio, p. 135.

above the mean, while the fifth, sixth, and seventh grades were below the mean. Approximately 13 per cent more of the eighth grade than of the seventh grade listened to the speeches.

The question, "Do you listen to the news broadcast daily?" did not result in differences among the grades which might be regarded as conclusive differences. The sixth grade alone showed a significant difference from the mean. This was 2.69 standard error below the mean. The fifth and the seventh grade were approximately on the mean while the eighth grade was 1.7 standard error above the mean.

Listening to special sports events brought out no conclusive differences among the grades. Only the fifth and the sixth grades showed significant differences from the mean. The sixth grade resulted in 2.21 standard errors below the mean while the fifth grade came out with 2.09 standard error above the mean.

No significant differences resulted among the grades on the question, "Do you think the radio has helped you to understand better what you read about and see in the world today?". The fifth, sixth, and seventh grades were approximately on the mean, while the eighth grade was above the mean.

Table VIII shows conclusive differences among the grades on Part I of the questionnaire. These differences

TABLE VIII. CONCLUSIVE DIFFERENCES AMONG THE GRADES

*Question No.	M	Grade	p	M-p	σ_p	$\frac{M-p}{\sigma_p} = t$
		8	.7487	.0121	.022	.55
		7	.7896	.0530	.0234	2.36
		6	.7006	.036	.0245	1.46
4.	.7366	5	.6856	.0510	.0271	1.88
		8	.6030	.0633	.025	2.53
		7	.5714	.0317	.025	1.26
		6	.50	.0397	.027	1.40
8.	.5397	5	.4469	.0928	.03	3.09
		8	.1884	.0712	.0219	3.25
		7	.2103	.0493	.0222	2.22
		6	.3197	.0583	.0243	2.40
9.	.2596	5	.3674	.1078	.0269	4.00
		8	.1356	.1051	.0215	4.88
		7	.2195	.0212	.0218	.97
		6	.2592	.0185	.0238	.77
12.	.2407	5	.3977	.1570	.0264	5.09
		8	.7788	.0910	.0231	3.93
		7	.6493	.0385	.0235	1.63
		6	.6666	.0212	.0257	.82
13.	.6878	5	.6328	.0553	.0284	1.94

4. Do you discuss radio programs with your parents or friends?
8. Do you like "musical" broadcasts better than "non-musical" broadcasts?
9. Do you like classical music, such as symphony concerts, better than popular or dance music?
12. Is your sleep sometimes disturbed by what you hear on the radio?
13. Do you listen to speeches by the President of the United States?

* The question number here refers to the question of the same number in Part I of the questionnaire and restated below this table for the reader's convenience.

are regarded as conclusive because a definite trend was established among the groups.

For a complete statistical analysis of differences among the grades, the reader is referred to Table VII in Appendix B.

Differences among the Ability Groups

Differences of the ability groups were calculated on their divergences from the mean proportion of the entire sample, rather than from the mean proportion of the ability groups. This was done because the mean proportion of the entire sample of the investigation is a truer mean of the population sampled than the mean proportion of the ability groups would be, since special precautions had been exercised to keep the sample representative of the population, and because the entire sample is more than eight times larger than the ability groups taken as a whole. The mean proportion of the ability groups would be biased to the extent that it lacked representativeness of the population, since the demands of the normal curve of distribution could not be carried out when the sample of the ability groups was obtained.

Since the number in the sample of the ability groups is necessarily small, statistical differences must have a larger magnitude than 1.96 standard errors to be significant. According to Snedecor[33] Ability Group E, with

33. G. W. Snedecor, op. cit., p.65

10 in the sample and 9 degrees of freedom, should have a standard error 2.26; Group D, C, and B, with 45 in each sample and 44 degrees of freedom, should have a standard error of 2.02; Ability Group A, with 17 in the sample and 16 degrees of freedom, should have a standard error 2.11.

The ability groups differed on the question of having particular programs to which they listened whenever possible. Groups A, B, and C, showed small positive differences from the mean while Groups D and E showed significant differences below the mean. It is therefore concluded that the lower ability groups do not select programs for listening as much as the average and upper ability levels do.

On the question of program discussion with members of the family or friends, a trend was apparent but it was supported by a significant difference in only one group. Group D differed from the mean by 2.75 standard errors. This was a negative difference. Group E likewise differed negatively; Groups A and B, however, resulted in positive differences. The differences remain inconclusive.

The question of membership in a Listening Group resulted in one significant difference. Group D differed 3.08 standard errors above the mean. The question is not directly affected by differences in intelligence;

it is a matter of coincidence that Group D was selected to a greater extent from schools which had Listening Groups than the other groups were.

The question, "Do you have a regular period in school devoted to listening to the radio?", resulted in positive differences in all groups. Groups B, D, and E, differed significantly above the mean. This question, like the previous one, is not related to intelligence. The divergences are explained by the fact that all of the ability groups were selected from a few schools and it is a matter of coincidence that these schools had regular listening periods for nearly all of the grades under consideration.

On the question, "Do you prefer classical music to popular or dance music?", ability Group A resulted in a positive significant difference from the mean. The standard error of this difference was 3.24. The other ability groups showed no significant differences. Ability Group A consisted of individuals with I.Q.'s of 125 and over. Such pupils usually demand a fuller program of activities than those with less ability. Music lessons, especially in the upper economic classes is one of the first extra-curricular activity chosen and since the higher ability group was selected from schools in the upper economic areas, it may, perhaps, be quite safely assumed that most of these children had had advantages of special music instruction, which usually stresses music in the classical style.

A consistent trend of differences resulted on the question of preferring listening to a story over the radio to reading it. The trend was upward from the higher ability groups to the lower. Group A showed a standard error of 3.62 below the mean. More children in Group A than in any of the other groups preferred reading a story to listening to it. The advantages of reading for skilled readers has already been discussed.[34] Groups D and E showed positive differences from the mean.

The same trend of differences was observed on the question, "Do you remember better what you hear over the radio than what you read?". Groups A, B, and C, were significantly below the mean, while Groups D and E resulted in differences above the mean.

The question, "Is your sleep sometimes disturbed by what you have heard on the radio?" resulted in one significant difference. Group C differed negatively from the mean by 2.03 standard errors. The difference must be regarded as inconclusive since no trend was indicated by differences in the other groups.

Only Group B resulted in a significant difference from the mean on the question of listening to the news broadcast daily. The difference must be regarded as inconclusive since differences in the other groups did not indicate a trend.

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34. Supra, p. 48

All ability groups resulted in positive differences from the mean on the question of listening to the broadcast of special sports events. However, only Group E showed a significant difference.

Table IX shows the conclusive statistical differences among the ability groups on Part I of the questionnaire.

For a complete statistical description of differences among the ability groups on Part I of the questionnaire the reader is referred to Table VIII of Appendix B.

TABLE IX. CONCLUSIVE DIFFERENCES AMONG THE ABILITY GROUPS

*Question No.	II	Group	p	II-p	σ_p	$\frac{II-p}{\sigma_p} = t$
		A	1.000	.0315	.04234	.74
		B	.9727	.0042	.02605	.16
		C	.9777	.0092	.02605	.35
		D	.8888	.0797	.02605	3.05
2.	.9685	E	.70	.2685	.05521	4.86
		A	.4706	.3543	.09267	3.82
		B	.7777	.0472	.05700	.82
		C	.7333	.0916	.05700	1.60
		D	.9333	.0916	.05700	1.607
10.	.8249	E	.9000	.0751	.12080	.62
		A	.4117	.2775	.1123	2.48
		B	.5555	.1337	.0691	1.93
		C	.4888	.2004	.0691	2.89
		D	.7777	.0885	.0691	1.28
11.	.6392	E	.7000	.0108	.1465	.07

2. Do you have any particular programs to which you listen whenever you can?

10. Would you rather hear a story over the radio than read it?

11. Do you remember better what you hear over the radio than what you read?

* Question number here refers to the question of the same number in Part I of the questionnaire and restated below this table for the reader's convenience.

CHAPTER IV

RADIO PROGRAMS AND THEIR LISTENING AUDIENCE

Part II of the questionnaire was designed to determine what radio programs were in greatest demand by the children, and to what extent they listened to them. Fifty-four programs were arranged in seven groups as a check-list with a double-choice check to enable the respondents to describe their listening as "regular" or "sometimes". By special instruction they were asked not to check any program to which they did not listen.

The programs constituting the check-list were obtained through the interviews with the children of the ages and grades to which this study is limited at the time when the questionnaire was assembled. Some were obtained from the answers to the free-response question in the tentative questionnaire when it was given for a test of reliability. The religious programs were added by the writer to find out to what extent the children listened to this type of program.

Table X presents the seven groups of radio programs with the percentage of "regular" and "occasional" listeners and the total percentage of these two classifications. With the exception of a few minor changes, these programs are listed in the table in the same order or sequence as

that of the questionnaire. Each per cent represents the number of listeners from the entire group of 1371 children in the investigation.

Although the programs were divided into seven groups in the questionnaire, no classification was indicated by topic or heading. This feature is added in the table to facilitate discussion.

It will be observed from the table that the programs with the highest percentage of "regular" listeners, usually had enough "occasional" listeners to give them the highest rating in the column of "Total Per Cents of Listeners". In other words, the column of "Regular Listeners", with but few exceptions, shows which programs rated highest with the children in general.

Programs which drew the largest percentage of listeners are found in the Mystery, Comedy and Variety, Youth and Adventure Serial, The Educational and Quiz, and the Drama groups of programs. The Religious group scored lowest of the seven groups.

Table XI shows the ten most favored programs in rank order of preference. The mean of this group was approximately 50 per cent of the respondents as "regular" listeners, 33 per cent as "occasional" listeners, and 83 per cent as the mean of the total percentage of listeners. An average of 17 per cent of the respondents must be classed as non-listeners of these programs.

TABLE X. RADIO PROGRAMS AND PERCENTAGE OF LISTENERS

Programs	% of Regular Listeners	% of Occasional Listeners	Total % of Listeners
1. Variety and Comedy			
Fibber McGee	.4755	.4172	.8927
Gildersleeve	.2589	.5010	.7599
Blondie	.4055	.4580	.8635
McCarthy	.2910	.4638	.7548
Bob Hope	.5346	.3326	.8672
Jack Benny	.3166	.4412	.7578
Burns and Allen....	.2932	.4660	.7592
Fannie Brice	.1582	.4048	.5630
Bob Burns	.1539	.4038	.5577
Beulah	.1838	.2970	.4808
2. Educational and Quiz			
We March with Faith	.2370	.4843	.7213
Take It or Leave It	.4485	.3712	.8197
Truth or Consequence	.5000	.3625	.8625
Quiz Kids	.1599	.3632	.5231
Nebr.-Iowa Quiz ...	.1371	.3552	.4923
Dr. I.Q.	.3724	.3690	.7424
Let's Pretend	.3180	.2975	.6155
3. Youth and Adventure Serials			
Terry and the Pirates	.3194	.3471	.6665
Superman	.2589	.3537	.6126
Tom Mix	.2589	.2830	.5419
Captain Midnight ..	.2465	.3442	.5907
Dick Tracy	.3136	.3566	.6702
Jack Armstrong	.2698	.3588	.6286
Hop Harrigan	.2954	.3413	.6367
Lone Ranger	.1072	.2793	.3865
4. Religious			

TABLE X. RADIO PROGRAMS AND PERCENTAGE OF LISTENERS (cont.)

Programs	% of Regular Listeners	% of Occasional Listeners	Total % of Listeners
N. P. Church of the air	.0368	.1969	.2355
Old Fashioned Revival	.0650	.1757	.2407
Dr. R.R. Brown	.0671	.1706	.2377
Lutheran Hour	.0554	.1626	.2180
Dr. Fowsey	.0408	.1487	.1895
Catholic Hour	.0678	.1772	.2450
5. Drama			
Aldrich Family	.4325	.3982	.8307
Those Websters	.3515	.3486	.7001
Ed McConnel	.1247	.1808	.3055
Theater of Today	.2093	.2713	.4806
Dr. Christian	.4427	.2895	.7322
6. Mystery			
Mr. Dist. Attorney	.5839	.2866	.8705
Big Town	.4806	.2844	.7650
Gangbusters	.4369	.2917	.7286
Inner Sanctum	.4325	.3019	.7344
Mr. Keen	.4113	.3245	.7358
The Shadow	.3734	.3384	.7118
Mr. and Mrs. North	.6148	.2662	.8810
Suspense	.4456	.2917	.7373
7. Music			
Hit Parade	.4135	.3129	.7264
Hour of Charm	.1954	.2647	.4601
Nelson Eddy	.1050	.2538	.3588
Kate Smith	.1677	.3436	.5112
Frank Sinatra	.1990	.3435	.5425
Dick Haymes	.1550	.3333	.4883
Symphony Orchestras	.1400	.2596	.3996
Swing & Dance Orchestra	.2763	.2501	.5264
Hymns of All Churches	.1363	.2713	.4076
Supper Club	.2341	.2479	.4820

TABLE XI. THE MOST FAVORED PROGRAMS IN RANK ORDER OF PREFERENCE

Programs	% of Regular Listeners	% of Occasional Listeners	Total % of Listeners
Mr. and Mrs. North.....	.6142	.2662	.8810
Mr. Dist. Attorney	.5839	.2866	.8705
Bob Hope	.5346	.3326	.8672
Truth or Consequences ..	.5000	.3625	.8625
Big Town	.4806	.2844	.7650
Fibber McGee	.4755	.4172	.8927
Take It or Leave It	.4485	.3712	.8197
Dr. Christian	.4427	.2895	.7322
Gangbusters	.4369	.2917	.7286
Aldrich Family	.4325	.3982	.8307
Total	4.9500	3.3001	8.2501
$\bar{X}$	.495	.33	.825

Sex Differences.(Listen Regularly)

Table IX of Appendix B presents a complete statistical description of the significance of differences between the sexes as related to program listening. The list in this table includes almost one half of the programs given in the questionnaire. A glance at the table will show that nearly all of the differences are positive differences from the mean by the girls and negative differences from the mean by the boys, that is the girls rated significantly above the mean while the boys rated significantly below the mean. the only exceptions to this rule were the Youth and Adventure Programs and one of the Mystery Plays.

Significant statistical differences on nearly one half of the programs listed argues strongly for the fact that a wide difference does actually exist between the boys and girls in their listening to the radio. The difference may be caused by a number of factors. It has already been shown that sex differences existed in matters of listening time. the girls averaged .37 hour of daily listening over the boys. This is perhaps one reason why the girls showed statistical differences above the mean on so many programs.

The difference, however, reached unusually wide proportions in a number of cases. It should be remembered that the differences are calculated from the mean. Therefore, if the difference has reached the magnitude of 1.96 standard errors from the mean, the chances are 5 in 100, that the girls do not differ from the population and again

there are also only 5 chances in 100 that the boys do not differ from the population as a whole. However, the chances that the boys and girls do not differ from each other when the standard error of the difference is plus 1.96 and minus 1.96 from the mean for each respectively, are 5/100 times 5/100 or 25/10,000. In other words, there is only 1 chance in 400 that a real difference does not exist between the boys and girls when they differ from the mean by 1.96 standard error.

Table XII gives the programs which resulted in positive differences for the girls and negative differences forthe boys. Looking at the table it will be observed that the programs which the girls strongly favored were the music and the drama type. This may indicate that there were perhaps qualities inherent in the programs which appealed more strongly to one group than to the other. This emphasized by the fact that the differences were reversed on the Youth and Adventure Serials. On these programs, the boys differed significantly above the mean. Table XIII presents the programs on which the boys differed significantly above the mean.

We may, therefore, conclude that the girls favor the music, drama, and play type of programs more than the boys do and that the boys favor the Adventure Serials and some of the crime plays more than the girls do.

TABLE XII. PROGRAMS SHOWING POSITIVE DIFFERENCES BY THE GIRLS

Program	Standard error of girls' diff.	Standard error of boys' diff.
Theater of Today	6.96	7.21
Hit Parade	5.42	5.58
Frank Sinatra	4.95	5.03
Let's Pretend	4.80	4.95
Hour of Charm	4.46	4.59
Hymns of All Churches	4.46	4.59
Dick Haymes	3.86	3.99
Dr. Christian	3.75	3.86
Supper Club	3.79	3.91
Kate Smith	3.58	3.68
Symphony Orchestras	3.27	3.38
Swing and Dance Orchestras	2.63	2.77
Burns and Allen	2.81	2.72
Aldrich Family	2.46	2.40
Old Fashioned Revival	2.24	2.80
Nelson Eddy	2.25	2.20
Truth or Consequences	2.13	2.30
Mr. and Mrs. North	1.97	1.92

TABLE XIII. PROGRAMS SHOWING POSITIVE DIFFERENCES BY THE BOYS

Program	Standard error of Boys' diff.	Standard error of Girls' diff.
Terry and the Pirates	2.87	2.61
Superman	2.86	2.75
Tom Mix	3.22	3.09
Captain Midnight	3.34	3.24
Jack Armstrong	2.06	1.97
Hop Harrigan	3.36	3.26
Lone Ranger	2.58	2.51
Gangbusters	4.09	3.97

Sex Differences. (Occasional Listening)

Table X in Appendix B shows the significance of sex differences on programs in "occasional" listening. Only eight of the programs resulted in differences of this kind. Four of these differences followed the trend of the differences found in the analysis of "regular" listening. These differences, therefore, can only serve to emphasize the differences already established in the foregoing analysis. These four programs were in the Youth and Adventure Group, viz.,

Tom Mix
Captain Midnight
Jack Armstrong
Lone Ranger.

Two of the programs in this list of eight in Table X of Appendix B had not resulted in significant differences in the foregoing analysis. These were,"Big Town", and "Young People's Church of the Air". The differences on "Big Town" followed the trend of the foregoing analysis of the Youth and Adventure Serials, that is, the boys differed above the mean while the girls differed below the mean.

Two programs,viz., the "Burns and Allen Show" and "Dr. Christian", reversed the order of differences found in the analysis of "regular" listening to programs. This does not mean that this nullifies what had been found before, since "regular" and "occasional" listening indicate degrees of listening interest. It does tend to lessen the difference in degree of interest.

Economic Differences (Regular Listening)

Table XI in Appendix B shows the significance of statistical differences among the economic groups in "regular" listening to radio programs. Forty-five of the fifty-four programs listed in the questionnaire are included in this table. However, not all of these programs showed differences which resulted in a definite trend among the groups, and therefore, such differences cannot be regarded as conclusive. Judged on this basis, the programs in table XIV may be taken to show conclusive differences from one group to another.

On these programs, increased listening was with the lower economic groups. One program, however, reversed the trend. The "Charlie McCarthy" Program showed increased listening by Groups A and B, and decreased listening by Groups D and E.

The increased listening in the lower economic groups does not harmonize with the daily listening time of these groups. Although no significant difference in daily listening time was found among these groups, the fact remains that the means of the groups did not bring out this difference.

Economic Differences (Occasional Listening)

Table XII in Appendix B shows the significance of differences in the economic groups in "occasional" listening

TABLE XXV. STANDARD ERROR OF DIFFERENCES FROM THE MEAN IN THE ECONOMIC GROUPS ON REGULAR LISTENING TO PROGRAMS SHOWING CONCLUSIVE DIFFERENCES

Programs	Economic Groups				
	A	B	C	D	E
Charlie McCarthy	+ 1.89	+3.78	-1.67	- 2.15	-1.20
Bob Burns	- 3.52	- .009	- .635	+ 1.509	+ 3.21
Frank Sinatra	- 1.6	- 3.23	+ .64	+ 2.16	+ 2.52
Beulah	- 2.03	-1.74	- .17	+ 2.80	+ 1.67
Dick Haymes	-1.74	-2.73	+ 1.40	- .02	+ 2.96
Truth or Consequences	+ .32	+ 1.13	+1.04	- 2.10	- 1.25
Terry and Pirates	- 3.81	- 1.05	+ .31	+1.82	+ 3.92
Superman	- 3.17	- .41	- 2.15	+ 2.20	+ 3.54
Tom Mix	- 2.42	-1.62	-1.53	+ 3.71	+ 3.66
Captain Midnight	- 2.09	- 1.20	-1.62	+ 2.66	+ 4.88
Dick Tracy	- 4.24	- 2.26	-1.08	+ 3.31	+ 3.85
Jack Armstrong	- 3.80	- 1.55	- .20	+ 2.70	+ 3.54
Hop Harrigan	- 4.37	-1.40	+ .25	+ 2.80	+ 2.44
Lone Ranger	- 3.12	-1.34	- 2.52	+ 3.60	+ 4.80
F. F. Church	-1.15	- 2.42	- .39	+ 3.77	+2.90
Old Fashioned Revival	-1.84	-1.97	- .79	+ 1.58	+ 3.40
Dr. R. E. Brown	- 2.25	-1.214	- .50	+ .75	+ 4.18
Lutheran Hour		- .388	- .162	+ 2.18	+ 4.30
Mr. Dist. Attorney	- 2.16	- .21	+ .014	+ .134	+ 2.44
Big Town	- 3.34	-1.45	- 3.22	+2.84	+ 3.84
Gangbusters	- 2.15	- .858	-1.89	+ 1.67	+ 3.95
Inner Sanctum	- 2.69	- 2.49	+ .83	+ 1.77	+ 2.42
Mr. Keen	- 2.85	- .803	- .606	+ 1.77	+ 3.101
Dr. Christian	- 3.94	- .93	- .167	+ 2.67	+ .56
The Shadow	- 1.45	- .519	- .479	- .604	+ 4.21
Suspense	- 2.55	- 3.52	+ 1.01	+ 2.05	+ 2.82
The Aldrich Family	- 2.36	- .209	- 1.237	+ 2.45	+ 2.24
Sullin' Ed McConnel	- 1.307	- 2.14	- .296	+ 2.78	+ 1.50
Theater of Today	- 1.90	- 2.69	+ 1.442	- .694	+ 3.72
Nelson Eddy	- 1.75	- .159	- .96	- 1.345	+ 2.01
Kate Smith	- 3.45	- 2.69	- .882	+ 3.76	+ 4.61
Swing and Dance Orch.	- 2.28	- 2.96	+ .754	+ .54	+ 4.57
Hymns	- 2.27	- 1.82	+ 1.08	+ .425	+ 2.73

to radio programs. Although twenty-one programs showed differences of this kind, only ten may be regarded as showing conclusive differences by reason of the fact that their differences indicate a definite trend or direction. These ten programs are:

Let's Pretend
Dick Tracy
Young People's Church
Old Fashioned Revival
Dr. R. E. Brown
Lutheran Hour
Catholic Hour
Smilin' Ed McConnel
Mr. Keen
Hymns of All Churches

Five of the above listed programs showed the same trend of differences in the analysis of "regular" listening. The trend was for greater listening in the lower economic groups. The five programs were from the religious group, viz.,

Young People's Church
Old Fashioned
Dr. R. E. Brown
Lutheran Hour
Hymns of All Churches

The programs, "Dick Tracy" and "Mr. Keen", reversed the order of differences among the economic groups found in the analysis of "regular" listening. The trend on the "occasional" listening was for increased listening in the upper economic groups. This would tend to modify the differences found on the "regular" listening, but not necessarily change the trend.

It should be noted that whenever the analysis of "occasional" listening corroborates what has been found in the analysis of "regular" listening, it merely emphasisizes what has already been found. If, however, the two analysis show a reversed order of differences, the trend on "regular" listening is modified but not changed, since "regular" listening involves a greater degree of interest, time, and energy spent in listening than "occasional" listening does.

The two programs, "Let's Pretend" and "Smilin' Ed McConnel" showed conclusive differences on "occasional" listening, although they had not done so on "regular" listening. On the "Let's Pretend" Program, the upper economic levels showed the greater amount of listening interest, while on the "Smilin' Ed McConnel" Program, the lower levels showed the greater interest.

Grade Differences (Regular Listening)

Table XIII in Appendix B shows the programs with statistical differences among the grades. With but few exceptions, a uniform consistency was established by the grades in the trend of differences. Almost always, the fifth and the eighth grades were at the extremes of the difference, while the sixth and the seventh grades bridged over to the mean. The eighth grade was consistently and significantly below the mean while the fifth grade was in like manner above it. As a rule the seventh grade showed a negative difference and the sixth grade a positive one in line with the gradation of the trend. This

shows that the programs given in this table appealed with greater force to the fifth and sixth grades than to the seventh and eighth grades. Several exceptions to this general observation should be noted. These programs were the following:

We March with Faith
Smilin' Ed McConnel
Hymns of All Churches
Theater of Today

These programs did not result in consistent differences through the grades. The "We March with Faith" program nearly reversed the order established as explained above. The seventh grade showed a positive difference of 4.8778 standard errors, while the fifth and the sixth grades both differed negatively by 2.4 standard errors. The eighth grade differed slightly below the mean. The "Theater of Today" Program resulted in a significant difference above the mean by the eighth grade. All of the other three grades showed negative differences. This is perhaps one of the programs which appeals more to the older age groups. "Hymns of All Churches" and "Smilin' Ed McConnel" brought out significant differences, but they remain inconclusive because they failed to establish a definite trend of differences.

Grade Differences (Occasional Listening)

Twenty-seven programs, as given in Table XIV in

Appendix B, came out with statistical differences among the grades in "occasional" listening. This is one half of the programs listed in the questionnaire. Twenty-three of these programs showed a definite trend of increased listening with the upper grades. Seventeen of them had shown the situation reversed in the analysis of the "regular" listening activity. It would therefore, perhaps, be correct to say that the lower grades, that is the fifth and the sixth grades do more regular listening to these programs than the seventh and the eighth grades do.

Five of these twenty-three programs had not shown any conclusive difference in the analysis of the "regular" listening activity. These were:

Dr. I.Q.
Mr. Keen
Suspense
Frank Sinatra
Supper Club.

It may be, perhaps, quite safe to conclude that they have a greater appeal to the more mature boys and girls.

Three of the programs showed statistical differences, but they remain inconclusive because no definite was indicated by their differences. These programs were:

We March with Faith
Inner sanctum
Hymns of All Churches.

Analysis of program listening by grades seems to indicate that the fifth and the sixth grades listen more extensively and with greater regularity than the seventh and the eighth grades do. Such a conclusion, however, would be conflicting at least mildly with the time spent on daily listening by these groups as it was established in the analysis of Part I of the questionnaire.

The daily listening time of the seventh and the eighth grades was above the mean of the group as a whole, while that of the fifth and the sixth grades was below the mean. However, no significant differences among the groups were found.

Perhaps the fifth and the sixth grades could not describe their listening on the program check-list as accurately as the seventh and the eighth grades could. The fifth and the sixth grades were, perhaps, more inclined to mark the first column in the check-list of programs more readily and with less discernment than the upper grades were. Perhaps, the fifth and the sixth grades could not give the time spent in listening to the radio each day as accurately as the upper grades could.

Ability Group Differences (Regular Listening)

Table XV in Appendix B shows the significance of differences in the ability groups. It may be said at the outset that no conclusive differences resulted on any of the programs. Most of the programs showed significant differences in only one or two of the groups, but they remain inconclusive for lack of corresponding differences in the

other groups.

On the "We March with Faith" Program, all of the groups showed positive differences from the mean. Group B and Group D differed significantly above the mean. It should be remembered that the ability groups were selected from a few schools only. It is a matter of coincidence that each of these schools had a period of radio listening for most of the grades under consideration. This, perhaps, accounts for the fact that all of the ability groups showed positive differences from the mean of the total sample in listening to a locally produced program in which talent from Omaha Schools figured prominently.

Group C, the average ability group, dropped significantly below the mean on twelve of the programs. Ten of these were of the mystery and adventure type of program. On five of these ten programs, Groups B and D also rated significantly below the mean. Since radio listening was a school activity with most of the ability groups, as explained before, a certain amount of guidance may have entered into the selection of programs. It is easily understood that the mystery and crime programs as well as the programs of adventure, charged with emotion and excitement, are not much in favor from the teacher's point of view and that proper guidance would steer the listening activity away from them. This seems to be emphasized further by the fact on the program, "Inner Sanctum", all of the groups differed below the mean.

Ability Group Differences (Occasional Listening)

Table XVI in Appendix B shows the significance of differences among the ability groups, in the analysis of "occasional" listening. Seven programs are included in this table because a significant difference resulted on each one in one or more of the groups. Usually the difference was limited to one group.

Only one of the seven programs resulted in conclusive differences among the groups. This was the "Nebraska-Iowa Quiz" Program. Groups A, B, and C, showed positive differences from the mean while Groups D and E differed negatively from the mean. The standard error of the difference from the mean was 2.51 above for Group A and 3.42 below for Group D. This quiz show seems to attract the children of the upper economic levels more than those of the lower levels.

The remaining differences remain inconclusive because no trend was established from one group to another.

CHAPTER V

REASONS FOR LISTENING

Table XV presents the respondents' evaluation of the reasons given in the questionnaire for listening to some of the most favored programs. It should be noted that although the questionnaire called for one best reason from the choices given, some of the children responded by marking several reasons. This explains why two of the programs, viz., the "Mr. District Attorney" and the "Inner Sanctum" Programs, had a somewhat higher percentage on the reasons given than they had total percentage of listeners. On the whole, however, the total percentage of those who checked these programs for reasons of listening coincided very closely with the total percentage of listeners. This may be regarded as a check of the consistency of the results of the questionnaire.

The highest percentage of agreement on reasons for listening was reached on the "Bob Hope" Program. 50.18 per cent agreed that they listened because his jokes are always funny and interesting.

This does not necessarily imply that children listen first of all to what is funny and interesting. It does mean that approximately one half of the listen-

TABLE XV. REASONS FOR LISTENING TO RADIO PROGRAMS AND THE PERCENTAGE OF RESPONDENTS WHO FAVORED THEM

A.	I like to listen to "Mr. District Attorney" because	
1.	it reviews cases that have actually happened----	.113
2.	it shows how detectives do their work.----------	.1349
3.	there is always a lot of action and excitement.-	.2574
4.	it shows that crime does not pay. ----------	.4981
B.	I like to listen to "Blondie" because	
1.	it is a comical show. ----------	.2443
2.	the people who play in it seem much like the people I know. ----------	.0547
3.	it is about funny family situations ----------	.2334
4.	Dagwood always does things that people ordinarily don't do. ----------	.4121
C.	I like to listen to "Big Town" because	
1.	there is much shooting in it. ----------	.0685
2.	I like to see how people meet danger. ----------	.1371
3.	it is full of daring and danger. ----------	.3107
4.	it has a lesson in it.----------	.2479
D.	I like to listen to "Bob Hope" because	
1.	his jokes are always funny and interesting. ----	.5018
2.	I like the way he speaks.----------	.0700
3.	it makes me feel that I am part of the audience which enjoys his jokes so much ----	.3019
E.	I	
E.	I like to listen to "Hop Harrigan" because	
1.	it is a serial and I am anxious to know what is going to happen next. ----------	.2509
2.	it is a thrilling story of adventure.----------	.2589
3.	it has airplanes in it.----------	.0736
4.	I like the characters who play in it. ----------	.0795

TABLE XV. (cont.) REASONS FOR LISTENING TO RADIO PROGRAMS AND PERCENTAGE OF RESPONDENTS WHO FAVORED THEM

F. I like to listen to "Fibber McGee and Molly" because

1.	it is about funny family situations.	.4770
2.	Molly always has to correct Fibber.	.3471
3.	the players are so much like the people I know.	.1035

G. I like to listen to "Inner Sanctum" because

1.	there is something "spooky" in it.	.1794
2.	I like the sound effects.	.0904
3.	Something mysterious usually happens.	.3738
4.	someone is usually murdered.	.1838

ers believed that of the three reasons given as possible answers to the question, this was the best one and that they could not supply a better one.

Since this program, however, ranked in the third place of the ten most favored programs, it may, perhaps, be inferred that children do listen to programs that are "funny" as one of their first preferences. This is further substantiated by the fact that the "Fibber McGee" Program, which ranked highest in the "Total Percentage of Listeners" column of the ten most favored programs, drew 47.7 per cents of the respondents as listeners because it had funny family situations in it, and 37.71 per cent of the respondents listened to this program because "Molly always has to correct Fibber".

"Mr. District Attorney" drew the next highest percentage of agreement on reasons for listening. 49.31 per cent listened to this program because it shows that crime does not pay. This program ranked second place in both the number of "regular" listeners as well as "occasional" listeners on the ten most favored group of programs.

The slogan,"Crime does not pay", has become familiar to nearly every one and its truth is not likely to be questioned. Its plausibility, or its fitness as a reason for listening to "Mr. District Attorney", a program

which consists largely of enacting the apprehension of criminals and crime suspects, was perhaps the reason why it was given by such a large number as the reason for their listening.

25.74 per cent of the respondents said that they listened to "Mr. District Attorney" because the program has a lot of action and excitement. In view of the foregoing explanation, this is perhaps the better reason. Ability Group A differed sharply from all of the other groups. 41.17 per cent of this Group listened because the program has a lot of action and excitement, whereas, only 17.6 per cent of this Group listened because crime does not pay. This Group, therefore, favored the foregoing conclusion.

The program "Big Town" listed similar reasons which were worded differently. 31.07 per cent of the respondents listened to this program because it is full of daring and danger, while only 24.79 per cent thought that they listened because the program has a lesson in it. This, too, would substantiate the conclusion reached before, viz., that children listen to mystery and crime programs, not so much for the warning that they give, but because they like the programs that arouse the emotions and show plenty of action.

The highest percentage of agreement for listening to "Inner Sanctum" was on the reason, "Something mysterious

usually happens and I want to find out what the mystery is about". 37.07 per cent of the respondents agreed that this was the best reason given for listening to "Inner Sanctum". 18.38 per cent agreed that they listened because someone is usually murdered.

The element of suspense was another factor in the determination of listening. 25.09 per cent said that they listened to "Hop Harrigan" because it is a serial. The serial programs usually wind up with a breath-taking climax and a question mark. The hero's life is usually left hanging in the balance and the audience is left wondering what will happen. 25.89 per cent said that they listened to the program because, "It is a thrilling story of adventure."

The element of surprize was another determiner of listening. 41.21 per cent listened to "Blondie" because "Dagwood usually does something unexpectedly". 24.43 per cent listened because it is a comical show and 23.34 per cent listened because it is about funny family situations.

Analysis of children's reasons for listening to programs as given in Part III of the questionnaire has shown that children listen for various reasons. Among factors which determine listening, the following should be given as some of the leading ones:

1. Comedy
2. Action and Excitement
3. Mystery
4. Suspense
5. Surprise
6. to learn

Sex Differences on Reasons for Listening

The sexes differed on seven of the reasons given for listening to programs in Part III of the questionnaire. More boys than girls favored the reason, "It shows how detectives do their work", as an explanation of why they liked to listen to "Mr. District Attorney". More boys than girls thought that they were attracted to "Blondie" because the actors seem familiar to them. Likewise, more boys than girls gave as their reason for listening to "Big Town", "It has much shooting in it". More boys than girls thought that they listened to "Bob Hope" because his jokes are always funny and interesting. However, more girls than boys thought that they listened to the same program because it afforded them projected or vicarious audience experience. The factor of having airplanes was given by more boys than girls as a reason for listening to the "Hop Harrigan" Program. The spooky element attracted more boys than girls to the "Inner Sanctum" Program.

For a complete statistical description of sex differences on reasons for listening to programs as given in Part III of the questionnaire, the reader is referred to Table XVII in Appendix B.

Economic Group Differences on Reasons for Listening

Statistical differences showed up on the reason "Crime does not pay". The lower economic groups favored this as a reason for listening to "Mr. District Attorney" more than the upper economic groups did.

The same trend of differences was observed on "Dagwood always does something that people ordinarily do not do", as a reason for listening to "Blondie", and again on "I like the way he speaks" as a reason for listening to "Bob Hope", and on "Funny family situations" as a reason for listening to Fibber McGee.

For a complete statistical analysis of differences among the economic groups, the reader is asked to turn to Table XVIII in Appendix B

Age-grade Differences on Reasons for Listening

The grades differed significantly on five reasons for listening to programs. These were:

1. There is much shooting in it. (Big Town)
2. It makes me feel that I am part of the big audience which enjoys his jokes so much. (Bob Hope)
3. It is a thrilling story of adventure (Hop Harrigan)
4. I like the characters who play in it. (Hop Harrigan)
5. Molly always has to correct Fibber. (Fibber McGee)

These were conclusive differences, that is, they showed that a definite trend existed among the grades

in their reactions to these reasons.

On four of the reasons, the trend of differences was the same. The seventh and the eighth grades differed below the mean while the fifth and the sixth grades differed above the mean. The lower grades favored these more than the seventh and the eighth grades did as reasons for listening to programs. On No. 3, "It is a thrilling story of adventure", the order of differences reversed the trend. The upper grades favored this more than the fifth and the sixth grades did as a reason for listening to "Hop Harrigan".

The reader is asked to turn to Table XIX in Appendix B for a complete statistical analysis of differences on reasons for listening to programs as given in Part III of the questionnaire.

Ability Group Differences on Reasons for Listening

Conclusive differences in the ability groups were found on only two of the reasons for listening to programs. These were:

1. It is about funny family situations. (Fibber McGee)
2. Molly always has to correct Fibber. (Fibber McGee)

On the first of these two reasons, the upper ability groups differed above the mean, while the lower ability groups differed below the mean. The differences of the lower ability groups were significant. This same trend

was observed in the differences of the economic groups on this particular reason for listening.

On the second reason, the trend of the differences was reversed. The upper ability levels differed below the mean and the lower ability levels differed above the mean. Again, the trend was the same as that observed in the analysis of the economic groups.

CHAPTER VI

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The results of this study point to several general basic conclusions about children's radio listening interests, habits, and attitudes, which, from an educator's point of view are of significance. Briefly stated, they are:

1. Radio listening has become a well-established habit by the time that children have reached the upper elementary school level. On an average, approximately 90 per cent of the children listen about three hours daily. The girls listen more than the boys do. A gradual increase of listening seems to be evident through the grades. Children of average or near average ability seem to listen more than those who are toward the extremes of the mental scale.

2. Children's radio listening activity includes adult programs mostly by the time that the fifth grade level is reached. Programs of the drama, comedy and variety, quiz, and

musical type, lead in the list of preferences. Nearly all of the children have program preferences to which they listen regularly. The upper ability levels select programs to a greater extent than the lower ability levels do. Musical programs begin to take dominance over non-musical programs by the time that the sixth grade is reached.

3. The girls listen more to the musical type of program than the boys do. Children seem to begin with a preference for classical music but as they approach the seventh and the eighth grade levels, they change over to popular music.

4. Most of the children prefer listening to a story over the radio to reading it, and most of them think that they remember better what they hear over the radio than what they read. The lower ability groups as well as the lower economic groups prefer listen-

ing to reading more than the upper levels in these groups do. These groups differ similarly in their opinion on the recall of facts as related to reading and listening. More of the children in the lower economic and ability groups than in the upper levels of these groups believe that they remember better what they hear than what they read.

5. Listening to the broadcast of special sports events may be classed as one of the major listening activities. The boys listen to this type of broadcast much more than the girls do. Likewise, the upper economic groups listen more than the lower economic groups do.

6. A majority of the children listen to the broadcast of the news and to speeches by famous men, e.g., the President of the United States.

7. About one fourth of the children have sleep disturbances caused by memories of radio broadcasts. This condition

seems to pass as the upper grades are reached.

6. Almost all of the children who listen to the radio quite regularly think that it helps them to understand better the world in which they live.

Recommendations

This study was necessarily limited in scope and kind, and therefore can hardly be taken as much as a mere beginning of research in the field of radio as an instrument or means of education. As this study progressed, the need for more and extended data was felt on every hand; new problems were met and it was often thought that a new attack would have been highly worth while. The writer, therefore, has the following recommendations to make for further study:

1. That research on the listening activity be extended to include the lower elementary school grades and also the high school level.

2. That the serious listening activity, e.g., listening to educational broadcasts, the news broadcasts, etc., receive intensive study.

3. That studies be made by teacher training institutions to stimulate teachers' interest in this new form of pupil activity and to assist them in making effective use of it.

4. That continued studies be made on the adaptability of radio to the purposes of education.

5. That the value of guidance in children's listening activities by parents and teachers be carefully studied toward a recognition of the responsibility which this new activity has placed upon them.

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APPENDIX A

TENTATIVE QUESTIONNAIRE

Name ---------- Age ----------

Grade ---------- Name of your School ----------

Father's Occupation ----------

Mother's Occupation ----------

Please answer the following questions by placing a check mark (✓) in the "yes" or "no" column to the right.

	YES	NO
1. Do you listen to the radio every day? ----------		
2. Do you listen to the news broadcast daily? - - -		
3. Do you listen to the speeches of the President of the United States? - - - - - - - -		
4. Do you enjoy educational broadcasts? - - - - - -		
5. Do you prefer musical broadcasts to non-musical broadcasts? - - - - - - - - - - - -		
6. Do you prefer symphony concerts to dance music or popular music? - - - - - - - - - - -		
7. Are you a member of a "Listening Group"? - - - -		
8. Do you have a regular period in school devoted to listening to the radio? - - - - - -		
9. Do you listen with other members of your family to any particular program at home? - - -		
10. Do you listen to the radio during the summer months? - - - - - - - - - - - - - - - -		

Please answer the following questions briefly.

11. Which is your favorite radio program? ----------

---

12. Why is this your choice? ----------

---

13. About how much time do you spend listening to the radio every day?

---------- hours ---------- minutes.

PART II.

Please place a check in the column to the right which best describes your listening to the radio. Don't check at all any program to which you do not listen.

Name of Program	Listen regularly	Listen frequently	Listen occasionally
Group 1.			
Information Please			
Truth or Consequences			
Correction Please			
Dr. I.Q.			
Nebraska-Iowa Quiz			
Take It or Leave It			
Group 2.			
Fibber McGee and Molly			
Amos and Andy			
The Great Gildersleeve			
The Bumsteads			
Jack Benny			
Bob Hope			
Charlie McCarthy			
Group 3.			
America Back to God			
The Christian Hour			
Dr. R.R.Brown			
Dr. E.Rowsey			
Lutheran Hour			
Catholic Hour			
Old Fashioned Revival			
Young People's Church of the Air			
Group 4.			
We March with Faith			
Youth on Parade			
Group 5.			
Terry and the Pirates			
Captain Midnight			
Jack Armstrong			
Dick Tracy			
Hop Harrigan			
Group 6.			
Suspense			
Mystery Theater			
Mr. District Attorney			
Big Town			
Mr. Keen, Tracer of lost Persons			
Crime Klan			

PART II (cont.)

Name of Program	Listen regularly	Listen frequently	Listen occasionally
Group 7.			
New York Philharmonic			
General Motors Symphony of the Air			
Voice of Firestone			
Hour of Charm			
Nelson Eddy			
The Family Hour			
Swing and Dance Orchestras			

On the following lines, please write the names of radio programs to which you listen but which are not listed here.

**_____

_____

_____

How many radios are in your home? _____. Is one of them for use mainly by the children? Yes ____ No ____(check). Do you discuss radio programs with your parents? Yes ____ No ____(Check) Friends? Yes ____No_____(Check)

TABLE II. TEST FOR CORRELATION OF TWO TRY OUTS OF PAGE ONE OF THE TENTATIVE QUESTIONNAIRE

X	Y	XY	X^2	Y^2
69	61	4209	4761	3721
42	35	1470	1764	1225
65	63	4095	4225	3969
54	40	2160	2916	1600
61	49	2989	3601	2401
25	28	700	625	784
2	8	16	4	64
9	13	117	81	169
77	71	5467	5929	5041
79	75	5925	6241	5625
473	443	28658	29147	24599

$$S(X)^2 = \frac{(473)^2}{10} = 22372.9$$

$$S(Y)^2 = \frac{(443)^2}{10} = 19624.9$$

$$SXY = \frac{(473)(443)}{10} = 20953.9$$

$$\Sigma x^2 = 29147.0 - 22372.9 = 6774.1$$

$$\Sigma y^2 = 24599.0 - 19624.9 = 4974.1$$

$$\Sigma xy = 28658.0 - 20953.1 = 5704.1$$

$$r = \frac{5704.1}{\sqrt{6774(4974)}} = .98$$

TABLE XII. TEST FOR DIFFERENCE BETWEEN TWO TRY OUTS OF PAGE ONE OF THE TENTATIVE QUESTIONNAIRE

X_1	X_2	$X_1 - X_2 = X$ Difference	$X - \bar{X} = x$ Deviation	x^2 Deviation sq.
69	61	8	5	25
42	35	7	4	16
65	63	2	- 1	1
54	40	14	11	121
51	49	2	- 1	1
25	28	- 3	- 6	36
2	8	- 6	- 9	81
9	15	- 4	- 7	49
77	71	6	3	9
79	75	4	1	1
473	443	30	0	340
	$\bar{X}$	3		

$$s^2 = \frac{340}{9} \text{ or } 37.7 \qquad s = \sqrt{37.7} = 6$$

$$s_{\bar{x}}^2 = \frac{37.7}{10} = 3.77$$

$$s_{\bar{x}} = \sqrt{3.77} = 1.94$$

$$t = \frac{3-0}{1.94} \text{ or } 1.54 \qquad P = .15^{*}$$

* See G. W. Snedecor, op. cit., p. 65 for table of probabilities.

TABLE IV. TEST FOR CORRELATION OF TWO THY OUTS OF THE FINAL QUESTIONNAIRE. PART I.

X	Y	X^2	Y^2	XY
43	45	1849	2025	1935
40	46	1600	2116	1840
36	35	1444	1225	1330
37	35	1369	1225	1295
3	2	9	4	6
0	0			
44	36	1936	1296	1584
32	28	1024	784	896
18	20	324	400	360
40	44	1600	1936	1760
32	34	1024	1156	1088
10	14	100	196	140
40	44	1600	1936	1760
26	31	676	961	806
33	34	1089	1156	1122
48	46	2304	2116	2208
484	494	17948	18532	18130

$$S(X)^2 = \frac{(484)^2}{16} = 14641$$

$$S(Y)^2 = \frac{(494)^2}{16} = 15252$$

$$S(XY) = \frac{(484)(494)}{16} = 14943$$

$$S_x^2 = 17948-14641 = 3307$$

$$S_y^2 = 18532-15252 = 3280$$

$$S_{xy} = 18130-14943 = 3187$$

$$r = \frac{3187}{\sqrt{3307(3280)}} = \frac{3187}{3295} = .96$$

TABLE V. TEST FOR DIFFERENCES BETWEEN TWO TRY OUTS OF THE FINAL QUESTIONNAIRE. PART I.

X_1	X_2	$X_1-X_2=X$ Difference	$X-\bar{X}=x$ Deviation	x^2 Deviation sq.
43	45	-2	- 1.34	1.795
40	46	-6	- 5.34	28.515
38	35	3	3.66	13.39
37	33	2	2.66	7.075
3	2	1	1.66	2.755
44	36	8	8.66	74.995
32	28	4	4.66	21.715
15	20	-2	- 1.34	1.795
40	44	-4	- 3.34	11.15
32	34	-2	- 1.34	1.795
10	14	-4	- 3.34	11.15
40	44	-4	- 3.34	11.15
26	31	-5	- 4.34	18.83
33	34	-1	- .34	.115
48	46	2	2.66	7.075
464	494	-10	- .10	213.300
		$\bar{X}$ = -.66		

$$s^2 = \frac{213.3}{14} \text{ or } 15.23 \qquad s = 3.9$$

$$s_{\bar{x}}^2 = \frac{15.23}{15} \text{ or } 1.01 \qquad s_{\bar{x}} = 1.00$$

$$t = \frac{-.66}{1.00} \text{ or } -.66 \qquad P = .5^*$$

* See G. W. Snedecor, op. cit., p. 65 for table of probabilities.

TABLE VI. TEST FOR CORRELATION OF TWO TRY OUTS OF THE FINAL QUESTIONNAIRE. PART II. (LISTED REGULARLY)

X	Y	X^2	Y^2	XY
4	3	16	9	12
17	19	289	361	323
5	4	25	16	20
11	13	121	169	143
3	4	9	16	12
21	14	441	196	294
30	25	900	625	750
15	17	225	289	255
15	12	225	144	180
29	24	841	576	696
19	14	361	196	266
13	17	169	289	221
10	12	100	144	120
13	11	169	121	143
4	2	16	4	8
5	4	25	16	20
4	3	16	9	12
14	14	196	196	196
0	1	0	1	0
4	9	16	81	36
2	0	4	0	0
3	2	9	4	6
9	7	81	49	63
18	17	324	289	306
12	15	144	225	180
14	16	196	256	224
15	14	225	196	210
22	16	484	256	352
16	12	256	144	192
13	10	169	100	130
32	27	1024	729	864
18	21	324	441	378
12	15	144	225	180
12	8	144	64	96
4	4	16	16	16
3	1	9	1	3
4	3	16	9	12
5	5	25	25	25
3	2	9	4	6
2	2	4	4	4
4	3	16	9	12
23	23	484	529	506
16	15	256	225	240
16	14	256	196	224
5	5	25	25	25
20	20	400	400	400
12	12	144	144	144
16	20	256	400	320
566	531	9597	8423	8825

$$S(X)^2 = \frac{(566)^2}{48} = 6674$$

$$S(Y)^2 = \frac{(531)^2}{48} = 5874$$

$$SXY = \frac{(566)(531)}{48} = 6261$$

$$Sx^2 = 9597 - 6674 = 2923$$

$$Sy^2 = 8423 - 5874 = 2549$$

$$Sxy = 8825 - 6261 = 2564$$

$$r = \frac{2564}{\sqrt{2923(2549)}} = \frac{2564}{2729} = .93$$

TABLE VII. TEST FOR CORRELATION OF TWO TRY OUTS OF THE FINAL QUESTIONNAIRE. PART II.(LISTEN SOMETIMES)

X	Y	X^2	Y^2	XY
21	19	441	361	399
19	20	361	400	380
18	15	324	225	270
15	15	225	225	225
9	11	81	121	99
24	27	576	729	648
13	9	161	81	117
9	15	81	225	135
19	14	361	196	266
18	15	324	225	270
16	16	256	256	256
16	24	256	576	384
17	17	289	289	289
21	16	441	256	336
9	7	81	49	63
14	15	196	225	210
4	8	16	64	32
12	6	4	64	16
12	11	144	121	132
7	7	49	49	49
6	7	36	49	42
11	11	121	121	121
15	9	225	81	135
17	11	289	121	187
16	14	256	196	224
9	15	81	225	135
11	15	121	225	165
15	19	225	361	285
12	9	144	81	108
11	10	121	100	110
15	13	225	169	195
12	12	144	144	144
12	13	144	169	156
16	17	256	289	272
12	12	144	144	144
4	4	16	16	16
7	3	49	9	21
10	5	100	25	50
7	5	49	25	35
4	5	16	25	20
7	7	49	49	49
15	18	225	324	270
18	14	324	196	252
13	9	169	81	117
11	9	121	81	99
15	12	225	144	180
19	14	361	196	266
602	586	8990	8308	8409

$$S(X)^2 = \frac{(602)^2}{48} = 7550$$

$$S(Y)^2 = \frac{(586)^2}{48} = 7154$$

$$S(XY) = \frac{602(586)}{48} = 7349$$

$Sx^2 = 8990-7550 = 1440$

$Sy^2 = 8308-7154 = 1154$

$Sxy = 8409-7349 = 1060$

$$r = \frac{1060}{\sqrt{1440(1154)}} = .82$$

TABLE VIII. TEST FOR CORRELATION OF TWO TRY OUTS OF THE FINAL QUESTIONNAIRE. PART III.

X	Y	X^2	Y^2	XY
0	2	0	4	0
9	4	81	16	36
11	17	121	289	187
2	5	4	25	10
20	19	400	361	380
16	17	256	289	272
0	1	0	1	0
19	14	361	196	266
8	11	64	121	88
8	9	64	81	72
1	1	1	1	1
6	6	36	36	36
8	9	64	81	72
12	14	144	196	168
5	3	25	9	15
24	27	576	729	648
10	8	100	64	80
4	7	16	49	28
19	18	361	324	342
1	3	1	9	3
5	5	25	25	25
1	3	1	9	3
19	15	361	225	285
23	24	529	576	552
8	14	64	196	112
4	1	16	1	4
20	17	4000	289	340
6	4	36	16	24
269	278	4107	4218	4049

$$S(X)^2 = \frac{(269)^2}{28} = \frac{72361}{28} = 2584$$

$$S(Y)^2 = \frac{(278)^2}{28} = \frac{77284}{28} = 2760$$

$$S(XY) = \frac{269(278)^2}{28} = 2670$$

$$s_x^2 = 4107 - 2584 = 1523$$

$$s_y^2 = 4218 - 2760 = 1458$$

$$s_{xy} = 4049 - 2670 = 1379$$

$$r = \frac{1379}{\sqrt{1523(1458)}} = .92$$

THE FINAL QUESTIONNAIRE
(Part I)

A RADIO LISTENING STUDY

We are making a study of how boys and girls listen to the radio. You can help us a lot by filling in the blanks and making check marks (✓) as the directions tell you. Do not hurry and be sure you understand what to do. You may ask your teacher for help if you need it.

Name _____ Age _____ Grade _____

Show by checking whether you are: boy ( ) girl ( ) white ( ) Colored ( )

Name of your school _____

Father's Occupation _____

Mother's Occupation _____

Please answer the following questions by placing a check mark ( ) in the "yes" or "no" column to the right.

	YES	NO
1. Do you listen to the radio every day?		
2. Do you have any particular programs to which you listen whenever you can?		
3. Do you listen with other members of your family to any particular program?		
4. Do you discuss radio programs with your parents or friends ?		
5. Are you a member of a "Listening Group"?		
6. Do you have a regular period in school devoted to listening to the radio?		
7. Do you enjoy educational broadcasts?		
8. Do you like "musical" broadcasts better than "non-musical" broadcasts?		
9. Do you like classical music such as symphony concerts better than popular or dance music?		
10. Would you rather hear a story over the radio then read it?		
11. Do you remember better what you hear over the radio than what you read?		
12. Is your sleep sometimes disturbed by what you have heard on the radio?		

PART I (cont.)

	YES	NO
13. Do you listen to the speeches of the President of the United States?		
14. Do you listen to the news broadcasts daily?		
15. Do you listen to special sports events such as football or hockey games?		
16. Do you think that the radio has helped you to understand better what you read about and see in the world today?		

17. About how much time do you spend each day listening to the radio?

_____hours _____minutes.

18. Which is your favorite radio program? _____

19. Why is this your choice? _____

PART II

Please check the column to the right ( ) which best describes your listening to the radio. Don't check at all any program to which you do not listen.

NAME OF PROGRAM	LISTEN REGULARLY	LISTEN SOMETIMES
Group 1.		
Fibber McGee and Molly		
Great Gildersleeve		
Blondie		
Charlie McCarthy		
Bob Hope		
Jack Benny		
George Burns and Gracie Allen		
Fannie Brice		
Bob Burns		
Frank Sinatra		
Beulah		
Dick Haymes		
Group 2.		
We March with Faith		
Take It or Leave It		
Truth or Consequences		

PART II (cont.)

NAME OF PROGRAM	LISTEN REGULARLY	LISTEN SOMETIMES
Quiz Kids		
Nebraska-Iowa Quiz		
Dr. I.Q.		
Let's Pretend		
Group 3.		
Terry and the Pirates		
Superman		
Tom Mix		
Captain Midnight		
Dick Tracy		
Jack Armstrong		
Hop Harrigan		
Lone Ranger		
Group 4.		
Young People's Church of the Air		
Old Fashioned Revival		
Chapel Service of Dr. H.R.Brown		
Lutheran Hour		
Dr. Rowsey's Church of the Air		
Catholic Hour		
Group 5.		
Mr. District Attorney		
Big Town		
Gangbusters		
Inner Sanctum		
Mr. Keen, Tracer of Lost Persons		
Dr. Christian		
The Shadow		
Mr. and Mrs. North		
Suspense		
Group 6.		
Supper Club		
The Aldrich Family		
Those Websters		
Smilin' Ed McConnel		
Theater of Today		
Group 7.		
Your Hit Parade		
Hour of Charm		
Nelson Eddy		
Kate Smith		
Symphony Orchestras		
Swing and Dance Orchestras		
Hymns of All Churches		

PART III

If you listen to one of the following programs, check ( ) one of the reasons given which best tells just why you like to listen to that program. If you can give a better reason for listening than those given, write it on the dotted line.

A. I like to listen to Mr. District Attorney because

_____ 1. it reviews cases that have actually happened.
_____ 2. it shows how detectives do their work.
_____ 3. there is always a lot of action and excitement.
_____ 4. it shows that crime does not pay.

_____ 5. _____

B. I like to listen to Blondie because

_____ 1. it is a comical show.
_____ 2. the people who play in it seem much like the people I know.
_____ 3. it is about funny family situations.
_____ 4. Dagwood always does things that people ordinarily don't do.

_____ 5. _____

C. I like to listen to Big Town because

_____ 1. there is much shooting in it.
_____ 2. I like to see how people meet danger.
_____ 3. it is full of daring and danger.
_____ 4. it has a lesson in it.

_____ 5. _____

D. I like to listen to Bob Hope because

_____ 1. his jokes are always funny and interesting.
_____ 2. I like the way he speaks.
_____ 3. it makes me feel that I am part of the big audience which enjoys his jokes so much.

_____ 4. _____

E. I like to listen to Hop Harrigan because

_____ 1. it is a serial and I am anxious to know what is going to happen next.
_____ 2. it is a thrilling story of adventure.
_____ 3. it has airplanes in it.
_____ 4. I like the characters who play in it.

_____ 5. _____

F. I like to listen to Fibber McGee and Molly because

_____ 1. it is about funny family situations.
_____ 2. Molly always has to correct Fibber.
_____ 3. the players are so much like the people I know.

_____ 4. _____

PART III (cont.)

G. I like to listen to Inner Sanctum because

_____ 1. there is something "spooky" in it.
_____ 2. I like the sound effects and the way the show makes me feel.
_____ 3. something mysterious usually happens and I want to find out what the mystery is.
_____ 4. someone is usually murdered.

_____ 5. _____

APPENDIX B

TABLE I. ANALYSIS OF FORTY MEANS OF EACH SEX GROUP.

N	d.f.	Boys		Girls	
		ΣX	ΣX^2	ΣX	ΣX^2
40	39	113.20	334.12	128.26	427.378
Sum of squares		13.77		16.11	
	$\bar{X}$	2.83		3.20	
	s^2	.353		.413	
	s	.594		.64	
	$s_{\bar{X}}$	.094		.101	
	**$t_{.05}$	2.02		2.02	
	$t_{.05}\, s_{\bar{X}}$	.189		.204	

Mean of parameter:

2.83 .189 3.20 .204

** See G. W. Snedecor, Statistical Methods, p. 65 for values of t at the 5 per cent probability level.

TABLE II. COMPARISON OF FORTY MEANS OF LISTENING TIME OF THE SEXES.

Sex	N	d.f.	$\bar{x}$*	Sum of squares
Boys	40	39	2.83	13.77
Girls	40	39	3.20	16.113
	80	78	.37	29.883

Pooled Variance $S^2 = \frac{29.883}{78} = .3831$

$$S_{\bar{x}:\bar{y}} = \sqrt{\frac{.3831(80)}{40(40}} = .138$$

$$t = \frac{.37}{.138} = 2.6 \quad P = .01$$

The difference is significant since it has reached the 1 per cent probability level.

* $\bar{x}$ signifies the mean of the forty means in each group.

TABLE III. TEST OF DIFFERENCES OF THE MEANS OF LISTENING TIME IN THE ECONOMIC GROUPS.

Grade	Sex	Economic Group					
		A	B	C	D	E	Totals
8	B	2.58	2.75	2.75	2.83	3.00	
	G	3.20	3.50	4.25	3.00	4.16	
7	B	2.30	3.12	3.58	3.08	2.16	
	G	2.50	3.66	3.58	3.33	4.16	
6	B	2.83	3.16	2.50	1.83	3.16	
	G	2.66	2.66	2.83	3.00	3.75	
5	B	2.75	3.00	2.83	3.00	2.16	
	G	2.50	3.00	2.83	3.00	3.50	
	ΣX	21.32	24.85	25.15	23.07	26.05	120.44
	$\bar{x}$	2.666	3.106	3.143	2.883	3.256	3.011
	ΣX^2	57.331	78.003	81.534	67.93	89.24	374.038
	$\frac{(\Sigma X)^2}{K}$	56.817	77.19	79.065	66.53	84.83	364.432
	Σx^2	.514	.813	2.469	1.40	4.41	9.606

1. $\Sigma X = 120.44$

2. $C = \frac{(120.44)^2}{40} = 362.6448$

3. Total Sum of Squares $374.0387 - 362.6448 = 11.3939$

4. Gr. $\frac{\Sigma(\Sigma X)^2}{K} - C = 364.432 - 362.6448 = 1.787$

$$\text{Mean square} = \frac{1.787}{n-1} = .446$$

5. Individual = Total Sqq.-Group Ssq or $11.3939 - 1.787 = 9.606$

$$\text{Mean Square} = \frac{9.606}{nk-1} \quad \text{or} \quad \frac{9.606}{35} = .2744$$

$$F = \frac{.446}{.2744} \quad \text{or } 1.62 \qquad P \text{ less than } .05$$

d.f. Total 39
Group 4
Individual 35

TABLE IV. TEST OF DIFFERENCES OF MEANS OF LISTENING TIME IN THE GRADES. 6

Economic Levels	Sex	Grades 8	7	6	5	Totals
A	B	2.68	2.30	2.83	2.75	
	G	3.20	2.50	2.66	2.50	
B	B	2.75	3.12	3.16	3.00	
	G	3.50	3.66	2.66	3.00	
C	B	2.75	3.58	2.50	2.83	
	G	4.25	3.58	2.83	2.83	
D	B	2.83	3.08	1.83	3.00	
	G	3.00	3.33	3.00	3.00	
E	B	3.00	2.16	3.16	2.16	
	G	4.16	4.16	3.75	3.50	
	ΣX	32.02	31.47	28.38	29.57	120.44
	$\frac{\Sigma X}{k}$	3.202	3.147	2.838	2.857	3.011
	ΣX^2	103.648	102.849	86.878	82.745	376.12
	$\frac{(\Sigma X)^2}{k}$	102.53	99.036	80.542	81.624	363.732
	Σx^2	1.118	3.813	6.336	1.121	12.388

1. $\Sigma X = 120.44$

2. $C = \frac{S^2}{nk} = \frac{(120.44)^2}{40} = 362.6448$

3. Total Ssq: 376.12-362.6448 = 13.475

4. Gr. $\frac{S(\Sigma X)^2}{k} - C = 363.732 - 362.6448 = 1.087$

   Mean square $= \frac{1.087}{n-1} = .362$

5. Individuals = Total Ssq - Gr. Ssq or 13.475 - 1.087 = 12.388

   Mean square $= \frac{12.388}{nk-1}$

   $= .3441$

   $F = \frac{.362}{.3441} = 1.052$ F less than .05

d.f. Total nk-1 or 39
Gr. n-1 or 3
Individuals 36

TABLE V. SIGNIFICANCE OF DIFFERENCES BETWEEN THE SEX GROUPS ON PART I OF THE QUESTIONNAIRE

Question No.	Sex	II	p	II-p	σ_p	$\frac{II-p}{\sigma_p} = t$
1.	B		.3496	.0292	.01265	2.3
	G	.6783	.9065	.0277	.01223	2.55
4.	B		.7000	.0366	.01714	2.13
	G	.7366	.7719	.0353	.0165	2.13
7.	B		.7563	.0416	.01558	2.67
	G	.7979	.8512	.0503	.01508	3.33
8.	B		.4930	.0467	.0197	2.37
	G	.5397	.5835	.0438	.019	2.30
15.	B		.8224	.1106	.0175	6.32
	G	.7118	.6076	.1042	.0170	6.12

TABLE VI. SIGNIFICANCE OF DIFFERENCES AMONG THE ECONOMIC GROUPS ON PART I OF THE QUESTIONNAIRE

Program No.	Group	II	p	II-p	σ_p	$\frac{II-p}{\sigma_p}=t$
	A		.9794	.0109	.01175	.927
	B		.9784	.0099	.0085	1.164
	C		.9714	.0029	.0055	.50
	D		.9368	.0377	.0115	3.27
2.	E	.9685	.9758	.0073	.0127	.574
	A		.8287	.0921	.0354	2.53
	B		.6487	.0879	.0264	3.32
	C		.7722	.0356	.018	1.97
	D		.6946	.0420	.0293	1.43
4.	E	.7366	.7096	.0270	.0395	.068
	A		.4726	.1233	.0394	3.12
	B		.2078	.1415	.0385	3.67
	C		.4568	.1070	.0195	5.48
	D		.2168	.1325	.0317	4.18
5.	E	.3493	.2419	.1074	.0428	2.50
	A		.7328	.1340	.0405	3.30
	B		.6451	.0463	.0293	1.58
	C		.7164	.1176	.02	5.88
	D		.2345	.3642	.0325	11.20
6.	E	.5988	.4354	.1634	.044	3.71
	A		.3767	.1630	.0415	3.95
	B		.4802	.0595	.0298	1.99
	C		.5704	.0507	.0203	1.51
	D		.5442	.0045	.0331	.135
8.	E	.5397	.7096	.1699	.0447	3.80
	A		.2602	.0006	.036	.016
	B		.3261	.0665	.0262	2.53
	C		.2164	.0432	.0179	2.40
	D		.2920	.0324	.0291	1.11
9.	E	.2596	.2580	.0016	.0393	.04
	A		.7260	.0989	.0314	3.14
	B		.7705	.0544	.0227	2.39
	C		.8422	.0172	.0155	1.116
	D		.8849	.0600	.0252	2.38
10.	E	.8249	.8709	.0460	.0341	1.34
	A		.5753	.1139	.0383	2.99
	B		.5878	.1014	.0276	3.67
	C		.7197	.0305	.0189	1.61
	D		.8146	.1254	.0307	4.08
11.	E	.6892	.6774	.0118	.0415	.284

TABLE VI.(cont.)SIGNIFICANCE OF DIFFERENCES AMONG THE ECONOMIC GROUPS ON PART I OF THE QUESTIONNAIRE

Program	Group	M	p	M-p	σ_D	$\frac{M-p}{\sigma_D}$ = t
	A		.6780	.0098	.0359	.272
	B		.5949	.0929	.026	3.57
	C		.7265	.0387	.0177	2.18
	D		.6592	.0286	.0292	.99
15.	E	.6878	.7741	.0863	.0389	2.21
	A		.8424	.1366	.0374	3.49
	B		.7245	.0127	.02706	.469
	C		.7130	.0012	.0185	.064
	D		.7039	.0079	.0301	.026
15.	E	.7118	.5403	.1715	.0406	4.22
	A		.9313	.005	.0204	.245
	B		.8709	.0656	.0147	4.46
	C		.9664	.0299	.0100	2.99
	D		.9380	.0015	.0164	.091
16.	E	.9365	.9436	.007	.0221	.316

TABLE VII. SIGNIFICANCE OF DIFFERENCES AMONG THE GRADES ON PART I OF THE QUESTIONNAIRE

Program	Group	II	p	II-p	σ_p	$\frac{II-p}{\sigma_p}$ = t
	8		.8341	.0368	.0169	2.17
	7		.9194	.0485	.0170	2.85
	6		.8580	.0185	.0186	.994
3.	5	.8709	.8712	.0003	.0206	.014
	8		.7487	.0121	.0221	.054
	7		.7896	.0530	.0224	2.36
	6		.7006	.026	.0245	1.46
4.	5	.7366	.6856	.051	.0271	1.88
	8		.6995	.1007	.0244	4.12
	7		.5792	.0196	.025	.784
	6		.3724	.2264	.0272	8.28
6.	5	.5988	.7575	.1587	.03	5.29
	8		.6030	.0633	.025	2.53
	7		.5714	.0317	.025	1.26
	6		.6000	.0397	.027	1.40
8.	5	.5397	.4469	.0928	.03	3.09
	8		.1884	.0712	.0219	3.25
	7		.2103	.0493	.0222	2.22
	6		.3179	.0583	.0243	2.40
9.	5	.2596	.3674	.1078	.0269	4.00
	8		.8417	.0168	.019	.88
	7		.8155	.0094	.0193	.48
	6		.7654	.0595	.0211	2.82
10.	5	.8249	.8863	.0614	.0233	2.63
	8		.1356	.1051	.0215	4.88
	7		.2195	.0212	.0218	.97
	6		.2592	.0185	.0238	.77
12/	5	.2407	.3977	.1570	.0264	5.09
	8		.7783	.091	.0251	3.93
	7		.6493	.0385	.0235	1.63
	6		.6666	.0212	.0257	.82
13.	5	.6878	.6325	.0553	.0284	1.94
	8		.6507	.0409	.024	1.70
	7		.6189	.0082	.024	.34
	6		.5370	.0728	.027	2.69
14.	5	.6098	.6216	.0118	.029	.40

TABLE VII.(cont.) SIGNIFICANCE OF DIFFERENCES AMONG THE GRADES ON PART I OF THE QUESTIONNAIRE

Program	Group II	p	II-p	σ_p	$\frac{II-p}{\sigma_p}$ = t
	8	.7311	.0123	.0227	.54
	7	.6883	.0305	.0222	1.37
	6	.6635	.0553	.026	2.21
15.	5 .7118	.7765	.0577	.0276	2.09
	8	.9598	.0233	.0123	1.77
	7	.9194	.0171	.0125	1.36
	6	.9351	.0014	.0136	.10
16.	5 .9365	.9280	.0085	.0151	.56

TABLE VIII. SIGNIFICANCE OF DIFFERENCES AMONG THE ABILITY GROUPS ON PART I OF THE QUESTIONNAIRE

Program	Group	II	p	II-p	σ_p	$\frac{II-p}{\sigma_p} = t$
	A		1.000	.0315	.04234	.74
	B		.9727	.0042	.02605	.16
	C		.9777	.0092	.02605	.35
	D		.8868	.0797	.02605	3.05
2.	E	.9685	.70	.2685	.05521	4.86
	A		.8235	.0869	.1068	.813
	B		.8222	.0856	.0657	1.30
	C		.7333	.0033	.0657	.05
	D		.5555	.1811	.0657	2.75
4.	E	.7366	.6000	.1366	.1392	.99
	A		.1764	.1729	.1205	1.434
	B		.3333	.016	.074	.216
	C		.2333	.116	.074	1.56
	D		.5777	.2284	.074	3.08
5.	E	.3493	.4000	.0507	.1572	.322
	A		.6470	.0482	.1188	.405
	B		.8000	.2012	.0731	2.75
	C		.7333	.1345	.0731	1.839
	D		.8666	.2678	.0731	3.66
6.	E	.5988	1.0000	.4012	.1549	2.59
	A		.5882	.3286	.1013	3.24
	B		.2444	.0152	.0654	.232
	C		.3333	.0737	.0654	1.26
	D		.3667	.1071	.0654	1.637
9.	E	.2596	.10	.1596	.1386	1.51
	A		.4706	.3543	.09267	3.82
	B		.7777	.0477	.057	.82
	C		.7333	.0916	.057	1.60
	D		.9333	.0916	.057	1.607
10.	E	.8249	.90	.0751	.1208	.62
	A		.4117	.2775	.1123	2.48
	B		.5555	.1337	.06912	1.93
	C		.4666	.2004	.06912	2.89
	D		.7777	.0885	.06912	1.28
11.	E	.6892	.7000	.0108	.1465	.07
	A		.2941	.0534	.10368	.515
	B		.3111	.0704	.06372	1.104
	C		.1112	.1296	.06372	2.03
	D		.1556	.0851	.06372	1.33
12.	E	.2407	.10	.1407	.1352	1.04

TABLE VIII.(cont.)SIGNIFICANCE OF DIFFERENCES AMONG THE ABILITY GROUPS ON PART I OF THE QUESTIONNAIRE

Program	Group	II	p	II-p	σ_p	$\frac{II-p}{\sigma_p} = t$
	A		.5882	.0216	.1182	.182
	B		.7555	.1457	.07279	2.001
	C		.6222	.0124	.07279	.17
	D		.6666	.0568	.07279	.78
14.	E	.6098	.6000	.1502	.1542	1.233
	A		.8235	.1117	.1098	1.017
	B		.7777	.0659	.0675	.97
	C		.7555	.0437	.0675	.646
	D		.7777	.0659	.0675	.97
15.	E	.7118	1.0000	.2882	.1432	2.01

TABLE IX. SIGNIFICANCE OF DIFFERENCES BETWEEN THE SEX GROUPS.
PART II. (REGULAR LISTENING)

Program	Sex	II	p	II-p	σ_p	$\frac{II-p}{\sigma_p} = t$
Burns and Allen	B		.2436	.0496	.0176	2.81
	G	.2932	.3399	.0467	.0171	2.72
Frank Sinatra	B		.1203	.0787	.0154	5.09
	G	.1990	.2733	.0745	.0150	4.95
Dick Haymes	B		.0992	.0561	.0140	3.99
	G	.1553	.2082	.0529	.0136	3.86
Truth or Consequences	B		.4587	.0413	.0193	2.13
	G	.5000	.5414	.0414	.0179	2.30
Terry and the Pirates	B		.3714	.0520	.0180	2.87
	G	.3194	.2700	.0494	.0175	2.81
Superman	B		.3068	.0479	.0167	2.86
	G	.2589	.2138	.0451	.0164	2.75
Tom Mix	B		.3128	.0539	.0167	3.22
	G	.2589	.2082	.0507	.0164	3.09
Captain Midnight	B		.3023	.0558	.0167	3.34
	G	.2465	.1940	.0525	.0162	3.24
Jack Armstrong	B		.3053	.0355	.0172	2.06
	G	.2698	.2365	.0333	.0168	1.97
Hop Harrigan	B		.3549	.0959	.0177	3.36
	G	.2954	.2393	.0561	.01718	3.26
Lone Ranger	B		.1383	.0311	.01204	2.58
	G	.1072	.0779	.0293	.01167	2.51
Let's Pretend	B		.2286	.0894	.01805	4.95
	G	.3180	.4022	.0842	.01752	4.80
Old Fashioned Revival	B		.0436	.0214	.00955	2.24
	G	.0650	.0864	.0214	.00927	2.30
Gangbusters	B		.5158	.0789	.01925	4.09
	G	.4369	.3625	.0744	.01870	3.97
Dr.Christian	B		.3684	.0743	.01922	3.86
	G	.4427	.5127	.0700	.01866	3.75
Mr.and Mrs.North	B		.5775	.0373	.01887	1.97
	G	.6148	.6501	.0353	.01832	1.92
Supper Club	B		.1699	.0642	.0164	3.91
	G	.2341	.2946	.0605	.01593	3.79

TABLE IX. (cont.) SIGNIFICANCE OF DIFFERENCES BETWEEN THE SEX GROUPS.
PART II. (REGULAR LISTENING)

Program	Sex	M	p	M-p	σ_p	$\frac{M-p}{\sigma_p}$ =
The Aldrich Family	B		.3550	.0475	.01924	2.46
	G	.4325	.4775	.0448	.01865	2.402
Theater of Today	B		.0947	.1146	.01589	7.21
	G	.2093	.3178	.1079	.01549	6.96
Hit Parade	B		.3068	.1067	.01910	5.58
	G	.4135	.5141	.1006	.01854	5.42
The Hour of Charm	B		.1248	.0706	.01537	4.59
	G	.1954	.2620	.0666	.01492	4.46
Nelson Eddy	B		.0782	.0268	.01186	2.25
	G	.1050	.1303	.0253	.01150	2.20
Kate Smith	B		.1143	.0534	.01449	3.68
	G	.1677	.2181	.0504	.01406	3.58
Symphony Orchestra	B		.0947	.0453	.01340	3.38
	G	.1400	.1827	.0427	.01302	3.27
Swing and Dance Orchestra	B		.2271	.0492	.01733	2.83
	G	.2763	.3229	.0446	.01602	2.77
Hymns of all Churches	B		.0752	.0611	.01351	4.59
	G	.1363	.1940	.0577	.01292	4.46
	B					
	G					

TABLE X. SIGNIFICANCE OF DIFFERENCES BETWEEN THE SEX GROUPS.
PART II. (OCCASIONAL LISTENING)

Program	Sex	M	p	M-p	σ_p	$\frac{M-p}{\sigma_p} = t$
Burns and Allen	B		.5085	.0423	.01934	2.18
	G	.4660	.4263	.0397	.01877	2.11
Let's Pretend	B		.3198	.0213	.01773	1.21
	G	.2975	.2778	.0199	.01721	1.15
Tom Mix	B		.3308	.0478	.01695	3.25
	G	.2930	.2379	.0551	.01839	2.38
Captain Midnight	B		.3880	.0438	.0184	2.38
	G	.3442	.3031	.0411	.0179	2.29
Jack Armstrong	B		.4075	.0487	.0180	2.61
	G	.3588	.3130	.0458	.0180	2.54
Lone Ranger	B		.3156	.0365	.0174	2.09
	G	.2793	.2450	.0343	.0168	2.04
Young People's Church	B		.1624	.0345	.0154	2.24
	G	.1969	.2294	.0325	.0149	2.18
Big Town	B		.3188	.0344	.0174	1.98
	G	.2844	.2521	.0323	.0169	1.91
Dr. Christian	B		.3248	.0353	.0176	2.00
	G	.2895	.2563	.0332	.0170	1.95

TABLE XI. SIGNIFICANCE OF DIFFERENCES AMONG THE ECONOMIC GROUPS. PART II. (REGULAR LISTENING)

Program	Group	II	p	II-p	σ_p	$\frac{II-p}{\sigma_p} = t$
	A		.3287	.0768	.0409	1.87
	B		.4085	.0030	.0280	.107
	C		.3907	.0048	.0201	.23
	D		.4071	.0016	.0327	.047
Blondie	E	.4055	.5564	.1509	.0440	3.43
	A		.3629	.0719	.0378	1.899
	B		.3942	.1032	.0272	3.76
	C		.2599	.0311	.0186	1.67
	D		.2256	.0654	.0302	2.159
Charlie McCarthy	E	.2910	.2419	.0491	.0408	1.20
	A		.3749	.0603	.0387	1.55
	B		.3834	.0668	.0278	2.402
	C		.2649	.0517	.0190	2.71
	D		.2699	.0465	.0310	1.499
Jack Benny	E	.3166	.4274	.1108	.0417	2.60
	A		.1369	.0213	.0301	.707
	B		.1361	.0221	.0217	1.032
	C		.1542	.0040	.0148	.27
	D		.1437	.0055	.0241	.228
Fannie Brice	E	.1582	.2419	.0837	.0325	2.57
	A		.0479	.1064	.0300	3.527
	B		.1541	.0002	.0216	.009
	C		.1442	.0097	.0147	.655
	D		.1902	.0363	.0240	1.509
Bob Burns	E	.1539	.2580	.1041	.0324	3.212
	A		.1438	.0552	.0332	1.6
	B		.1218	.0772	.0238	3.232
	C		.2096	.0106	.0163	.648
	D		.2566	.0576	.0266	2.165
Frank Sinatra	E	.1990	.2822	.0832	.0359	2.321
	A		.1095	.0743	.0322	2.024
	B		.1453	.0405	.0231	1.74
	C		.1811	.0027	.0159	.17
	D		.2566	.0728	.0258	2.8
Beulah	E	.1838	.2419	.0581	.0347	1.67
	A		.1027	.0526	.0302	1.74
	B		.0967	.0586	.0217	2.7
	C		.1760	.0207	.0148	1.40
	D		.1548	.0005	.0241	.02
Dick Haymes	E	.1553	.2500	.0947	.0325	2.96

TABLE XI.(cont.)SIGNIFICANCE OF DIFFERENCES AMONG THE ECONOMIC GROUPS. PART II. (REGULAR LISTENING)

Program	Group	II	p	II-p	σ_p	$\frac{II-p}{\sigma_p} = t$
	A		.2808	.0438	.0354	1.23
	B		.2329	.0041	.0254	.161
	C		.2685	.-313	.0174	1.798
	D		.1194	.1176	.0235	5.231
We March with Faith	E	.2370	.2580	.0210	.0382	.549
	A		.5136	.0136	.0416	.326
	B		.5340	.0340	.0299	1.13
	C		.5215	.0215	.0204	1.049
	D		.4292	.0708	.0333	2.1
Truth or Consequences	E	.5000	.4435	.0565	.0449	1.257
	A		.1986	.0387	.0303	1.27
	B		.1433	.0166	.0219	.756
	C		.1190	.0409	.0301	.815
	D		.1593	.0006	.0243	.024
The Quiz Kids	E	.1599	.2661	.1062	.0329	3.2
	A		.1506	.0135	.0284	.474
	B		.1648	.0277	.0205	1.34
	C		.1207	.0164	.0140	1.16
	D		.1017	.0294	.0228	1.28
Nebr.-Iowa Quiz	E	.1371	.2016	.0645	.0309	2.06
	A		.3835	.0101	.0400	.252
	B		.4014	.0280	.0289	.966
	C		.3672	.0062	.0198	.312
	D		.2610	.1124	.0321	3.492
Dr. I.Q.	E	.3734	.5332	.1598	.0434	3.60
	A		.1712	.1482	.0388	3.81
	B		.2903	.0291	.0277	1.05
	C		.3135	.0059	.0190	.31
	D		.3761	.0567	.0310	1.82
Terry and the Pirates	E	.3194	.4838	.1644	.0419	3.92
	A		.1458	.1151	.0362	3.17
	B		.2472	.0117	.0260	.45
	C		.2230	.0386	.0179	2.15
	D		.3250	.0641	.0291	2.20
Superman	E	.2589	.4758	.2169	.0393	5.54
	A		.1712	.0877	.0362	2.42
	B		.2114	.0475	.0260	1.82
	C		.2514	.0275	.0179	1.53
	D		.3672	.1083	.0291	3.71
Tom Mix	E	.2589	.4032	.1443	.0395	3.66

TABLE XI.(cont.) SIGNIFICANCE OF DIFFERENCES AMONG THE ECONOMIC GROUPS. PART II. (REGULAR LISTENING)

Program	Group	II	p	II-p	σ_p	$\frac{II-p}{\sigma_p}$ = t
	A		.1438	.1027	.0356	2.88
	B		.2150	.0315	.0258	1.20
	C		.2180	.0285	.0175	1.62
	D		.3830	.0765	.0286	2.66
Captain Midnight	E	.2465	.4354	.1889	.0386	4.88
	A		.1506	.1630	.0384	4.24
	B		.2508	.0628	.0277	2.26
	C		.2934	.0202	.0187	1.08
	D		.4159	.1023	.0308	3.31
Dick Tracy	E	.3136	.5564	.2428	.0416	5.83
	A		.1301	.1397	.0367	3.80
	B		.2893	.0405	.0286	1.55
	C		.2652	.0056	.0182	.30
	D		.3495	.0797	.0295	2.70
Jack Armstrong	E	.2698	.4112	.1414	.0399	3.54
	A		.1301	.1653	.0377	4.37
	B		.2580	.0374	.0272	1.40
	C		.3001	.0047	.0186	.25
	D		.3305	.0851	.0303	2.80
Pop Harrigan	E	.2954	.3952	.0998	.0409	2.44
	A		.0273	.0779	.0256	3.12
	B		.0324	.0248	.0185	1.34
	C		.0754	.0318	.0126	2.52
	D		.1314	.0742	.0206	3.60
Lone Ranger	E	.1072	.2741	.1669	.0278	6.00
	A		.2534	.0646	.0368	1.75
	B		.3225	.0045	.0277	.75
	C		.3001	.0179	.0163	1.09
	D		.3009	.0171	.0309	.55
Let's Pretend	E	.3180	.4999	.1819	.0418	4.34
	A		.0205	.0181	.0158	1.15
	B		.0107	.0279	.0115	2.42
	C		.0355	.0051	.0133	.39
	D		.0709	.0492	.0127	3.77
Young People's Church	E	.0304	.0387	.0501	.0172	2.90
	A		.0273	.0377	.0204	1.84
	B		.0358	.0292	.0147	1.97
	C		.0570	.0080	.0100	.79
	D		.0840	.0190	.0164	1.158
Old Fashioned Revival	E		.1854	.1204	.0221	5.40

TABLE XI. (cont.) SIGNIFICANCE OF DIFFERENCES AMONG THE ECONOMIC GROUPS. PART II. (REGULAR LISTENING)

Program	Group	II	p	II-p	σ_p	$\frac{II-p}{\sigma_p} = t$
	A		.0205	.0466	.0207	2.251
	B		.0501	.0170	.0149	1.214
	C		.0520	.0051	.0102	.500
	D		.0796	.0125	.0165	.757
Dr. R. R. Brown	E	.0671	.1612	.0941	.0224	4.18
	A		.0000			
	B		.0501	.0053	.0136	.388
	C		.0402	.0152	.0933	.162
	D		.0885	.0331	.0151	2.18
The Lutheran Hour	E	.0554	.1451	.0897	.0204	4.30
	A		.0890	.0480	.0162	2.96
	B		.0250	.0138	.0162	1.34
	C		.0155	.0253	.0080	3.138
	D		.0531	.0123	.0130	.939
Dr. Rowsey	E	.0408	.1209	.0801	.0171	4.66
	A		.0410	.0268	.0207	1.29
	B		.0752	.0074	.0149	.528
	C		.0536	.0142	.0149	1.392
	D		.0531	.0147	.0166	.885
The Catholic Hour	E	.0678	.1774	.1096	.0224	4.87
	A		.5060	.0879	.0406	2.15
	B		.5877	.0062	.0294	.21
	C		.5936	.0003	.0201	.014
	D		.5973	.0044	.0326	.134
Mr. District Attorney	E	.5939	.7016	.1077	.0441	2.44
	A		.3424	.1382	.0413	3.343
	B		.4372	.0454	.0299	1.45
	C		.4128	.0678	.0204	3.32
	D		.5752	.0946	.0332	2.84
Big Town	E	.4806	.6532	.1726	.0449	3.84
	A		.3492	.0877	.0410	2.136
	B		.4120	.0249	.029	.858
	C		.4091	.0278	.020	1.39
	D		.5000	.0631	.033	1.87
Gangbusters	E	.4369	.6129	.1760	.0445	3.95
	A		.3219	.1108	.0410	2.69
	B		.3584	.0741	.0296	2.49
	C		.4494	.0169	.0202	.832
	D		.4911	.0586	.0329	1.77
Inner Sanctum	E	.4325	.5403	.1078	.0444	2.42

TABLE XI. (cont.) SIGNIFICANCE OF DIFFERENCES AMONG THE ECONOMIC GROUPS. PART II. (REGULAR LISTENING)

Program	Group	II	p	II-p	σ_p	$\frac{II-p}{\sigma_p} = t$
	A		.2945	.1168	.0407	2.85
	B		.3901	.0212	.0264	.803
	C		.3991	.0122	.0201	.606
	D		.4694	.0581	.0327	1.77
Mr. Keen	E	.4113	.5483	.1370	.0441	3.101
	A		.2809	.1619	.0410	3.94
	B		.4157	.0270	.0290	.93
	C		.4525	.0034	.0203	.167
	D		.5310	.0883	.0329	2.67
Dr. Christian	E	.4427	.4677	.0250	.0445	.56
	A		.3150	.0584	.0400	1.456
	B		.3584	.0150	.0289	.519
	C		.3639	.0095	.0198	.479
	D		.3540	.0194	.0321	.604
The Shadow	E	.3734	.5564	.1830	.0434	4.21
	A		.3492	.0984	.0411	2.338
	B		.3404	.1052	.0297	3.528
	C		.4662	.0206	.0203	1.012
	D		.5133	.0677	.0330	2.053
Suspense	E	.4456	.5715	.1259	.0446	2.82
	A		.3356	.0969	.0409	2.36
	B		.4263	.0062	.0296	.209
	C		.4075	.0250	.0202	1.237
	D		.5133	.0808	.0329	2.40
The Aldrich Family	E	.4325	.5322	.0997	.0444	2.24
	A		.3356	.0159	.0394	.403
	B		.3548	.0033	.0284	.116
	C		.3253	.0262	.0193	1.357
	D		.3628	.0113	.0316	.357
Those Websters	E	.3515	.4677	.1162	.0428	2.715
	A		.0890	.0357	.0273	1.307
	B		.0824	.0423	.0197	2.14
	C		.1207	.0040	.0135	.296
	D		.1858	.0611	.0219	2.78
Smilin' Ed McConnel	E	.1247	.1693	.0446	.0296	1.50
	A		.1438	.0655	.0340	1.90
	B		.1433	.0660	.0245	2.69
	C		.2331	.0238	.0165	1.442
	D		.1947	.0126	.0266	.694
Theater of Today	E	.2093	.3467	.1374	.0369	3.72

TABLE XI. (cont.) SIGNIFICANCE OF DIFFERENCES AMONG THE ECONOMIC GROUPS. PART II. (REGULAR LISTENING)

Program	Group	II	p	II-p	σ_p	$\frac{II-p}{\sigma_p} = t$
	A		.0616	.0443	.0252	1.75
	B		.1030	.0029	.0162	.179
	C		.0939	.0120	.0125	.96
	D		.1327	.0268	.0199	1.346
Nelson Eddy	E	.1059	.1612	.0553	.0274	2.01
	A		.0616	.1061	.0309	3.43
	B		.1075	.0602	.0223	2.69
	C		.1542	.0135	.0153	.882
	D		.2610	.0953	.0248	3.76
Kate Smith	E	.1677	.3224	.1547	.0335	4.61
	A		.1095	.0305	.0286	1.066
	B		.1182	.0218	.0210	1.03
	C		.1442	.0042	.0140	.30
	D		.1283	.0117	.0230	.508
Symphony Orchestras	E	.1400	.2258	.0859	.0310	2.76
	A		.1917	.0846	.037	2.28
	B		.1971	.0792	.0267	2.96
	C		.2901	.0138	.0183	.754
	D		.2920	.0157	.029	.54
Swing and Dance Orchestras	E	.2763	.4598	.1835	.0401	4.57
	A		.0616	.0747	.0328	2.27
	B		.0931	.0430	.0206	1.82
	C		.1509	.0146	.014	1.04
	D		.1430	.0097	.0229	.425
Hymns of All Churches	E	.1383	.2358	.0975	.0356	2.73

TABLE XII. SIGNIFICANCE OF DIFFERENCES AMONG THE ECONOMIC GROUPS PART II (OCCASIONAL LISTENING)

Program	Group	II	p	II-p	σ_p	$\frac{II-p}{\sigma_p}$ = t
	A		.3764	.0406	.0408	.99
	B		.3542	.0629	.0295	2.13
	C		.4366	.0194	.0201	.96
	D		.4425	.0253	.0328	.77
Fibber McGee	E	.4172	.4677	.0505	.04427	1.14
	A		.5573	.0262	.0418	.654
	B		.5017	.0006	.0299	.02
	C		.5064	.0053	.0204	.259
	D		.4292	.0719	.0332	2.16
Great Gildersleeve	E	.5011	.5715	.0704	.0446	1.57
	A		.3766	.0872	.0412	2.11
	B		.4408	.0230	.0298	.767
	C		.4947	.0309	.0204	1.51
	D		.3932	.0700	.0331	2.11
Charlie McCarthy	E	.4638	.5161	.0537	.0452	1.18
	A		.3287	.0556	.0413	1.344
	B		.4981	.0139	.0299	.461
	C		.5416	.0573	.0204	2.79
	D		.4469	.0347	.0332	1.124
We March with Faith	E	.4642	.4274	.0369	.0446	1.268
	A		.4451	.0619	.0398	2.05
	B		.3655	.0023	.0288	.079
	C		.3387	.0245	.0197	1.243
	D		.3761	.0139	.032	.403
The Quiz Kids	E	.3632	.3548	.0084	.0432	.194
	A		.4383	.0821	.0394	2.098
	B		.3840	.0288	.0286	1.005
	C		.3354	.0198	.0196	1.01
	D		.3274	.0278	.0318	.873
Meur.-Iowa Quiz	E	.3552	.3629	.0077	.0429	.18
	A		.3082	.0137	.0378	.36
	B		.3297	.0322	.0275	1.17
	C		.3018	.0043	.0187	.229
	D		.2920	.0055	.0304	.18
Let's Pretend	E	.2975	.2016	.0959	.041	2.33
	A		.3219	.0389	.0372	1.04
	B		.2831	.0001	.0269	.003
	C		.2934	.0104	.0184	.56
	D		.2168	.0662	.0299	2.209
Tom Mix	E	.2830	.3064	.0234	.0502	.46

TABLE XXI. (cont.) SIGNIFICANCE OF DIFFERENCES AMONG THE ECONOMIC GROUPS. PART II. (OCCASIONAL LISTENING)

Program	Group	II	p	II-p	σ_p	$\frac{II-p}{\sigma_p} = t$
	A		.4314	.0748	.0396	1.8
	B		.3727	.0161	.0286	.562
	C		.3773	.0207	.0196	1.056
	D		.3027	.0469	.0318	1.474
Dick Tracy	E	.3566	.2933	.0583	.0430	1.35
	A		.1095	.0874	.0328	2.65
	B		.1863	.0106	.0237	.447
	C		.1677	.0292	.0162	1.802
	D		.2473	.0509	.0264	1.92
Young People's Church	E	.1969	.3709	.1740	.0356	4.87
	A		.0753	.0998	.0315	3.16
	B		.1433	.0318	.0228	1.39
	C		.1693	.0058	.0156	.37
	D		.2038	.0284	.0253	1.32
Old Fashioned Revival	E	.1751	.3467	.1716	.0341	5.02
	A		.0821	.0885	.0311	2.84
	B		.1576	.0130	.0225	.577
	C		.1643	.0063	.0154	.409
	D		.1991	.0285	.0250	1.14
Dr. R.R.Brown	E	.1706	.2822	.1116	.0338	3.301
	A		.0753	.0837	.0305	2.86
	B		.1641	.0085	.0220	.384
	C		.1513	.0108	.01511	.714
	D		.1859	.0232	.0245	.945
Lutheran Hour	E	.1626	.2983	.1351	.0331	4.09
	A		.1849	.0362	.0294	1.23
	B		.1612	.0125	.0213	.586
	C		.1123	.0367	.0145	2.517
	D		.0000			
Dr. Rowsey	E		.2661	.1174	.0319	3.68
	A		.0821	.0951	.0315	3.01
	B		.1805	.0267	.0228	1.16
	C		.1794	.0022	.0156	.14
	D		.2124	.0352	.0254	1.38
Catholic Hour	E	.1772	.2741	.0969	.0428	2.32
	A		.1164	.0644	.0318	2.02
	B		.1576	.0232	.0230	1.008
	C		.1778	.003	.0157	.191
	D		.1681	.0127	.0256	.49
Smilin' Ed McConnel	E	.1808	.2983	.1175	.0348	3.39

TABLE XXI(cont.) SIGNIFICANCE OF DIFFERENCES AMONG ECONOMIC GROUPS. PART II. (OCCASIONAL LISTENING)

Program	Group	II	p	II-p	σ_p	$\frac{II-p}{\sigma_p} = t$
	A		.4177	.0932	.0387	2.405
	B		.3297	.0052	.0280	.185
	C		.3253	.0008	.0191	.04
	D		.2920	.0325	.0311	1.045
Mr. Kern	E	.3245	.2580	.0665	.0420	1.58
	A		.3293	.0802	.0375	2.13
	B		.2506	.0387	.0271	1.428
	C		.3102	.0207	.0185	1.119
	D		.2389	.0506	.0301	1.68
Dr. Christian	E	.2895	.2741	.0154	.0407	.378
	A		.2808	.0270	.0361	.747
	B		.2652	.0114	.0262	.438
	C		.2565	.0027	.0178	.151
	D		.1725	.0813	.0289	2.809
Nelson Eddy	E	.2538	.3306	.0768	.0390	1.965
	A		.2123	.0278	.0258	1.054
	B		.3046	.0545	.0259	2.101
	C		.2421	.0070	.0177	.395
	D		.2478	.0023	.0285	.079
Swing and Dance Orch.	E	.2501	.2096	.0405	.0388	1.04
	A		.1369	.1344	.0368	3.65
	B		.2939	.0225	.0266	.845
	C		.2716	.0003	.0018	.166
	D		.2655	.0042	.0295	.142
Hymns of All Churches	E	.2713	.3870	.1157	.0399	2.89

TABLE XIII. SIGNIFICANCE OF DIFFERENCES AMONG THE GRADES. PART II. (REGULAR LISTENING)

Program	Group	II	p	II-p	σ_p	$\frac{II-p}{\sigma_p} = t$
	8		.4246	.0509	.0249	2.024
	7		.4492	.0263	.0254	1.035
	6		.5216	.0461	.0277	1.66
Fibber McGee	5	.4755	.5346	.0591	.0307	1.925
	8		.2035	.0554	.0219	2.538
	7		.2545	.0044	.0223	.197
	6		.2870	.0281	.0243	1.156
The Great Gildersleeve	5	.2589	.2916	.0327	.0269	1.215
	8		.3566	.0689	.0246	2.79
	7		.3791	.0264	.0250	1.056
	6		.4691	.0636	.0272	2.33
Blondie	5	.4055	.4697	.0642	.0302	2.12
	8		.2185	.0725	.0227	3.096
	7		.2856	.0054	.0231	.233
	6		.3055	.0145	.0252	.574
Charlie McCarthy	5	.2910	.3522	.0612	.0279	2.189
	8		.2814	.0852	.0232	1.51
	7		.2778	.0388	.0237	1.63
	6		.3456	.0290	.0256	1.22
Jack Benny	5	.3166	.3901	.0735	.0286	2.54
	8		.2185	.0747	.0288	3.27
	7		.2804	.0128	.0232	.551
	6		.3117	.0185	.0253	.73
Burns and Allen	5	.2932	.4015	.1083	.0280	3.86
	8		.1256	.0326	.0181	1.80
	7		.1246	.0336	.0184	1.82
	6		.1913	.0331	.0201	1.14
Fannie Brice	5	.1582	.2159	.0577	.0223	2.58
	8		.1231	.0308	.0180	1.70
	7		.1428	.0111	.0183	.603
	6		.1419	.0120	.0200	.598
Bob Burns	5	.1539	.2111	.0572	.0222	2.57
	8		.1407	.0431	.0193	2.226
	7		.1558	.0280	.0197	1.417
	6		.2057	.0199	.0215	.925
Beulah	5	.1838	.2537	.0699	.0228	2.607
	8		.2236	.0134	.0212	.63
	7		.3428	.1058	.0216	4.877
	6		.1790	.0580	.0236	2.45
We March with Faith	5	.2370	.1742	.0628	.02616	2.40

TABLE XIII.(cont.) SIGNIFICANCE OF DIFFERENCES AMONG THE GRADES.
PART II. (REGULAR LISTENING)

Program	Grade	II	p	II-p	σ_p	$\frac{II-p}{\sigma_p}$ = t
	8		.4472	.0528	.025	2.112
	7		.5061	.0061	.0255	.23
	6		.5493	.0493	.0277	1.78
Truth or Consequences	5	.500	.5151	.0151	.0307	.49
	8		.1105	.0494	.01837	2.689
	7		.1350	.0249	.0186	1.33
	6		.1635	.0036	.0203	.176
The Quiz Kids	5	.1599	.2651	.1052	.0225	4.66
	8		.1256	.0115	.01723	.667
	7		.0986	.0385	.01752	2.197
	6		.1697	.0326	.01910	1.706
Nebr.-Iowa Quiz	5	.1371	.1704	.0333	.02116	1.57
	8		.2487	.0707	.0233	3.03
	7		.3116	.0078	.0237	.329
	6		.3363	.0170	.0258	.658
Terry and the Pirates	5	.3194	.4166	.0972	.0286	3.39
	8		.1884	.0705	.0219	3.21
	7		.2311	.0278	.0224	1.24
	6		.2654	.0065	.0244	.266
Superman	5	.2589	.3977	.1388	.0269	5.15
	8		.1683	.0906	.0219	3.16
	7		.2311	.0278	.0224	1.24
	6		.2746	.0157	.0244	.64
Tom Mix	5	.2589	.4166	.1577	.0269	5.86
	8		.1834	.0631	.0215	2.93
	7		.1973	.0492	.0219	2.24
	6		.2808	.0343	.0239	1.43
Captain Midnight	5	.2465	.3712	.1247	.0265	4.70
	8		.2311	.0825	.0232	3.55
	7		.3116	.0020	.0236	.084
	6		.3148	.0012	.0260	.046
Dick Tracy	5	.3136	.4394	.1258	.0285	4.41
	8		.1959	.0739	.0222	3.32
	7		.2674	.0024	.0226	.106
	6		.2746	.0048	.0246	.195
Jack Armstrong	5	.2698	.3788	.1090	.0273	4.00
	8		.2110	.0844	.0228	3.70
	7		.2908	.0046	.0232	.198
	6					
	5		.3024	.0070	.0252	.277
Hop Harrigan		.2954	.4204	.1250	.0287	4.35

TABLE XIII.(cont.)SIGNIFICANCE OF DIFFERENCES AMONG THE GRADES.
PART II. (REGULAR LISTENING)

Program	Grade	II	p	II-p	Op	$\frac{II-p}{Op} = t$
	8		.0653	.0419	.0155	2.70
	7		.0727	.0345	.0158	2.18
	6		.1111	.0039	.0172	.226
The Lone Ranger	5	.1072	.2159	.1087	.0191	5.71
	8		.2512	.0668	.0254	2.65
	7		.3064	.0116	.0238	.487
	6		.3611	.0431	.0260	1.65
Let's Pretend	5	.3180	.3825	.0645	.0287	2.25
	8		.0251	.0135	.0096	1.40
	7		.0363	.0023	.0097	.237
	6		.0246	.0140	.0106	1.32
Young People's Church	5	.0386	.0795	.0409	.0118	3.46
	8		.0452	.0219	.0124	1.766
	7		.0623	.0048	.0126	.38
	6		.0679	.0008	.0138	.057
Dr. R. R. Brown	5	.0671	.1060	.0389	.0153	2.53
	8		.0201	.0207	.0098	2.058
	7		.0355	.0045	.0100	.45
	6		.0493	.0085	.0109	.779
Dr. Rowsey	5	.0408	.0681	.0273	.0121	2.25
	8		.0427	.0127	.0114	1.114
	7		.0363	.0191	.0116	1.64
	6		.0524	.0030	.0126	.238
The Lutheran Hour	5	.0554	.0984	.0430	.0140	2.410
	8		.0452	.0226	.0126	1.8
	7		.0623	.0055	n.0127	.433
	6		.0586	.0092	.0138	.666
Catholic Hour	5	.0678	.1212	.0534	.0153	3.48
	8		.5402	.0537	.0247	2.17
	7		.6051	.0112	.0240	.466
	6		.6111	.0172	.0272	.632
Mr. District Attorney	5	.5939	.6591	.0652	.0302	2.15
	8		.4221	.0585	.0250	2.34
	7		.4854	.0048	.0254	.188
	6		.5185	.0379	.0277	1.36
Big Town	5	.4806	.5151	.0245	.0307	.798
	8		.3593	.0776	.0248	3.12
	7		.3973	.0396	.0252	1.57
	6		.5000	.0631	.0270	2.33
Gangbusters	5	.4369	.5341	.0972	.0305	3.18

TABLE XIII. (cont.) SIGNIFICANCE OF DIFFERENCES AMONG THE GRADES.
PART II. (REGULAR LISTENING) 6

Program	Grade	II	p	II-p	σ_p	$\frac{II-p}{\sigma_p}$ = t
	8		.3384	.0350	.0242	1.446
	7		.3298	.0432	.0246	1.756
	6		.3859	.0124	.0268	.462
The Shadow	5	.3734	.4772	.1038	.0297	2.274
	8		.5728	.0420	.0244	1.72
	7		.5895	.0253	.0246	1.02
	6		.6728	.0580	.0270	2.14
Mr. and Mrs. North	5	.5148	.6439	.0291	.0299	.973
	8		.3668	.0657	.0247	2.64
	7		.4181	.0144	.0252	.57
	6		.4660	.0335	.0275	1.218
The Aldrich Family	5	.4325	.5113	.0788	.0305	2.58
	8		.2939	.0576	.0239	2.41
	7		.3142	.0373	.0243	1.534
	6		.4166	.0651	.0265	2.45
These Websters	5	.3515	.4128	.0613	.0290	2.11
	8		.0703	.0544	.0165	3.29
	7		.1298	.0051	.0168	.303
	6		.1172	.0075	.0183	.409
Smilin' Ed McConnel	5	.1247	.2083	.0836	.0203	2.743
	8		.2562	.0469	.0206	2.27
	7		.1695	.0198	.0210	.942
	6		.1820	.0273	.0228	1.197
Theater of Today	5	.2093	.2007	.0086	.0251	.34
	8		.4497	.0362	.0247	1.46
	7		.4311	.0176	.0251	.70
	6		.4074	.0061	.0274	.22
Hit Parade	5	.4135	.3409	.0726	.0303	2.39
	8		.0929	.0121	.0154	.785
	7		.0753	.0297	.0156	1.90
	6		.0925	.0125	.017	.735
Nelson Eddy	5	.1050	.1818	.0768	.0189	4.06
	8		.1356	.0321	.0187	1.31
	7		.1428	.0249	.0190	1.31
	6		.1759	.0082	.0207	.39
Kate Smith	5	.1677	.2424	.0747	.0230	3.24
	8		.0778	.0585	.0171	3.42
	7		.1662	.0299	.0174	1.71
	6		.1172	.0191	.0186	1.02
Hymns of All Churches	5	.1363	.2045	.0682	.0210	3.24

TABLE XIV. SIGNIFICANCE OF DIFFERENCES AMONG THE GRADES. PART II. (OCCASIONAL LISTENING)

Program	Grade	II	p	II-p	σ_p	$\frac{II-p}{\sigma_p} = t$
	8		.4778	.0576	.02471	2.331
	7		.4472	.0300	.02512	1.194
	6		.3333	.0839	.02738	3.06
Fibber McGee	5	.4172	.3863	.0309	.03034	1.018
	8		.5605	.0592	.02504	2.36
	7		.5349	.0336	.02547	1.32
	6		.4413	.0598	.02776	2.15
The Great Gildersleeve	5	.5011	.4353	.0638	.03075	2.07
	8		.5150	.0570	.0249	2.25
	7		.5142	.0562	.0253	2.18
	6		.3734	.0646	.0276	3.06
Blondie	5	.4580	.3939	.0641	.0306	2.11
	8		.5276	.0638	.02499	2.55
	7		.4908	.0270	.0254	1.06
	6		.4290	.0348	.0276	1.26
Charlie McCarthy	5	.4638	.3712	.0926	.0368	3.01
	8		.5351	.0691	.0250	2.76
	7		.4935	.0275	.0254	1.08
	6		.4197	.0463	.0277	1.67
Burns and Allen	5	.4660	.3789	.0872	.0306	2.90
	8		.4271	.0223	.0246	.90
	7		.4388	.0340	.0250	1.35
	6		.3856	.0190	.02726	.696
Fannie Brice	5	.4048	.3447	.0601	.0302	1.99
	8		.3467	.0497	.0229	2.17
	7		.2986	.0016	.02328	.068
	6		.2716	.0254	.02508	1.0
Beulah	5	.2970	.2500	.0470	.02812	1.67
	8		.5527	.0684	.0250	2.73
	7		.4674	.0169	.0254	.665
	6		.4475	.0368	.0277	1.328
We March with Faith	5	.4643	.4507	.0236	.0307	.768
	8		.4196	.0571	.0240	2.37
	7		.3817	.0192	.0250	.768
	6		.3086	.0539	.0267	2.07
Truth or Consequences	5	.3625	.3181	.0444	.0295	1.505
	8		.3517	.0035	.02398	.145
	7		.4051	.0499	.02438	2.046
	6		.3086	.0466	.02658	1.75
Nebr.-Iowa Quiz	5	.3552	.3447	.0105	.02944	.356

TABLE XIV.(cont.)SIGNIFICANCE OF DIFFERENCES AMONG THE GRADES.
PART II. (OCCASIONAL LISTENING)

Program	Grade II	p	II-p	σ_p	$\frac{II-p}{\sigma_p} = t$
	8	.3869	.0179	.02418	.74
	7	.4103	.0413	.02459	1.679
	6	.3487	.0203	.02680	.757
Dr. I.Q.	5 .3690	.3066	.0624	.02960	2.101
	8	.3668	.0197	.0238	.827
	7	.2557	.0086	.0249	.345
	6	.3672	.0201	.0264	.761
Terry and the Pirates	5 .3471	.2803	.0668	.0293	2.28
	8	.2715	.0117	.02857	.50
	7	.2597	.0233	.02295	1.015
	6	.3456	.0626	.02502	2.501
Tom Mix	5 .2830	.2575	.0255	.02772	.919
	8	.1331	.0156	.0178	.876
	7	.1246	.0241	.01814	1.328
	6	.1481	.0006	.01977	.03
Dr.Rowsey	5 .1487	.2083	.0596	.0219	2.72
	8	.4447	.0465	.0245	1.897
	7	.4466	.0484	.0249	1.94
	6	.3765	.0217	.0272	.797
The Aldrich Family	5 .3982	.2841	.1142	.0301	3.79
	8	.3869	.0383	.0667	.574
	7	.3817	.0331	.0242	1.36
	6	.3308	.0184	.0264	.696
Those Websters	5 .3486	.2651	.0835	.0293	2.84
	8	.3542	.0678	.02266	2.99
	7	.3142	.0276	.0230	1.20
	6	.2314	.0552	.02511	2.19
Mr.District Attorney	5 .2866	.2130	.0736	.02782	2.65
	8	.3593	.0749	.0226	3.31
	7	.2804	.0040	.0230	.173
	5	.2345	.0499	.0250	1.98
Big Town	5 .2844	.2386	.0459	.0277	1.65
	8	.3417	.0500	.0230	2.17
	7	.3168	.0251	.0233	1.07
	6	.2469	.0448	.0255	1.75
Gangbusters	5 .2917	.2348	.0569	.0282	2.01

TABLE XIV. (cont.) SIGNIFICANCE OF DIFFERENCES AMONG THE GRADES.
PART II. (OCCASIONAL LISTENING)

Program	Grade	II	p	II-p	σ_p	$\frac{II-p}{\sigma_p} = t$
	8		.3619	.0599	.0230	2.56
	7		.2804	.0215	.0236	.911
	6		.3035	.0035	.0256	.140
Inner Sanctum	5	.3019	.2548	.0671	.0283	2.37
	8		.3517	.0272	.0234	1.162
	7		.3324	.0079	.0238	.331
	6		.3333	.0088	.0260	.338
Mr. Keen	5	.3245	.2613	.0632	.0288	2.19
	8		.3165	.0503	.02215	2.27
	7		.3116	.0454	.02252	2.01
	6		.2037	.0625	.02455	2.34
Mr. and Mrs. North	5	.2662	.2007	.0655	.02721	2.407
	8		.3442	.0525	.0230	2.31
	7		.2762	.0165	.0233	.708
	6		.2716	.0201	.0255	.788
Suspense	5	.2917	.2613	.0304	.0282	1.078
	8		.3567	.0141	.02378	.592
	7		.2557	.0131	.02418	.541
	6		.3734	.0308	.02637	1.167
Kate Smith	5	.3426	.2689	.0703	.0292	2.53
	8		.3442	.0007	.02379	.029
	7		.4077	.0642	.02419	2.65
	6		.3117	.0318	.02637	1.304
Frank Sinatra	5	.3435	.2878	.0557	.02922	1.90
	8		.2763	.0284	.02163	1.312
	7		.2648	.0169	.0220	.768
	6		.2438	.0041	.02398	.170
Supper Club	5	.2479	.1856	.0623	.02656	2.34
	8		.2814	.0101	.0222	.454
	7		.3012	.0299	.0266	1.323
	6		.2746	.0033	.0246	.134
Hymns of All Churches	5	.2713	.2083	.0630	.02737	2.301
	8					

TABLE XV. SIGNIFICANT DIFFERENCES AMONG THE ABILITY GROUPS. PART II. (REGULAR LISTENING)

Program	Group	II	p	II-p	σ_p	$\frac{II-p}{\sigma_p}$ =
	A		.5883	.2978	.1101	2.704
	B		.2666	.0244	.06779	.359
	C		.2888	.0022	.06779	.032
	D		.2444	.0466	.06779	.068
Charlie McCarthy	E	.2910	.3000	.0090	.13329	.067
	A		.5294	.2128	.1281	1.661
	B		.2888	.0278	.0694	.40
	C		.4222	.1056	.0694	1.521
	D		.1777	.1389	.0694	2.001
Jack Benny	E	.3166	.2000	.1166	.1472	.792
	A		.0588	.1402	.0967	1.449
	B		.2222	.0252	.0595	.389
	C		.0888	.1102	.0595	1.852
	D		.3333	.1343	.0595	2.257
Frank Sinatra	E	.1990	.4000	.2010	.1262	1.592
	A		.0588	.1250	.0939	1.33
	B		.0222	.1616	.0578	2.795
	C		.0666	.1172	.0578	2.027
	D		.1333	.0505	.0578	.873
Beulah	E	.1838	.3000	.1162	.1226	.948
	A		.3529	.1159	.1031	1.123
	B		.4000	.1630	.0634	2.568
	C		.3555	.1185	.0634	1.867
	D		.4666	.2296	.0634	3.617
We March with Faith	E	.2370	.3000	.0630	.1345	.468
	A		.2941	.1342	.0888	1.509
	B		.0666	.0933	.0546	1.707
	C		.1550	.0049	.0546	.089
	D		.1555	.0044	.0546	.080
Quiz Kids	E	.1599	.4000	.2401	.1159	2.071
	A		.2352	.0842	.1130	.745
	B		.2444	.0750	.0695	1.07
	C		.1550	.1644	.0695	2.37
	D		.4222	.0028	.0695	.04
Terry and the Pirates	E	.3194	.3000	.0194	.1474	.131
	A		.2352	.0237	.1090	.217
	B		.1111	.1478	.0694	2.12
	C		.1333	.1256	.0694	1.87
	D		.2222	.0367	.0694	.529
Tom Mix	E	.2583	.4000	.1411	.1430	.986
	A		.2352	.0784	.1130	.693
	B		.2333	.0803	.0691	1.16
	C		.1111	.2025	.0691	2.92
	D		.4000	.0864	.0691	1.249
Dick Tracy	E	.3136	.5000	.1864	.1480	1.259

TABLE XV.(cont.) SIGNIFICANCE OF DIFFERENCES AMONG THE ABILITY GROUPS. PART II. (REGULAR LISTENING)

Program	Group	II	p	II-p	σ_p	$\frac{II-p}{\sigma_p} = t$
	A		.2941	.0239	.11320	.211
	B		.2868	.0292	.06942	.42
	C		.1777	.1403	.06942	2.02
	D		.3333	.0153	.06942	.220
Let's Pretend	E	.3180	.2000	.1180	.14780	.798
	A		.0000	.0386	.0455	.84
	B		.0222	.0164	.0286	.57
	C		.0444	.0058	.0286	.202
	D		.0222	.0164	.0286	.57
Young People's Church	E	.0386	.2000	.1614	.0604	2.65
	A		.7647	.1708	.1191	1.43
	B		.4000	.1939	.0732	2.64
	C		.4222	.1717	.0732	2.34
	D		.6222	.0283	.0732	.37
Mr. District Attorney	E	.5939	.5000	.0939	.1555	.604
	A		.3529	.1277	.1211	1.053
	B		.3111	.1695	.07447	2.27
	C		.2888	.1918	.07447	2.57
	D		.5111	.0305	.07447	.409
Big Town	E	.4806	.5000	.1194	.158	.755
	A		.2352	.2017	.1202	1.678
	B		.3555	.0814	.0739	1.100
	C		.2666	.1703	.0739	2.3
	D		.3333	.1036	.0739	1.401
Gangbusters	E	.4369	.5009	.0631	.1580	.39
	A		.2491	.1834	.1201	1.52
	B		.2888	.1437	.0713	2.01
	C		.2666	.1659	.0713	2.32
	D		.4222	.0103	.0713	.144
Inner Sanctum	E	.4325	.3000	.1325	.1566	.846
	A		.2352	.1761	.1193	1.475
	B		.3111	.1002	.0733	1.36
	C		.2444	.1669	.0733	2.27
	D		.4444	.0331	.0733	.451
Mr. Keen	E	.4113	.3000	.1113	.1555	.715
	A		.3529	.0898	.1203	.746
	B		.4222	.0205	.0739	.27
	C		.3333	.1094	.0739	1.48
	D		.4444	.0017	.0739	.023
Dr. Christian	E	.4427	.4000	.0427	.1560	.273
	A		.4117	.0383	.1173	.326
	B		.3333	.0401	.0721	.556
	C		.0888	.2846	.0721	3.94
	D		.3111	.0623	.0721	.864
The Shadow	E	.3734	.5000	.1266	.1530	.827

TABLE XV. (cont.) SIGNIFICANCE OF DIFFERENCES AMONG THE ABILITY GROUPS. PART II. (REGULAR LISTENING)

Program	Group	II	p	II-p	σ_p	$\frac{II-p}{\sigma_p} = t$
	A		.4707	.1441	.1181	1.22
	B		.6000	.0148	.0726	.203
	C		.3777	.2371	.0726	3.25
	D		.6222	.0074	.0726	.101
Mr. and Mrs. North	E	.6148	.5000	.1148	.1540	.745
	A		.4117	.0339	.1205	.279
	B		.2444	.2012	.0740	2.71
	C		.2666	.1790	.0740	2.41
	D		.5333	.0877	.0740	1.18
Suspense	E	.4456	.5000	.0544	.1571	.34
	A		.4117	.0018	.1194	.015
	B		.4000	.0135	.0734	.184
	C		.3333	.0802	.0734	1.09
	D		.6222	.2087	.0734	2.84
Hit Parade	E	.4135	.4000	.0135	.1556	.086
	A		.3529	.2129	.06391	2.53
	B		.1111	.0289	.0517	.558
	C		.1777	.0377	.0517	.729
	D		.2000	.0600	.0517	1.16
Symphony Orchestra	E	.1400	.1176	.0224	.1097	.204

TABLE XVI. SIGNIFICANCE OF DIFFERENCES AMONG THE ABILITY GROUPS.
PART II. (OCCASIONAL LISTENING)

Program	Group	II	p	II-p	σ_p	$\frac{II-p}{\sigma_p} = t$
	A		.4117	.0726	.121	.60
	B		.3111	.1732	.0744	2.32
	C		.2888	.1955	.0744	2.62
	D		.2000	.2843	.0744	3.08
We March with Faith	E	.4117	.7000	.2157	.1580	1.365
	A		.6471	.2919	.1162	2.51
	B		.3555	.0002	.0713	.004
	C		.4444	.0892	.0713	1.25
	D		.2888	.0664	.0713	.93
Nebraska-Iowa Quiz	E	.3552	.2000	.1552	.151	1.027
	A		.1764	.0008	.0926	.008
	B		.1555	.0217	.0569	.381
	C		.0666	.1106	.0569	1.943
	D		.2666	.0894	.0569	1.57
The Catholic Hour	E	.1772	.5000	.3228	.1207	2.67
	A		.5294	.1312	.1187	1.105
	B		.3777	.0205	.0729	.281
	C		.4000	.2018	.0729	2.76
	D		.2888	.1094	.0729	1.50
The Aldrich Family	E	.3982	.5000	.0982	.1548	.634
	A		.1176	.1690	.1096	1.54
	B		.4444	.1578	.0672	2.34
	C		.4222	.1356	.0673	2.01
	D		.2222	.0644	.0672	.95
Mr. District Attorney	E	.2866	.2000	.0866	.1429	.606
	A		.3529	.0510	.1100	.463
	B		.4222	.1203	.0680	1.769
	C		.4666	.1647	.0680	2.42
	D		.2222	.0797	.0680	1.17
Inner Sanctum	E	.3019	.2000	.1019	.1440	.70
	A		.3529	.0634	.11	.576
	B		.1333	.1562	.0676	2.31
	C		.2888	.0007	.0676	.01
	D		.1555	.1340	.0676	1.98
Dr. Christian	E	.2895	.2000	.0895	.1430	.625

TABLE XVII. SIGNIFICANCE OF DIFFERENCES BETWEEN THE SEX GROUPS. PART III. REASONS FOR LISTENING.

No.	Sex	II	p	II-p	σ_p	$\frac{II-p}{\sigma_p} = t$
A-2.	B		.1789	.0380	.01324	2.11
	G	.1549	.0991	.0358	.01285	2.78
B-2.	B		.0767	.0220	.00882	2.49
	G	.0547	.0339	.0208	.00856	2.42
C-1.	B		.1112	.0427	.00979	4.36
	G		.0283	.0402	.00950	4.33
D-1.	B		.5624	.0606	.01951	3.15
	G	.5018	.4447	.0429	.01881	2.20
E-3.	B		.1218	.0422	.01012	4.76
	G	.0736	.0283	.0453	.01563	2.89
G-1.	B		.2075	.0281	.01487	1.89
	G	.1794	.1388	.0406	.01445	2.81

TABLE XVIII. SIGNIFICANCE OF DIFFERENCES AMONG THE ECONOMIC GROUPS. PART III. REASONS FOR LISTENING.

No.	Group II	p	II-p	σ_p	$\frac{II-p}{\sigma_p} = t$
	A	.1849	.0500	.02272	2.20
	B	.1459	.0110	.02045	.537
	C	.0922	.0427	.01396	3.06
	D	.2256	.0907	.02272	3.99
A-2.	E .1342	.0887	.0462	.03067	1.506
	A	.2808	.0234	.03590	.666
	B	.3046	.0472	.02597	1.817
	C	.3414	.0840	.07760	1.082
	D	.2699	.0125	.02881	.433
A-3.	E .2574	.1774	.0800	.03895	2.05
	A	.3835	.1146	.04129	2.77
	B	.3655	.1326	.02988	4.43
	C	.5399	.0418	.02043	2.04
	D	.3664	.0683	.03320	2.05
A-4.	E .4981	.6048	.1067	.04481	2.38
	A	.2534	.0200	.03499	.571
	B	.2652	.0318	.02532	1.25
	C	.2465	.0069	.01732	.398
	D	.1770	.0564	.02813	2.00
B-3.	E .2334	.1774	.0560	.03797	1.747
	A	.2534	.1587	.04073	2.89
	B	.3548	.0573	.02947	1.94
	C	.4158	.0037	.02016	.183
	D	.5354	.1253	.03274	3.76
B-4.	E .4121	.4758	.0737	.04420	1.44
	A	.0273	.0412	.02090	1.97
	B	.0718	.0031	.01512	.205
	C	.0519	.0166	.01034	1.60
	D	.1259	.0554	.01680	3.29
C-1.	E .0665	.0887	.0202	.02268	.89
	A	.1164	.0207	.02846	.727
	B	.1290	.0081	.02059	.393
	C	.1157	.0214	.01480	1.519
	D	.2301	.0930	.02288	4.06
C-2.	E .1371	.1129	.0042	.03091	.135
	A	.2191	.0288	.03572	.806
	B	.2257	.0222	.02585	.858
	C	.2297	.0182	.01768	1.029
	D	.2655	.0176	.02872	.612
C-4	E .2479	.3870	.1391	.03871	3.59

TABLE XVIII.(cont.) SIGNIFICANCE OF DIFFERENCES AMONG THE ECONOMIC GROUPS. PART III. REASONS FOR LISTENING.

No.	Group II		p	II-p	σ_p	$\frac{II-p}{\sigma_p} = t$
		A	.4109	.0909	.04157	2.19
		B	.5053	.0035	.02993	.116
		C	.4779	.0339	.02047	1.167
		D	.6195	.1177	.03326	3.53
D-1.	E .5018		.5000	.0018	.04489	.04
		A	.0139	.0564	.03110	2.67
		B	.0716	.0016	.01527	.104
		C	.0737	.0037	.01058	.349
		D	.0705	.0008	.01696	.047
D-2.	E .0700		.1209	.0509	.02269	2.22
		A	.3835	.0816	.03799	2.14
		B	.2759	.0260	.02748	.946
		C	.2917	.0102	.01880	.542
		D	.3141	.0022	.03054	.072
D-3.	E .3019		.2903	.0116	.04122	.281
		A	.2191	.0398	.03625	1.91
		B	.2114	.0475	.02622	1.811
		C	.2683	.0094	.01792	.524
		D	.2723	.0134	.02914	.459
E-2.	E .2589		.3306	.0717	.03933	1.823
		A	.0068	.0668	.02160	3.09
		B	.0824	.0086	.01563	.563
		C	.0737	.0001	.01069	.009
		D	.1327	.0591	.01737	3.40
E-3.	E .0738		.0322	.0414	.02344	1.766
		A	.0340	.0455	.02258	2.033
		B	.0501	.0294	.01619	1.815
		C	.0804	.0009	.00110	.818
		D	.1416	.0621	.01799	3.45
E-4.	E .0795		.0806	.0011	.02439	.045
		A	.6164	.1394	.04129	3.35
		B	.5412	.0642	.02983	2.14
		C	.4762	.0008	.02045	.039
		D	.3849	.0921	.03320	2.77
F-1.	E .4770		.3387	.1383	.04431	3.09
		A	.1563	.2102	.03939	5.33
		B	.3225	.0246	.02850	.863
		C	.3152	.0319	.01949	1.636
		D	.5044	.1573	.03167	4.96
F-2.	E .3471		.5241	.1770	.04275	4.14

TABLE XVIII.(cont.) SIGNIFICANCE OF DIFFERENCES AMONG THE ECONOMIC GROUPS. PART III. REASONS FOR LISTENING.

No.	Group	II	p	II-p	σ_p	$\frac{II-p}{\sigma p} = t$
	A		.0411	.0493	.02372	2.07
	B		.0860	.0044	.01716	.256
	C		.0972	.0068	.01174	.579
	D		.1106	.0202	.01907	1.059
G-3	E	.0904	.0887	.0017	.02574	.066
	A		.1252	.0606	.05205	1.89
	B		.1048	.0190	.02319	.819
	C		.1811	.0027	.01586	.17
	D		.2589	.0551	.02576	.213
G-4	E	.1838	.1532	.0306	.03478	.879

TABLE XIX. SIGNIFICANCE OF DIFFERENCES AMONG THE GRADES. PART III. REASONS FOR LISTENING.

No.	Grade	M	p	M-p	σ_p	$\frac{M-p}{\sigma_p} = t$
	8		.4643	.0358	.02501	1.431
	7		.5038	.0057	.02543	.224
	6		.4598	.0385	.02872	1.34
A-4.	5	.4981	.5909	.0928	.03071	3.02
	8		.2713	.0270	.02153	1.254
	7		.2371	.0126	.02189	.584
	6		.1872	.0571	.02386	2.39
B-1.	5	.2443	.2527	.0094	.02644	.355
	8		.0376	.0171	.01140	1.50
	7		.0675	.0128	.01160	1.103
	6		.0555	.0008	.01264	.063
B-2.	5	.0547	.0606	.0059	.01400	.421
	8		.2336	.0002	.02119	.009
	7		.2181	.0153	.02165	.709
	6		.2438	.0104	.02349	.442
B-3.	5	.2334	.2224	.0110	.02602	.422
	8		.3291	.0830	.02467	3.364
	7		.4466	.0545	.02308	2.173
	6		.3827	.0294	.02734	1.075
B-4.	5	.4121	.5227	.01106	.03029	.365
	8		.0351	.0334	.01266	2.63
	7		.0519	.0166	.01287	1.289
	6		.0771	.0086	.01403	.612
C-1.	5	.0685	.1325	.0640	.01554	4.11
	8		.1451	.0086	.01722	.499
	7		.1610	.0239	.01752	1.364
	6		.0925	.0446	.01910	2.32
C-2.	5	.1371	.1459	.0088	.02116	.321
	8		.2713	.0234	.02163	1.081
	7		.1999	.0480	.02201	2.18
	6		.2314	.0165	.02392	.689
C-4.	5	.2479	.3030	.0551	.02651	2.07
	8		.4748	.0270	.02505	1.077
	7		.4622	.0396	.02547	1.55
	6		.4999	.0019	.02777	.068
D-1.	5	.5018	.6022	.1004	.03076	3.26
	8		.3643	.0624	.02301	2.71
	7		.3272	.0253	.02339	1.08
	6		.2255	.0764	.02550	2.99
D-3.	5	.3019	.2657	.0362	.02825	1.281

TABLE XIX.(cont.) SIGNIFICANCE OF DIFFERENCES AMONG THE GRADES: PART III. REASONS FOR LISTENING.

No.	Grade	M	p	M-p	σ_p	$\frac{M-p}{\sigma_p} = t$
	8		.2185	.0324	.02171	1.492
	7		.2752	.0248	.02209	1.10
	6		.2160	.0349	.02408	1.44
E-1.	5	.2509	.3068	.0559	.02668	2.09
	8		.1934	.0655	.02195	2.98
	7		.2612	.0023	.02232	.103
	6		.2839	.0250	.02433	1.027
E-2.	5	.2589	.3219	.0630	.02695	2.33
	8		.0502	.0234	.01333	1.788
	7		.0727	.0009	.01330	.067
	6		.0771	.0035	.01450	.241
E-3.	5	.0736	.1060	.0324	.01606	2.01
	8		.0502	.0293	.01335	22.16
	7		.0779	.0016	.02757	.058
	6		.0555	.0240	.01502	.159
E-4.	5	.0795	.1553	.0758	.01664	4.56
	8		.5050	.0280	.02501	1.119
	7		.4700	.0070	.02543	.275
	6		.5246	.0476	.02772	1.717
F-1.	5	.4770	.5343	.0907	.03071	2.95
	8		.2457	.1036	.02386	4.33
	7		.3454	.0017	.02426	.70
	6		.3425	.0046	.02644	.173
F-2.	5	.3471	.5113	.1642	.02929	5.60
	8		.1407	.0372	.01526	2.43
	7		.1038	.0003	.02734	.01
	6		.0740	.0295	.01691	.174
F-3.	5	.1035	.0933	.0202	.01874	.107
	8		.4572	.0794	.04353	1.82
	7		.3765	.0013	.02470	.052
	6		.3672	.0106	.02693	.393
G-3	5	.3778	.2727	.1051	.02983	3.52
	8		.0276	.1562	.01941	8.04
	7		.2285	.0447	.01974	2.264
	6		.1635	.0208	.02151	.094
G-4.	5	.1838	.2424	.0536	.02383	.245

TABLE XX. SIGNIFICANCE OF DIFFERENCES AMONG THE ABILITY GROUPS. PART III. REASONS FOR LISTENING.

No.	Group	II	p	II-p	σ_p	$\frac{II-p}{\sigma_p} = t$
	A		.1760	.3221	.12102	2.66
	B		.3777	.1204	.07438	1.618
	C		.4444	.0537	.07438	.721
	D		.5777	.0796	.07438	1.07
A-4	E	.4981	.4000	.0981	.15781	.621
	A		.1760	.0574	.10257	.559
	B		.3111	.0777	.06304	1.23
	C		.0666	.1668	.06304	2.64
	D		.2000	.0334	.06304	.529
B-3	E	.2334	.3000	.0666	.13374	.497
	A		.2941	.1180	.11937	.988
	B		.2222	.1899	.0737	2.58
	C		.4666	.0545	.0737	.742
	D		.3555	.0566	.0737	.771
B-4	E	.4121	.6000	.1879	.15566	1.207
	A		.2353	.0126	.1047	.12
	B		.3777	.1288	.06435	2.01
	C		.2000	.0479	.06435	.744
	D		.2000	.0479	.06435	.744
C-4	E	.2479	.3000	.0521	.13652	.381
	A		.1176	.1843	.11134	1.656
	B		.3111	.0092	.06843	.134
	C		.3555	.0536	.06843	.783
	D		.4222	.1203	.06843	1.758
D-3	E	.3019	.0000	.3019	.14518	2.079
	A		.1176	.1413	.01624	1.33
	B		.2444	.0145	.06529	.222
	C		.0666	.1923	.06529	2.94
	D		.2353	.0256	.06529	.392
E-2	E	.2589	.1000	.1589	.13852	1.147
	A		.6470	.1700	.12102	1.404
	B		.5333	.0563	.07438	.766
	C		.4888	.0110	.07438	.14
	D		.5333	.1437	.07438	1.93
F-1	E	.4770	.1000	.3770	.15781	2.39
	A		.2352	.1119	.11545	.969
	B		.1111	.2360	.07096	3.32
	C		.3111	.0360	.07096	.507
	D		.4888	.1417	.07096	1.99
F-2	E	.3471	.5000	.1529	.15055	1.015

TABLE XX.(cont.) SIGNIFICANCE OF DIFFERENCES AMONG THE ABILITY GROUPS. PART III. REASONS FOR LISTENING.

No.	Group	II	p	II-p	σ_p	$\frac{II-p}{\sigma p} = t$
	A		.0588	.1206	.09303	1.296
	B		.0666	.1128	.05718	1.97
	C		.1333	.0461	.05718	.806
	D		.1333	.0461	.05718	.806
G-1.	E	.1794	.2000	.0206	.12131	.169
	A		.5888	.0516	.06953	.454
	B		.0488	.0416	.04274	.973
	C		.0888	.0016	.04274	.037
	D		.0000	.0904	.04274	2.115
G-2.	E	.0904	.2000	.1096	.09067	1.208
	A		.0000	.1838	.09393	1.95
	B		.0888	.0950	.05773	1.645
	C		.0000	.1838	.05773	3.18
	D		.0888	.0950	.05773	1.645
G-4	E	.1838	.0000	.1838	.12248	1.50

TABLE XXI. RAW SCORES OF AFFIRMATIVE RESPONSES ON PART I OF THE QUESTIONNAIRE

	GROUPS																
	Sex		Economic					Grade					Ability				
	B	G	A	B	C	D	E	9	7	6	5	Total	A	B	C	D	E
Group size	665	706	146	279	598	226	124	398	385	324	284	1371	17	45	45	45	10
Ques. No.																	
1.	565	640	181	250	525	198	111	354	344	234	223	1205	15	40	38	39	9
2.	641	687	143	273	579	212	121	386	374	316	253	1328	17	44	44	40	7
3.	564	630	131	246	514	191	112	332	354	278	230	1194	16	41	40	37	8
4.	465	545	121	181	463	157	83	295	304	227	181	1010	14	37	33	25	7
5.	216	263	69	58	272	80	50	139	148	111	81	479	3	15	10	26	4
6.	397	424	107	180	427	55	54	277	223	121	200	821	11	36	33	39	10
7.	503	591	117	216	488	170	103	312	309	260	213	1094	15	33	36	36	9
8.	328	412	56	134	340	128	83	240	220	162	118	740	6	26	28	28	6
9.	165	191	38	91	129	66	32	75	81	105	97	358	10	11	15	12	1
10.	556	575	106	215	502	200	108	335	314	248	234	1151	8	35	33	42	9
11.	459	486	84	164	429	184	84	260	266	221	176	945	7	25	22	35	7
12.	148	182	40	57	134	65	34	55	87	84	105	330	5	14	5	7	1
13.	436	507	99	166	433	149	96	310	250	216	167	943	13	27	30	37	8
14.	401	434	92	171	369	156	67	259	238	174	164	835	10	34	23	30	8
15.	547	429	123	202	425	159	67	291	265	215	205	976	14	35	34	35	10
16.	615	669	156	245	576	212	117	382	354	503	245	1284	15	41	40	41	8

XXII. NUMBER OF REGULAR LISTENERS OF PROGRAMS LISTED IN PART II OF THE QUESTIONNAIRE

	GROUPS																
	Sex		Economic					Grade					Ability				
	B	G	A	B	C	D	E	8	7	6	5	Total	A	B	C	D	E
Group size	665	706	146	279	596	226	124	398	385	324	264	1371	17	45	45	45	10
Program																	
Fibber McGee	308	344	76	146	272	101	57	169	173	169	141	652	12	29	21	17	5
Blondie	258	298	48	114	233	92	69	134	146	152	124	556	3	16	14	15	4
Gildersleeve	177	178	37	65	147	46	40	87	98	93	77	355	6	10	10	6	2
McCarthy	193	206	53	110	155	51	30	67	110	99	103	399	10	12	13	11	3
Bob Hope	336	397	72	155	319	122	65	216	206	174	137	733	10	30	24	26	5
Jack Benny	215	219	54	107	158	61	53	112	107	112	103	434	9	13	19	8	2
Burns and Allen	162	240	42	90	169	60	41	87	106	102	106	402	7	12	11	12	3
Fannie Brice	94	123	27	33	98	37	30	30	39	71	57	217	3	7	5	8	2
Bob Burns	104	107	7	45	88	41	32	49	55	46	61	211	5	6	8	6	3
Frank Sinatra	80	193	21	54	125	58	35	87	72	60	54	273	1	10	4	15	4
Beulah	113	139	16	40	108	58	30	56	60	66	70	252	1	1	3	6	3
Dick Haymes	66	147	15	27	105	35	31	72	51	40	50	213	0	10	5	10	3
Group 2.																	
March with Faith	171	164	41	65	160	27	42	89	148	58	46	335	6	16	16	21	3
Take It or Leave	288	327	70	124	366	94	65	177	167	148	123	615	7	18	19	21	2
Truth or Consequences	305	382	75	149	311	97	55	178	195	178	136	687	11	23	16	18	3
Quiz Kids	111	108	29	40	81	36	33	44	52	53	70	219	5	3	7	7	4
Nebr.-Iowa Quiz	92	96	22	46	72	23	25	50	38	33	45	166	4	7	4	5	2
Dr. I.Q.	248	264	56	113	219	59	66	150	159	121	102	512	8	17	16	21	3
Let's Pretend	152	284	37	90	179	68	62	100	118	117	101	436	5	15	8	15	2
Group 3.																	
Terry and Pirate	247	191	35	71	187	85	60	99	120	109	110	438	4	11	7	19	3
Superman	204	151	21	69	153	75	59	75	89	86	105	355	3	6	7	14	3
Captain Midnight	191	147	21	60	130	73	54	73	76	91	98	338	2	8	6	14	2
Dick Tracy	230	200	28	70	175	94	69	92	120	102	116	430	4	10	5	13	5
Jack Armstrong	203	167	19	64	157	79	51	78	98	89	100	370	3	8	7	16	3
Hop Harrigan	236	169	19	72	179	86	49	84	112	93	111	405	3	10	8	16	3
Lone Ranger	92	55	4	23	45	41	34	26	28	36	57	147	0	2	1	2	2
Tom Mix	208	147	25	59	138	83	50	67	89	89	110	355	4	5	6	10	4

TABLE XXII.(cont.) NUMBER OF REGULAR LISTENERS OF PROGRAMS LISTED IN PART II OF THE QUESTIONNAIRE

	GROUPS																
	Sex		Economic					Grade					Ability				
	B	G	A	B	C	D	E	8	7	6	5	Total	A	B	C	D	E
Group size	665	706	146	379	595	286	124	396	385	324	264	1371	17	45	45	45	10
Program																	
Group 4.																	
Young People's Church	20	33	3	3	20	16	11	10	14	8	21	55	0	1	2	1	1
Old Fashioned Revival	39	61	4	10	34	19	23	20	25	18	27	90	0	2	6	2	0
Dr. R.H.Brown	53	59	3	14	37	18	20	13	24	22	23	92	0	3	5	4	0
Lutheran Hour	37	49	0	14	24	20	18	17	15	17	26	76	0	1	5	5	0
Dr. Rowsey	19	37	13	7	9	12	15	8	14	16	18	56	0	2	2	1	0
Catholic Hour	41	52	6	21	32	12	22	13	24	19	32	93	1	4	3	6	1
Group 5.																	
Mr. Dist. Att'y	383	431	74	164	334	135	87	215	233	198	168	814	13	18	19	28	5
Big Town	317	342	50	122	278	130	81	163	187	169	136	659	6	14	13	23	6
Gangbusters	343	257	51	115	244	113	77	144	155	163	141	500	4	16	12	15	3
Inner Sanctum	296	297	47	100	288	111	67	162	171	140	120	593	5	15	12	19	3
Mr. Keen	261	303	43	109	238	106	68	156	154	134	120	564	4	14	11	20	3
Dr. Christian	245	362	41	116	262	130	58	168	164	156	125	607	6	19	4	20	4
The Shadow	259	253	46	100	217	80	69	134	127	125	126	512	7	15	4	14	5
Mr.& Mrs. North	384	459	85	165	367	144	84	228	227	218	170	843	8	27	17	28	5
Suspense	291	320	51	95	278	116	71	164	178	155	114	611	7	11	12	24	5
Group 6.																	
Supper Club	113	208	24	60	147	52	38	98	89	75	59	321	0	13	8	14	0
Aldrich Family	256	337	49	119	243	116	66	146	161	151	135	593	0	18	14	20	3
Those Websters	215	267	49	99	194	82	58	117	121	155	109	482	0	15	13	14	3
Ed McConnel	75	96	13	23	78	42	21	28	50	36	55	171	0	2	3	3	1
Theater of Today	63	224	21	40	139	44	43	102	73	59	53	287	0	11	6	12	2

TABLE XXII.(cont.) NUMBER OF REGULAR LISTENERS OF PROGRAMS LISTED IN PART II OF THE QUESTIONNAIRE

	GROUPS																
	Sex		Economic					Grade					Ability				
	B	G	A	B	C	D	E	8	7	6	5	Total	A	B	C	D	E
Group size	665	706	146	279	596	226	124	398	385	324	264	1371	17	45	45	45	10
Program																	
Group 7.																	
Hit Parade	304	263	52	107	256	94	56	179	166	152	90	567	0	18	15	28	4
Hour of Charm	83	185	19	69	116	40	28	91	67	57	53	268	0	10	10	9	2
Nelson Eddy	52	92	9	29	56	30	20	37	29	30	48	144	0	4	5	7	2
Kate Smith	76	154	9	30	93	59	40	54	55	57	64	230	0	4	9	9	2
Symphony orchest.	63	129	16	33	86	29	23	48	52	48	44	192	0	5	6	8	2
Swing and Dance Orchestra	151	228	23	55	173	66	57	119	105	88	67	379	0	10	11	13	4
Hymns	50	137	9	26	90	53	29	31	64	38	54	187	0	2	5	6	1

TABLE XXIII. NUMBER OF OCCASIONAL LISTENERS OF PROGRAMS LISTED IN PART II OF THE QUESTIONNAIRE

	GROUPS																
	Sex		Economic					Grade					Ability				
	B	G	A	B	C	D	E	8	7	6	5	TOTAL	A	B	C	D	E
Group size	665	706	146	279	596	828	124	398	385	324	264	1571	17	45	46	45	10
Program																	
Fibber McGee	276	296	55	96	261	100	38	109	173	106	102	572	5	22	16	22	5
Gildersleeve	343	344	77	140	302	97	71	223	206	145	115	687	7	27	29	19	4
Blondie	332	306	75	120	285	99	49	205	198	121	104	628	11	19	27	21	5
McCarthy	325	311	55	123	295	99	64	210	189	139	98	636	4	26	24	21	4
Bob Hope	239	217	52	89	200	70	45	139	125	101	91	456	4	12	16	12	4
Jack Benny	301	304	63	116	233	99	44	152	128	127	106	605	5	21	20	25	6
Burns and Allen	338	301	69	125	274	115	56	213	190	136	100	639	4	25	24	21	5
Fannie Brice	274	281	65	117	221	93	54	170	169	125	91	555	9	17	21	16	2
Bob Burns	278	275	56	111	254	93	59	163	164	129	97	553	6	15	20	14	4
Frank Sinatra	241	230	46	87	209	82	47	137	157	101	76	471	6	13	13	13	2
Beulah	201	206	37	80	185	65	40	138	115	88	66	407	2	16	16	15	4
Dick Haymes	212	245	54	90	197	79	47	140	145	93	74	457	4	9	14	18	4
Group 2.																	
March with Faith	302	362	48	139	323	101	53	220	180	145	119	664	7	14	15	9	7
Take It or Leave It	251	258	52	107	222	87	41	161	140	115	93	509	8	19	18	12	5
Truth or Con.	262	233	53	100	208	86	50	167	147	100	84	497	5	16	22	20	3
Quiz Kids	247	251	65	102	202	85	44	138	154	114	98	498	7	20	15	16	4
Nebr.-Iowa Quiz	240	247	64	104	200	74	35	140	156	100	91	487	11	16	20	13	2
Dr. I.Q.	246	261	57	97	224	92	36	154	159	113	81	506	5	12	19	12	4
Let's Pretend	212	196	45	92	180	66	25	125	114	87	82	408	7	14	19	18	3
Group 3.																	
Terry & Pirates	244	232	60	103	214	66	33	146	137	119	74	476	6	20	16	7	3
Superman	254	231	55	90	230	76	35	134	156	131	82	485	5	19	14	14	2
Tom Mix	220	188	47	79	175	49	38	108	100	112	68	388	3	13	18	15	2
Captain Midnight	268	214	51	89	220	78	34	123	148	121	78	472	5	17	16	15	2
Dick Tracy	250	239	65	104	285	60	37	149	151	126	83	489	9	19	16	10	3
Jack Armstrong	271	221	57	99	217	75	46	155	150	119	88	492	6	17	14	10	2
Hop Harrigan	250	218	52	95	210	68	45	137	138	114	79	468	6	16	14	11	2
Lone Ranger	210	173	41	64	166	71	41	103	120	89	71	365	2	12	10	13	2

TABLE XXIII.(cont.) NUMBER OF OCCASIONAL LISTENERS OF PROGRAMS LISTED IN PART II OF THE QUESTIONNAIRE

	GROUPS																
	Sex		Economic					Grade					Ability				
	B	G	A	B	C	D	E	8	7	6	5	TOTAL	A	B	C	D	E
Group size	665	706	146	279	596	226	124	598	385	324	264	1371	17	45	45	45	10
Program																	
Group 4.																	
Young People's Church	108	162	16	52	100	56	46	82	72	70	46	270	3	7	9	12	2
Old Fashioned Revival	110	132	11	40	101	46	43	74	65	50	55	242	1	6	4	10	3
Dr. R.R.Brown	125	109	12	44	96	45	35	63	65	52	54	234	2	3	9	10	3
Lutheran Hour	107	116	11	45	90	42	37	61	69	43	50	223	2	8	4	9	3
Dr. Rowsey	104	100	27	45	67	32	33	53	48	48	55	204	2	5	5	9	2
Catholic Hour	115	128	12	42	107	48	34	65	65	67	48	243	3	7	3	12	3
Group 5.																	
Mr. Dist. Att'y	186	207	50	89	174	53	27	141	121	75	36	393	2	20	19	10	2
Big Town	212	178	48	82	175	56	29	143	109	76	63	390	6	14	23	9	3
Gangbuster's	210	190	43	74	195	61	27	156	123	80	62	400	6	13	15	16	2
Inner Sanctum	206	208	47	87	188	59	35	144	109	99	62	414	6	19	21	10	2
Mr. Keen	232	213	61	92	194	66	32	140	126	108	69	445	7	14	19	11	5
Dr. Christian	216	181	54	70	185	54	34	120	120	87	70	397	6	6	13	7	2
Shadow	244	220	49	87	215	79	34	153	141	100	70	464	4	15	20	16	2
Mr. & Mrs. North	192	173	43	77	166	49	30	126	120	66	53	365	7	14	16	11	4
Suspense	214	186	43	95	170	57	35	137	106	88	69	400	4	19	18	9	3
Group 6.																	
Supper Club	165	175	31	67	154	60	28	110	102	79	49	340	4	11	12	11	3
Aldrich Family	280	266	61	114	262	75	34	177	172	122	75	546	9	17	27	13	3
Those Websters	245	233	48	95	214	64	37	154	147	107	70	478	6	14	20	11	3
Ed McConnel	130	118	17	44	112	38	37	77	71	61	39	248	1	7	8	10	2
Theater of Today	117	195	45	75	150	66	36	107	103	91	71	372	7	7	9	14	2
Group 7.																	
Hit Parade	229	200	51	97	176	72	33	141	123	92	73	429	3	15	18	13	4
Hour of Charm	171	192	41	80	154	49	39	111	107	91	64	363	3	17	16	13	4
Nelson Eddy	190	176	41	74	153	39	41	98	112	82	56	348	5	15	12	10	3
Kate Smith	209	262	45	98	224	68	36	142	137	121	71	471	6	16	13	15	5
Symphony Orch.	160	196	36	75	143	66	36	108	100	78	70	356	5	16	10	13	1
Swing & Dance	166	177	31	85	145	56	26	112	99	74	58	343	5	16	11	14	2
Hymns	168	206	20	82	162	60	48	112	116	89	55	372	6	15	14	17	2

TABLE XXIV. NUMBER OF RESPONSES ON REASONS FOR LISTENING. PART III OF THE QUESTIONNAIRE.

	GROUPS																
	Sex		Economic					Grade					Ability				
	B	G	A	B	C	D	E	8	7	6	5	TOTAL	A	B	C	D	E
Group size	665	706	146	279	596	226	124	398	385	324	364	1371	17	45	45	45	10
No.																	
A - 1	87	68	17	33	58	32	15	44	47	36	28	155	1	7	4	3	0
2	115	70	27	41	55	51	11	59	54	30	42	185	4	6	8	9	0
33	165	188	41	85	144	61	22	109	94	81	69	353	7	9	9	1	2
4	311	372	56	102	322	128	75	184	194	149	156	683	5	17	20	26	4
B - 1	179	156	42	76	132	55	30	108	99	61	67	335	5	8	15	10	1
2	51	24	10	14	26	15	10	15	26	18	16	75	1	4	1	5	1
3	147	173	37	74	147	40	22	93	84	79	64	320	3	14	3	9	3
4	270	295	37	99	248	121	59	131	178	124	138	565	5	10	21	16	6
C - 1	74	20	4	20	31	28	11	14	20	25	35	94	0	3	2	2	1
2	106	62	17	36	69	52	14	58	62	30	38	188	3	4	4	8	2
3	209	217	41	77	198	71	39	120	133	98	75	426	5	9	14	10	3
4	148	198	32	65	137	60	46	106	77	75	80	340	4	17	9	0	5
D - 1	374	314	60	141	285	140	62	169	178	162	159	688	7	21	19	20	6
2	37	59	2	20	44	16	15	23	26	24	23	96	2	0	3	3	2
3	167	247	56	77	174	71	36	145	126	73	70	414	2	14	16	19	0
E - 1	188	156	34	71	143	56	46	87	106	70	81	344	6	7	9	9	1
2	182	173	32	59	160	62	41	77	101	92	83	355	2	11	3	10	1
3	81	20	1	23	44	30	4	20	28	25	28	101	1	3	3	5	1
4	52	57	5	14	48	32	10	20	30	18	41	109	1	1	3	3	2
F - 1	325	329	90	151	284	87	42	201	181	170	102	654	11	24	22	15	1
	235	241	20	90	166	114	65	97	135	111	135	476	4	5	14	22	5
	61	61	17	27	62	22	15	56	40	24	22	142	2	8	3	1	0
G - 1	138	98	20	45	97	47	27	64	63	51	58	236	1	5	6	6	2
2	63	61	6	24	58	35	11	31	37	25	31	124	1	2	4	1	0
3	257	281	46	100	234	82	56	182	145	119	72	518	8	19	17	23	2
4	141	111	18	46	109	54	19	11	66	53	64	252	0	4	5	4	2