

THE RELATIONSHIP OF MUSIC  
PREFERENCE TO CERTAIN CULTURAL  
DETERMINERS

Thesis for the Degree of Ph. D.  
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EDDIE SPENCER MEADOWS  
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The Pearson Product-moment Coefficient of Correlation was used to establish reliability and content validity was used to determine the truthfulness of the music preference test.

#### ABSTRACT

#### THE RELATIONSHIP OF MUSIC PREFERENCE TO CERTAIN CULTURAL DETERMINERS

By

Eddie Spencer Meadows

This study investigated the difference between music preference and socioeconomic status, race, musical experience, school level, geographical location and preferred music category. The primary purpose of this study was to provide the music teacher with a knowledge of musical preferences as they relate to social, racial, and musical variables.

The main hypothesis was that musical preferences were independent of socioeconomic status, race, musical experience, school level, geographical location and the preferred music category.

The experimental population consisted of 982 black and white students, including junior high, senior high and college, from 19 different schools throughout the United States. Subjects were equated on the basis of a written questionnaire, a taped music inventory and the Otis Dudley Duncan Socioeconomic Index



The Pearson Product-Moment Coefficient of Correlation was used to establish reliability and content validity was used to determine the truthfulness of the music preference test.

The experimental treatment consisted of single testing and questionnaire periods. Thereafter, the obtained data were coded and key punched on IBM cards and analyzed on the 6500 Computer in the Michigan State University's Computer Center. Chi-square, Cramer's Contingency Coefficient, Kruskal-Wallis one-way analysis of variance and reference to individual cells were the statistical procedures used in analyzing the data. The .01 and .05 levels of significance were adopted as the criterion for accepting or rejecting the hypotheses.

Socioeconomic status, race, musical experience, school level and geographical location were all found to be statistically significant in determining musical preferences. A somewhat different disclosure was that the subjects viewed jazz and blues, also classical and light classical music as one music category, respectively.

DOCTOR OF PHILOSOPHY

Department of Music

THE RELATIONSHIP OF MUSIC PREFERENCE  
TO CERTAIN CULTURAL DETERMINERS

By

Eddie Spencer Meadows

A THESIS

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\*\*\*\*\*

## To My Family



## ACKNOWLEDGMENTS

### Chapter

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<sup>1</sup> Helen M. Roberts, *Native Music of the United States*, *Journal of American Anthropology*, No. 12 (New Haven: Yale University Press, 1936).

<sup>2</sup> William D. Allen, *Primitive Music* (New York: Dover Publications, 1962).

<sup>3</sup> R. Peter Stokorn, "Relational and Special Patterns in American Popular Music," *Journal of Research in Music Education*, VII, No. 4 (1966), pp. 279-280.

opinions about music depend on cultural background.<sup>4</sup> Allen, in a study which considers the ideology and bias of music historians, uses historical data to support the point that cultural conditions control what kind of music is approved and preferred, what kind is written, and in what way the music is regarded.<sup>5</sup>

## CHAPTER I

### INTRODUCTION

The idea that musical taste is a function of socio-economic background is consistent with sociological theory and the factual evidence on which that theory rests. Sociological theory postulates that human behavior is learned in culture; it follows, therefore, that musical preferences are learned in culture. This notion that individual taste is not fortuitous, but rather is controlled by cultural standards is supported by anthropological, historical and music data. Among the authors who have addressed this point are Roberts,<sup>1</sup> Allen<sup>2</sup> and Etzkorn.<sup>3</sup> In disposing of some popular traditions about Indian music, Roberts asserts that to many people, American Indian music seems uninteresting, and lacks melodic beauty and harmony; thus the point is confirmed that

<sup>1</sup>Helen H. Roberts, Musical Areas in Aboriginal North America, No. 12 (New Haven: Yale University Publications in Anthropology, 1936).

<sup>2</sup>William D. Allen, Philosophies of Music History (New York: Dover Publications, 1962).

<sup>3</sup>K. Peter Etzkorn, "Relationships between Musical and Special Patterns in American Popular Music," Journal of Research in Music Education, VII, No. 4 (Winter, 1964), 279-280.



opinions about music depend on cultural background.<sup>4</sup> Allen, in a study which considers the ideology and bias of music historians, uses historical data to support the point that cultural conditions control what kind of music is approved and preferred, what kind of music is written, and in what way the music is regarded.<sup>5</sup> In a study that relates musical and social patterns in American popular music, Etzkorn advocates that music, wherever found is a product of social circumstances. Furthermore, Etzkorn states that music should be evaluated in terms of these circumstances and their implications for the total social structure, rather than in terms of the accepted canons of some aesthetic system. Musicians have also placed great emphasis on the role that immediate environment performs in determining human behavior. Among the musicians who have addressed this point are Schuessler,<sup>6</sup> Baumann<sup>7</sup> and Coyners.<sup>8</sup> In recent years, research has indicated that differences exist in musical preferences of different socioeconomic groups.

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<sup>4</sup>Roberts, op. cit., p. 41.

<sup>5</sup>Allen, op. cit., p. 32.

<sup>6</sup>Karl F. Schuessler, "Social, Background and Musical Taste," American Sociological Review, XIII (June, 1968), 330-333.

<sup>7</sup>Victor Baumann, "Teen-Age Music Preferences," Journal of Research in Music Education, IX, No. 2 (Fall, 1960).

<sup>8</sup>James E. Conyers, "An Exploratory Study of Music Tastes and Interests of College Students," Sociology Inquiry, XXXIII, No. 1 (Winter, 1963), 58-60.

Schuessler's study indicated that musical taste is somewhat dependent upon socioeconomic background. Other studies have substantiated Schuessler's work, and in addition, have stated a need for additional research in this area. Baumann presumed it would be helpful for music teachers to know the musical preferences of their students. Furthermore, he found that a direct correlation exists between socioeconomic class and music preferences. In addition to socioeconomic status, research has also indicated the importance of exposure in shaping musical preferences. Conyers, in a study of musical tastes of 202 college seniors, found that the type of music liked and the extent of musical exposure would contradict the contention of a unitary variable which constitutes so-called ethnic group tastes. Conyers' study is important, because it implies that the degree of musical exposure is often dependent on an individual's socioeconomic class.

Music educators should be concerned with the teaching of all students. Under this premise it is necessary to proceed from known music preferences to unknown music preferences. The hierarchical sequency of the concrete to the abstract provides the teacher with a logical schemata for developing desired musical behaviors, which are important if active music participants after formal education is a goal.

There is one apparent weakness in music preference research. In many studies on music preference researchers made comparisons concerning the preferred type of music

between art music and popular music. No such comparisons were attempted in the present study. Furthermore, the researcher agrees with Reimer<sup>9</sup> that such comparisons are naive in character. Reimer states:

. . . A factor which casts grave doubt upon the validity of some studies of music preferred is the seemingly blind acceptance that serious music and popular music can be reasonably compared on the basis of which is "liked better." The assumption that serious music can and should be "liked" in precisely the same way that popular music is "liked" is one which seems to permeate the thought of the entire music education profession.

### The Problem

The primary problem of this study was to determine if relationships exist between music preference and socio-economic status, race, musical experience, school level and geographical location. Another problem of the study was to determine if relationships exist between music preference and the preferred music category.

### Significance of the Problem

It was a premise of this study that knowledge of musical preferences would be a valuable aid for teachers. Furthermore it was believed that knowledge of variables

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<sup>9</sup>Bennett Reimer, "Effects of Music Education: Implications from a Seminar of Research," Journal of Research in Music Education, XIII, No. 3 (Fall, 1965), 165.

which shape preferences could aid the development of instructional strategies.

### Purpose of the Study

In today's society artistic skills and knowledge are not the sole prerequisites to becoming a successful music teacher. Beyond skills and knowledge the modern music educator should also become aware of social problems and how they effect music teaching. The previous assumption is supported by Wersen.<sup>10</sup>

In an area of protest, irritation, and rapid change, when students tell us that the music we teach and the methods we use are irrelevant and ineffectual, music educators cannot simply sit back with eyes closed and ears turned backwards.

The primary purpose of this study was to provide the music teacher with a knowledge of musical preferences as they relate to social, racial and musical variables.

### Scope of the Study

This study dealt with the measurement of music preference in relation to socioeconomic status, race, musical experience, school level, geographical location and the preferred music category of 982 subjects throughout the United States. A written questionnaire, taped music

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<sup>10</sup> Judith Murphy and George Sullivan, Music in American Society (Washington, D.C.: M.E.N.C., 1968). (The statement was made by Louis Wersen.)



inventory, and the Duncan Socioeconomic Index were used to gather the data.

The data were gathered from subjects in (1) Baton Rouge, Louisiana; (2) Chicago, Illinois; (3) Jackson, Mississippi; (4) Las Vegas, Nevada; (5) Nashville, Tennessee; (6) Norfolk, Virginia; (7) Washington, D.C.; and (8) Lansing, East Lansing, and Williamston, Michigan. The data were obtained in a single test administration.

### Hypotheses

The main hypothesis of this study was that musical preference was independent of socioeconomic status, race, musical experience, school level, geographical location and preferred music category.

Investigation of the main hypothesis necessitated examination of the following null hypotheses:

1. There will be no significant difference in music preference attributable to socioeconomic status.
2. There will be no significant difference in music preference attributable to race.
3. There will be no significant difference in music preference attributable to musical experience.
4. There will be no significant difference in music preference attributable to school level.
5. There will be no significant difference in music preference attributable to geographical location.
6. There will be no significant difference in music preference attributable to preferred music category.

### 3. Rock and roll      Limitations

This study did not attempt to relate all sociological and environmental factors to music preference. Only the specific variable in each hypothesis was studied with relation to stated music preferences.

### the second      Definition of Terms

For the purpose of this study, the following terms need clarification. The terms are limited as indicated:

1. Classical. A term which denotes musical works which have held their places as art music in the general estimation for a considerable time, and new works which are generally considered to be of the same type, quality and style. For the purpose of this study the excerpts are taken from the works of Haydn, Brahms and Stravinsky.
2. Light classical. A classification of classical music that is characterized by music that has been used as themes for television programs or similar media, also by works that are recorded by an individual or group associated with popular music. For the purpose of this study the excerpts are taken from Mascagni, Tchaikovsky and Khachaturian.

3. Rock and roll. A style of music derived from hill-billy and blues, and characterized by strong beat and repetition.<sup>11</sup>
4. Blues. A form of folk developed by the Black slaves in the United States during the nineteenth century. The typical blues text has a stanza of three lines, the second of which is a repetition of the first. It usually tells of moods of depression, natural disasters, or the loss of a loved one. As the blues became urbanized, the subject matter became broader, including eventually the evocation of happier moods. In a corollary development, the blues form crystallized into a specific chord and measure pattern. The most common form is the twelve-bar blues set in the following chord progression: I-IV-I-V-I. Eight-bar and sixteen-bar blues are also relatively common. Today blues can refer to a vocal blues song, or simply to the twelve-bar blues structure.
5. Soul. A type of music closely aligned with the blues, often, but not exclusively, associated with Black performers. It has no definite pattern, rhythm, or tonality, and in most cases includes a variety of elements from the blues and rock and roll. Some of the most prominent exponents are James Brown,

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<sup>11</sup> Lewis M. Adams, ed. Webster's New American Dictionary (New York: Books, Inc., 1968), p. 24.

12. Wilson Pickett, Arethe Franklin, the Temptations,  
and the Righteous Brothers. This is type of occupa-
6. Show tunes. Tunes that are often associated with  
13. or taken from Broadway shows and/or film scores.
7. Folk. Music that is often associated with anonymous  
origin. Anonymous collective folk authorship and  
oral transmission are the identifying characteris-  
tics of many folk songs. In recent years folk has  
been written by known composers and is characterized  
by text dealing with American folklore and current  
political and social events.
8. Country and western. Type of music that originated  
in the South and is characterized by a conglomer-  
ation of spiritual and all forms of popular music.  
The music is best identified by associating it with  
known performers.
9. Jazz. A type of American music of Negro origin,  
developed from ragtime and characterized by subtle  
syncopations and eccentric contrasts in orchestra-  
tion, used especially for dance music.
10. Spirituals. A type of religious song usually of  
Black origin and associated with the southern  
United States. Nashville, Tennessee.
11. Music preference. A combination and interaction of  
musical taste, musical attitudes, and musical dis-  
crimination. State College, Jackson, Mississippi.



12. Socioeconomic status--the amount of prestige associated with the income, wealth, or type of occupation possessed by a member of society.

13. Geographical locations:

Eastern. Schools included are: (1) Norfolk State College, Norfolk, Virginia; (2) Old Dominion University, Norfolk, Virginia; (3) Indian River Junior High, Chesapeake, Virginia; (4) Benjamin Stoddert Junior High, Washington, D.C.; and (5) Eastern Senior High, Washington, D.C.

Western. School included is: (1) Rancho High School, Las Vegas, Nevada.

Northern. Schools included are: (1) Pattengil Junior High, Lansing, Michigan; (2) Williamston Junior High, Williamston, Michigan; (3) Williamston Senior High, Williamston, Michigan; (4) Fermi Junior High, Chicago, Illinois; (5) Dranke Junior High, Chicago, Illinois; and (6) Morgan Park Senior High, Chicago, Illinois.

Southern. Schools included are: (1) Howard Junior High, Nashville, Tennessee; (2) Tennessee State University, Nashville, Tennessee; (3) Stratford Senior High, Nashville, Tennessee; (4) Rosenwald Junior High, New Roads, Louisiana; (5) Rosenwald Senior High, New Roads, Louisiana; and (6) Jackson State College, Jackson, Mississippi.

### Further Organization of the Report

The preceding pages of this chapter have presented a statement, definition and discussion of the problem. The report continues in the following order: Chapter II, a Review of the Literature; Chapter III, Design of the Study; Chapter IV, Presentation and Analysis of the Data; and Chapter V, Summary, Conclusions, Implications and Recommendations.

One of the new trends in the social sciences has been the increasing interest in the social concepts of music. This trend has been reflected in the recent years have writers begun to write about the relationship between sociology and music.<sup>1</sup>

One of the earliest studies of music education (preference) and socioeconomic background was by Max Kaplan. According to Schuessler, the study was published in 1941.

<sup>1</sup>Max Kaplan, Foundations and Principles of Music Education (Chicago: Holt, Rinehart & Company, 1941).

<sup>2</sup>Alphonse Silberman, The Social Background of Music Education: A Sociological Approach (Chicago: University of Chicago Press, 1958), pp. 88-123; Max Weber, The Sociology of Music (Carbondale: Southern Illinois University Press, 1958); Johannes Riedel, "The Sociology of Music," Music Educators' Journal, XLIX, 80; (November, 1958); and Johannes Riedel, "The Function of Sociology in the Sociology of Music and Music Education," Journal of Music Education, XII, No. 2 (Summer, 1964).

<sup>3</sup>Karl F. Schuessler, "Musical Taste and Socio-Economic Background" (unpublished doctoral dissertation, Indiana University, 1941).

## CHAPTER II

## REVIEW OF THE LITERATURE

One of the newer fields of inquiry, in music education, is the sociology of music and studies related to social concepts of music.<sup>1</sup> Although sociological factors have affected musical behavior throughout the ages, only in recent years have writers begun to identify relationships between sociology and music.<sup>2</sup>

One of the earliest studies on musical taste (preference) and socioeconomic background was by Schuessler.<sup>3</sup> According to Schuessler, the research was primarily concerned

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<sup>1</sup>Max Kaplan, Foundations and Frontiers of Music Education (Chicago: Holt, Rinehart and Winston, Inc., 1966).

<sup>2</sup>Alphonse Silberman, The Sociology of Music (New York: Humanities Press, 1963); John Mueller, Music and Education: A Sociological Approach, Basic Concepts in Music Education, NSSE (Chicago: University of Chicago Press, 1958), pp. 88-123; Max Weber, The Rational and Social Foundation of Music (Carbondale: Southern Illinois University Press, 1958); Johannes Riedel, "The Sociology of Music," Music Educators' Journal, XLIX, No. 2 (November-December); and Johannes Riedel, "The Function of Sociability in the Sociology of Music and Music Education," Journal of Research in Music Education, XII, No. 2 (Summer, 1964).

<sup>3</sup>Karl F. Schuessler, "Musical Taste and Socio-Economic Background" (unpublished doctoral dissertation, Indiana University, 1941).

with the relationship between musical taste and socioeconomic background. Musical taste was gauged by having the respondents hear the first minute of each of eight musical selections. All selections were orchestral renditions. Respondents were asked to select from a given list of categories the one category best describing the type of musical example. The categories were: classical, old song, hymn, jazz, march, hillbilly, popular, and old waltz. They also were asked to state their attitude toward the example by selecting a statement from the following: (1) like it, (2) like it a great deal, (3) dislike it, (4) dislike it a great deal, and (5) undecided. Data were collected from over 1,200 individuals of different races in Evansville, Indiana.

The socioeconomic classification was based on six occupational groupings developed by Edwards<sup>4</sup> (Warner's and Duncan's more complex work on social status was not available when this study was undertaken). The data were analyzed in four ways: (1) determination of the degree of independence among the classifications using the probability indicated by the chi-square, (2) computation of the ratio of affirmative to negative responses to the musical selections by socioeconomic groups, (3) relation of the variation in

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<sup>4</sup>Alba M. Edwards, Comparative Occupation Statistics for the United States, 1870 to 1940 (Washington, D.C.: Government Printing Office, 1943), 180 pp.



musical taste to differences in the music background and degree of familiarity with the music, and (4) estimation of the relative importance of the factors that indicate an association with musical taste. There was evidence that age, familiarity with the musical work, and musical training were as influential as socioeconomic status in determining musical taste, depending on the particular work. Noticeable differences existed in the reactions to the various musical works. Age seemed to be the most significant factor in determining taste for popular music.

There are several points in the above study that the present writer finds questionable. One point is the use of all orchestral renditions. At no time in the study did Schuessler indicate that he had valid research to confirm that his subjects listened to only orchestral renditions. It seems that the researcher produced a bias variable that could have been controlled by giving equal status to vocal and instrumental renditions. Another point of disagreement is the serious limitation of the musical taste-attitudinal scale. As stated earlier, Schuessler used the following scale: (1) like it, (2) like it a great deal, (3) dislike it, (4) dislike it a great deal, and (5) undecided. The primary criticism is that the scale does not form an adequate continuum from liking to disliking. Perhaps the writer should have added a category, dislike it moderately, between "dislike it" and "dislike it a great deal," thereby eliminating a forced negative choice. In view of the nature

of the statements, the subjects were forced to choose ~~four~~ between definite positive or negative responses, or to ~~of~~ admit no choice.<sup>4</sup> The fact that the music preference rating scale lacks an adequate hierarchical sequence is unfortunate especially since Likert formulated his continuum from liking to disliking as early as 1932.<sup>5</sup>

Another related study was reported by Rubin.<sup>6</sup> Rubin indicated several difficulties of measuring musical preference. Rubin believed that factors of honesty, cultural conditioning and introspective accuracy must be taken into account when responses to music are verbalized. Rubin cautioned that the data collected are subject to many reservations as to usefulness and accuracy, and that it would be improper to make broad generalizations on the basis of his study.

In his study a questionnaire was used to identify seventh, ninth, and twelfth grade students with extensive musical experience and students with little musical experience. He chose fifty students well-experienced in music and fifty students with minimum music experience from each grade. Each group was given a "Test of Musical Preferences" and a "Test of Discriminatory Ability," both devised by

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<sup>5</sup>Rensis Likert, "Technique for the Measurement of Attitudes," Archives of Psychology, No. 140, 1932.

<sup>6</sup>Louis Rubin, "The Effects of Musical Experience on Musical Discrimination and Musical Preferences" (unpublished doctoral dissertation, University of California, 1952).

Rubin. The preference test consisted of rating on a four point scale fifteen selections representing three types of music: "art music," "folk music," and "music of transient current vogue." The discrimination test was modeled on the "Musical Discrimination Test" of Kate Hevner. Forty-two pairs of phrases were played with the subjects determining which of the pairs was different and which the same. For those pairs in which the second phrase was different a judgment was made as to whether the harmony, rhythm, or melody was changed.

Results of the study were determined by comparing scores on each of the tests with the music-experience level of the subjects. Both the "high" and "low" experience groups liked music of transient current vogue best. Rubin concluded that formal music experiences in the public schools had little effect on musical preferences. Interest in art music increased slightly from seventh to twelfth grade for the experienced group, and fell slightly for the nonexperienced group. In comparing the scores of the ability test between "high" and "low" experience groups, the scores between musical experience and musical ability was found to be low. Rubin concluded that adequate musical skills are not resulting from school experience.

Nicholas Wexler, "A Study of the Effect of Musical Experience and Musical Ability on the Development of Musical Taste" (unpublished doctoral dissertation, Florida State University, 1961).

Hevner, op. cit.

In 1961, Nicholas Erneston undertook one of the most comprehensive dissertations of its kind.<sup>7</sup> Erneston made an exploratory study of acquired musical taste in relation to musical experience and mental ability. The following questions were posed by Erneston:<sup>8</sup>

1. Is there a correlation between musical experience and acquired musical taste?
2. If a correlation is found to exist, does any particular kind of experience seem to be more effective in developing taste than any other kind?
3. What is the effect of performance activities (band, orchestra, chorus) as compared with classroom musical experiences and with private instruction?
4. Are the factors of parental interest, sex, length of time involved in musical activities, and listening habits significant in developing taste?
5. Does a combination of musical activities produce more effect than one activity at a time?
6. Is there a relationship between mental ability and musical taste?

The freshman class of Appalachian State Teachers College was tested. To measure attitudes Erneston used the Hevner-Seashore "Oregon Test of Attitude Toward Music." To measure preferences he devised his own "Musical Preference

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<sup>7</sup>Nicholas Erneston, "A Study to Determine the Effect of Musical Experience and Mental Ability on the Formulation of Musical Taste" (unpublished doctoral dissertation, Florida State University, 1961).

<sup>8</sup>Reimer, op. cit. Third Mental Measurements Yearbook (New York: Associated Press, 1964), p. 38.



Record" which asked the subject to rank order a series of four, thirty-second excerpts from classical, light classical, popular, jazz or folk music. For musical discrimination the Wing "Standardized Tests of Musical Intelligence (revised edition)" were employed.<sup>9</sup> Mental ability was measured by the "School and College Ability Tests,"<sup>10</sup> and musical experience was determined by an inventory which included both activities and listening habits.

Erneston found significant differences (beyond the .01 level of confidence) in test scores between those with no participation in music activities and those who had been musically active regardless of which activity they participated in. In addition, he found the longer a person participated in music, and the more variety of experiences he had, the higher his taste score tended to be. Among subjects who had a high level of participation in music, the intellectually advanced subjects correlated significantly with high taste scores, a fact which contradicts the findings of Rubin. No sex differences were found, a direct contradiction to the Schuessler conclusions that music taste depends on sex, age, social class and how much of each kind of music has been heard. Possibly the contradiction is

was employed to determine the background of the subjects.

<sup>9</sup> William E. Whybrew, Measurement and Evaluation in Music (Dubuque, Iowa: Wm. C. Brown Company, 1962), pp. 126-128.

<sup>10</sup> Oscar Buros, The Third Mental Measurements Yearbook (New York: Associated Press, 1964), p. 978.

because different measures were used. However, significant differences were found between the experienced group and the group with no formal music experience in the factors of attitude and discrimination (the experienced group scored higher), but no differences were discovered in musical preferences. Erneston concludes, as did Rubin, that public school music education has little, if any effect, on musical preferences. This conclusion was made probably because neither of the authors used band music in their preference test. A study by Birch<sup>11</sup> illustrates several weaknesses in research dealing with musical taste or preference. Birch assumed that records freely purchased would accurately reflect the musical tastes of the buyer. As a result of this seemingly invalid assumption, Birch encountered some difficulty in collecting data from his sample of students in a small Missouri college. Many students could not remember all the records they owned and many collections were family affairs to which parents and siblings had contributed. No attempt was made to calculate the proportion of records in each of several musical types (folk, Broadway and TV, light classical, etc.). Judgments were made on the basis of owning any number of records in a group. A check list was employed to determine the backgrounds of the students.

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<sup>11</sup>Thomas Erskine Birch, "Musical Taste as Indicated by Records Owned by College Students with Varying High School Experiences" (unpublished doctoral dissertation, University of Missouri, 1962).

In addition to the previously mentioned research weaknesses, no attempt was made to subject the data to statistical procedures. Birch listed the following findings:<sup>12</sup>

- (a) Students who have participated in high school music activities for three years or more have better musical taste and discrimination than those with less than three years of experience.

Birch's finding is stated despite his failure to recognize experiences ranging from zero to almost three years. Also, no attempt was made to measure musical discrimination, even according to the definition adopted. The assumption that one group has "better" musical taste than another is qualitative and does not reflect the degree of improvement.

- (b) High school vocal students have better taste and discriminations than high school instrumental students.

This finding contradicts that of Erneston's by concluding that no particular type of experience was of more value than another in affecting taste.

- (c) Women have broader musical tastes than men.

Again this contradicts Erneston's finding that no significant sex differences exist with respect to musical taste. However, Schuessler postulates that musical taste depends on sex, age, social class and how much music of each kind has been heard.

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<sup>12</sup>Bennett Reimer, "Effects of Music Education: Implication from a Review of Research," Journal of Research in Music Education, XIII, No. 3 (Fall, 1965), 159.

Victor H. Baumann, "Teenage Music Preference" (unpublished doctoral dissertation, Princeton University, 1959).

(d) A greater percentage of those with high school musical experiences owns records than those with no such experiences.

(e) No differences exist between those with high school experience and those who had private lessons only, however, those with both high school and private lesson experience had better taste and discrimination than those with only one of these types of activities.

A less sociologically oriented study of the correlations between age, intelligence, musical training, and reactions to music were made by Rubin-Rabson, whose subjects were adults, aged 20 to 70.<sup>13</sup> The subjects reacted to 24 pieces of music marking their reactions on a five-point scale. The most significant relationship obtained was that between the age of the subjects and indifference to classical or modern music. Training seemed to influence taste only in regard to modern music, also, intelligence was found to be higher among those indifferent to classical or modern music. The Rubin-Rabson study did not control the possibility that other variables in the musical examples might have affected reactions to the music more than those components which justified the music's classification by periods.

Another study was reported by Baumann.<sup>14</sup> The problem of the Baumann investigation concerned the following

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<sup>13</sup>G. Rubin-Rabson, "The Influence of Age, Intelligence, and Training on Reaction to Classical and Modern Music," Journal of General Psychology, XXII, 413-429.

<sup>14</sup>Victor H. Baumann, "Teenage Music Preferences" (unpublished doctoral dissertation, Princeton University, 1959).



four points: (1) to develop a device for sampling music preferences, (2) to discover what teenage preferences are and how they vary at different ages, (3) to determine if teenagers of different socioeconomic status develop different music preferences, and (4) to verify or contradict results of music preference surveys using other methods of measurement. The study was conducted with 1,600 teenagers of the Phoenix, Arizona and the Cumberland, Maryland schools. The Music Preference Inventory consisted of fifty selections, including such music as pop, folk and classical. Subjects were asked to rate the examples by marking them "like most," or "like least" after listening to the music without the benefit of title or type identification.

A short Social Status Inventory, modified from the Gaugh Home Index<sup>15</sup> of socioeconomic status was administered to determine what effect this factor played in the musical preferences of the teenage subjects. Sex and age of the respondents were also noted and tabulated within the age brackets of 12-14, 15-17, and 18-20, respectively.

Baumann indicates in his findings that all groups preferred popular selections with the current fad of rock and roll then exemplified (1955-56) by "Rock Around the Clock" leading the list among the younger teenagers. There were both sex and regional differences found between choices

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<sup>15</sup>Harrison G. Gaugh, "A Short Social Status Inventory," Journal of Educational Psychology, XL (1949), 52-56.

of boys and girls and the respondents from Arizona as contrasted with Maryland, respectively. The idea that sex differences exist between choices reinforces the findings of Birch; however, it contradicts Erneston's. An interesting difference was noted between the low socioeconomic status teenagers whose tastes ran generally to traditional music to a greater degree than their high-status group contemporaries.

All teenagers heard their favorite music principally in their own homes. Of importance to education was the fact that formal music classes constituted a relatively unimportant place where their favorites were heard. Perhaps the most significant conclusion made by Baumann was the necessity for teachers in secondary schools to capitalize upon the amount of musical information and experience which teenagers bring to the formal music class. Baumann elaborates further by saying teachers should use survey devices to examine current student interest, avoiding extreme prejudices and capitalizing on strong points as an area of departure.<sup>16</sup>

Rogers attempted to determine whether any significant changes occur in musical taste during the period from fourth to twelfth grade.<sup>17</sup> Children in fourth, seventh,

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<sup>16</sup> Baumann, op. cit.

<sup>17</sup> Vincent R. Rogers, "Children's Expressed Musical Preferences at Selected Grade Levels" (unpublished doctoral dissertation, Syracuse University, 1956).

ninth, and twelfth grades were tested as to preferences for four types of music: "seriously classical," "popular classical," "dinner music," and "popular music." The subjects were asked to indicate which of two selections they "liked best," the pairing being arranged to include all possible permutations of the four types of music. Rogers found that at all grade levels dinner and popular music were "liked least." From the seventh grade up the preference for dinner and popular music became progressively stronger.

Rogers concludes that increasing physical and mental maturity apparently does not in and of itself bring about an increased maturity in musical preference. Since Rogers' study was confined to the teenage years, the acceptance of this conclusion becomes questionable.

When factor analysis was employed by Hornyak<sup>18</sup> he showed that it was an effective tool in revealing significant relationships between components of music and value judgments about the music by individuals and groups. Hornyak demonstrated that the relationship between certain components are bi-polar since the presence of a particular component can lead to both negative and positive responses. He also demonstrated that melody, tonal and triadic harmonies, orchestral color, solo voice color, and choral color

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<sup>18</sup>Robert R. Hornyak, "A Factor Analysis of the Relationship Between the Components of Music Present in Selected Music Examples and the Preference Rating Responses of College Students to the Selected Musical Examples" (unpublished doctoral dissertation, Indiana University, 1964).

provide bases for value judgments by college students. Hornyak's study suggested that music appreciation need not start with 19th century examples, and it showed that accented rhythms and propulsive rhythms provide bases for value judgments, whereas meter and temp do not. In addition, Hornyak concluded that factor analysis can provide the basis for general understanding of what students are able to perceive in music.

A study by Fulbright<sup>19</sup> revealed several interesting facts. Fulbright found that college women had a more favorable attitude toward classical music than did college men. This conclusion with Birch's findings that women have broader musical tastes than men, however, contradicts Erneston's findings that no significant sex differences exist with respect to musical taste. Fulbright, also, found that both pre-college and college training in music correlated positively with favorable attitudes toward classical music. Erneston's findings are somewhat in agreement because he found a high level of discriminatory ability in his experience group. Again, Fulbright's conclusion contradicts Rubin's findings that the relationship between musical experience and musical ability was found to be very low. Fulbright found a positive correlation between favorable

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<sup>19</sup>Ercy Glenn Fulbright, "An Investigation of Relationships Between Cultural Background and Attitude Toward Classical Music Among College Undergraduates" (unpublished doctoral dissertation, Indiana University, 1964).



attitudes and college class, academic achievements and familiarity with the examples; however, he found no significant relationship between attitudes toward classical music and occupation of father, family income or academic achievement.

### Socioeconomic Class Determinants

Many different variables have been used to delineate a class-status structure. The two most common types of measures employed to stratify a population have been prestige ratings of persons and of socioeconomic status scales. The three most commonly used measures of socioeconomic status are income, education and occupation. Each of these measures consists of a rank or scale order such that a population can be stratified from high to low status.

The literature on social stratification is replete with attempts to construct socioeconomic class determiners. Many of these include occupation as one of the indicators of status. A number of status scales are based entirely on some measure of occupational position. The most common of these scales are the Edwards socioeconomic groupings,<sup>20</sup> and the North-Hatt prestige ratings of occupations.<sup>21</sup> These and

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<sup>20</sup>Alba M. Edwards, A Social Economic Grouping of the Gainful Workers of the United States, 1930 (Washington, D.C.: Government Printing Office, 1938).

<sup>21</sup>National Opinion Research Center, "Jobs and Occupations," Opinion News, IX (September, 1967), 4-5.

other similar types of scales based on rank-ordering of occupational titles generally are classified as nominal or partially ordered scales since they do not satisfy the postulates of order appropriate for constructing an ordinal scale.

The North-Hatt Occupational Prestige Scale was constructed as a result of a nationwide evaluation of the prestige rating of occupations; over 2,900 people were asked to rate a list of ninety occupations as follows:

- (1) Excellent Standing
- (2) Good Standing
- (3) Average Standing
- (4) Somewhat Below Average Standing
- (5) Poor Standing
- (6) I Don't Know Where to Place That One

Consistency of ratings for the ninety occupations, as a whole, was not high because raters did not always rate occupations in the same order, thus destroying the prestige continuum.<sup>22</sup> Using Guttman's Scaling Technique,<sup>23</sup> Hatt discovered that the continuum, as it stood, did not yield even a quasi-scale.<sup>24</sup> Hatt then classified the occupation titles

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<sup>22</sup>Robert Sidnell, "The Influence of the Tyler Junior College on the Fine-Arts Culture of Tyler, Texas" (unpublished doctoral dissertation, University of Texas, 1960), p. 42.

<sup>23</sup>Louis Guttman, "A Basis for Scaling Qualitative Data," American Sociological Review, IX, No. 139 (1966).

<sup>24</sup>Sidnell, op. cit., p. 42.

into eight families or situses and established greater internal consistency along the scale of prestige.<sup>25</sup>

Sidnell offers further evidence of the importance that North and Hatt give to occupation.<sup>26</sup>

A man's job--occupying one-third of his daily life--is more than just a means of livelihood or an outlet for his creative energy; it is a vital influence on his existence even beyond working hours. His social position, his economic welfare and even his daily habits are all determined by the kind of job he holds.

Occupation is also used as one of four determiners of social class status in W. Lloyd Warner's Index of Status Characteristics.<sup>27</sup> The characteristics or determiners are weighted as follows:

Occupation Weight	4
Source of Income Weight	3
House Type Weight	3
Dwelling Area Weight	2

Status is determined by rating each of the above on a scale of 1 to 7, 1 being high. The sum of the weighted scores is then compared to a conversion table. The method had high validity for rating 209 old American families in Warner's Jonesville study.<sup>28</sup> However, criticism has been leveled at

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<sup>25</sup>Paul K. Hatt, "Occupation and Social Stratification," American Journal of Sociology, LV (May, 1950), 539.

<sup>26</sup>Sidnell, op. cit., p. 43.

<sup>27</sup>W. Lloyd Warner, Social Class in America (Chicago: Science Research Associates, 1949), p. 41.

<sup>28</sup>W. Lloyd Warner, Democracy in Jonesville (New York: Harper and Brothers, 1949), p. 127.

the Index for a variety of reasons.<sup>29</sup> The applicability of the Index in larger communities is questioned as is the ability in predicting individuals in marginal classes.

A study by Mills<sup>30</sup> also utilizes occupations as an index to class position. The focus of the study is on the middle class; however, some information is given regarding other strata. Mills declares:

When the occupations of a cross section of married men in Central City are coded in 24 groups and ranked according to average family income, five strata are crystallized [sic]; between each [sic] there is a "natural" break in average income, whereas the average income of the occupations making up each income stratum are homogeneous.<sup>31</sup>

Anderson's study, We Americans,<sup>32</sup> also uses occupation as a means of stratification. The author distinguishes three main groups in the community: working class, business class, and professional class.

The socioeconomic determiner used in the study under consideration is the Otis-Dudley-Duncan Socioeconomic Index for all occupations.<sup>33</sup> The Duncan Scale is the construction

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<sup>29</sup>Paul K. Hatt, "Occupation and Social Stratification," American Journal of Sociology, LV (May, 1950), 539.

<sup>30</sup>C. Wright Mills, "The Middle Classes in Middle Sized Cities," American Sociological Review, XI (October, 1946), 520.

<sup>31</sup>Ibid., p. 521.

<sup>32</sup>Elin L. Anderson, We Americans (Cambridge: Harvard University Press, 1939).

<sup>33</sup>Albert J. Reiss, Jr. Occupations and Social Status (New York: N.Y. Free Press, 1961), pp. 263-275.



of a socioeconomic index from Census information on detailed occupation characteristics. Duncan considers his socioeconomic index prestige by pointing out that previous wide use of the NORC scale justifies a systematic examination of the problem of grading occupations according to socioeconomic status. According to Reiss,<sup>34</sup> the NORC scores are available only for occupations encompassing, in the aggregate, less than half of the labor force. Consequently, investigators using the NORC scale to stratify a sample of the general population have been forced to infer the prestige standing of occupations not on the NORC list. In this situation, various expedients have been adopted as indicated in the following studies.<sup>35</sup>

Duncan decided to approach the problem of constructing the occupational socioeconomic index in terms of the relationship between the NORC prestige ratings and socioeconomic characteristics of the occupations. Duncan's socioeconomic index is similar to the work of Bogue,<sup>36</sup>

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<sup>34</sup>Ibid., p. 110.

<sup>35</sup>Lamar T. Empey, "Social Class and Occupational Aspiration: A Comparison of Absolute and Relative Measurement," American Sociological Review, XXI (December, 1956), 705-706; Stuart Adams, "Trends in Occupational Origins of Physicians," American Sociological Review, XVIII (August, 1953), 404-405; and Alfred C. Clarke, "The Use of Leisure and Its Relation to Levels of Occupational Prestige," American Sociological Review, XXI (1956), 301-302.

<sup>36</sup>Donald J. Bogue, "The Construction of Socioeconomic Indexes of Detailed Occupations" (on the bases of census statistics on income and education), found in Reiss, op. cit., p. 114.

however, Duncan's approach differs from Bogue's in several details: (1) in using the NORC ratings as a criterion in derivation of weights for the census characteristics, (2) in using different means of summarizing the census information, (3) in employing an age adjustment for the occupation data and (4) in treating the industry subheadings under detailed occupations as though they represent distinct occupations.

Duncan described his problem as that of obtaining a socioeconomic index for each of the occupations in the detailed classification of the 1950 Census of Population. Furthermore, he states:

The index is to have both face validity, in terms of its constituent variables, and sufficient predictive efficiency with respect to the NORC occupational prestige ratings that it can serve as an acceptable substitute for them in any research where it is necessary to grade or rank occupations in the way that the NORC score does, but where some of the occupations are not on the NORC list.<sup>37</sup>

Another study that bears considerable resemblance to the Duncan study is the work of Blishen<sup>38</sup> on Canadian Occupational data. Both Duncan and Blishen basically share an identical philosophy that is summarized as follows:<sup>39</sup>

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<sup>37</sup>Reiss, op. cit., p. 115.

<sup>38</sup>Bernard R. Blishen, "The Construction and Use of Occupational Class Scale," Canadian Journal of Economics and Political Science, XXIV (November, 1958), 519-531.

<sup>39</sup>Reiss, op. cit., p. 115.

A man qualifies himself for occupational life by obtaining an education; as a consequence of pursuing his occupation, he obtains income.

Occupation, therefore, is the intervening activity linking income to education. Because the Duncan socioeconomic index combines the available information on educational and income levels of persons engaged in the various occupations, the writer feels this socioeconomic scale best serves the need of the problem under consideration.

One of the best known systems for classifying occupations is Edward's socioeconomic groupings. Edwards proposed that the validity, as a convenient yardstick for measuring and comparing groups of workers, be ascertained from data on the income and education of the persons falling in the social economic groups.<sup>40</sup> In addition, Edwards presented income and education data indicating that the socioeconomic groups are arranged in the descending order of the social economic status of the workers comprising them and that they do constitute a scale.<sup>41</sup>

Edward's socioeconomic scale consists of six major categories, two of which are so subdivided as to yield ten more or less hierarchically-arranged groupings.<sup>42</sup> While Edward's technique is essentially oriented toward duties

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<sup>40</sup>Alba M. Edwards, Comparative Occupation Statistics for the United States, 1870 to 1940 (Washington, D.C.: Government Printing Office, 1943), p. 180.

<sup>41</sup>Ibid., p. 180.

<sup>42</sup>Ibid., p. 182.

it is also validated in terms of yearly income and total educational qualifications of the job occupants.

In Edward's view, "Education is a very large factor in the social status of workers and wage or salary is a large factor in their economic status."<sup>43</sup> The Edward's classification has done yeoman service in such research, as that of Anderson and Davidson,<sup>44</sup> Centers,<sup>45</sup> and Lind.<sup>46</sup> The chief weakness of Edward's socioeconomic scale lies in the breadth of the categories, some of which clearly overlap.

A scale closely related to the NORC and to that of Edward's is Guttman Scales of Occupation.<sup>47</sup> The Guttman scale is a joint ordering of subjects and items on an underlying continuum. The original NORC list comprised ninety occupational titles, which theoretically might form a scale. In Guttman Scales the more items in the scale, the greater confidence one may have in the universality of the scale. The present writer detects a variety of practical problems

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<sup>43</sup> Ibid., p. 180.

<sup>44</sup> Dewey Anderson and Percy S. Davidson, Ballots and the Democratic Class Structure (Palo Alto: Stanford University Press, 1963).

<sup>45</sup> Richard Centers, The Psychology of Social Classes (Princeton: Princeton University Press, 1969).

<sup>46</sup> Andrew W. Lind, An Island Community (Chicago: University of Chicago, 1938).

<sup>47</sup> Albert J. Reiss, "Guttman Scales of Occupations," Occupation and Social Status (New York: Free Press, 1961), pp. 90-99.



associated with scaling the ninety occupations according to Guttman's techniques. Occupations are selected from a finite set of titles, and in the case of the NORC list they cannot be considered a random sample from a universe of occupational titles. Even if all the items did scale it would not necessarily demonstrate there is an underlying prestige continuum for a universality of all occupations.

Occupation, by definition, cannot possibly be taken as describing esteem; moreover, when an occupation is used as an index position in one structure it is substituted for a sum of positions in many structures. Thus, in order to appraise occupation values as an index, it should be compared with other current techniques for locating societal position.

The problem posed by the number and variety of position, held by one person, was confronted by Chapin with the construction of the "Living Room Scale." Considerable evidence as to the validity of this scale exists; one such study indicates its superiority over occupation.<sup>48</sup> The Chapin scale best represents a cluster of items including income, occupation, education, a measure of social participation and the Living Room Scale. However, the Living Room Scale presents one grave drawback. The scale is questionable because the study was conducted with only a sample of

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<sup>48</sup>Louis Guttman, "A Review of Chapin's Social Status Scale," American Sociological Review, VIII, No. 3 (June, 1963), 362-369.

67 Minneapolis Black Homes, thereby making research usage somewhat risky.

A socioeconomic determiner that combines several variables is the American Home Scale.<sup>49</sup> This scale consists of five scores: cultural, aesthetic, economic and miscellaneous. The scale raises and fails to alleviate the same doubts as other group administered scales of "home environment" intended to be answered by school age subjects with a "yes" or "no." The authors assume the subjects will answer directly questions about material possessions, parents' education and membership in status-giving and labor organizations, etc. Another apparent flaw is that the authors assume validity on the "home environment" question. The obvious criticism is, can "home environment" be ascertained without trained field work observations of the social relationships within the family? Furthermore, can the social relationships within the family be measured with sufficient validity through group administration to warrant the use of results in "individual guidance," which the authors suggest as their primary purpose.

For survey purposes and for some research dealing with a large number of subjects, the American Home Scale has some value. The tests of reliability and norms of standardization upon eighth grade pupils in 12 American cities should enhance its use for group studies.

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<sup>49</sup>Oscar Buros, op. cit., p. 417.

### Summary

A review of literature related to music preference studies disclosed several points. Several studies indicated that age, familiarity with the musical work and musical training were influential in determining musical preference. In addition, Baumann concluded that geographical location was influential in determining musical preference.

A review of literature related to socioeconomic class determinants revealed two common measures for determining socioeconomic status. The two most common types of measures were prestige ratings of persons and socioeconomic status scales. The three most commonly used measures of socioeconomic status were income, education and occupation. Each of these measures consisted of a rank or scale order that would stratify a population from high to low status.

## CHAPTER III

### DESIGN OF THE STUDY

#### Sample

The data were gathered from 19 different schools in 11 different cities covering four geographical locations throughout the United States. Table 1 reveals the breakdown of subjects by school level and race. The sample included black and white subjects from all socioeconomic and musical backgrounds.

Table 1. Racial and educational level of the testing sample

School Level	Black	White	Total
Junior High	176	103	279
Senior High	125	286	411
College	<u>170</u>	<u>122</u>	<u>292</u>
Total	471	511	982

#### Method of Gathering Data

For the purpose of this study the writer developed a written questionnaire and a taped music inventory consisting of 30 musical excerpts, approximately 30 to 40 seconds each in length. The questionnaire may be found in Appendix D.



The questionnaire and two copies of the taped inventory were sent to testers in (1) Baton Rouge, Louisiana; (2) Chicago, Illinois; (3) Jackson, Mississippi; (4) Las Vegas, Nevada; (5) Nashville, Tennessee; (6) Norfolk, Virginia; (7) Washington, D.C.; and (8) Lansing, East Lansing, and Williamston, Michigan. The Duncan Socioeconomic Index was used to gauge socioeconomic status.

#### Descriptions of Data-Gathering Instruments

The written questionnaire was designed to indicate age, grade, school, location, occupation and music experience of all subjects. These data provided necessary information for relating music preference to various cultural situations. The questionnaire also included instructions on the use of the seven point music preference scale.

The Otis Dudley Duncan Socioeconomic Index (see Appendix E) was used to determine the socioeconomic status of the subjects. Briefly described, the Duncan scale determines socioeconomic status by the father's occupation. Each occupation is assigned a numerical rating. As a result each subject was placed in a specific socioeconomic class. In case the father was absent the subject was asked to indicate the occupation of his mother or guardian.

The writer devised 10 socioeconomic classes and one "no response" classification to classify each subject. The primary categories were Upper, Middle and Lower. Within

each primary category there are three smaller (upper, middle and lower). The socioeconomic classes and their numerical ratings were as follows:

upper-Upper	90-99
middle-Upper	80-89
lower-Upper	70-79
upper-Middle	60-69
middle-Middle	50-59
lower-Middle	40-49
upper-Lower	30-39
middle-Lower	20-29
lower-Lower	10-19
below lower-Lower	0-9
no Response	

The "No Response" socioeconomic classification included all subjects that fail to indicate an occupation on the questionnaire. Of the 982 tested subjects, 96 failed to indicate an occupation on the questionnaire, thereby making it necessary to create a separate socioeconomic classification.

The seven point scale was preferred over the five point scale in gauging musical preferences. The five statement scale was preferred in some research studies. Among the people who have used this scale are Sayre<sup>1</sup> and Schuessler.<sup>2</sup>

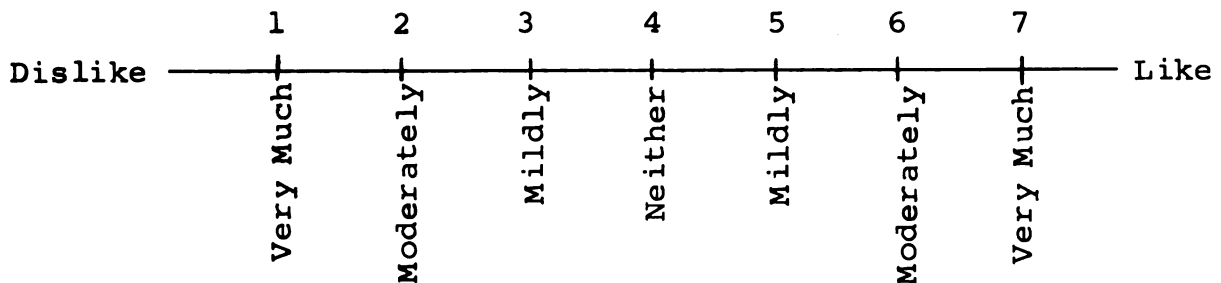
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<sup>1</sup>Jeanette Sayre, "A Comparison of Three Indices of Attitude Toward Radio Advertising," Journal of Applied Psychology, XXIII (1939), 28.

<sup>2</sup>Karl F. Schuessler, "Musical Taste and Socioeconomic Background" (unpublished doctoral dissertation, Indiana University, 1948).

Sayre used the Likert<sup>3</sup> procedure. Briefly described the Likert procedure consists of five statements: "strongly agree," "agree," "uncertain," "disagree," or "strongly disagree." The advantage of the Likert procedure is that it forms a continuum from liking to disliking.

Although the writer preferred the organization of the Likert continuum from liking to disliking, it was necessary to expand the five point scale to a seven point scale. The seven point scale augmented the respondent's leverage between definite positive or definite negative responses. Among researchers using the seven point scale was Bartlett.<sup>4</sup> Bartlett used the following scale:



The Bartlett Scale compared favorably with the Likert procedure of forming a continuum from liking to disliking;

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<sup>3</sup>Rensis Likert, "Technique for the Measurement of Attitudes," Archives of Psychology, No. 140, 1932, p. 81.

<sup>4</sup>Dale L. Bartlett, "The Effect of Repeated Listeners on Discrimination of Musical Structure and Some Relationships Between this Discrimination and Affective Shift," Project No. 8-F-032, Final Report, U.S. Department of Health, Education and Welfare, University of Kansas, 1969, p. 34.

therefore, the writer adopted the Bartlett Scale for this study.

The taped music inventory consisted of thirty musical excerpts of approximately 30-40 seconds each representing the following ten music categories: classical, light classical, jazz, spirituals, country and western, soul, blues, rock and roll, show and folk tunes. Table 2 reveals the title, order, composer and/or artist of the musical excerpts.

The musical excerpts were divided into ten specific categories for analysis purposes. Table 3 reveals the category, title, composer and/or artist of the combined musical excerpts.

From data on the questionnaire the writer developed seven different ranges of musical experience to rank each subject tested. The musical experience levels are as follows:

- (a) 0-5 months
- (b) 6-12 months
- (c) 1 year
- (d) 2 and 3 years
- (e) 4 and 5 years
- (f) 6 and 7 years
- (g) 8 or more years



Table 2. Music preference inventory

Title	Composer or Artist	Category
1. Aram	Gerald Wilson	Jazz
2. Fire	Jim Hendrix	Rock & Roll
3. Just Beyond the Moon	Tex Ritter	Country & Western
4. Baby-baby-baby	Aretha Franklin	Soul
5. Symphony No. 88 (3rd Movement)	Joseph Haydn	Classical
6. Jet Song	Leonard Bernstein	Show
7. Intermezzo	Pietro Mascagni	Light Classical
8. Tears Will Be the Chaser		Country & Western
9. The Seventh Son	Mose Allison	Blues
10. Gone the Rainbow	Peter, Paul and Mary	Folk
11. Aisha	John Coltrane	Jazz
12. I'm the Greatest Star	Barbara Streisand	Show
13. Sixth Symphony (Theme from)	Peter Tschaikovsky	Light Classical
14. Sing Me Back Home	Merle Haggard	Country & Western
15. Why Did She Have to Leave Me	Temptations	Soul
16. Sabre Dance	Aram Khachaturian	Light Classical
17. I Couldn't Hear Nobody Pray	Fisk Jubilee Singers	Spiritual
18. I've Got News for You	Ray Charles	Blues
19. Mornin' Reverend	Thad Jones and Mel Lewis	Jazz
20. Wanderlove	Tom and Dick Smothers	Folk
21. Six Man Band	Association	Rock & Roll
22. The Monkey	Bill Doggett	Rock & Roll
23. My Favorite Things	Julie Andrews	Show
24. Our Bread of Life	Community Youth Ensemble	Spiritual
25. Symphony No. 4 (1st Movement)	Johannes Brahms	Classical
26. Jesus Lover of My Soul	Edwin Hawkins Singers	Spiritual
27. Mo-Mary	Richard Dyer Bennett	Folk
28. Lonesome Lover Blues	Pete Condoni	Blues
29. A Change Is Gonna Come	Aretha Franklin	Soul
30. Greeting Prelude	Igor Stravinsky	Classical

Table 3. Combined music excerpts listed by categories

Category	Excerpts	Composer or Artist
I. Jazz	(1) Aram (2) Aisha (3) Mornin Reverend	Gerald Wilson John Coltrane Thad Jones and Mel Lewis
II. Classical	(1) Symphony No. 88 (3rd Movement) (2) Symphony No. 4 (1st Movement) (3) Greeting Prelude	Joseph Haydn Johannes Brahms Igor Stravinsky
III. Country & Western	(1) Just Beyond the Moon (2) Tears Will Be the Chaser (3) Sing Me Back Home	Tex Ritter Merle Haggard
IV. Spirituals	(1) I Couldn't Hear Nobody Pray (2) Our Bread of Life (3) Mo-Mary	Fisk Jubilee Singers Community Youth Ensemble Richard Dyer Bennett
V. Light Classical	(1) Intermezzo (2) Theme From the Sixth Symphony (3) Sabre Dance	Pietro Mascagni Peter Tschaikovsky Aram Khachaturian
VI. Soul	(1) Baby-Baby-Baby (2) Why Did She Have to Leave Me (3) A Change is Gonna Come	Aretha Franklin Temptations Aretha Franklin
VII. Blues	(1) The Seventh Son (2) I've Got News for You (3) Lonesome Lover Blues	Mose Allison Ray Charles Pete Condoni
VIII. Rock & Roll	(1) Fire (2) Six Man Band (3) The Monkey	Jimi Hendrix Association Bill Doggett
IX. Show	(1) Jet Song (2) I'm the Greatest Star (3) My Favorite Things	Leonard Bernstein Barbara Streisand Julie Andrews
X. Folk	(1) Gone the Rainbow (2) Wanderlove (3) Mo-Mary	Peter, Paul and Mary Tom and Dick Smothers Richard Dyer Bennett

### Item Analysis

Two major problems encountered when developing the music preference test were validity and reliability. Evidence must be given to indicate that the test is measuring what it purports to measure and that it will measure with consistency when given repeatedly.

Content validity was used to determine the authenticity of the music categories. Kerlinger defines content validity as the "representativeness" or "sampling adequacy" of the content, the substance, the matter, or the topics of a measuring instrument.<sup>5</sup> Five music graduate assistants were used to judge the content validity of the music preference test. Each judge was asked to indicate the music category of each of the musical excerpts. Wherever opinions differed, the musical excerpts were changed until all judges agreed on the music category of each musical excerpt.

Reliability for each music category was established by the test-retest method using the Pearson Product-Moment Coefficient of Correlation. The tests were given to 38 black and white high school students over a three day period with and without musical experience. The results of the analysis revealed reliability coefficients as follows:

(1) jazz,  $r = .85$ ; (2) classical,  $r = .74$ ; (3) country and

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<sup>5</sup>Fred N. Kerlinger, Foundations of Behavioral Research (New York: Holt, Rinehart and Winston, 1967), p. 446.

western,  $r = .88$ ; (4) spirituals,  $r = .84$ ; (5) light classical,  $r = .83$ ; (6) soul,  $r = .84$ ; (7) blues,  $r = .76$ ; (8) rock and roll,  $r = .84$ ; (9) show,  $r = .89$ ; (10) folk,  $r = .88$ . The music category reliabilities are consistent with those recommended by Guilford, who maintains that for tests to be considered reliable they should yield coefficient values of .70 to .98.<sup>6</sup>

### Factor Analysis

A factor analysis of the music categories was conducted to determine how the subjects perceived music. The results of the analysis revealed that classical and light classical music was perceived as one category, also blues and jazz was perceived as one category (see tables in Appendix C). In addition, the factor analysis indicated that the spiritual musical excerpts were the only excerpts perceived as a specific music category.

### Design

The present study consisted of single testing and questionnaire periods administered to 982 subjects in 11 different cities throughout the country. The obtained data were coded and key punched on IBM cards for each subject and

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<sup>6</sup>J. P. Guilford, Fundamental Statistics in Psychology and Education (4th ed.; New York: McGraw-Hill Book Company, 1964), p. 104.



later analyzed on the 6500 Computer in the Michigan State University's Computer Center.

### Analysis Procedures

The chi-square statistical procedure was used to determine the significant differences in response between the variables in each hypothesis. Concerning chi-square Siegel states, "chi-square usually tests the hypothesis that two groups differ with respect to some characteristics and therefore with respect to the relative frequency with which group members fall in several categories."<sup>7</sup>

Beyond the significant difference it was also necessary to ascertain the degree of association between the two variables. The Cramer Contingency Coefficient mean square was preferred to the Coefficient of Contingency. The major disadvantage of the latter index is that it cannot attain an upper limit of 1.00 unless the number of categories for both variables is infinite.<sup>8</sup> Obviously, this limits the usefulness of the Coefficient of Contingency as a descriptive statistic, therefore, the Cramer statistic was used to determine the degree of association between the two variables in each hypothesis.

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<sup>7</sup>Sidney Siegel, Non-Parametric Statistics (New York: McGraw-Hill Book Company, 1956), p. 104.

<sup>8</sup>William Hays, Statistics for Psychologists (New York: Holt, Rinehart, and Winston, 1964), p. 66ff.

Since the strength of association in a sample must lie between 0, reflecting complete independence, and 1, showing complete dependence, specific terms were used to interpret the statistics. The terms and their meanings are as follows:

- |                   |             |
|-------------------|-------------|
| (a) very weak     | .0 to .20   |
| (b) weak          | .21 to .40  |
| (c) mildly strong | .41 to .60  |
| (d) strong        | .61 to .80  |
| (e) very strong   | .81 to 1.00 |

The analysis of the data also included extensive descriptive references to specific cells. The cells were discussed in terms of observed and expected frequencies and their significance to the hypothesis under consideration. Individual cells were discussed whenever the writer believed the cells contributed significant frequencies to the overall chi-square:

The Kruskal-Wallis one-way analysis of variance was used to determine the significant difference in preference response between the down and the across variables in each hypothesis. Significant differences in the down and across variables were determined by comparing the degrees of freedom ( $K-1$ ) with the statistical print out of the down and across variables.

A summary of the analytical procedures is as follows:

1. Chi-square was used to determine if a significant difference existed in music preference attributable to the specific variable in each hypothesis.
2. Cramer's Contingency Coefficient was used to determine the strength of association between the variables in each hypothesis.
3. The Kruskal-Wallis one-way analysis of variance was used to determine if a significant difference in preference response existed between the down and across variable.
4. Descriptive reference to specific cells was used to determine what cells and variables contributed significant frequencies to the overall chi-square.

## CHAPTER IV

### PRESENTATION AND ANALYSIS OF THE DATA

The presentation and analysis of the data will be presented in the following order:

1. Chi-square analysis of preference response for music preference by socioeconomic status.
2. Chi-square analysis of preference response for music preference by race.
3. Chi-square analysis of preference response for music preference by musical experience.
4. Chi-square analysis of preference response for music preference by school level.
5. Chi-square analysis of preference response for music preference by geographical location.
6. Chi-square analysis of preference response for music preference by preferred music category.

#### Socioeconomic Status

##### Chi-Square Analysis of Preference Response for Rock and Roll Music

Table 4 reveals a significant difference between socioeconomic status and preference for rock and roll music; therefore, the null-hypothesis was rejected. The degree of

Table 4. Chi-square analysis of preference response for rock and roll music by socioeconomic status

Socioeconomic Classes	Preference Scale						
	1	2	3	4	5	6	7
<u>No Response</u>							
1. Frequency	20	20	24	12	52	81	52
2. Theoretical frequency	16	16	22	27	49	60	71
3. Chi-square	0.83	0.97	0.21	8.15	0.13	<u>7.39</u>	<u>4.89</u>
<u>Below Lower Lower</u>							
1. Frequency	27	17	24	30	39	58	72
2. Theoretical frequency	17	16	22	27	51	61	72
3. Chi-square	6.36	0.02	0.12	0.24	2.63	0.18	0.00
<u>Lower Lower</u>							
1. Frequency	51	63	77	88	172	198	224
2. Theoretical frequency	55	54	77	90	165	201	236
3. Chi-square	0.23	1.61	0.22	0.02	0.27	0.03	0.62
<u>Middle Lower</u>							
1. Frequency	13	18	29	48	77	72	82
2. Theoretical frequency	21	21	28	35	64	78	92
3. Chi-square	3.16	0.38	0.01	5.01	2.56	0.44	1.02
<u>Upper Lower</u>							
1. Frequency	14	11	12	26	33	37	58
2. Theoretical frequency	12	12	16	20	36	44	52
3. Chi-square	0.33	0.05	1.02	2.01	0.30	1.14	0.70
<u>Lower Middle</u>							
1. Frequency	15	16	25	32	52	55	72
2. Theoretical frequency	17	16	22	27	51	61	72
3. Chi-square	0.17	0.00	0.32	0.77	0.04	0.65	0.00
<u>Middle Middle</u>							
1. Frequency	14	3	10	15	19	38	42
2. Theoretical frequency	9	9	12	14	27	32	38
3. Chi-square	3.04	3.70	0.27	0.01	2.21	0.97	0.39
<u>Upper Middle</u>							
1. Frequency	11	13	14	20	40	51	85
2. Theoretical frequency	15	14	20	24	44	54	63
3. Chi-square	0.90	0.13	1.58	0.67	0.41	0.14	<u>7.44</u>
<u>Lower Upper</u>							
1. Frequency	18	12	20	13	42	59	70
2. Theoretical frequency	15	14	20	24	<del>44</del> 44	54	63
3. Chi-square	0.77	0.39	0.00	5.05	0.11	0.51	<u>6.71</u>
<u>Middle Upper</u>							
1. Frequency	1	6	8	14	23	21	29
2. Theoretical frequency	6	6	9	10	19	23	28
3. Chi-square	4.53	0.00	0.03	1.19	0.70	0.25	0.07
<u>Upper Upper</u>							
1. Frequency	0	2	3	4	8	6	10
2. Theoretical frequency	2	2	3	3	6	8	9
3. Chi-square	2.06	0.00	0.00	0.11	0.49	0.32	0.12

$\chi^2 = 109.159^{**}$  (\*Represents .05 level of significance; \*\*represents .01 level of significance in all tables.)

DF = 60

$\phi = 0.0781$

Kruskal-Wallis down = 16.601; across = 16.042



association was "very weak" between socioeconomic status and preference for rock and roll music.

Neither the down or across variables were significant according to Kruskal-Wallis analysis. Cell 6 indicated that the "no response" and cell 7 indicated that the "upper Middle" and "lower Upper" classes all differed in the way they rated rock and roll music.

#### Chi-Square Analysis of Preference Response for Jazz Music

The null-hypothesis was rejected in Table 5 as revealed by the chi-square analysis. The degree of association was "very weak" between socioeconomic status and jazz music.

Two cells, 1 and 7, revealed significant chi-squares in the difference between socioeconomic status and music preference. The "upper Lower" class revealed a more observed than expected frequency in cell 1 and the "below lower Lower" class revealed a more observed than expected frequency in cell 7.

The Kruskal-Wallis down variable indicated that the socioeconomic classes differed in the way they rated jazz.

The "below lower Lower" class demonstrated slightly stronger preference values for jazz.

Table 5. Chi-square analysis of preference response for jazz music by socioeconomic status

Socioeconomic Classes	Preference Scale						
	1	2	3	4	5	6	7
<u>No Response</u>							
1. Frequency	32	23	30	31	56	47	42
2. Theoretical frequency	35	24	33	35	53	45	36
3. Chi-square	0.32	0.01	0.25	0.48	0.18	0.09	0.90
<u>Below Lower Lower</u>							
1. Frequency	43	23	34	26	41	45	55
2. Theoretical frequency	36	24	34	36	54	46	37
3. Chi-square	1.27	0.04	0.00	2.74	3.15	0.02	<u>8.62</u>
<u>Lower Lower</u>							
1. Frequency	126	80	112	110	181	148	116
2. Theoretical frequency	118	79	110	117	177	150	121
3. Chi-square	0.49	0.02	0.03	0.47	0.10	0.03	0.23
<u>Middle Lower</u>							
1. Frequency	48	36	47	52	61	49	46
2. Theoretical frequency	46	31	43	46	69	58	47
3. Chi-square	0.09	0.98	0.42	0.89	0.85	1.51	0.02
<u>Upper Lower</u>							
1. Frequency	42	20	25	32	35	21	17
2. Theoretical frequency	26	17	24	26	39	33	27
3. Chi-square	<u>9.79</u>	0.42	0.02	1.47	0.38	4.40	3.51
<u>Lower Middle</u>							
1. Frequency	25	27	37	41	56	47	34
2. Theoretical frequency	36	24	34	36	54	46	37
3. Chi-square	3.46	0.36	0.33	0.71	0.06	0.02	0.25
<u>Middle Middle</u>							
1. Frequency	14	11	15	19	23	38	21
2. Theoretical frequency	19	13	18	19	29	24	20
3. Chi-square	1.36	0.22	0.43	0.00	1.08	7.73	0.10
<u>Upper Middle</u>							
1. Frequency	32	15	27	31	54	46	29
2. Theoretical frequency	32	21	29	31	47	40	33
3. Chi-square	0.00	1.74	0.21	0.00	0.92	0.80	0.38
<u>Lower Upper</u>							
1. Frequency	27	20	24	35	53	40	35
2. Theoretical frequency	32	21	29	31	47	40	33
3. Chi-square	0.70	0.05	1.02	0.39	0.66	0.00	0.18
<u>Middle Upper</u>							
1. Frequency	7	3	16	14	30	20	12
2. Theoretical frequency	14	9	13	14	21	18	14
3. Chi-square	3.37	4.16	0.76	0.00	4.22	0.33	0.33
<u>Upper Upper</u>							
1. Frequency	3	7	4	5	6	6	2
2. Theoretical frequency	4	3	4	4	7	6	5
3. Chi-square	0.48	5.46	0.00	0.07	0.06	0.00	1.45

 $\chi^2 = 88.409^{**}$ Kruskal-Wallis down = 32.440<sup>\*\*</sup>; across = 2.238

DF = 60

 $\phi = 0.0707$

### Chi-Square Analysis of Preference Response for Blues Music

As in previous tables the null-hypothesis was rejected in Table 6 as revealed by the chi-square analysis. The degree of association was "very weak" between socioeconomic status and preference for blues music.

The "below lower Lower" class disclosed a more observed than expected frequency in cell 7 and the "upper Lower" class disclosed a less observed than expected frequency in cell 7.

The Kruskal-Wallis down variable indicated that socioeconomic classes differed in the way they rated the blues music. The "below lower Lower" class demonstrated the strongest preference values for the blues music. In addition the "upper Middle" and "middle Upper" classes revealed noticeable indifferent attitudes in cell 4 toward the blues music.

### Chi-Square Analysis of Preference Response for Soul Music

Table 7 disclosed a significant difference between socioeconomic status and preference for soul music thereby rejecting the null-hypothesis. Beyond the significant difference the degree of association was "very weak" between socioeconomic status and preference for soul music. Three cells, 5, 6, and 7, demonstrated significant chi-squares on the difference between socioeconomic status and preference for soul music.

Table 6. Chi-square analysis of preference response for blues music by socio-economic status

Socioeconomic Classes	Preference Scale						
	1	2	3	4	5	6	7
<u>No Response</u>							
1. Frequency	25	30	22	28	47	59	50
2. Theoretical frequency	29	25	30	37	55	48	37
3. Chi-square	0.59	1.11	2.20	2.06	1.20	2.76	4.22
<u>Below Lower Lower</u>							
1. Frequency	36	20	24	26	45	59	57
2. Theoretical frequency	30	25	31	38	56	39	38
3. Chi-square	1.26	1.11	1.51	3.55	2.31	2.21	<u>9.14</u>
<u>Lower Lower</u>							
1. Frequency	105	92	98	119	186	156	117
2. Theoretical frequency	98	83	101	123	185	159	125
3. Chi-square	0.56	1.03	0.08	0.11	0.01	0.05	0.53
<u>Middle Lower</u>							
1. Frequency	41	34	47	43	72	65	37
2. Theoretical frequency	38	32	39	48	72	62	49
3. Chi-square	0.25	0.10	1.56	0.46	0.00	0.17	2.77
<u>Upper Lower</u>							
1. Frequency	33	21	26	34	41	25	11
2. Theoretical frequency	21	18	22	27	41	35	28
3. Chi-square	6.20	0.43	0.65	1.80	0.00	2.84	<u>9.92</u>
<u>Lower Middle</u>							
1. Frequency	22	21	33	40	62	51	38
2. Theoretical frequency	30	25	31	38	56	49	38
3. Chi-square	2.06	0.73	0.15	0.15	0.54	0.11	0.00
<u>Middle Middle</u>							
1. Frequency	14	10	16	16	37	23	25
2. Theoretical frequency	16	13	16	20	30	26	20
3. Chi-square	0.19	0.84	0.00	0.74	1.73	0.27	1.13
<u>Upper Middle</u>							
1. Frequency	17	23	30	48	49	34	33
2. Theoretical frequency	26	22	27	33	49	43	33
3. Chi-square	3.20	0.03	0.32	<u>6.91</u>	0.00	1.74	0.00
<u>Lower Upper</u>							
1. Frequency	26	17	22	31	53	46	39
2. Theoretical frequency	26	22	27	33	49	43	34
3. Chi-square	0.00	1.21	0.93	0.11	0.25	0.26	0.88
<u>Middle Upper</u>							
1. Frequency	8	5	14	24	26	12	13
2. Theoretical frequency	11	10	12	14	22	19	15
3. Chi-square	1.01	2.25	0.41	<u>6.49</u>	0.91	2.32	0.18
<u>Upper Upper</u>							
1. Frequency	2	6	8	5	4	6	2
2. Theoretical frequency	4	3	4	5	7	6	5
3. Chi-square	0.77	2.63	4.59	0.02	1.26	0.00	1.57

$$\chi^2 = 128.351^{**}$$

$$\text{Kruskal-Wallis down} = 43.683^{**}; \text{ across} = 8.107$$

$$DF = 60$$

$$\phi = 0.0848$$

Table 7. Chi-square analysis of preference response for soul music by socioeconomic status

Socioeconomic Classes	Preference Scale						
	1	2	3	4	5	6	7
<u>No Response</u>							
1. Frequency	10	5	5	8	4	22	207
2. Theoretical frequency	12	10	14	19	28	42	136
3. Chi-square	0.47	2.58	5.10	6.42	<u>20.33</u>	9.35	<u>37.71</u>
<u>Below Lower Lower</u>							
1. Frequency	15	5	5	8	12	22	200
2. Theoretical frequency	13	10	15	20	28	43	139
3. Chi-square	0.41	2.75	6.39	6.78	9.46	<u>10.05</u>	<u>27.17</u>
<u>Lower Lower</u>							
1. Frequency	35	34	40	60	78	112	514
2. Theoretical frequency	42	34	48	64	93	140	453
3. Chi-square	1.02	0.00	1.35	0.22	2.37	5.49	8.13
<u>Middle Lower</u>							
1. Frequency	12	16	26	21	31	70	163
2. Theoretical frequency	16	13	19	25	36	54	176
3. Chi-square	1.05	0.62	2.88	0.57	0.70	4.57	0.96
<u>Upper Lower</u>							
1. Frequency	19	10	20	23	28	38	54
2. Theoretical frequency	9	7	11	14	20	31	100
3. Chi-square	10.65	0.88	8.41	5.74	2.81	1.72	20.93
<u>Lower Middle</u>							
1. Frequency	15	12	18	26	40	51	105
2. Theoretical frequency	13	10	15	20	28	43	139
3. Chi-square	0.41	0.26	0.74	2.16	4.74	1.60	8.15
<u>Middle Middle</u>							
1. Frequency	3	2	3	11	19	28	75
2. Theoretical	7	5	8	10	15	23	73
3. Chi-square	2.04	2.19	2.92	0.04	1.06	1.30	0.04
<u>Upper Middle</u>							
1. Frequency	11	7	21	22	40	64	69
2. Theoretical frequency	11	9	13	17	25	37	121
3. Chi-square	0.00	0.47	5.11	1.40	9.17	18.82	22.68
<u>Lower Upper</u>							
1. Frequency	9	11	14	21	35	40	104
2. Theoretical frequency	11	9	13	17	25	37	121
3. Chi-square	0.40	0.41	0.09	0.89	4.10	0.17	2.51
<u>Middle Upper</u>							
1. Frequency	10	6	7	9	20	21	29
2. Theoretical frequency	5	4	6	7	11	16	53
3. Chi-square	5.46	1.06	0.34	0.32	7.72	1.33	10.83
<u>Upper Upper</u>							
1. Frequency	1	6	3	6	6	3	8
2. Theoretical frequency	2	1	2	2	4	5	17
3. Chi-square	0.20	17.44	0.77	5.34	1.76	0.98	4.86

 $\chi^2 = 379.694^{**}$ Kruskal-Wallis down = 262.351<sup>\*\*</sup>; across = 57.397<sup>\*\*</sup>

DF = 60

 $\phi = 0.1466$



The "no response" and "below lower Lower" classes disclosed more observed than expected frequencies in cell 7, and the "upper Middle" classes revealed a less observed than expected frequency in cell 7. In addition, the "upper Middle" and "upper Upper" classes demonstrated a more observed than expected frequency in cell 6 and the "below lower Lower" and "no response" classes revealed a less observed than expected frequency in cells 5 and 6.

The Kruskal-Wallis down and across variables indicated that the "no response" socioeconomic classification displayed the strongest preference values for soul music.

#### Chi-Square Analysis of Preference Response for Spiritual Music

The data in Table 8 revealed a significant difference between socioeconomic status and preference for spirituals; therefore, the null-hypothesis was rejected. Beyond the significant difference the degree of association was "very weak" between socioeconomic status and preference for spiritual music. Three cells, 1, 6 and 7 disclosed significant chi-squares on the difference between socioeconomic status and preference for spirituals.

The "no response" and "below lower Lower" classes displayed more observed than expected frequencies in cells 6 and 7. In addition, the "upper Lower" class displayed a more observed than expected frequency in cell 1, and the "upper Middle" class displayed a less observed than expected frequency in cell 7.

Table 8. Chi-square analysis of preference response for spiritual music by socioeconomic status

Socioeconomic Classes	Preference Scale						
	1	2	3	4	5	6	7
<u>No Response</u>							
1. Frequency	28	15	14	26	38	59	81
2. Theoretical frequency	62	26	22	33	35	41	42
3. Chi-square	<u>18.84</u>	4.82	2.74	1.41	0.26	<u>7.74</u>	<u>36.59</u>
<u>Below Lower Lower</u>							
1. Frequency	48	12	14	23	37	59	74
2. Theoretical frequency	64	27	22	34	36	42	43
3. Chi-square	3.86	8.21	3.04	3.32	0.04	<u>6.78</u>	<u>22.70</u>
<u>Lower Lower</u>							
1. Frequency	205	83	79	111	111	142	142
2. Theoretical frequency	208	88	73	110	117	138	140
3. Chi-square	0.05	0.26	0.55	0.01	0.29	0.13	0.02
<u>Middle Lower</u>							
1. Frequency	86	30	23	46	44	56	54
2. Theoretical frequency	81	34	28	43	45	53	54
3. Chi-square	0.32	0.49	0.96	0.26	0.04	0.12	0.00
<u>Upper Lower</u>							
1. Frequency	73	25	15	31	15	19	14
2. Theoretical frequency	46	19	16	24	26	30	31
3. Chi-square	<u>16.15</u>	1.67	0.06	1.95	4.45	4.19	<u>9.15</u>
<u>Lower Middle</u>							
1. Frequency	80	38	23	31	30	34	31
2. Theoretical frequency	64	27	22	34	36	42	43
3. Chi-square	4.17	4.62	0.02	0.19	0.92	1.55	3.26
<u>Middle Middle</u>							
1. Frequency	28	8	9	17	28	26	25
2. Theoretical frequency	34	14	12	18	19	22	23
3. Chi-square	0.94	2.69	0.63	0.02	4.40	0.63	0.25
<u>Upper Middle</u>							
1. Frequency	64	34	28	37	39	19	13
2. Theoretical frequency	56	24	19	29	31	37	38
3. Chi-square	1.19	4.65	3.72	1.95	1.87	8.67	<u>16.03</u>
<u>Lower Upper</u>							
1. Frequency	59	24	22	31	29	39	30
2. Theoretical frequency	56	24	19	29	31	37	38
3. Chi-square	0.18	0.00	0.32	0.08	0.17	0.12	1.51
<u>Middle Upper</u>							
1. Frequency	21	18	14	14	20	7	8
2. Theoretical frequency	24	10	8	13	14	16	16
3. Chi-square	0.45	5.84	3.57	0.10	2.94	5.12	4.27
<u>Upper Upper</u>							
1. Frequency	10	9	4	3	3	4	0
2. Theoretical frequency	8	3	3	4	4	5	5
3. Chi-square	0.57	9.72	0.57	0.31	0.45	0.27	5.29

 $\chi^2 = 266.091^{**}$ Kruskal-Wallis down = 190.285<sup>\*\*</sup>; across = 19.599\*

DF = 60

 $\phi = 0.1224$

The Kruskal-Wallis down and across variables indicated that the "no response" socioeconomic classification revealed the strongest preference values for spiritual music.

#### Chi-Square Analysis of Preference Response for Classical Music

Table 9 divulged a significant difference between socioeconomic status and preference for classical music thereby rejecting the null-hypothesis. Beyond the significant difference the degree of association was "very weak" between socioeconomic status and preference for classical music.

The "lower Lower" class revealed a less observed than expected frequency in cell 7 and the "upper Middle," "lower Upper" and "middle Upper" classes revealed more observed than expected frequencies in cell 7.

The Kruskal-Wallis down and across variables indicated that the "middle Upper" class demonstrated the strongest preference value for classical music.

#### Chi-Square Analysis of Preference Response for Light Classical Music

The null hypothesis was rejected in Table 10 as revealed by the chi-square analysis. In addition, the degree of association was "very weak" between socioeconomic status and preference for light classical music. Three cells, 3, 6 and 7, demonstrated significant chi-squares on the differences between socioeconomic status and preference for light classical music.

Table 9. Chi-square analysis of preference response for classical music by socioeconomic status

Socioeconomic Classes	Preference Scale						
	1	2	3	4	5	6	7
<u>No Response</u>							
1. Frequency	60	32	37	51	35	24	22
2. Theoretical frequency	66	27	29	49	43	32	24
3. Chi-square	0.57	1.09	1.93	3.02	1.58	1.81	0.15
<u>Below Lower Lower</u>							
1. Frequency	83	22	34	46	35	28	19
2. Theoretical frequency	68	27	30	41	44	32	24
3. Chi-square	3.46	1.00	0.49	0.63	1.94	0.57	1.23
<u>Lower Lower</u>							
1. Frequency	250	208	115	122	144	82	52
2. Theoretical frequency	221	89	98	134	144	106	80
3. Chi-square	3.72	4.06	2.77	1.03	0.00	5.27	<u>9.85</u>
<u>Middle Lower</u>							
1. Frequency	87	39	39	50	47	50	27
2. Theoretical frequency	86	35	38	52	56	41	31
3. Chi-square	0.01	0.57	0.01	0.07	1.50	1.97	0.54
<u>Upper Lower</u>							
1. Frequency	61	14	26	21	26	33	11
2. Theoretical frequency	49	20	22	29	32	23	18
3. Chi-square	3.12	1.58	0.86	2.41	1.07	4.11	2.48
<u>Lower Middle</u>							
1. Frequency	62	23	22	48	46	30	36
2. Theoretical frequency	68	27	30	41	44	32	24
3. Chi-square	0.47	0.65	2.18	1.22	0.06	0.16	5.40
<u>Middle Middle</u>							
1. Frequency	33	14	12	16	37	16	13
2. Theoretical frequency	36	14	16	22	23	17	13
3. Chi-square	0.21	0.00	0.95	1.45	7.93	0.06	0.00
<u>Upper Middle</u>							
1. Frequency	44	24	21	38	42	31	34
2. Theoretical frequency	59	24	26	36	39	28	21
3. Chi-square	3.95	0.00	1.10	0.12	0.26	0.25	7.31
<u>Lower Upper</u>							
1. Frequency	45	17	19	34	47	37	35
2. Theoretical frequency	59	24	26	36	39	28	21
3. Chi-square	3.45	1.96	2.07	0.09	1.73	2.67	<u>8.52</u>
<u>Middle Upper</u>							
1. Frequency	18	4	6	15	21	18	20
2. Theoretical frequency	26	10	12	16	17	12	9
3. Chi-square	2.38	3.93	2.63	0.02	0.98	2.59	<u>12.10</u>
<u>Upper Upper</u>							
1. Frequency	3	3	1	10	8	7	1
2. Theoretical frequency	8	3	4	5	5	4	3
3. Chi-square	3.44	0.00	1.99	4.83	1.16	2.26	1.35

$$\chi^2 = 160.747^{**}$$

$$DF = 60$$

$$\text{Kruskal-Wallis down} = 81.608^{**}; \text{ across} = 43.408^{**}$$

$$\phi = 0.0953$$





Table 10. Chi-square analysis of preference response for light classical music by socioeconomic status

Socioeconomic Classes	Preference Scale						
	1	2	3	4	5	6	7
<u>No Response</u>							
1. Frequency	41	31	29	33	59	37	31
2. Theoretical frequency	44	24	26	30	53	46	35
3. Chi-square	0.23	1.79	0.41	0.00	0.69	1.80	0.38
<u>Below Lower Lower</u>							
1. Frequency	63	29	32	34	43	40	26
2. Theoretical frequency	45	25	26	34	54	47	35
3. Chi-square	6.94	0.65	1.23	0.00	2.30	1.09	2.52
<u>Lower Lower</u>							
1. Frequency	162	89	109	104	174	149	86
2. Theoretical frequency	148	82	86	110	177	154	116
3. Chi-square	1.32	0.67	<u>6.13</u>	0.33	0.05	0.17	<u>7.75</u>
<u>Middle Lower</u>							
1. Frequency	48	37	32	46	79	60	37
2. Theoretical frequency	57	32	33	43	69	60	45
3. Chi-square	1.56	0.89	0.05	0.24	1.52	0.00	1.43
<u>Upper Lower</u>							
1. Frequency	48	22	11	20	35	31	25
2. Theoretical frequency	33	18	19	24	39	34	26
3. Chi-square	7.32	0.91	3.31	0.73	0.40	0.25	0.01
<u>Lower Middle</u>							
1. Frequency	38	19	24	38	47	51	50
2. Theoretical frequency	45	25	26	34	54	47	35
3. Chi-square	1.16	1.41	0.20	0.55	0.94	0.30	5.94
<u>Middle Middle</u>							
1. Frequency	19	6	9	21	34	25	27
2. Theoretical frequency	24	13	14	18	29	25	19
3. Chi-square	1.00	3.90	1.72	0.58	1.01	0.00	3.64
<u>Upper Middle</u>							
1. Frequency	29	18	20	32	51	44	40
2. Theoretical frequency	40	22	23	29	47	41	31
3. Chi-square	2.87	0.68	0.40	0.21	0.26	0.17	2.55
<u>Lower Upper</u>							
1. Frequency	31	16	17	28	43	57	42
2. Theoretical frequency	40	22	23	29	47	41	31
3. Chi-square	1.89	1.57	1.59	0.07	0.42	<u>5.92</u>	<u>3.82</u>
<u>Middle Upper</u>							
1. Frequency	12	5	6	13	23	20	23
2. Theoretical frequency	17	10	10	13	21	18	14
3. Chi-square	1.62	2.15	1.63	0.00	0.25	0.21	6.58
<u>Upper Upper</u>							
1. Frequency	8	3	1	2	9	6	4
2. Theoretical frequency	6	3	3	4	7	6	4
3. Chi-square	1.03	0.00	1.55	1.12	0.79	0.00	0.03

 $\chi^2 = 117.163^{**}$ Kruskal-Wallis down = 68.379<sup>\*\*</sup>; across = 23.117<sup>\*</sup>

DF = 60

 $\phi = 0.0812$

The "lower Lower" class demonstrated a more observed than expected frequency in cell 3 and a less observed than expected frequency in cell 7. The "lower Upper" class demonstrated a more observed than expected frequency in cells 6 and 7.

The Kruskal-Wallis down and across variables revealed that the "lower Upper" class demonstrated the strongest preference values for light classical music.

#### Chi-Square Analysis of Preference Response for Country and Western Music

The null-hypothesis was rejected in Table 11 as revealed by the chi-square analysis. As in the previous tables the degree of association was "very weak" between socioeconomic status and preference for country and western music. Two cells, 1 and 7, revealed significant chi-squares on the difference between socioeconomic status and preference for country and western music.

The "lower Middle" class revealed a more observed than expected frequency in cell 7 and the "middle Lower" class revealed a less observed than expected frequency in cell 1.

The Kruskal-Wallis down variable indicated that the socioeconomic classes differed in their attitude toward country and western music. The "lower Middle" class demonstrated the strongest preference values for country and western music.

Table 11. Chi-square analysis of preference response for country and western music by socioeconomic status

Socioeconomic Classes	Preference Scale						
	1	2	3	4	5	6	7
<u>No Response</u>							
1. Frequency	81	41	27	42	37	17	16
2. Theoretical frequency	93	38	33	35	29	19	15
3. Chi-square	1.51	0.25	1.11	1.42	2.37	0.14	0.08
<u>Below Lower Lower</u>							
1. Frequency	97	32	30	45	26	21	16
2. Theoretical frequency	95	39	34	36	29	19	15
3. Chi-square	0.04	1.17	0.43	2.39	0.39	0.19	0.03
<u>Lower Lower</u>							
1. Frequency	324	139	109	97	93	61	50
2. Theoretical frequency	311	127	111	117	96	62	50
3. Chi-square	0.58	1.20	0.02	3.37	0.10	0.02	0.00
<u>Middle Lower</u>							
1. Frequency	86	50	67	53	33	25	25
2. Theoretical frequency	121	49	43	45	37	24	19
3. Chi-square	9.92	0.01	13.44	1.27	0.50	0.02	1.64
<u>Upper Lower</u>							
1. Frequency	89	27	21	24	11	15	5
2. Theoretical frequency	68	28	24	26	21	14	11
3. Chi-square	6.26	0.02	0.45	0.11	4.86	0.12	3.24
<u>Lower Middle</u>							
1. Frequency	90	30	27	43	26	20	31
2. Theoretical frequency	95	39	34	36	29	19	15
3. Chi-square	0.26	1.97	1.38	1.47	0.39	0.04	16.29
<u>Middle Middle</u>							
1. Frequency	53	26	27	9	20	3	3
2. Theoretical frequency	50	20	18	19	16	10	8
3. Chi-square	0.16	1.50	4.66	5.16	1.29	4.95	3.16
<u>Upper Middle</u>							
1. Frequency	86	24	29	28	34	23	10
2. Theoretical frequency	83	34	30	31	26	17	13
3. Chi-square	0.09	2.91	0.01	0.35	2.63	2.37	0.84
<u>Lower Upper</u>							
1. Frequency	98	36	18	30	28	15	9
2. Theoretical frequency	83	34	30	31	26	17	3
3. Chi-square	2.61	0.12	4.58	0.05	0.19	0.17	1.42
<u>Middle Upper</u>							
1. Frequency	27	17	13	19	14	9	3
2. Theoretical frequency	36	15	13	14	11	7	6
3. Chi-square	2.37	0.32	0.00	2.09	0.68	0.40	1.36
<u>Upper Upper</u>							
1. Frequency	16	5	5	4	2	1	0
2. Theoretical frequency	12	5	4	4	4	2	2
3. Chi-square	1.54	0.00	0.15	0.00	0.73	0.77	1.88

$$\chi^2 = 132.372^{**}$$

$$\text{Kruskal-Wallis down} = 42.779^{**}; \text{ across} = 5.673$$

$$DF = 60$$

$$\phi = 0.0860$$

### Chi-Square Analysis of Preference Response for Folk Music

Table 12 disclosed a significant difference between socioeconomic status and preference for folk music; therefore, the null-hypothesis was rejected. The degree of association was "very weak" between socioeconomic status and preference for folk music.

The "no response" and "below lower Lower" classes revealed a less observed than expected frequency in cell 7; in addition, the "lower Middle" and "upper Middle" classes revealed a more observed than expected frequency in cell 7.

The Kruskal-Wallis down and across variables indicated that the "upper Middle" class disclosed the strongest preference values for folk music.

### Chi-Square Analysis of Preference Response for Show Music

The null-hypothesis was rejected in Table 13 as revealed by the chi-square analysis. Beyond the significant difference the degree of association was "very weak" between socioeconomic status and preference for show music.

The "no response" class displayed a more observed than expected frequency in cell 1 and a less observed than expected frequency in cell 7. The "lower Middle," "upper Middle" and "middle Upper" classes revealed more observed than expected frequencies in cell 7.

Table 12. Chi-square analysis of preference response for folk music by socioeconomic status

Socioeconomic Classes	Preference Scale						
	1	2	3	4	5	6	7
<u>No Response</u>							
1. Frequency	71	36	38	40	47	18	11
2. Theoretical frequency	55	32	31	40	42	31	29
3. Chi-square	4.37	0.49	1.74	0.00	0.58	5.59	<u>11.32</u>
<u>Below Lower Lower</u>							
1. Frequency	78	48	37	36	31	28	9
2. Theoretical frequency	57	33	31	41	43	32	30
3. Chi-square	7.99	7.09	1.00	0.69	3.35	0.48	<u>14.56</u>
<u>Lower Lower</u>							
1. Frequency	215	93	117	137	135	107	69
2. Theoretical frequency	185	107	103	135	141	104	98
3. Chi-square	4.72	1.85	2.01	0.02	0.22	0.06	8.37
<u>Middle Lower</u>							
1. Frequency	50	55	33	51	70	43	37
2. Theoretical frequency	72	42	40	53	55	41	38
3. Chi-square	6.71	4.32	1.17	0.04	4.34	0.14	0.02
<u>Upper Lower</u>							
1. Frequency	48	22	21	34	21	23	23
2. Theoretical frequency	41	24	23	30	31	23	21
3. Chi-square	1.28	0.10	0.10	0.60	3.18	0.00	0.10
<u>Lower Middle</u>							
1. Frequency	39	36	28	40	37	37	50
2. Theoretical frequency	57	33	31	41	43	32	30
3. Chi-square	5.52	0.32	0.36	0.04	0.83	0.80	<u>13.60</u>
<u>Middle Middle</u>							
1. Frequency	32	17	13	27	19	13	20
2. Theoretical frequency	30	17	17	22	23	17	16
3. Chi-square	0.14	0.00	0.77	1.21	0.60	0.88	1.13
<u>Upper Middle</u>							
1. Frequency	36	20	19	26	46	34	53
2. Theoretical frequency	50	29	28	36	38	28	26
3. Chi-square	3.77	2.63	2.63	2.90	1.83	1.29	<u>27.54</u>
<u>Lower Upper</u>							
1. Frequency	42	23	21	44	44	26	34
2. Theoretical frequency	50	29	28	36	38	28	26
3. Chi-square	1.19	1.13	1.54	1.65	1.05	0.14	2.35
<u>Middle Upper</u>							
1. Frequency	10	9	10	15	20	18	20
2. Theoretical frequency	22	13	12	16	16	12	11
3. Chi-square	6.27	0.98	0.33	0.04	0.77	2.75	6.48
<u>Upper Upper</u>							
1. Frequency	4	2	9	6	4	5	3
2. Theoretical frequency	7	4	4	5	5	4	4
3. Chi-square	1.29	1.03	6.75	0.15	0.32	0.28	0.12

$$\chi^2 = 204.354^{**}$$

DF = 60

$$\text{Kruskal-Wallis down} = 121.424^{**}; \text{ across} = 27.594^{**}$$

$$\phi = 0.1072$$

Table 13. Chi-square analysis of preference response for show music by socioeconomic status

Socioeconomic Classes	Preference Scale						
	1	2	3	4	5	6	7
<u>No Response</u>							
1. Frequency	128	34	19	36	22	18	4
2. Theoretical frequency	82	30	24	33	32	27	32
3. Chi-square	<u>25.37</u>	0.64	1.22	0.19	3.13	2.92	<u>24.78</u>
<u>Below Lower Lower</u>							
1. Frequency	103	32	28	41	28	20	15
2. Theoretical frequency	84	30	25	34	33	27	33
3. Chi-square	4.20	0.09	0.34	1.35	0.68	2.04	9.83
<u>Lower Lower</u>							
1. Frequency	299	102	94	117	97	83	80
2. Theoretical frequency	275	99	82	112	107	90	108
3. Chi-square	2.04	0.15	1.79	0.23	0.94	0.52	7.24
<u>Middle Lower</u>							
1. Frequency	94	39	38	44	57	32	35
2. Theoretical frequency	107	39	32	44	42	35	42
3. Chi-square	1.55	0.00	1.21	0.00	5.71	0.24	1.14
<u>Upper Lower</u>							
1. Frequency	69	16	10	26	24	23	24
2. Theoretical frequency	61	22	18	25	24	20	24
3. Chi-square	1.81	1.53	3.55	0.08	0.00	0.52	0.00
<u>Lower Middle</u>							
1. Frequency	53	24	25	36	40	34	55
2. Theoretical frequency	84	30	25	34	33	27	33
3. Chi-square	11.55	1.31	0.00	0.09	1.60	1.54	<u>14.62</u>
<u>Middle Middle</u>							
1. Frequency	37	19	15	17	15	16	22
2. Theoretical frequency	44	16	13	18	17	15	17
3. Chi-square	1.25	0.56	0.23	0.06	0.30	0.15	1.19
<u>Upper Middle</u>							
1. Frequency	54	23	20	17	38	33	49
2. Theoretical frequency	74	27	22	30	29	24	29
3. Chi-square	5.30	0.47	0.17	5.61	3.01	3.29	<u>13.90</u>
<u>Lower Upper</u>							
1. Frequency	65	27	16	27	27	29	43
2. Theoretical frequency	74	27	22	30	29	24	29
3. Chi-square	1.04	0.00	1.61	0.29	0.10	0.99	6.82
<u>Middle Upper</u>							
1. Frequency	15	13	7	13	10	13	31
2. Theoretical frequency	32	12	10	13	13	11	13
3. Chi-square	9.15	0.17	0.68	0.00	0.50	0.59	<u>26.79</u>
<u>Upper Upper</u>							
1. Frequency	11	4	4	3	3	2	6
2. Theoretical frequency	10	4	3	4	4	3	4
3. Chi-square	0.03	0.00	0.26	0.35	0.27	0.57	0.90

 $\chi^2 = 224.088^{**}$ Kruskal-Wallis down = 158.168<sup>\*\*</sup>; across = 58.962<sup>\*\*</sup>

DF = 60

 $\phi = 0.1122$



The Kruskal-Wallis down and across variables indicated that the "middle Upper," "upper Middle" and "lower Middle" classes revealed the strongest preference values for show music.

### Summary

The null-hypothesis was rejected in the data on socioeconomic status and music preference. In addition, the degree of association was "very weak" between socioeconomic status and music preference.

A summary of the disclosures is as follows:

- (1) The "no response," "upper Middle" and "lower Upper" socioeconomic classes demonstrated similar preference values for rock and roll music.
- (2) The "below lower Lower" class demonstrated slightly stronger preference values for jazz music.
- (3) The "below lower Lower" class demonstrated the strongest preference values for the blues music.
- (4) The "no response" socioeconomic classification demonstrated the strongest preference values for soul music.
- (5) The "no response" class demonstrated the strongest preference values for spiritual music.
- (6) The "middle Upper" class demonstrated the strongest preference values for classical music.
- (7) There was complete independence between socioeconomic status and light classical music.

- (8) The "lower Middle" class demonstrated the strongest preference values for country and western music.
- (9) The "upper Middle" class demonstrated the strongest preference values for folk music.
- (10) The "middle Upper," "upper Middle" and "lower Middle" classes demonstrated the strongest preference values for show music.

The "below lower Lower" and "no response" socio-economic classifications revealed the strongest preference values for jazz, blues, soul and spirituals. However, the "Middle" and "Upper" classes preferred classical, country and western, folk, and show music. The rock and roll and light classical preference values were independent of socio-economic status.

The present findings are consistent with Schuessler's conclusion that socioeconomic status was influential in determining musical preference. However, the writer's findings contradict Baumann's conclusion that low socioeconomic subject's preferences ran generally to traditional music.



RaceChi-Square Analysis of Preference  
Response for Rock and Roll Music

The null-hypothesis was rejected in Table 14 as revealed by the chi-square analysis. Beyond the significant difference the degree of association was "very weak" between race and preference for rock and roll music.

Cell 7 revealed a significant chi-square on the difference between race and preference for rock and roll music. White subjects revealed a more observed than expected frequency, and black subjects revealed a less observed than expected frequency.

The Kruskal-Wallis down and across variables indicated that the white subjects demonstrated the strongest preference values for rock and roll music.

Chi-Square Analysis of Preference  
Response for Jazz Music

Table 15 revealed a significant difference between race and preference for jazz thereby rejecting the null-hypothesis. The degree of association was "very weak" between jazz and race.

Cell 7 disclosed a significant chi-square on the difference between race and preference for jazz. Black subjects demonstrated a more than expected frequency, and white subjects demonstrated a less observed than expected frequency.

Table 14. Chi-square analysis of preference response for rock and roll music by race

Race	Preference Scale						
	1	2	3	4	5	6	7
<u>White</u>							
1. Frequency	65	73	93	139	222	273	404
2. Theoretical frequency	80	78	106	130	240	292	342
3. Chi-square	2.69	0.31	1.51	0.57	1.39	1.26	<u>11.05</u>
<u>Black</u>							
1. Frequency	119	107	151	162	333	402	387
2. Theoretical frequency	104	102	138	171	315	383	449
3. Chi-square	2.06	0.23	1.15	0.44	1.06	0.96	<u>8.44</u>

$\chi^2 = 33.948^{**}$

Kruskal-Wallis down = 19.158\*; across = 33.937\*\*

DF = 6

$\phi = 0.1072$

Table 15. Chi-square analysis of preference response for jazz music by race

Race	Preference Scale						
	1	2	3	4	5	6	7
<u>White</u>							
1. Frequency	185	140	182	205	261	177	119
2. Theoretical frequency	171	115	160	170	258	219	177
3. Chi-square	1.07	5.56	3.09	7.33	0.04	7.93	19.04
<u>Black</u>							
1. Frequency	211	125	187	187	334	328	290
2. Theoretical frequency	225	150	209	222	337	286	232
3. Chi-square	0.81	4.24	2.36	5.59	0.03	6.05	14.54

$\chi^2 = 77.754^{**}$

Kruskal-Wallis down = 9.590; across = 32.048\*\*

DF = 6

$\phi = 0.1627$



The Kruskal-Wallis across variable indicated that the black subjects demonstrated the strongest preference values for jazz music.

#### Chi-Square Analysis of Preference Response for Blues Music

The null-hypothesis was rejected in Table 16 as revealed by the chi-square analysis. The degree of association was "very weak" between race and preference for the blues.

Four cells, 1, 2, 6, and 7, disclosed significant chi-squares on the differences between race and preference for blues music. In cells 1 and 2 the white subject's observed frequencies were more than their expected frequencies, and the black subjects observed frequencies were less than their expected frequencies. Cells 6 and 7 revealed a more observed than expected frequency for black and a less observed than expected frequency for whites.

The Kruskal-Wallis down and across variables indicated that black subject's demonstrated the strongest preference values for blues music.

#### Chi-Square Analysis of Preference Response for Soul Music

Several interesting disclosures were demonstrated in Table 17. The null-hypothesis was rejected as revealed by the chi-square analysis. A previously undetected disclosure was the "mildly strong" degree of association that exists between race and preference for soul music.

Table 16. Chi-square analysis of preference response for blues music by race

Race	Preference Scale						
	1	2	3	4	5	6	7
<u>White</u>							
1. Frequency	171	152	168	214	255	181	127
2. Theoretical frequency	142	121	148	179	267	231	181
3. Chi-square	<u>5.74</u>	<u>8.06</u>	2.80	6.92	0.51	<u>10.89</u>	<u>16.09</u>
<u>Black</u>							
1. Frequency	158	127	173	199	361	353	291
2. Theoretical frequency	187	158	193	234	349	303	237
3. Chi-square	<u>4.37</u>	<u>6.15</u>	2.14	5.28	0.39	<u>8.32</u>	<u>12.24</u>

$\chi^2 = 91.304^{**}$

Kruskal-Wallis down = 82.237<sup>\*\*</sup>; across = 91.273<sup>\*\*</sup>

DF = 6

$\phi = 0.1763$

Table 17. Chi-square analysis of preference response for soul music by race

Race	Preference Scale						
	1	2	3	4	5	6	7
<u>White</u>							
1. Frequency	99	86	117	165	221	255	326
2. Theoretical frequency	60	49	70	92	135	203	660
3. Chi-square	<u>23.03</u>	<u>28.09</u>	<u>32.08</u>	<u>57.43</u>	<u>54.65</u>	<u>13.53</u>	<u>169.22</u>
<u>Black</u>							
1. Frequency	40	26	44	48	91	213	1199
2. Theoretical frequency	79	64	91	121	177	265	865
3. Chi-square	<u>19.11</u>	<u>21.45</u>	<u>24.50</u>	<u>43.85</u>	<u>41.72</u>	<u>10.33</u>	<u>129.20</u>

 $\chi^2 = 670.263^{**}$ Kruskal-Wallis down = 645.672<sup>\*\*</sup>; across = 670.035<sup>\*\*</sup>

DF = 6

 $\phi = 0.4781$

Five cells, 1, 2, 3, 5, and 7, revealed significant chi-squares on the difference between race and preference for soul music. Cells 1, 2, and 3 disclosed a more observed than expected frequency by white subjects whereas black subjects revealed a less observed than expected frequency. Cell 7 disclosed the most significant data in Table 17. The black subjects observed frequency was markedly more than the expected frequency, whereas the white subjects revealed a frequency that was less than the expected. Cell 5 disclosed a more observed frequency by the white subjects and a less observed frequency by black subjects.

The Kruskal-Wallis down and across variables indicated that the black subjects demonstrated the strongest preference values for soul music. In addition, cell 4 revealed a strong indifferent attitude by white subjects and a more favorable indifferent attitude toward soul music by black subjects.

#### Chi-Square Analysis of Preference Response for Spiritual Music

Table 18 compares favorably with Table 17. The null-hypothesis was rejected as revealed by the chi-square analysis. The degree of association was "mildly strong" between race and preference for spirituals.

Four cells, 1, 2, 6, and 7, displayed significant chi-squares on the difference between race and preference for spirituals. Cells 1 and 2 demonstrated a more observed than expected frequency by white subjects and a less observed

Table 18. Chi-square analysis of preference response for spiritual music by race

Race	Preference Scale						
	1	2	3	4	5	6	7
<u>White</u>							
1. Frequency	465	191	136	185	135	116	41
2. Theoretical frequency	302	128	105	159	171	201	203
3. Chi-square	<u>88.29</u>	<u>30.81</u>	9.30	4.13	7.42	<u>35.87</u>	<u>129.75</u>
<u>Black</u>							
1. Frequency	232	105	106	183	259	348	429
2. Theoretical frequency	395	168	137	209	223	263	267
3. Chi-square	<u>67.41</u>	<u>23.53</u>	7.10	3.15	5.66	<u>27.39</u>	<u>99.06</u>

 $\chi^2 = 538.932^{**}$ Kruskal-Wallis down = 519.342<sup>\*\*</sup>; across = 538.748<sup>\*\*</sup>

DF = 6

 $\phi = 0.4287$

than expected frequency by black subjects. The 6th and 7th cells demonstrated a less observed than expected frequency by white subjects and a more observed than expected frequency by black subjects.

The Kruskal-Wallis down and across variables indicated that black subjects revealed the strongest preference values for spiritual music.

#### Chi-Square Analysis of Preference Response for Classical Music

The data on classical music and race was inconsistent with the data in Table 18. The null-hypothesis was rejected as revealed by the chi-square analysis (Table 19) although the level of significance was .05 rather than .01 reported in the previous data.

A consistency with previous tables was the "very weak" degree of association between race and preference for classical music.

The Kruskal-Wallis across variable indicated that white subjects demonstrated slightly stronger preference values for classical music. In addition, cell 4 disclosed a level of indifference by each race that varied somewhat from expected frequencies.

#### Chi-Square Analysis of Preference Response for Light Classical Music

No statistical significance existed in Table 20 as revealed by the chi-square analysis. The degree of association was "very weak" between race and preference for





Table 19. Chi-square analysis of preference response for classical music by race

Race	Preference Scale						
	1	2	3	4	5	6	7
<u>White</u>							
1. Frequency	328	130	126	172	216	174	123
2. Theoretical frequency	320	129	144	194	211	154	117
3. Chi-square	0.18	0.00	2.18	2.48	0.12	2.56	0.31
<u>Black</u>							
1. Frequency	412	168	206	276	271	182	147
2. Theoretical frequency	420	169	188	254	276	202	153
3. Chi-square	0.13	0.00	1.67	1.89	0.09	1.95	0.24

$\chi^2 = 13.880^*$

Kruskal-Wallis down = 1.182; across = 13.875\*

DF = 6

$\phi = 0.0685$

Table 20. Chi-square Analysis of preference response for light classical music by race

Race	Preference Scale						
	1	2	3	4	5	6	7
<u>White</u>							
1. Frequency	224	123	110	150	266	211	185
2. Theoretical frequency	215	117	124	160	259	226	168
3. Chi-square	0.39	0.27	1.63	0.59	0.19	0.99	1.72
<u>Black</u>							
1. Frequency	272	148	177	219	332	311	203
2. Theoretical frequency	281	154	163	209	339	296	220
3. Chi-square	0.30	0.20	1.24	0.45	0.14	0.76	1.31

$\chi^2 = 10.261$

Kruskal-Wallis down = 0.057; across = 10.257

DF = 6

$\phi = 0.0591$

light classical music. There was a complete independence between race and preference values for light classical music.

#### Chi-Square Analysis of Preference Response for Country and Western Music

The null-hypothesis was rejected in Table 21 as revealed by the chi-square analysis. The degree of association was "very weak" between race and preference for country and western music.

Two cells, 6 and 7, demonstrated significant chi-squares on the difference between race and preference for country and western music. The white subjects displayed a more observed than expected frequency in cells 6 and 7 and the black subjects displayed a less observed than expected frequency in cells 6 and 7.

The Kruskal-Wallis across variable indicated that between the two races the white subjects demonstrated the strongest preference values for country and western music.

#### Chi-Square Analysis of Preference Responses for Folk Music

The data on folk music and race varied somewhat from previous disclosures. The degree of association was "weak" between race and preference for folk music. The null-hypothesis was rejected in Table 22 as revealed by the chi-square analysis.

Table 21. Chi-square analysis of preference response for country and western music by race

Race	Preference Scale						
	1	2	3	4	5	6	7
<u>White</u>							
1. Frequency	440	176	145	154	145	114	95
2. Theoretical frequency	453	184	161	169	139	90	71
3. Chi-square	0.36	0.38	1.68	1.38	0.22	6.36	7.77
<u>Black</u>							
1. Frequency	606	250	228	237	177	94	70
2. Theoretical frequency	593	242	212	222	183	118	94
3. Chi-square	0.27	0.29	1.28	1.05	0.17	4.86	5.93

$\chi^2 = 32.059^{**}$

Kruskal-Wallis down = 9.590; across = 32.048\*\*

DF = 6

$\phi = 0.1044$



Table 22. Chi-square analysis of preference response for folk music by race

Race	Preference Scale						
	1	2	3	4	5	6	7
<u>White</u>							
1. Frequency	221	123	113	164	211	212	225
2. Theoretical frequency	271	156	149	195	204	152	142
3. Chi-square	<u>9.09</u>	<u>6.92</u>	<u>8.67</u>	<u>4.87</u>	<u>0.21</u>	<u>23.30</u>	<u>48.49</u>
<u>Black</u>							
1. Frequency	404	237	231	286	261	140	103
2. Theoretical frequency	354	204	195	255	268	200	186
3. Chi-square	<u>6.94</u>	<u>8.29</u>	<u>6.62</u>	<u>3.72</u>	<u>0.16</u>	<u>17.79</u>	<u>37.03</u>

$\chi^2 = 179.163^{**}$

Kruskal-Wallis down = 130.539<sup>\*\*</sup>; across = 179.102<sup>\*\*</sup>

DF = 6

$\phi = 0.2471$



Five cells, 1, 2, 3, 6, and 7, contributed significant chi-squares on the differences between race and preference for folk music. Cells 1, 2, and 3 demonstrated a less observed than expected frequency by the white subjects and a more observed than expected frequency by the black subjects. Cells 6 and 7 disclosed a more observed than expected frequency by the white subjects and the black subjects disclosed a less observed than expected frequency.

The Kruskal-Wallis down and across variables indicated that the white subjects demonstrated the strongest preference values for folk music.

#### Chi-Square Analysis of Preference Response for Show Music

The data in Table 23 was consistent with the disclosures on race and preference for folk music. One consistency was the "weak" degree of association between race and preference for folk music. Another consistency was the significant differences between race and preference for show music, thereby rejecting the null-hypothesis.

Two cells, 1 and 7, disclosed significant chi-squares on the difference between race and preference by show music. Cell 1 revealed a less observed than expected frequency by the white subjects and a more observed than expected frequency by the black subjects. Cell 7 disclosed a more observed than expected frequency by the white subjects and a less observed than expected frequency by the black subjects.

Table 23. Chi-square analysis of preference response for show music by race

Race	Preference Scale						
	1	2	3	4	5	6	7
<u>White</u>							
1. Frequency	324	117	107	135	180	104	242
2. Theoretical frequency	400	145	118	162	155	130	158
3. Chi-square	<u>14.30</u>	5.57	1.06	4.61	3.88	8.70	<u>45.20</u>
<u>Black</u>							
1. Frequency	599	219	166	240	179	137	122
2. Theoretical frequency	523	191	155	213	204	171	206
3. Chi-square	<u>10.92</u>	4.25	0.80	3.52	2.96	6.64	<u>34.51</u>

$\chi^2 = 146.982^{**}$

Kruskal-Wallis down = 112.677<sup>\*\*</sup>; across = 146.932<sup>\*\*</sup>

DF = 6

$\phi = 0.2238$

The Kruskal-Wallis down and across variables indicated that the white subjects demonstrated the strongest preference values for show music.

### Summary

Nine of the ten music categories revealed statistical significant differences between race and music preference; only light classical music deviated. The degree of association between race and music preference was as follows: the blues, classical, light classical, country and western, and jazz categories revealed "very weak" degrees of association with race. The folk and show categories revealed "weak" degrees of association and the soul and spirituals revealed "mildly strong" degrees of association with race. The results of the difference between race and music preference were as follows:

- (1) The white subjects revealed the strongest preference values for rock and roll music.
- (2) The black subjects revealed the strongest preference values for jazz music.
- (3) The black subjects revealed the strongest preference values for the blues.
- (4) The black subjects revealed the strongest preference values for soul music.
- (5) The black subjects revealed the strongest preference values for spirituals.
- (6) The white subjects revealed the strongest preference values for classical music.

- (7) There was complete independence between race and preference values of light classical music.
- (8) The white subjects revealed the strongest preference values for country and western music.
- (9) The white subjects revealed the strongest preference values for folk music.
- (10) The white subjects revealed the strongest preference values for show music.

### Musical Experience

#### Chi-Square Analysis of Preference Response for Rock and Roll Music

The null-hypothesis was rejected in Table 24 as revealed by the chi-square analysis. In addition, the extent of association was "very weak" between musical experience and preference for rock and roll music.

Three cells, 2, 5, and 7, revealed significant chi-squares on the difference between musical experience and preference for rock and roll music. The 6-12 months experience group disclosed a more observed than expected frequency in cell 2 and a less observed than expected frequency in cell 7. The 8 or more year group demonstrated more observed than expected frequencies in cells 5 and 7.

The Kruskal-Wallis down variable indicated that the 8 or more years experience group demonstrated slightly stronger preference values for rock and roll music.

Table 24. Chi-square analysis of preference response for rock and roll music by musical experience

Musical Experience	Preference Scale						
	1	2	3	4	5	6	7
<u>Zero-Five Months</u>							
1. Frequency	18	13	29	30	57	62	94
2. Theoretical frequency	19	19	25	31	57	70	82
3. Chi-square	0.04	1.69	0.54	0.04	0.00	0.83	1.76
<u>Six-Twelve Months</u>							
1. Frequency	70	87	92	131	208	264	254
2. Theoretical frequency	69	68	92	114	209	254	299
3. Chi-square	0.01	5.30	0.00	2.58	0.00	0.36	6.90
<u>One Year</u>							
1. Frequency	15	13	8	11	19	25	41
2. Theoretical frequency	8	8	11	14	25	30	36
3. Chi-square	5.53	2.94	0.82	0.48	1.42	0.93	0.78
<u>Two and Three Years</u>							
1. Frequency	18	19	20	25	63	70	91
2. Theoretical frequency	19	19	26	31	58	70	83
3. Chi-square	0.06	0.00	1.20	1.33	0.45	0.00	0.81
<u>Four and Five Years</u>							
1. Frequency	36	25	48	43	100	118	149
2. Theoretical frequency	32	32	43	53	98	119	140
3. Chi-square	0.39	1.48	0.50	2.01	0.03	0.01	0.52
<u>Six and Seven Years</u>							
1. Frequency	16	13	21	38	46	76	78
2. Theoretical frequency	18	18	24	30	54	66	78
3. Chi-square	0.21	1.24	0.38	2.37	1.31	1.45	0.00
<u>Eight or More Years</u>							
1. Frequency	11	11	28	25	64	62	90
2. Theoretical frequency	18	18	24	30	55	67	79
3. Chi-square	2.83	2.64	0.56	0.81	1.46	0.35	1.61

$X^2 = 60.843$

Kruskal-Wallis down = 16.420\*; across = 8.863

DF = 36

$\phi = 0.0583$

### Chi-Square Analysis of Preference Response for Jazz Music

Table 25 revealed a significant difference between musical experience and preference for jazz. Therefore, the null-hypothesis was rejected. In addition to the significant difference, the degree of association was "very weak" between musical experience and preference for jazz.

Three cells, 1, 2, and 6, demonstrated significant chi-squares on the difference between musical experience and preference for jazz music. The 0-5 months experience level disclosed a less observed than expected frequency in cells 1 and 2 and a more observed than expected frequency in cell 6.

The Kruskal-Wallis down and across variables indicated that the 0-5 months experience group demonstrated the strongest preference values for jazz music.

### Chi-Square Analysis of Preference Response for Blues Music

The null-hypothesis was rejected in Table 26 as revealed by the chi-square analysis. Also the strength of association was "very weak" between musical experience and preference for the blues. Two cells, 1 and 5, disclosed significant chi-squares on the difference between musical experience and preference for the blues.

No statistical significance was found in the down and across Kruskal-Wallis variables. The 0-5 months experience group demonstrated a less observed than expected frequency in cell on and a more observed than expected

Table 25. Chi-square analysis of preference response for jazz music by musical experience

Musical Experience	Preference Scale						
	1	2	3	4	5	6	7
<u>Zero-Five Months</u>							
1. Frequency	30	16	29	30	70	80	48
2. Theoretical frequency	41	27	38	41	61	52	42
3. Chi-square	2.96	4.64	2.19	2.92	1.20	14.87	0.83
<u>Six-Twelve Months</u>							
1. Frequency	182	110	135	151	198	176	155
2. Theoretical frequency	150	100	139	150	224	191	154
3. Chi-square	6.85	1.09	0.13	0.01	3.09	1.10	0.01
<u>One Year</u>							
1. Frequency	29	5	14	23	20	14	26
2. Theoretical frequency	18	12	17	18	27	23	18
3. Chi-square	6.97	3.97	0.15	1.49	1.70	3.34	3.21
<u>Two and Three Years</u>							
1. Frequency	50	31	34	43	56	39	53
2. Theoretical frequency	41	28	39	41	62	53	42
3. Chi-square	1.76	0.43	0.53	0.06	0.58	3.54	2.60
<u>Four and Five Years</u>							
1. Frequency	54	48	75	69	125	90	58
2. Theoretical frequency	70	47	65	70	105	89	72
3. Chi-square	3.77	0.03	1.42	0.01	3.73	0.00	2.74
<u>Six and Seven Years</u>							
1. Frequency	31	37	48	40	54	47	31
2. Theoretical frequency	39	26	36	39	58	50	40
3. Chi-square	1.64	4.75	3.79	0.03	0.32	0.13	2.01
<u>Eight or More Years</u>							
1. Frequency	23	18	35	42	74	61	38
2. Theoretical frequency	39	26	37	39	59	50	40
3. Chi-square	6.83	2.55	0.07	0.18	3.83	2.38	0.14

$\chi^2 = 112.751^{**}$

Kruskal-Wallis down 36.199\*\*; across = 18.677\*\*

DF = 36

$\phi = 0.07937$



Table 26. Chi-square analysis of preference response for blues music by musical experience

Musical Experience	Preference Scale						
	1	2	3	4	5	6	7
<u>Zero-Five Months</u>							
1. Frequency	20	21	44	33	92	46	47
2. Theoretical frequency	34	29	35	43	64	55	43
3. Chi-square	5.65	2.06	2.27	2.19	12.27	1.54	0.29
<u>Six-Twelve Months</u>							
1. Frequency	136	124	120	153	214	207	153
2. Theoretical frequency	124	105	128	156	234	202	159
3. Chi-square	1.23	3.50	0.51	0.05	1.66	0.13	0.19
<u>One Year</u>							
1. Frequency	22	11	11	23	22	22	21
2. Theoretical frequency	15	13	15	19	28	24	19
3. Chi-square	3.57	0.18	1.19	1.04	1.23	0.17	0.23
<u>Two and Three Years</u>							
1. Frequency	37	24	31	36	67	63	47
2. Theoretical frequency	34	29	35	43	65	56	44
3. Chi-square	0.23	0.85	0.55	1.17	0.08	0.93	0.22
<u>Four and Five Years</u>							
1. Frequency	54	47	64	74	115	86	79
2. Theoretical frequency	58	49	60	73	110	95	74
3. Chi-square	0.27	0.09	0.25	0.01	0.26	0.78	0.29
<u>Six and Seven Years</u>							
1. Frequency	30	32	35	56	46	55	34
2. Theoretical frequency	32	27	33	41	61	52	41
3. Chi-square	0.14	0.81	0.08	5.86	3.60	0.11	1.27
<u>Eight or More Years</u>							
1. Frequency	30	20	36	40	66	58	41
2. Theoretical frequency	32	28	34	41	61	53	42
3. Chi-square	0.19	2.07	0.15	0.02	0.33	0.46	0.01

$\chi^2 = 71.104^{**}$

Kruskal-Wallis down = 8.834; across = 6.279

DF = 36

$\phi = 0.0632$

frequency in cell 5. The 0-5 months experience group displayed slightly stronger preference values for the blues music.

#### Chi-Square Analysis of Preference Response for Soul Music

The null-hypothesis was rejected in Table 27 as revealed by the chi-square analysis. In addition to the significant difference, the strength of association was "very weak" between musical experience and preference for soul music.

Three cells, 1, 5, and 7, disclosed significant chi-squares on the difference between musical experience and preference for soul music. The 6-12 months experience group demonstrated a more observed than expected frequency in cell 7 and the 6 and 7 years experience group demonstrated a more observed than expected frequency in cell 1 and a less observed than expected frequency in cell 7. The 8 or more years experience group disclosed a more observed than expected frequency in cell t and a less observed than expected frequency in cell 7.

The Kruskal-Wallis down and across variables indicated that the 8 or more years experience group disclosed slightly stronger preference values for soul music. A significant more observed than expected chi-square was demonstrated by the 6 and 7 years experience group in cell 4.

Table 27. Chi-square analysis of preference response for soul music by musical experience

Musical Experience	Preference Scale						
	1	2	3	4	5	6	7
<u>Zero-Five Months</u>							
1. Frequency	8	8	16	19	32	64	156
2. Theoretical frequency	14	12	17	22	32	48	157
3. Chi-square	2.84	1.23	0.02	0.43	0.00	4.99	0.01
<u>Six-Twelve Months</u>							
1. Frequency	46	29	40	64	109	153	666
2. Theoretical frequency	53	43	61	81	118	177	575
3. Chi-square	0.82	4.67	7.15	3.48	0.68	3.25	14.55
<u>One Year</u>							
1. Frequency	12	5	10	15	12	20	58
2. Theoretical frequency	6	5	7	10	14	21	69
3. Chi-square	5.22	0.00	1.03	2.98	0.30	0.05	1.61
<u>Two and Three Years</u>							
1. Frequency	9	11	20	21	28	48	169
2. Theoretical frequency	15	12	17	22	33	49	159
3. Chi-square	2.11	0.07	0.59	0.07	0.65	0.01	0.65
<u>Four and Five Years</u>							
1. Frequency	28	27	31	35	45	73	280
2. Theoretical frequency	25	20	29	38	55	83	269
3. Chi-square	0.45	2.24	0.21	0.21	1.92	1.19	0.41
<u>Six and Seven Years</u>							
1. Frequency	25	19	21	41	30	51	101
2. Theoretical frequency	14	11	16	21	31	46	149
3. Chi-square	9.35	5.35	1.68	18.99	0.01	0.53	15.72
<u>Eight or More Years</u>							
1. Frequency	12	16	24	20	58	62	99
2. Theoretical frequency	14	11	16	21	31	47	151
3. Chi-square	0.24	1.89	3.99	0.07	23.47	5.14	17.92

 $\chi^2 = 170.699^{**}$ Kruskal-Wallis down = 108.555<sup>\*\*</sup>; across = 66.886<sup>\*\*</sup>

DF = 36

 $\phi = 0.09797$

### Chi-Square Analysis of Preference Response for Spiritual Music

Table 28 revealed a significant difference between musical experience and preference for spirituals; therefore, the null-hypothesis was rejected. The degree of association was "very weak" between musical experience and preference for spirituals.

Three cells, 1, 2, and 6, revealed significant chi-squares on the difference between musical experience and preference for spirituals. The 6-12 month experience groups disclosed a less observed than expected frequency in cell 2 and the 6 and 7 year experience group disclosed a more observed than expected frequency in cell 2. Cell 1 revealed a more observed than expected frequency by the one year experience group and cell 5 revealed a less observed than expected frequency by the one year experience group.

The Kruskal-Wallis down and across variables indicated that the 6-12 month experience group disclosed the strongest preference values for spiritual music.

### Chi-Square Analysis of Preference Response for Classical Music

Table 29 revealed a significant difference between musical experience and preference for classical music, thereby rejecting the null-hypothesis. In addition, the strength of association was "very weak" between musical experience and preference for classical music.

Table 28. Chi-square analysis of preference response for spiritual music by musical experience

Musical Experience	Preference Scale						
	1	2	3	4	5	6	7
<u>Zero-Five Months</u>							
1. Frequency	67	31	29	48	51	44	31
2. Theoretical frequency	72	30	25	38	41	48	49
3. Chi-square	0.38	0.21	0.57	2.53	2.64	0.29	6.34
<u>Six-Twelve Months</u>							
1. Frequency	246	77	77	138	149	212	208
2. Theoretical frequency	264	111	92	139	148	174	177
3. Chi-square	1.24	<u>10.53</u>	2.46	0.01	0.00	8.12	5.29
<u>One Year</u>							
1. Frequency	54	16	12	15	14	5	16
2. Theoretical frequency	31	13	11	17	18	21	21
3. Chi-square	<u>16.07</u>	0.56	0.09	0.15	0.77	<u>11.99</u>	1.25
<u>Two and Three Years</u>							
1. Frequency	68	36	28	30	35	59	50
2. Theoretical frequency	73	31	25	39	41	48	49
3. Chi-square	0.34	0.89	0.25	1.89	0.88	2.42	0.01
<u>Four and Five Years</u>							
1. Frequency	120	48	51	63	66	78	93
2. Theoretical frequency	124	52	43	65	70	82	83
3. Chi-square	0.11	0.32	1.42	0.08	0.18	0.17	1.16
<u>Six and Seven Years</u>							
1. Frequency	87	47	21	25	38	35	35
2. Theoretical frequency	69	29	24	36	39	45	46
3. Chi-square	4.85	<u>11.27</u>	0.36	3.50	0.00	2.36	2.69
<u>Eight or More Years</u>							
1. Frequency	61	39	27	52	42	31	39
2. Theoretical frequency	69	29	24	37	39	46	47
3. Chi-square	1.02	3.25	0.32	6.43	0.22	4.80	1.24

$\chi^2 = 124.171^{**}$

Kruskal-Wallis down = 57.926<sup>\*\*</sup>; across = 22.072<sup>\*\*</sup>

DF = 36

$\phi = 0.0836$

Table 29. Chi-square analysis of preference response for classical music by musical experience

Musical Experience	Preference Scale						
	1	2	3	4	5	6	7
<u>Zero-Five Months</u>							
1. Frequency	60	20	27	40	71	47	38
2. Theoretical frequency	77	31	34	46	50	37	28
3. Chi-square	3.64	3.81	1.49	0.87	8.52	2.81	3.76
<u>Six-Twelve Months</u>							
1. Frequency	348	137	125	183	162	95	57
2. Theoretical frequency	280	113	125	169	184	135	101
3. Chi-square	16.34	5.22	0.00	1.08	2.57	11.61	19.47
<u>One Year</u>							
1. Frequency	66	13	15	14	9	7	8
2. Theoretical frequency	33	13	15	20	22	16	12
3. Chi-square	31.74	0.01	0.00	1.90	7.60	5.09	1.38
<u>Two and Three Years</u>							
1. Frequency	93	30	42	41	39	36	25
2. Theoretical frequency	77	31	34	47	51	37	28
3. Chi-square	3.10	0.04	1.63	0.72	2.73	0.03	0.33
<u>Four and Five Years</u>							
1. Frequency	108	63	74	87	82	68	37
2. Theoretical frequency	131	53	58	79	86	63	48
3. Chi-square	4.17	1.94	4.11	0.71	0.19	0.38	2.34
<u>Six and Seven Years</u>							
1. Frequency	43	21	27	49	59	53	36
2. Theoretical frequency	73	29	32	44	48	35	26
3. Chi-square	12.28	2.36	0.91	0.54	2.62	9.25	3.49
<u>Eight or More Years</u>							
1. Frequency	28	16	22	37	67	52	69
2. Theoretical frequency	74	30	33	45	48	35	27
3. Chi-square	28.32	6.27	3.55	1.27	7.23	7.82	67.18

$\chi^2 = 304.698^{**}$  Kruskal-Wallis down = 244.306<sup>\*\*\*</sup>; across = 73.928<sup>\*\*\*</sup>

DF = 36  $\phi = 0.1311$

Four cells, 1, 5, 6, and 7, significant chi-squares on the difference between musical experience and preference for classical music. The 6-12 month and one year experience groups revealed more observed than expected frequencies in cell 1 and the 6 and 7 year and 8 or more years experience groups revealed less observed than expected frequencies in cell 1. Further, the 6-12 month experience group revealed less observed than expected frequencies in cell 6 and 7. The 8 or more years experience group demonstrated more observed than expected frequencies in cells 5, 6, and 7.

The Kruskal-Wallis down and across variables indicated that the 8 or more years experience group demonstrated the strongest preference values for classical music.

#### Chi-Square Analysis of Preference Response for Light Classical Music

The null-hypothesis was rejected in Table 30 as revealed by the chi-square analysis. Further, the strength of association was "very weak" between musical experience and preference for light classical music.

Five cells, 1, 2, 3, 6, and 7 revealed significant chi-squares on the difference between musical experience and preference for light classical music. The 6-12 months and one year experience groups demonstrated a more observed than expected frequency in cell 1. In addition the 6-12 months experience group revealed a less observed than expected frequency in cell 7. The 8 or more years experience group

Table 30. Chi-square analysis of preference response for light classical music by musical experience

Musical Experience	Preference Scale						
	1	2	3	4	5	6	7
<u>Zero-Five Months</u>							
1. Frequency	44	19	29	50	62	52	47
2. Theoretical frequency	51	28	30	38	62	52	40
3. Chi-square	1.04	3.04	0.02	3.67	0.00	0.05	1.14
<u>Six-Twelve Months</u>							
1. Frequency	235	128	129	147	205	168	95
2. Theoretical frequency	188	103	109	139	225	196	147
3. Chi-square	12.02	5.88	3.68	0.41	1.72	4.03	18.35
<u>One Year</u>							
1. Frequency	39	14	18	18	15	16	12
2. Theoretical frequency	22	12	13	17	27	23	18
3. Chi-square	12.38	0.22	1.92	0.11	5.19	2.33	1.73
<u>Two and Three Years</u>							
1. Frequency	63	25	38	33	53	53	41
2. Theoretical frequency	52	29	30	39	62	51	41
3. Chi-square	2.40	0.44	2.06	0.79	1.33	0.02	0.00
<u>Four and Five Years</u>							
1. Frequency	65	49	53	65	126	98	63
2. Theoretical frequency	88	48	51	65	105	92	69
3. Chi-square	5.97	0.00	0.07	0.00	4.04	0.39	0.50
<u>Six and Seven Years</u>							
1. Frequency	37	30	17	29	62	56	57
2. Theoretical frequency	49	27	28	36	58	51	38
3. Chi-square	2.84	0.36	4.54	1.45	0.21	0.48	9.22
<u>Eight or More Years</u>							
1. Frequency	16	10	6	29	75	79	76
2. Theoretical frequency	49	26	29	37	59	52	39
3. Chi-square	22.48	10.84	17.90	1.59	4.29	14.60	36.17

 $\chi^2 = 224.143^{**}$ Kruskal-Wallis down = 180.725<sup>\*\*</sup>; across = 91.593<sup>\*\*</sup>

DF = 36

 $\phi = 0.1122$



disclosed a less observed than expected frequency in cells 1, 2, and 3 and a more observed than expected frequency in cells 6 and 7.

The Kruskal-Wallis down and across variables indicated that the 8 or more years experience group disclosed the strongest preference values for light classical music.

#### Chi-Square Analysis of Preference Response for Country and Western Music

The null-hypothesis was rejected in Table 31 as revealed by the chi-square analysis. Beyond the significant difference the degree of association was "very weak" between musical experience and preference for country and western music.

Two cells, 6 and 1, disclosed significant chi-squares on the difference between musical experience and preference for country and western music. The 6-12 month experience group demonstrated a less observed than expected frequency in cell 6. Further, the 4 and 5 year and 6 and 7 year experience groups disclosed a more observed than expected frequency in the 6th and 7th cells.

The Kruskal-Wallis down and across variables indicated that the 4 and 5 plus the 6 and 7 years experience groups disclosed the strongest preference values for country and western music.

Table 31. Chi-square analysis of preference response for country and western music by musical experience

Musical Experience	Preference Scale						
	1	2	3	4	5	6	7
<u>Zero-Five Months</u>							
1. Frequency	127	55	30	26	29	13	22
2. Theoretical frequency	108	44	38	41	33	22	17
3. Chi-square	3.34	2.79	1.82	4.51	0.56	3.42	1.28
<u>Six-Twelve Months</u>							
1. Frequency	426	166	146	152	115	47	55
2. Theoretical frequency	395	160	140	148	122	79	63
3. Chi-square	2.50	0.19	0.24	0.10	0.37	12.90	1.04
<u>One Year</u>							
1. Frequency	46	13	14	26	14	12	6
2. Theoretical frequency	47	19	17	18	15	9	8
3. Chi-square	0.02	1.96	0.44	4.94	0.01	0.71	0.30
<u>Two and Three Years</u>							
1. Frequency	104	44	37	45	28	29	19
2. Theoretical frequency	109	44	39	41	34	22	17
3. Chi-square	0.23	0.00	0.07	0.40	0.94	2.36	0.13
<u>Four and Five Years</u>							
1. Frequency	154	63	73	71	71	53	34
2. Theoretical frequency	185	75	66	69	57	36	30
3. Chi-square	5.18	1.98	0.80	0.03	3.39	6.92	0.65
<u>Six and Seven Years</u>							
1. Frequency	97	39	36	36	28	32	20
2. Theoretical frequency	103	42	36	39	32	21	16
3. Chi-square	0.31	0.18	0.00	0.16	0.42	6.40	0.77
<u>Eight or More Years</u>							
1. Frequency	96	47	37	36	39	24	12
2. Theoretical frequency	104	42	37	39	32	21	17
3. Chi-square	0.57	0.55	0.00	0.21	1.52	0.51	1.27

 $\chi^2 = 79.647^{**}$ Kruskal-Wallis down = 34.537<sup>\*\*</sup>; across 38.848<sup>\*\*</sup>

DF = 36

 $\phi = 0.0670$

### Chi-Square Analysis of Preference Response for Folk Music

The null-hypothesis was rejected in Table 32 as revealed by the chi-square analysis. Beyond the significant difference the strength of association was "very weak" between musical experience and preference for folk music.

Four cells, 1, 2, 6, and 7, demonstrated significant chi-squares on the difference between musical experience and preference for folk music. The 6-12 month experience group revealed a less observed than expected frequency in cell 7. In addition, the 8 or more years experience group revealed less observed than expected frequencies in cells 1 and 2 and more observed than expected frequencies in cells 6 and 7.

The Kruskal-Wallis down and across variables indicated that the 8 or more years experience group revealed the strongest preference values for folk music.

### Chi-Square Analysis of Preference Response for Show Music

The null-hypothesis was rejected in Table 33 as revealed by the chi-square analysis. As in previous tables, the degree of association was "very weak" between musical experience and preference for show music.

Three cells, 1, 6, and 7, demonstrated significant chi-squares on the difference between musical experience and preference for show music. The 0-5 months experience group disclosed a less observed than expected frequency in cell 1 and more observed than expected frequencies in cells 6 and 7.

Table 32. Chi-square analysis of preference response for folk music by musical experience

Musical Experience	Preference Scale						
	1	2	3	4	5	6	7
<u>Zero-Five Months</u>							
1. Frequency	58	34	30	36	54	38	53
2. Theoretical frequency	64	37	36	47	49	36	34
3. Chi-square	0.61	0.26	0.90	2.53	0.56	0.08	10.55
<u>Six-Twelve Months</u>							
1. Frequency	282	168	142	189	160	110	56
2. Theoretical frequency	235	136	130	171	178	132	124
3. Chi-square	9.46	7.71	1.03	1.81	1.84	3.74	37.59
<u>One Year</u>							
1. Frequency	39	12	14	27	25	9	6
2. Theoretical frequency	28	16	16	20	21	16	15
3. Chi-square	4.31	1.07	0.15	2.11	0.66	2.90	5.25
<u>Two and Three Years</u>							
1. Frequency	73	43	37	40	39	41	33
2. Theoretical frequency	65	37	36	47	49	37	34
3. Chi-square	1.00	0.80	0.02	1.14	2.12	0.53	0.05
<u>Four and Five Years</u>							
1. Frequency	97	60	70	94	94	54	50
2. Theoretical frequency	110	64	61	80	84	62	58
3. Chi-square	1.56	0.20	1.28	2.32	1.31	1.03	1.18
<u>Six and Seven Years</u>							
1. Frequency	43	30	25	42	48	50	50
2. Theoretical frequency	61	35	34	45	46	34	32
3. Chi-square	5.36	0.79	2.34	0.14	0.05	7.06	9.61
<u>Eight or More Years</u>							
1. Frequency	33	14	29	28	54	50	83
2. Theoretical frequency	62	36	34	45	47	35	33
3. Chi-square	13.37	13.15	0.81	6.44	1.10	6.67	77.39

 $\chi^2 = 254.206^{**}$ Kruskal-Wallis down = 173.076<sup>\*\*</sup>; across = 79.304<sup>\*\*</sup>

DF = 36

† = 0.1195

Table 33. Chi-square analysis of preference response for show music by musical experience

Musical Experience	Preference Scale						
	1	2	3	4	5	6	7
<u>Zero-Five Months</u>							
1. Frequency	62	28	25	31	43	52	62
2. Theoretical frequency	90	35	28	39	37	31	37
3. Chi-square	<u>11.72</u>	1.24	0.40	1.55	0.92	<u>13.74</u>	<u>16.11</u>
<u>Six-Twelve Months</u>							
1. Frequency	401	153	105	141	121	97	89
2. Theoretical frequency	349	126	104	141	136	114	137
3. Chi-square	7.84	5.66	0.01	0.00	1.58	2.59	<u>16.68</u>
<u>One Year</u>							
1. Frequency	62	15	10	19	8	10	8
2. Theoretical frequency	42	15	12	17	16	14	16
3. Chi-square	10.02	0.00	0.45	0.26	4.13	0.96	4.23
<u>Two and Three Years</u>							
1. Frequency	114	27	29	38	32	27	39
2. Theoretical frequency	96	35	29	39	37	32	38
3. Chi-square	3.21	1.78	0.00	0.03	0.80	0.66	0.03
<u>Four and Five Years</u>							
1. Frequency	161	61	60	80	67	39	51
2. Theoretical frequency	163	59	49	66	64	54	64
3. Chi-square	0.03	0.05	2.66	2.77	0.18	3.95	2.68
<u>Six and Seven Years</u>							
1. Frequency	80	30	22	37	37	39	43
2. Theoretical frequency	91	33	27	37	35	30	36
3. Chi-square	1.26	0.24	0.91	0.00	0.08	2.89	1.54
<u>Eight or More Years</u>							
1. Frequency	48	22	25	31	53	40	72
2. Theoretical frequency	92	33	27	37	36	30	36
3. Chi-square	<u>20.80</u>	3.77	0.18	1.04	8.43	<u>3.31</u>	<u>36.13</u>

 $\chi^2 = 199.741^{**}$ Kruskal-Wallis down = 157.334<sup>\*\*</sup>; across 19.356

DF = 36

 $\phi = 0.1063$

A less observed than expected frequency was also disclosed in cell 7 by the 6-12 month experience group. The 8 or more years experience group revealed a less observed than expected frequency in cell 1 and more observed than expected frequencies in cells 6 and 7.

The Kruskal-Wallis down and across variables indicated that the 8 or more years experience group revealed the strongest preference values for show music.

### Summary

The null-hypothesis was rejected in the data on music preference and musical experience. In addition, the degree of association was "very weak" between music preference and musical experience. The following disclosures were made:

- (1) The 8 or more years experience group demonstrated slightly stronger preference values for rock and roll music.
- (2) The 0-5 months experience group demonstrated the strongest preference values for jazz.
- (3) The 0-5 months experience group demonstrated the strongest preference values for blues music.
- (4) The 8 or more years experience group demonstrated the strongest preference values for soul music.
- (5) The 6-12 months experience group demonstrated the strongest preference values for spiritual music.

- (6) The 8 or more years experience group demonstrated the strongest preference values for classical music.
- (7) The 8 or more years experience group demonstrated the strongest preference values for light classical music.
- (8) The 4 and 5 years and the 6 and 7 years experience groups demonstrated the strongest preference values for country and western music.
- (9) The 8 or more years experience group demonstrated the strongest preference values for folk music.
- (10) The 8 or more years experience group demonstrated the strongest preference values for show music.

#### School Level

#### Chi-Square Analysis of Preference Response for Rock and Roll Music

The null-hypothesis was rejected in Table 34 as revealed by the chi-square analysis. The degree of association was "very weak" between school level and preference for rock and roll music.

Cells 1, 2, and 5 revealed significant chi-squares on the difference between school level and preference for rock and roll music. Cells 1 and 2 disclosed a more observed than expected frequency by the junior high subjects and a less observed than expected frequency by the college subjects. Cell 5 revealed a less observed than expected

Table 34. Chi-square analysis of preference response for rock and roll music by school level

School Level	Preference Scale						
	1	2	3	4	5	6	7
<u>Junior High School</u>							
1. Frequency	73	59	74	109	132	173	216
2. Theoretical frequency	52	51	70	86	158	192	226
3. Chi-square	<u>8.21</u>	<u>1.11</u>	0.24	6.09	<u>4.35</u>	1.94	0.48
<u>Senior High School</u>							
1. Frequency	77	89	95	105	220	279	368
2. Theoretical frequency	77	76	103	126	233	283	334
3. Chi-square	0.00	2.31	0.61	3.75	<u>0.73</u>	0.06	3.55
<u>College</u>							
1. Frequency	34	33	77	89	205	225	213
2. Theoretical frequency	55	54	73	90	166	201	237
3. Chi-square	<u>7.84</u>	<u>8.05</u>	0.20	0.01	<u>9.36</u>	2.78	2.42

$\chi^2 = 66.705^{**}$

Kruskal-Wallis down = 11.719; across = 47.210<sup>\*\*</sup>

DF = 12

$\phi = 0.1063$



frequency by the junior and senior high subjects and a more observed than expected frequency by the college subjects.

The Kruskal-Wallis down and across variables indicated that the school levels differed in their preference for rock and roll music. College subjects demonstrated the strongest preference values for rock and roll music.

#### Chi-Square Analysis of Preference Response for Jazz Music

Several similarities in Table 34 are found in Table 35. Among the similarities was the significant difference between school level and preference for jazz music as revealed by chi-square analysis, thereby rejecting the null-hypothesis. In addition, the strength of association was "very weak" between school level and preference for jazz music.

Four cells, 1, 2, 5, and 6, displayed significant chi-squares on the difference between school level and preference for jazz. Cells 1 and 2 revealed a less observed than expected frequency by the college subjects and a more observed than expected frequency by the junior and senior high subjects. Cells 5 and 6 demonstrated a more observed than expected frequency by the college subjects and also observed a more than expected frequency by the junior and senior high school subjects.

The Kruskal-Wallis down and across variables indicated that college subjects demonstrated the strongest

Table 35. Chi-square analysis of preference response for jazz music by school level

School Level	Preference Scale						
	1	2	3	4	5	6	7
<u>Junior High School</u>							
1. Frequency	156	91	107	124	141	109	109
2. Theoretical frequency	113	75	105	113	170	144	116
3. Chi-square	<u>16.03</u>	<u>3.27</u>	0.02	1.05	<u>4.82</u>	<u>8.52</u>	0.44
<u>Senior High School</u>							
1. Frequency	184	124	171	186	231	186	151
2. Theoretical frequency	167	111	155	167	250	212	171
3. Chi-square	<u>1.73</u>	<u>1.54</u>	1.59	2.26	<u>1.42</u>	<u>3.23</u>	2.37
<u>College</u>							
1. Frequency	59	50	93	88	225	212	149
2. Theoretical frequency	119	79	110	118	178	151	122
3. Chi-square	<u>29.98</u>	<u>10.52</u>	2.71	7.78	<u>12.69</u>	<u>24.87</u>	6.16

 $\chi^2 = 143.118^{**}$ Kruskal-Wallis down = 111.567<sup>\*\*</sup>; across = 120.689<sup>\*\*</sup>

DF = 12

 $\phi = 0.1555$

preference values for jazz music. In addition, college subjects also demonstrated a significant indifferent attitude toward jazz in cell 4.

#### Chi-Square Analysis of Preference Response for Blues Music

The null-hypothesis was rejected in Table 36 as revealed by the chi-square analysis. Beyond the significant difference the degree of association was "very weak" between school level and preference for blues music.

Five cells, 1, 2, 5, 6, and 7, revealed significant chi-squares on the difference between school level and the blues music. Cells 1 and 2 revealed a more observed than expected frequency by the junior and senior high subjects and a less observed than expected frequency by the college subjects. The 5, 6, and 7 cells demonstrated a less observed than expected frequency by the junior and senior high subjects and a more observed than expected frequency by the college subjects.

The Kruskal-Wallis down and across variables indicated that the college subjects demonstrated the strongest preference values for blues music. College subjects revealed a significant indifferent attitude toward blues music in cell 4.

Table 36. Chi-square analysis of preference in response for blues music by school level

School Level	Preference Scale						
	1	2	3	4	5	6	7
<u>Junior High School</u>							
1. Frequency	130	82	101	133	148	136	106
2. Theoretical frequency	93	79	97	118	177	153	120
3. Chi-square	<u>14.27</u>	<u>0.09</u>	<u>0.17</u>	<u>1.93</u>	<u>4.66</u>	<u>1.79</u>	<u>1.61</u>
<u>Senior High School</u>							
1. Frequency	162	143	152	192	217	208	159
2. Theoretical frequency	138	117	143	174	260	225	177
3. Chi-square	<u>4.28</u>	<u>5.89</u>	<u>0.60</u>	<u>1.92</u>	<u>7.21</u>	<u>1.24</u>	<u>1.75</u>
<u>College</u>							
1. Frequency	37	54	88	90	257	193	157
2. Theoretical frequency	98	83	101	123	184	160	125
3. Chi-square	<u>37.82</u>	<u>10.11</u>	<u>1.77</u>	<u>9.04</u>	<u>28.06</u>	<u>6.95</u>	<u>7.91</u>

 $\chi^2 = 151.682^{**}$ Kruskal-Wallis down = 101.269<sup>\*\*</sup>; across = 113.951<sup>\*\*</sup>

DF = 12

 $\phi = 0.1603$

Chi-Square Analysis of Preference  
Response for Soul Music

The null-hypothesis was rejected in Table 37 as revealed by the chi-square analysis. The degree of association was "very weak" between school level and preference for soul music.

Four cells, 1, 2, 6, and 7, revealed significant chi-squares on the difference between school level and soul music. The college subjects demonstrated a less observed than expected frequency in cells 1 and 2 and a more observed than expected frequency in cells 6 and 7. The junior and senior high subjects demonstrated a more observed than expected frequency in cell 1 and a less observed than expected frequency in cell 7.

The Kruskal-Wallis down and across variables indicated that the college subjects demonstrated slightly stronger preference values for soul music. In addition, the senior high and college subjects demonstrated noticeably indifferent attitudes toward soul music in cell 4.

Chi-Square Analysis of Preference  
Response for Spiritual Music

The null-hypothesis was rejected in Table 38 as revealed by the chi-square analysis. The degree of association was "very weak" between school level and preference for spirituals.

Table 37. Chi-square analysis of preference response for soul music by school level

School Level	Preference Scale						
	1	2	3	4	5	6	7
<u>Junior High School</u>							
1. Frequency	55	33	56	64	80	144	405
2. Theoretical frequency	40	33	46	61	89	134	434
3. Chi-square	5.82	0.00	2.16	0.13	0.95	0.77	<u>1.99</u>
<u>Senior High School</u>							
1. Frequency	68	66	71	111	127	170	620
2. Theoretical frequency	59	48	68	90	131	197	640
3. Chi-square	<u>1.50</u>	6.63	0.15	4.90	0.14	3.73	<u>0.62</u>
<u>College</u>							
1. Frequency	17	16	35	40	107	157	504
2. Theoretical frequency	42	34	48	64	93	140	455
3. Chi-square	<u>14.57</u>	<u>9.68</u>	3.60	8.95	1.99	<u>2.05</u>	<u>5.35</u>

 $\chi^2 = 75.763^{**}$ Kruskal-Wallis down = 35.592<sup>\*\*</sup>; across = 46.418<sup>\*\*</sup>

DF = 12

 $\phi = 0.1131$

Table 38. Chi-square analysis of preference response for spiritual music by school level

School Level	Preference Scale						
	1	2	3	4	5	6	7
<u>Junior High School</u>							
1. Frequency	277	92	78	112	93	89	96
2. Theoretical frequency	200	84	70	105	112	132	134
3. Chi-square	<u>29.89</u>	0.74	1.01	0.41	3.29	<u>13.91</u>	<u>10.82</u>
<u>Senior High School</u>							
1. Frequency	346	140	95	151	152	189	160
2. Theoretical frequency	294	124	103	155	165	194	198
3. Chi-square	<u>9.10</u>	2.09	0.55	0.11	1.07	<u>0.13</u>	<u>7.13</u>
<u>College</u>							
1. Frequency	80	64	72	108	150	186	216
2. Theoretical frequency	209	88	73	110	117	138	140
3. Chi-square	<u>79.65</u>	6.55	0.00	0.04	9.01	<u>16.71</u>	<u>40.77</u>

$\chi^2 = 233.098^{**}$

Kruskal-Wallis down = 220.160\*; across = 201.283\*\*

DF = 12

$\phi = 0.1987$

Three cells, 1, 6, and 7, demonstrated significant chi-squares on the difference between school level and spirituals. Cell 1 disclosed a less observed than expected frequency by the college subjects and a more observed than expected frequency by the junior and senior high subjects. Cells 6 and 7 disclosed a more observed than expected frequency by the college subjects and a less observed than expected frequency by the junior and senior high subjects.

The Kruskal-Wallis down and across variables indicated that the college subjects revealed the strongest preference values for spirituals.

#### Chi-Square Analysis of Preference Response for Classical Music

Table 39 varies somewhat from previous findings. The degree of association was "weak" between school level and preference for classical music which was a higher degree of association than previously reported in the section under consideration. Two disclosures were consistent with previous data; i.e., the significant difference between school level and preference for classical music as revealed by the chi-square analysis and the rejection of the null-hypothesis.

Four cells, 1, 5, 6, and 7, demonstrated significant chi-squares on difference between school level and preference for classical music. Cell 1 disclosed a markedly less observed than expected frequency by the college subjects and a more observed than expected frequency by the junior and senior high subjects. Cells 5, 6, and 7 disclosed more



Table 39. Chi-square analysis of preference response for classical music by school level

School Level	Preference Scale						
	1	2	3	4	5	6	7
<u>Junior High School</u>							
1. Frequency	313	101	96	124	90	66	47
2. Theoretical frequency	212	85	94	128	139	102	77
3. Chi-square	<u>48.17</u>	2.91	0.02	0.13	<u>17.23</u>	<u>12.53</u>	<u>11.50</u>
<u>Senior High School</u>							
1. Frequency	392	145	155	176	162	135	68
2. Theoretical frequency	312	126	139	189	205	150	113
3. Chi-square	<u>20.38</u>	3.00	1.85	0.86	<u>8.89</u>	<u>1.46</u>	<u>17.92</u>
<u>College</u>							
1. Frequency	41	54	81	151	237	157	155
2. Theoretical frequency	222	89	99	134	145	106	80
3. Chi-square	<u>147.40</u>	13.89	3.18	2.12	<u>57.69</u>	<u>24.00</u>	<u>69.53</u>

 $\chi^2 = 464.768^{**}$ Kruskal-Wallis down = 441.067<sup>\*\*</sup>; across = 378.451<sup>\*\*</sup>

DF = 12

 $\phi = 0.2807$

observed than expected frequencies by the college subjects and less observed than expected frequencies by the junior and senior high subjects.

The Kruskal-Wallis down and across variables indicated that the college subjects demonstrated the strongest preference values for classical music.

#### Chi-Square Analysis of Preference Response for Light Classical Music

The data on school level and light classical music was consistent with the data in Table 39. The degree of association was "weak" between school level and preference for light classical music. The null-hypothesis was rejected as revealed by the chi-square analysis.

Four cells, 1, 2, 6, and 7, revealed significant chi-squares on the difference between school level and light classical music. Cells 1 and 2 disclosed a less observed than expected frequency by the college subjects and a more observed than expected frequencies by the junior and senior high subjects. The college subjects disclosed a more observed than expected frequency in the 6th and 7th cells and the junior and senior high subjects disclosed a less observed than expected frequencies in the 6th and 7th cells.

The Kruskal-Wallis down and across variables indicated that college subjects demonstrated the strongest preference values for light classical music.

Table 40. Chi-square analysis of preference response for light classical music by school level

School Level	Preference Scale						
	1	2	3	4	5	6	7
<u>Junior High School</u>							
1. Frequency	211	88	106	121	139	89	83
2. Theoretical frequency	142	78	82	105	170	148	111
3. Chi-square	<u>33.80</u>	<u>1.24</u>	<u>6.76</u>	<u>2.30</u>	<u>5.61</u>	<u>23.71</u>	<u>7.10</u>
<u>Senior High School</u>							
1. Frequency	257	144	127	137	244	210	114
2. Theoretical frequency	209	115	121	155	250	218	164
3. Chi-square	<u>11.10</u>	<u>7.25</u>	<u>0.26</u>	<u>2.15</u>	<u>0.15</u>	<u>0.32</u>	<u>15.06</u>
<u>College</u>							
1. Frequency	31	43	57	113	215	223	194
2. Theoretical frequency	148	82	86	110	178	155	116
3. Chi-square	<u>92.85</u>	<u>18.38</u>	<u>9.90</u>	<u>0.06</u>	<u>7.77</u>	<u>29.59</u>	<u>51.97</u>

 $\chi^2 = 327.442^{**}$ Kruskal-Wallis down = 301.946<sup>\*\*</sup>; across = 269.149<sup>\*\*</sup>

DF = 12

 $\phi = 0.2355$

Chi-Square Analysis of Preference  
Response for Country and Western  
Music

Table 41 revealed a significant difference between school level and preference for country and western music, thereby rejecting the null-hypothesis. The variance of association was "very weak" between school level and preference for country and western music.

Three cells, 2, 6, 7, revealed significant chi-squares on the difference between school level and country and western music. The junior and senior high subjects revealed a less observed than expected frequency in cell 2 and the college subjects disclosed a more observed than expected frequency in cell 2. Cells 6 and 7 disclosed a more observed than expected frequency by the junior and senior high subjects and a less observed than expected frequency by the college subjects.

The Kruskal-Wallis down and across variables indicated that the senior high subjects demonstrated the strongest preference values for country and western music.

Chi-Square Analysis of Preference  
Response for Folk Music

Table 42 revealed a significant difference between school level and preference for folk music, thereby rejecting the null-hypothesis. The variance of association was "very weak" between school level and preference for folk music.

Table 41. Chi-square analysis of preference response for country and western music by school level

School Level	Preference Scale						
	1	2	3	4	5	6	7
<u>Junior High School</u>							
1. Frequency	310	109	92	131	85	49	61
2. Theoretical frequency	298	121	106	112	92	60	48
3. Chi-square	0.45	<u>1.25</u>	1.84	3.24	0.54	<u>1.90</u>	<u>3.68</u>
<u>Senior High School</u>							
1. Frequency	411	158	156	171	138	118	82
2. Theoretical frequency	439	179	156	165	136	88	70
3. Chi-square	1.84	<u>2.40</u>	0.00	0.22	0.04	<u>10.31</u>	<u>1.94</u>
<u>College</u>							
1. Frequency	329	160	126	92	101	43	25
2. Theoretical frequency	312	127	111	117	96	62	50
3. Chi-square	0.90	<u>8.59</u>	2.05	5.40	0.22	<u>6.05</u>	<u>12.46</u>

$\chi^2 = 65.401^{**}$

Kruskal-Wallis down = 22.375<sup>\*\*</sup>; across = 37.283<sup>\*\*</sup>

DF = 12

$\phi = 0.1048$

Table 42. Chi-square analysis of preference response for folk music by school level

School Level	Preference Scale						
	1	2	3	4	5	6	7
<u>Junior High School</u>							
1. Frequency	231	114	98	138	115	83	58
2. Theoretical frequency	178	103	99	130	135	100	94
3. Chi-square	<u>16.07</u>	1.27	0.00	0.55	2.87	2.89	<u>13.81</u>
<u>Senior High School</u>							
1. Frequency	294	160	146	182	181	163	107
2. Theoretical frequency	262	151	145	191	198	146	139
3. Chi-square	<u>4.01</u>	0.52	0.00	0.41	1.52	1.66	<u>7.17</u>
<u>College</u>							
1. Frequency	100	87	103	136	178	106	166
2. Theoretical frequency	186	107	103	136	141	105	98
3. Chi-square	<u>39.65</u>	3.85	0.00	0.00	9.74	0.01	<u>46.39</u>

 $\chi^2 = 152.477^{**}$ Kruskal-Wallis down = 122.779<sup>\*\*</sup>; across - 128.112<sup>\*\*</sup>

DF = 12

 $\phi = 0.1606$

The junior and senior high subjects disclosed a more observed than expected frequency in cell 1; in addition, the college subjects disclosed a less observed than expected frequency in cell 1. Cell 7 disclosed a less observed than expected frequency by the junior and senior high subjects and a more observed than expected frequency by the college subjects.

The Kruskal-Wallis down and across variables indicated that the college subjects disclosed strongest preference values for folk music.

#### Chi-Square Analysis of Preference Response for Show Music

Table 43 revealed a significant difference between school level and preference for show music, thereby rejecting the null-hypothesis. Closely associated to these findings was the "very weak" strength of association between school level and preference for show music.

Three cells, 1, 6, and 7, revealed significant chi-squares on the difference between school level and show music. Cell 1 revealed a more observed than expected frequency by the junior and senior high subjects and a less observed than expected frequency by the college subjects. Cells 6 and 7 revealed a more observed than expected frequency by the college subjects and a less observed than expected frequency by the junior and senior high subjects.

Table 43. Chi-square analysis of preference response for show music by school level

School Level	Preference Scale						
	1	2	3	4	5	6	7
<u>Junior High School</u>							
1. Frequency	275	101	97	127	91	68	78
2. Theoretical frequency	264	95	78	107	103	86	103
3. Chi-square	<u>0.48</u>	0.32	4.40	3.69	1.30	<u>3.90</u>	<u>6.24</u>
<u>Senior High School</u>							
1. Frequency	463	136	111	153	157	114	99
2. Theoretical frequency	388	141	116	158	151	126	152
3. Chi-square	<u>14.32</u>	0.15	0.17	0.14	0.23	<u>1.37</u>	<u>18.67</u>
<u>College</u>							
1. Frequency	190	99	68	97	113	122	187
2. Theoretical frequency	276	100	82	112	107	90	108
3. Chi-square	<u>26.76</u>	0.00	2.41	2.03	0.29	<u>11.05</u>	<u>57.31</u>

 $\chi^2 = 155.342^{**}$ Kruskal-Wallis down = 114.251<sup>\*\*</sup>; across = 97.550<sup>\*\*</sup>

DF = 12

 $\phi = 0.1621$



The Kruskal-Wallis down and across variables indicated that the college subjects demonstrated the strongest preference values for show music.

### Summary

The null hypothesis was rejected in the data on music preference and school level. The degree of association was "very weak" in all categories except classical and light classical music, whereas the degree of association was "weak." A summary of the results is as follows:

- (1) The college subjects disclosed the strongest preference values for rock and roll music.
- (2) The college subjects disclosed the strongest preference values for jazz music.
- (3) The college subjects disclosed the strongest preference values for blues music.
- (4) The college subjects disclosed the strongest preference values for soul music.
- (5) The college subjects disclosed the strongest preference values for spirituals.
- (6) The college subjects disclosed the strongest preference values for classical music.
- (7) The college subjects disclosed the strongest preference values for light classical music.
- (8) The senior high subjects disclosed the strongest preference values for country and western music.

- (9) The college subjects disclosed the strongest preference values for folk music.
- (10) The college subjects disclosed the strongest preference values for show music.

### Geographical Location

#### Chi-Square Analysis of Preference Response for Rock and Roll Music

The chi-square analysis in Table 44 revealed a significant difference between geographical location and preference for rock and roll music; therefore, the null-hypothesis was rejected. Along with the significant difference Table 44 divulged a "very weak" strength of association between geographical location and preference for rock and roll music.

Three cells disclosed significant chi-squares on geographical location and preference for rock and roll music. Cell 7 revealed a less observed than expected frequency by the southern region and cell 3 revealed a less observed than expected frequency by the eastern region. Furthermore, the eastern region demonstrated more observed than expected frequency by the eastern region. Furthermore, the eastern region demonstrated more observed than expected frequency in cell 7.

The Kruskal-Wallis down and across variables indicated that the eastern region demonstrated the strongest preference values for rock and roll music.

Table 44. Chi-square analysis of preference response for rock and roll music by geographical location

Geographical Location	Preference Scale						
	1	2	3	4	5	6	7
<u>Northern</u>							
1. Frequency	67	69	103	121	222	210	293
2. Theoretical frequency	68	67	91	112	205	250	294
3. Chi-square	0.01	0.07	1.67	0.77	1.35	6.27	0.00
<u>Southern</u>							
1. Frequency	70	57	98	86	208	265	206
2. Theoretical frequency	62	61	83	102	187	228	268
3. Chi-square	1.07	0.24	2.84	2.45	2.31	6.17	14.27
<u>Eastern</u>							
1. Frequency	32	31	27	67	91	150	214
2. Theoretical frequency	38	38	51	63	116	141	166
3. Chi-square	1.01	1.15	11.36	0.26	5.27	0.62	14.16
<u>Western</u>							
1. Frequency	15	24	18	29	36	52	84
2. Theoretical frequency	16	16	22	26	49	59	70
3. Chi-square	0.07	4.18	0.58	0.22	3.34	0.89	2.88

$\chi^2 = 87.349^{**}$

Kruskal-Wallis down = 33.185<sup>\*\*</sup>; across = 27.485<sup>\*\*</sup>

DF = 18

$\phi = 0.0989$

Chi-Square Analysis of Preference  
Response for Jazz Music

The data in Table 45 vary somewhat from disclosures on rock and roll music and geographical location. Beyond the significant difference the variance of association was "very weak" between geographical location and preference for jazz music. The null-hypothesis was rejected as revealed by the chi-square analysis.

Two cells, 2 and 7, disclosed significant chi-squares on geographical location and preference for jazz music. The northern region demonstrated a less observed than expected frequency in cell 7 and the eastern region demonstrated a more observed than expected frequency in cell 7.

The Kruskal-Wallis down and across variables indicated that the eastern region demonstrated the strongest preference values for jazz music.

Chi-Square Analysis of Preference  
Response for Blues Music

The null-hypothesis was rejected in Table 46 as revealed by the chi-square analysis. The strength of association was "very weak" between geographical location and preference for the blues.

Four cells, 1, 2, 6, and 7, disclosed significant chi-squares in the difference between geographical location and preference for the blues. The western region disclosed more observed than expected frequencies in cells 1 and 2 and a less observed than expected frequency in cell 7. The

Table 45. Chi-square analysis of preference response for jazz music by geographical location

Geographical Location	Preference Scale						
	1	2	3	4	5	6	7
<u>Northern</u>							
1. Frequency	157	108	149	174	226	170	102
2. Theoretical frequency	147	98	137	147	220	187	151
3. Chi-square	0.66	1.08	1.09	5.07	0.15	1.52	15.77
<u>Southern</u>							
1. Frequency	128	75	118	114	208	210	137
2. Theoretical frequency	134	89	125	134	201	170	137
3. Chi-square	0.27	2.21	0.35	2.91	0.27	9.21	0.00
<u>Eastern</u>							
1. Frequency	80	43	71	63	113	96	145
2. Theoretical frequency	83	55	77	83	124	105	85
3. Chi-square	0.10	2.63	0.47	4.68	0.97	0.65	42.41
<u>Western</u>							
1. Frequency	34	39	33	47	50	30	25
2. Theoretical frequency	35	23	32	35	52	44	36
3. Chi-square	0.02	10.74	0.00	4.23	0.09	4.67	3.26

$\chi^2 = 115.650^{**}$

Kruskal-Wallis down = 50.513<sup>\*\*</sup>; across = 33.404<sup>\*\*</sup>

DF = 18

$\phi = 0.1140$

Table 46. Chi-square analysis of preference response for blues music by geographical location

Geographical Location	Preference Scale						
	1	2	3	4	5	6	7
<u>Northern</u>							
1. Frequency	108	113	143	179	252	180	111
2. Theoretical frequency	121	103	126	153	229	198	156
3. Chi-square	<u>1.45</u>	<u>1.00</u>	2.37	4.42	2.24	<u>1.62</u>	<u>12.76</u>
<u>Southern</u>							
1. Frequency	91	74	105	109	213	226	172
2. Theoretical frequency	111	94	115	139	209	180	142
3. Chi-square	<u>3.46</u>	<u>4.16</u>	0.80	6.65	0.07	<u>11.49</u>	<u>6.42</u>
<u>Eastern</u>							
1. Frequency	80	46	61	86	115	99	124
2. Theoretical frequency	68	58	71	86	129	112	88
3. Chi-square	<u>1.98</u>	<u>2.46</u>	1.36	0.00	1.56	<u>1.41</u>	<u>15.05</u>
<u>Western</u>							
1. Frequency	50	46	32	41	42	32	15
2. Theoretical frequency	29	24	30	36	54	47	37
3. Chi-square	<u>15.58</u>	<u>19.03</u>	0.15	0.59	2.85	<u>4.80</u>	<u>13.04</u>

$\chi^2 = 124.719^{**}$

Kruskal-Wallis down = 86.398<sup>\*\*</sup>; across = 31.905<sup>\*\*</sup>

DF = 18

$\phi = 0.1030$

southern region demonstrated more observed than expected frequencies in cells 6 and 7 and the eastern region demonstrated a more than expected frequency in cell 7.

The Kruskal-Wallis down and across variables revealed that the southern and eastern region demonstrated the strongest preference values for the blues music.

#### Chi-Square Analysis of Preference Response for Soul Music

The extent of association was "weak" between geographical location and preference for soul music. Table 47 revealed a significant difference between geographical location and preference for soul music; therefore, the null-hypothesis was rejected.

Five cells, 3, 4, 5, 6, and 7, demonstrated significant chi-squares on the difference between soul music and geographical location. The northern region revealed more observed than expected frequencies in cells 3, 5, and 6, and a less observed than expected frequency in cell 7. The southern region demonstrated less observed than expected frequencies in the 2nd, 3rd, and 6th cells and a more observed than expected frequency in cell 7.

The Kruskal-Wallis down and across variables indicated that the southern region revealed the strongest preference values for soul music. One additional disclosure was the strong indifferent attitude expressed by the northern and southern regions in cell 4.

Table 47. Chi-square analysis of preference response for soul music by geographical location

Geographical Location	Preference Scale						
	1	2	3	4	5	6	7
<u>Northern</u>							
1. Frequency	55	58	91	124	172	248	338
2. Theoretical frequency	52	42	60	79	116	174	564
3. Chi-square	0.22	5.74	<u>16.38</u>	<u>25.25</u>	<u>27.33</u>	<u>31.85</u>	<u>90.33</u>
<u>Southern</u>							
1. Frequency	29	13	21	35	39	111	742
2. Theoretical frequency	47	39	54	72	106	158	514
3. Chi-square	6.92	<u>17.01</u>	<u>20.54</u>	<u>19.20</u>	<u>41.93</u>	<u>14.12</u>	<u>101.33</u>
<u>Eastern</u>							
1. Frequency	34	24	33	37	68	82	334
2. Theoretical frequency	29	24	34	45	65	98	318
3. Chi-square	0.83	0.00	<u>0.01</u>	<u>1.31</u>	<u>0.11</u>	<u>2.56</u>	<u>0.84</u>
<u>Western</u>							
1. Frequency	22	20	17	19	35	30	115
2. Theoretical frequency	12	10	14	19	26	41	134
3. Chi-square	7.73	9.78	<u>0.55</u>	<u>0.00</u>	<u>2.04</u>	<u>3.06</u>	<u>2.66</u>

$\chi^2 = 449.765^{**}$

Kruskal-Wallis down = 371.341<sup>\*\*</sup>; across = 125.691<sup>\*\*</sup>

DF = 18

$\phi = 0.2253$



### Chi-Square Analysis of Preference Response for Spiritual Music

Table 48 disclosed a "weak" variance of association between geographical location and preference for spirituals. The null-hypothesis was rejected in Table 48 as revealed by the chi-square analysis.

Six cells, 1, 2, 3, 5, 6, and 7, revealed significant chi-squares on the difference between spiritual music and geographical location. The northern region revealed more observed than expected frequencies in cells 1, 2, and 3, in addition, the northern region revealed less observed than expected frequencies in the 5th, 6th, and 7th cells. The southern region demonstrated less observed than expected frequencies in cells 1 and 2 and more observed than expected frequencies in cells 6 and 7.

The Kruskal-Wallis down and across variables indicated that the southern region demonstrated the strongest preference values for spiritual music.

### Chi-Square Analysis of Preference Response for Classical Music

Table 49 disclosed a significant difference between geographical location and preference for classical music thereby negating the null-hypothesis. In addition the strength of association was "very weak" between geographical location and preference for classical music.

**Table 48.** Chi-square analysis of preference response for spiritual music by geographical location

Geographical Location	Preference Scale						
	1	2	3	4	5	6	7
<u>Northern</u>							
1. Frequency	323	177	126	161	122	109	69
2. Theoretical frequency	259	109	90	137	146	171	174
3. Chi-square	<u>15.73</u>	<u>42.23</u>	<u>13.31</u>	4.29	<u>3.82</u>	<u>22.50</u>	<u>63.35</u>
<u>Southern</u>							
1. Frequency	121	52	60	103	165	226	263
2. Theoretical frequency	236	99	82	125	133	156	159
3. Chi-square	<u>56.21</u>	<u>22.65</u>	<u>6.05</u>	3.76	<u>7.84</u>	<u>31.49</u>	<u>68.69</u>
<u>Eastern</u>							
1. Frequency	171	46	42	72	68	92	121
2. Theoretical frequency	146	61	51	77	82	96	98
3. Chi-square	<u>4.26</u>	<u>3.90</u>	<u>1.55</u>	0.33	<u>2.40</u>	<u>0.20</u>	<u>5.37</u>
<u>Western</u>							
1. Frequency	88	21	18	35	40	37	19
2. Theoretical frequency	62	26	21	32	35	41	41
3. Chi-square	<u>11.34</u>	<u>0.93</u>	<u>0.55</u>	0.19	<u>0.84</u>	<u>0.32</u>	<u>12.06</u>

$\chi^2 = 406.307^{**}$

Kruskal-Wallis down = 331.801<sup>\*\*</sup>; across = 102.556<sup>\*\*</sup>

DF = 18

$\phi = 0.2142$

Table 49. Chi-square analysis of preference response for classical music by geographical location

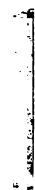
Geographical Location	Preference Scale						
	1	2	3	4	5	6	7
<u>Northern</u>							
1. Frequency	270	117	116	153	175	127	128
2. Theoretical frequency	275	111	122	166	180	132	100
3. Chi-square	<u>0.09</u>	0.37	0.33	1.05	0.15	0.18	<u>8.14</u>
<u>Southern</u>							
1. Frequency	234	97	137	166	163	126	67
2. Theoretical frequency	251	101	112	152	164	120	91
3. Chi-square	<u>1.11</u>	0.14	5.79	1.37	0.01	0.26	<u>6.20</u>
<u>Eastern</u>							
1. Frequency	130	54	51	106	125	82	64
2. Theoretical frequency	155	62	69	94	102	74	56
3. Chi-square	<u>4.02</u>	1.11	4.68	1.61	5.39	0.78	<u>1.11</u>
<u>Western</u>							
1. Frequency	112	32	28	26	26	23	11
2. Theoretical frequency	65	26	29	39	43	31	24
3. Chi-square	<u>33.33</u>	1.24	0.03	4.61	6.61	2.22	<u>6.74</u>

$\chi^2 = 98.818^{**}$

Kruskal-Wallis down = 59.631<sup>\*\*</sup>; across = 13.118<sup>\*\*</sup>

DF = 18

$\phi = 0.1053$



Two cells, 1 and 7, revealed significant chi-squares difference between geographical location and preference for classical music. The western region demonstrated a more observed than expected frequency in cell 1 and the northern region demonstrated a more observed than expected frequency in cell 7.

The Kruskal-Wallis down and across variables indicated that the northern and eastern regions disclosed slightly stronger preference values for classical music.

#### Chi-Square Analysis of Preference Response for Light Classical Music

Table 50 presented data that was consistent with classical music and geographical location. The degree of association was "very weak" between geographical location and preference for light classical music. The null-hypothesis was rejected as revealed by the chi-square analysis.

Two cells, 6 and 7, demonstrated less observed than expected frequencies by the southern (6) and northern (7) regions, respectively. The eastern region disclosed a less observed than expected frequency in cell 2 and more observed than expected frequencies in cells 6 and 7.

The Kruskal-Wallis down and across variables demonstrated that the eastern region revealed the strongest preference values for light classical music.

Table 50. Chi-square analysis of preference response for light classical music by geographical location

Geographical Location	Preference Scale						
	1	2	3	4	5	6	7
<u>Northern</u>							
1. Frequency	196	117	108	152	197	151	165
2. Theoretical frequency	184	101	107	137	220	192	166
3. Chi-square	0.78	2.40	0.01	1.69	2.49	8.91	3.01
<u>Southern</u>							
1. Frequency	157	89	117	130	204	196	97
2. Theoretical frequency	168	92	97	125	201	175	131
3. Chi-square	0.68	0.12	3.92	0.22	0.04	2.41	9.00
<u>Eastern</u>							
1. Frequency	83	33	42	65	151	133	105
2. Theoretical frequency	104	57	60	77	124	108	81
3. Chi-square	4.11	10.19	5.52	1.89	5.76	5.56	6.95
<u>Western</u>							
1. Frequency	63	36	23	24	46	42	24
2. Theoretical frequency	44	24	25	32	52	46	34
3. Chi-square	8.52	5.89	0.22	2.21	0.77	0.30	3.06

$\chi^2 = 96.779^{**}$

Kruskal-Wallis down = 47.1866\*\*; across = 24.1866\*\*

DF = 18

$\phi = 0.1044$

Chi-Square Analysis of Preference  
Response for Country and Western  
Music

Table 51 revealed a significant difference between geographical location and preference for country and western music, thereby rejecting the null-hypothesis. Beyond the significant difference the variance of association was "very weak" between geographical location and preference for country and western music.

The Kruskal-Wallis across variable indicated that the western region demonstrated the strongest preference values for country and western music. In addition, the northern and eastern regions demonstrated noticeably indifferent attitudes toward country and western music in cell 4.

Chi-Square Analysis of Preference  
Response for Folk Music

The extent of association was "very weak" between geographical location and preference for folk music. The null-hypothesis was rejected in Table 52 as revealed by the chi-square analysis.

Two cells, 6 and 7, revealed significant chi-squares on the difference between geographical location and preference for folk music. The northern region displayed more observed than expected frequencies in cells 6 and 7 and the southern region revealed less observed than expected frequencies in cells 6 and 7.

Table 51. Chi-square analysis of preference response for country and western music by geographical location

Geographical Location	Preference Scale						
	1	2	3	4	5	6	7
<u>Northern</u>							
1. Frequency	375	174	126	167	109	84	50
2. Theoretical frequency	287	157	138	145	119	77	62
3. Chi-square	0.37	1.74	0.80	<u>3.25</u>	0.91	0.56	<u>2.29</u>
<u>Southern</u>							
1. Frequency	339	127	143	139	129	66	47
2. Theoretical frequency	353	143	125	132	109	61	56
3. Chi-square	0.54	1.89	2.48	0.32	3.71	0.29	<u>1.58</u>
<u>Eastern</u>							
1. Frequency	246	91	72	61	66	37	39
2. Theoretical frequency	218	89	77	82	67	44	35
3. Chi-square	3.56	0.05	0.38	<u>5.31</u>	0.02	1.00	<u>0.48</u>
<u>Western</u>							
1. Frequency	90	35	31	26	20	23	32
2. Theoretical frequency	92	37	33	35	28	18	15
3. Chi-square	0.04	0.15	0.08	1.63	2.47	1.15	<u>20.31</u>

$\chi^2 = 57.495^{**}$

Kruskal-Wallis down = 7.487; across = 24.802\*\*

DF = 18

$\phi = 0.0806$



Table 52. Chi-square analysis of preference response for folk music by geographical location

Geographical Location	Preference Scale						
	1	2	3	4	5	6	7
<u>Northern</u>							
1. Frequency	187	122	122	149	178	134	194
2. Theoretical frequency	230	133	128	168	175	130	122
3. Chi-square	8.17	0.92	0.27	2.16	0.06	0.13	<u>42.36</u>
<u>Southern</u>							
1. Frequency	233	140	146	176	176	87	32
2. Theoretical frequency	210	121	117	153	159	118	111
3. Chi-square	2.51	2.87	7.40	3.38	1.75	<u>8.27</u>	<u>56.43</u>
<u>Eastern</u>							
1. Frequency	146	67	55	105	90	81	68
2. Theoretical frequency	130	75	72	95	98	73	69
3. Chi-square	2.01	0.85	4.04	1.11	0.72	0.84	0.00
<u>Western</u>							
1. Frequency	59	32	24	26	30	50	37
2. Theoretical frequency	55	32	30	40	42	31	29
3. Chi-square	0.33	0.00	1.34	4.86	3.19	<u>11.92</u>	2.21

$\chi^2 = 170.337^{**}$

Kruskal-Wallis down = 76.206<sup>\*\*</sup>; across = 35.973

DF = 18

$\phi = 0.1385$

The Kruskal-Wallis down and across variables demonstrated that the northern region revealed the strongest preference values for folk music.

#### Chi-Square Analysis of Preference Response for Show Music

Table 53 revealed a significant difference between geographical location and preference for show music, thereby rejecting the null-hypothesis. The variance of association was "very weak" between geographical location and preference for show music.

Four cells, 1, 2, 6, and 7, demonstrated significant chi-squares on the difference between show music and geographical location. The southern region displayed a more observed than expected frequency in cell 1 and less observed than expected frequencies in cells 6 and 7. The northern region displayed a less observed than expected frequency in cell 1 and a more observed than expected frequency in cell 7.

The Kruskal-Wallis down and across variables revealed that the northern region demonstrated the strongest preference values for show music.

#### Summary

The null-hypothesis was rejected in data on music preference and geographical location. In addition, the degree of association was "weak" between soul music, spirituals and geographical location and "very weak" between the remaining categories and geographical location.

Table 53. Chi-square analysis of preference response for show music by geographical location

Geographical Location	Preference Scale						
	1	2	3	4	5	6	7
<u>Northern</u>							
1. Frequency	251	110	113	139	146	134	193
2. Theoretical frequency	342	124	102	139	133	112	134
3. Chi-square	24.25	1.55	1.24	0.00	1.25	4.29	25.78
<u>Southern</u>							
1. Frequency	404	139	108	157	92	66	24
2. Theoretical frequency	312	113	93	127	121	102	122
3. Chi-square	26.22	6.02	2.50	7.25	7.08	12.79	79.03
<u>Eastern</u>							
1. Frequency	190	61	46	65	84	76	90
2. Theoretical frequency	193	70	57	78	75	63	76
3. Chi-square	0.04	1.10	2.24	2.26	1.08	2.61	2.73
<u>Western</u>							
1. Frequency	83	26	9	16	39	28	57
2. Theoretical frequency	81	29	24	33	32	27	32
3. Chi-square	0.03	0.39	9.52	8.77	1.72	0.07	19.79

$\chi^2 = 252.718^{**}$

Kruskal-Wallis down = 175.074<sup>\*\*</sup>; across = 29.588<sup>\*\*</sup>

DF = 18

$\phi = 0.1688$

A summary of the disclosures is as follows:

- (1) The eastern region revealed the strongest preference values for rock and roll music.
- (2) The southern region revealed the strongest preference values for jazz music.
- (3) The southern and eastern regions revealed the strongest preference values for blues music.
- (4) The southern region revealed the strongest preference values for soul music.
- (5) The southern region revealed the strongest preference values for spiritual music.
- (6) The northern region revealed slightly stronger preference values for classical music.
- (7) The eastern region revealed the strongest preference values for light classical music.
- (8) The western region revealed the strongest preference values for country and western music.
- (9) The northern region revealed the strongest preference values for folk music.
- (10) The northern region revealed the strongest preference values for show music

The present disclosures that attitudes vary toward music by geographical region are consistent with Baumann's conclusion. Baumann concluded that regional differences existed in music preference between respondents from Arizona and Maryland, respectively.

Preferred Music Category

Chi-Square Analysis of Preference  
Response for Rock and Roll Music

Table 54 revealed a significant difference between preferred music category and preference for rock and roll music; therefore, the null-hypothesis was rejected. The degree of association was "very weak" between preferred music category and preference for rock and roll.

Two cells, 1 and 7, demonstrated significant chi-squares on the difference between preferred music category and preference for rock and roll music. The rock and roll category revealed a less observed than expected frequency in cell 1 and a more observed than expected frequency in cell 7.

The Kruskal-Wallis down and across variables indicated that the rock and roll category revealed the strongest preference values for rock and roll as a preferred music category.

Chi-Square Analysis of Preference  
Response for Jazz Music

The null-hypothesis was rejected in Table 55 as revealed by the chi-square analysis. In addition the degree of association was "very weak" between preferred music category and preference for jazz music.

Table 54. Chi-square analysis of preference response for rock and roll music by preferred music category

Preferred Music Category	Preference Scale						
	1	2	3	4	5	6	7
<u>Jazz Music</u>							
1. Frequency	17	15	27	42	65	77	72
2. Theoretical frequency	20	20	27	32	59	73	85
3. Chi-square	0.35	1.04	0.00	3.05	0.54	0.25	1.93
<u>Classical Music</u>							
1. Frequency	4	9	14	15	29	35	35
2. Theoretical frequency	9	9	12	14	27	33	38
3. Chi-square	2.60	0.00	0.33	0.02	0.22	0.18	0.23
<u>Country and Western Music</u>							
1. Frequency	7	5	6	6	8	18	10
2. Theoretical frequency	4	4	5	6	11	14	16
3. Chi-square	2.84	0.44	0.15	0.00	0.96	1.24	2.34
<u>Spiritual Music</u>							
1. Frequency	18	12	16	19	31	29	34
2. Theoretical frequency	10	10	14	16	30	37	43
3. Chi-square	6.60	0.46	0.45	0.48	0.03	1.61	1.81
<u>Light Classical Music</u>							
1. Frequency	5	6	10	13	22	27	16
2. Theoretical frequency	6	6	8	10	19	23	27
3. Chi-square	0.22	0.00	0.29	0.84	0.60	0.75	4.26
<u>Soul Music</u>							
1. Frequency	80	66	103	80	208	262	274
2. Theoretical frequency	67	67	91	109	202	248	289
3. Chi-square	2.54	0.00	1.47	7.91	0.15	0.81	0.79
<u>Blues Music</u>							
1. Frequency	7	11	4	7	17	18	26
2. Theoretical frequency	6	6	8	9	17	21	24
3. Chi-square	0.34	5.27	1.74	0.51	0.00	0.36	0.12
<u>Rock and Roll Music</u>							
1. Frequency	29	45	49	89	128	156	260
2. Theoretical frequency	47	47	64	77	142	174	204
3. Chi-square	6.96	0.07	3.65	1.86	1.45	1.94	15.64
<u>Show Music</u>							
1. Frequency	2	2	4	9	11	8	15
2. Theoretical frequency	3	3	4	5	10	12	14
3. Chi-square	0.43	0.42	0.02	2.78	0.20	1.20	0.11
<u>Folk Music</u>							
1. Frequency	9	6	10	11	19	29	27
2. Theoretical frequency	7	7	9	11	21	26	30
3. Chi-square	0.62	0.11	0.03	0.00	0.17	0.44	0.27

 $\chi^2 = 99.500^{**}$ Kruskal-Wallis down = 31.644<sup>\*\*</sup>; across = 26.233<sup>\*\*</sup>

DF = 54

 $\phi = 0.0761$

Table 55. Chi-square analysis of preference response for jazz music by preferred music category

Preferred Music Category	Preference Scale						
	1	2	3	4	5	6	7
<u>Jazz Music</u>							
1. Frequency	12	10	27	21	45	81	119
2. Theoretical frequency	42	28	40	42	64	54	44
3. Chi-square	<u>21.75</u>	<u>11.77</u>	4.42	10.35	4.68	<u>13.03</u>	<u>129.19</u>
<u>Classical Music</u>							
1. Frequency	5	14	20	17	37	28	20
2. Theoretical frequency	19	13	18	19	29	24	20
3. Chi-square	10.27	0.14	0.20	0.15	2.41	0.55	0.00
<u>Country and Western Music</u>							
1. Frequency	11	7	7	9	15	7	4
2. Theoretical frequency	8	5	8	8	12	10	8
3. Chi-square	1.06	0.48	0.06	0.13	0.63	1.08	2.25
<u>Spiritual Music</u>							
1. Frequency	25	16	18	15	27	36	22
2. Theoretical frequency	21	14	20	21	32	27	22
3. Chi-square	0.61	0.21	0.27	1.76	0.88	2.66	0.00
<u>Light Classical Music</u>							
1. Frequency	5	12	10	17	30	17	8
2. Theoretical frequency	13	9	13	13	20	17	14
3. Chi-square	5.18	1.10	0.56	1.13	4.82	0.00	2.41
<u>Soul Music</u>							
1. Frequency	162	87	126	143	226	197	133
2. Theoretical frequency	144	96	138	143	218	185	149
3. Chi-square	2.14	0.89	0.98	0.00	0.25	0.72	1.77
<u>Blues Music</u>							
1. Frequency	10	7	7	5	18	28	15
2. Theoretical frequency	12	8	12	12	18	16	13
3. Chi-square	0.36	0.14	1.78	4.03	0.00	10.00	0.49
<u>Rock and Roll Music</u>							
1. Frequency	138	92	122	126	141	78	59
2. Theoretical frequency	102	68	97	100	154	131	105
3. Chi-square	13.00	8.66	6.51	6.57	1.06	21.12	20.21
<u>Show Music</u>							
1. Frequency	2	3	6	12	17	9	2
2. Theoretical frequency	7	5	7	7	10	9	7
3. Chi-square	3.44	0.54	0.04	4.04	4.23	0.00	3.65
<u>Folk Music</u>							
1. Frequency	14	8	23	14	25	12	15
2. Theoretical frequency	15	10	14	15	23	19	15
3. Chi-square	0.05	0.38	5.41	0.03	0.25	2.67	0.01

$$\chi^2 = 362.923^{**}$$

$$\text{Kruskal-Wallis down} = 236.180^{**}; \text{ across} = 153.635^{**}$$

$$DF = 54$$

$$\phi = 0.1452$$





Three cells, 1, 6, and 7, revealed significant chi-squares on the difference between the preferred music category and preference for jazz music. The rock and roll category revealed a more observed than expected frequency in cell 1 and less observed than expected frequencies in cells 6 and 7. The jazz music category revealed a less observed than expected frequency in cell 1 and more observed than expected frequencies in cells 6 and 7.

The Kruskal-Wallis down and across variables indicated that the jazz music category demonstrated the strongest preference value for jazz as a preferred music category. In addition, the jazz category revealed a noticeably indifferent attitude toward jazz in cell 4.

#### Chi-Square Analysis of Preference Response for Blues Music

The null-hypothesis was rejected in Table 56 as revealed by the chi-square analysis. The degree of association was "very weak" between preferred music category and preference for blues music.

Four cells, 1, 2, 6, and 7, disclosed significant chi-squares on the difference between preferred music category and preference for the blues. The rock and roll category displayed more observed than expected frequencies in cells 1 and 2 and less observed than expected frequencies in cells 6 and 7. The jazz category displayed less observed than expected frequencies in cells 1 and 2 and more observed than expected frequencies in cells 6 and 7.

Table 56. Chi-square analysis of preference response for blues music by preferred music category

Preferred Music Category	Preference Scale						
	1	2	3	4	5	6	7
<u>Jazz Music</u>							
1. Frequency	15	14	22	26	54	78	105
2. Theoretical frequency	35	30	37	44	66	57	45
3. Chi-square	<u>11.75</u>	<u>8.87</u>	5.97	7.44	2.02	7.52	<u>78.54</u>
<u>Classical Music</u>							
1. Frequency	10	9	20	16	42	24	20
2. Theoretical frequency	16	14	16	20	29	26	20
3. Chi-square	2.15	1.57	0.74	0.71	5.47	0.10	0.00
<u>Country and Western Music</u>							
1. Frequency	7	9	8	14	10	9	3
2. Theoretical frequency	7	6	7	8	12	11	9
3. Chi-square	0.00	1.76	0.13	3.72	0.49	0.33	3.67
<u>Spiritual Music</u>							
1. Frequency	20	14	24	21	24	27	29
2. Theoretical frequency	18	15	19	22	33	29	23
3. Chi-square	0.25	0.12	1.57	0.07	2.48	0.12	1.63
<u>Light Classical Music</u>							
1. Frequency	15	13	13	15	21	14	8
2. Theoretical frequency	11	10	12	14	21	18	14
3. Chi-square	1.34	1.23	0.17	0.09	0.00	0.88	2.73
<u>Soul Music</u>							
1. Frequency	105	90	116	129	240	241	153
2. Theoretical frequency	121	104	126	150	223	195	155
3. Chi-square	2.04	1.83	0.73	3.05	1.23	10.76	0.01
<u>Blues Music</u>							
1. Frequency	9	4	5	13	20	15	24
2. Theoretical frequency	10	9	11	13	19	16	13
3. Chi-square	0.12	2.53	2.90	0.01	0.08	0.11	9.42
<u>Rock and Roll Music</u>							
1. Frequency	125	110	100	138	141	83	59
2. Theoretical frequency	85	73	88	106	157	137	109
3. Chi-square	18.85	18.67	1.51	9.74	1.67	21.52	22.79
<u>Show Music</u>							
1. Frequency	210	6	6	9	17	9	2
2. Theoretical frequency	60	5	6	7	11	9	7
3. Chi-square	2.42	0.23	0.00	0.48	3.85	0.00	3.88
<u>Folk Music</u>							
1. Frequency	13	7	20	19	25	19	8
2. Theoretical frequency	12	11	13	16	23	20	16
3. Chi-square	0.02	1.29	3.79	0.76	0.15	0.06	3.98

 $\chi^2 = 314.521^{**}$ Kruskal-Wallis down = 216.588<sup>\*\*</sup>; across = 132.776<sup>\*\*</sup>

DF = 54

 $\phi = 0.1352$

The Kruskal-Wallis down and across variables indicated that the jazz category disclosed the strongest preference values for blues music as a preferred music category.

Chi-Square Analysis of Preference  
Response for Soul Music

Table 57 revealed a significant difference between preferred music category and preference for soul music; therefore, the null-hypothesis was rejected. The degree of association was "very weak" between preferred music category and preference for soul music.

Seven cells disclosed significant chi-squares on the difference between the preferred music category and soul music. The rock and roll category displayed a more observed than expected frequency in cell 1 and a less observed than expected frequency in cell 7. The soul music category revealed less observed than expected frequencies in cells 1, 2, 3, and 5, and more observed than expected frequencies in cells 6 and 7.

The Kruskal-Wallis down and across variables indicated that the soul music category disclosed the strongest preference values for soul music as a preferred category. In addition, the soul, rock and roll, and folk music categories revealed noticeably indifferent attitudes toward soul music in cell 4.

Table 57. Chi-square analysis of preference response for soul music by preferred music category

Preferred Music Category	Preference Scale						
	1	2	3	4	5	6	7
<u>Jazz Music</u>							
1. Frequency	1	10	10	15	25	81	203
2. Theoretical frequency	15	12	17	22	33	50	166
3. Chi-square	12.62	0.44	2.80	2.43	2.02	0.04	8.19
<u>Classical Music</u>							
1. Frequency	12	10	4	14	21	27	43
2. Theoretical frequency	7	6	8	10	15	22	74
3. Chi-square	4.61	3.61	5.50	1.57	2.53	1.05	13.21
<u>Country and Western Music</u>							
1. Frequency	7	5	5	7	9	12	15
2. Theoretical frequency	3	2	3	4	6	9	32
3. Chi-square	6.44	2.97	0.99	1.75	1.13	0.69	8.75
<u>Spiritual Music</u>							
1. Frequency	6	7	8	4	7	24	103
2. Theoretical frequency	7	6	9	11	17	25	84
3. Chi-square	0.24	0.09	0.03	4.71	5.68	0.03	4.37
<u>Light Classical Music</u>							
1. Frequency	2	5	10	10	13	20	39
2. Theoretical frequency	5	4	5	7	10	16	52
3. Chi-square	1.44	0.32	4.15	1.24	0.63	1.26	3.33
<u>Soul Music</u>							
1. Frequency	24	16	23	28	42	123	818
2. Theoretical frequency	50	42	58	76	113	169	566
3. Chi-square	<u>13.24</u>	<u>16.19</u>	<u>20.73</u>	<u>30.60</u>	<u>44.77</u>	<u>12.44</u>	<u>111.83</u>
<u>Blues Music</u>							
1. Frequency	1	3	6	2	17	17	44
2. Theoretical frequency	4	4	5	6	9	14	47
3. Chi-square	2.40	0.07	0.28	3.02	5.95	0.57	0.25
<u>Rock and Roll Music</u>							
1. Frequency	72	45	59	96	125	146	213
2. Theoretical frequency	35	30	41	54	80	119	399
3. Chi-square	<u>39.30</u>	7.95	8.45	<u>33.24</u>	25.78	6.20	86.45
<u>Show Music</u>							
1. Frequency	4	3	8	7	13	9	7
2. Theoretical frequency	2	2	3	4	5	8	27
3. Chi-square	1.14	0.50	10.15	3.14	10.81	0.12	14.71
<u>Folk Music</u>							
1. Frequency	3	8	10	20	29	20	21
2. Theoretical frequency	5	4	6	8	12	17	59
3. Chi-square	0.88	3.05	2.76	<u>18.58</u>	25.58	0.37	24.06

 $\chi^2 = 696.758^{**}$ Kruskal-Wallis down = 606.359<sup>\*\*</sup>; across = 204.154<sup>\*\*</sup>

DF = 54

 $\phi = 0.2014$

### Chi-Square Analysis of Preference Response for Spiritual Music

The null-hypothesis was rejected in Table 58 as revealed by the chi-square analysis. Beyond the significant difference the degree of association was "very weak" between the preferred music category and preference for spiritual music.

Three cells, 1, 6, and 7, revealed significant chi-squares on the difference between the preferred music category and preference for spiritual music. The soul music category disclosed a less observed than expected frequency in cell 1 and more observed than expected frequencies in cells 6 and 7. The rock and roll music category revealed a more than expected frequency in cell 1 and less observed than expected frequencies in cells 6 and 7. Also the spiritual category displayed a less observed than expected frequency in cell 1 and a more observed than expected frequency in cell 7.

The Kruskal-Wallis down and across variables indicated that the spiritual music category demonstrated the strongest preference values for spiritual music as a preferred music category.

### Chi-Square Analysis of Preference Response for Classical Music

Table 59 disclosed a significant difference between the preferred music category and preference for classical music; therefore, the null-hypothesis was rejected. The

Table 58. Chi-square analysis of preference response for spiritual music by preferred music category

Preferred Music Category	Preference Scale						
	1	2	3	4	5	6	7
<u>Jazz Music</u>							
1. Frequency	48	11	18	53	65	60	63
2. Theoretical frequency	73	32	25	39	43	51	52
3. Chi-square	11.02	13.47	2.19	4.80	11.66	1.69	2.45
<u>Classical Music</u>							
1. Frequency	26	24	16	18	15	20	22
2. Theoretical frequency	33	14	11	18	19	23	23
3. Chi-square	1.43	6.82	1.85	0.01	0.88	0.32	0.05
<u>Country and Western Music</u>							
1. Frequency	16	9	3	7	8	13	4
2. Theoretical frequency	14	6	5	7	8	10	10
3. Chi-square	0.28	1.46	0.70	0.03	0.00	1.15	3.47
<u>Spiritual Music</u>							
1. Frequency	11	8	9	8	12	35	76
2. Theoretical frequency	37	16	13	20	22	26	26
3. Chi-square	<u>18.34</u>	3.98	1.15	7.04	4.22	3.44	<u>95.32</u>
<u>Light Classical Music</u>							
1. Frequency	16	14	16	14	16	13	10
2. Theoretical frequency	23	10	8	12	13	16	16
3. Chi-square	2.17	1.64	7.97	0.22	0.49	0.54	2.40
<u>Soul Music</u>							
1. Frequency	185	78	73	109	160	234	235
2. Theoretical frequency	250	108	87	134	146	173	176
3. Chi-square	<u>17.10</u>	8.29	2.21	4.62	1.43	<u>21.52</u>	<u>19.49</u>
<u>Blues Music</u>							
1. Frequency	23	9	7	6	14	16	15
2. Theoretical frequency	21	9	7	11	12	14	15
3. Chi-square	0.19	0.00	0.01	2.42	0.26	0.15	0.00
<u>Rock and Roll Music</u>							
1. Frequency	300	100	72	119	75	52	38
2. Theoretical frequency	176	76	61	94	102	122	124
3. Chi-square	<u>86.80</u>	7.60	1.92	6.50	7.35	<u>39.97</u>	<u>59.77</u>
<u>Show Music</u>							
1. Frequency	12	13	5	4	8	5	4
2. Theoretical frequency	12	5	4	6	7	8	8
3. Chi-square	0.00	12.10	0.18	0.87	0.17	1.25	2.28
<u>Folk Music</u>							
1. Frequency	32	21	12	18	14	12	2
2. Theoretical frequency	26	11	9	14	15	18	18
3. Chi-square	1.44	8.69	1.01	1.25	0.07	1.93	14.44

 $\chi^2 = 548.251^{**}$ Kruskal-Wallis down = 413.268<sup>\*\*</sup>; across = 241.841<sup>\*\*</sup>

DF = 54

 $\phi = 0.1786$

Table 59. Chi-square analysis of preference response for classical music by preferred music category

Preferred Music Category	Preference Scale						
	1	2	3	4	5	6	7
<u>Jazz Music</u>							
1. Frequency	55	25	31	47	69	46	42
2. Theoretical frequency	78	32	35	48	53	39	29
3. Chi-square	6.88	1.48	0.49	0.04	4.56	1.28	5.81
<u>Classical Music</u>							
1. Frequency	5	6	12	17	19	25	56
2. Theoretical frequency	35	14	16	22	24	17	13
3. Chi-square	<u>25.71</u>	3.70	0.89	1.00	1.00	3.29	<u>142.50</u>
<u>Country and Western Music</u>							
1. Frequency	12	5	3	13	9	14	4
2. Theoretical frequency	15	6	7	9	10	7	6
3. Chi-square	0.56	0.18	2.04	1.54	0.13	5.84	0.42
<u>Spiritual Music</u>							
1. Frequency	26	16	21	27	32	26	13
2. Theoretical frequency	39	16	18	24	27	20	15
3. Chi-square	4.59	0.27	0.59	0.26	0.94	2.05	0.18
<u>Light Classical Music</u>							
1. Frequency	11	4	9	18	14	25	18
2. Theoretical frequency	25	10	11	15	17	12	9
3. Chi-square	7.50	3.61	0.38	0.50	0.45	13.31	8.65
<u>Soul Music</u>							
1. Frequency	337	119	130	165	176	90	57
2. Theoretical frequency	267	109	120	165	182	133	99
3. Chi-square	<u>18.57</u>	0.98	0.84	0.00	0.19	<u>13.76</u>	<u>17.75</u>
<u>Blues Music</u>							
1. Frequency	21	9	7	12	15	19	7
2. Theoretical frequency	22	9	10	14	16	11	8
3. Chi-square	0.08	0.00	0.92	0.24	0.00	5.57	0.20
<u>Rock and Roll Music</u>							
1. Frequency	226	93	90	114	117	79	37
2. Theoretical frequency	188	77	84	116	128	93	70
3. Chi-square	7.82	3.55	0.36	0.04	0.96	2.23	15.28
<u>Show Music</u>							
1. Frequency	3	2	5	8	13	11	9
2. Theoretical frequency	13	5	6	8	9	6	5
3. Chi-square	7.37	1.93	0.08	0.00	2.19	3.49	3.94
<u>Folk Music</u>							
1. Frequency	13	11	11	18	20	18	20
2. Theoretical frequency	28	11	12	17	19	14	10
3. Chi-square	7.68	0.00	0.15	0.05	0.09	1.33	9.35

$$\chi^2 = 379.908^{**}$$

$$\text{Kruskal-Wallis down} = 263.466^{**}; \text{across} = 54.569^{**}$$

$$DF = 54$$

$$\phi = 0.1486$$

degree of association was "very weak" between preferred music category and preference for classical music.

Three cells, 1, 6, and 7, disclosed significant chi-squares on the difference between the preferred music category and preference for classical music. The soul music category revealed a more observed than expected frequency in cell 1 and less observed than expected frequencies in cells 6 and 7. In addition, the classical category demonstrated a less observed than expected frequency in cell 1 and a more observed than expected frequency in cell 7.

The Kruskal-Wallis down and across variables indicated that the classical category revealed the strongest preference values for classical music as a preferred music category.

#### Chi-Square Analysis of Preference Response for Light Classical Music

The null-hypothesis was rejected in Table 60 as revealed by the chi-square analysis. Further, the degree of association was "very weak" between the preferred music category and preference for light classical music.

Two cells, 1 and 7, disclosed significant chi-squares on the differences between the preferred music category and preference for light classical music. The soul music category revealed a more observed than expected frequency in cell 1 and a less observed than expected frequency in cell 7. The classical music category revealed a



Table 60. Chi-square analysis of preference response for light classical music by preferred music category

Preferred Music Category	Preference Scale						
	1	2	3	4	5	6	7
<u>Jazz Music</u>							
1. Frequency	39	30	27	41	63	67	48
2. Theoretical frequency	52	20	30	40	65	57	42
3. Chi-square	3.13	0.04	0.38	0.04	0.05	1.74	0.78
<u>Classical Music</u>							
1. Frequency	2	4	10	15	22	32	56
2. Theoretical frequency	23	13	14	18	29	26	19
3. Chi-square	19.32	6.17	0.96	0.43	1.72	1.64	72.75
<u>Country and Western Music</u>							
1. Frequency	7	4	5	5	15	12	12
2. Theoretical frequency	10	6	6	8	12	11	8
3. Chi-square	0.82	0.41	0.10	0.86	0.55	0.11	1.94
<u>Spiritual Music</u>							
1. Frequency	15	8	15	16	38	45	22
2. Theoretical frequency	26	15	15	20	33	29	21
3. Chi-square	4.72	2.97	0.00	0.81	0.82	9.13	0.02
<u>Light Classical Music</u>							
1. Frequency	7	3	4	8	28	23	25
2. Theoretical frequency	16	9	10	12	20	18	13
3. Chi-square	5.27	4.07	3.23	1.60	2.81	2.06	10.35
<u>Soul Music</u>							
1. Frequency	224	105	132	159	200	161	93
2. Theoretical frequency	176	99	104	135	221	194	144
3. Chi-square	12.86	0.42	7.66	4.12	2.08	5.74	18.07
<u>Blues Music</u>							
1. Frequency	14	6	6	8	23	17	16
2. Theoretical frequency	15	8	9	11	19	16	12
3. Chi-square	0.04	0.61	0.83	0.98	1.06	0.03	1.28
<u>Rock and Roll Music</u>							
1. Frequency	153	95	67	92	163	112	74
2. Theoretical frequency	124	69	73	95	156	137	101
3. Chi-square	6.70	9.48	0.50	0.11	0.32	4.51	7.39
<u>Show Music</u>							
1. Frequency	0	2	3	4	11	18	13
2. Theoretical frequency	8	5	5	6	11	9	7
3. Chi-square	8.37	1.53	0.75	0.91	0.02	8.32	5.54
<u>Folk Music</u>							
1. Frequency	8	5	7	12	26	29	24
2. Theoretical frequency	18	10	11	14	23	20	15
3. Chi-square	5.73	2.63	1.29	0.28	0.42	3.94	5.58

$$\chi^2 = 292.250^{**}$$

$$\text{Kruskal-Wallis down} = 234.010^{**}; \text{ across} = 30.484^{**}$$

$$DF = 54$$

$$\phi = 0.1303$$

less observed than expected frequency in cell 1 and a more observed than expected frequency in cell 7.

The Kruskal-Wallis down and across variables indicated that the classical category revealed the strongest preference values for light classical music as a preferred music category.

Chi-Square Analysis of Preference  
Response for Country and Western  
Music

The null-hypothesis was rejected in Table 61 as revealed by the chi-square analysis. As in previous tables the degree of association was "very weak" between the preferred music category and preference for country and western music.

Two cells, 1 and 7, demonstrated significant chi-squares on the difference between the preferred music category and preference for country and western music. The country and western category demonstrated a less observed than expected frequency in cell 1 and a more observed than expected frequency in cell 7.

The Kruskal-Wallis across variable indicated a difference in the attitude of music categories toward country and western music. The country and western music category revealed the strongest preference values for country and western as a preferred music category.

Table 61. Chi-square analysis of preference response for country and western music by preferred music category

Preferred Music Category	Preference Scale						
	1	2	3	4	5	6	7
<u>Jazz Music</u>							
1. Frequency	109	46	40	45	44	16	15
2. Theoretical frequency	112	46	41	42	35	23	18
3. Chi-square	0.07	0.00	0.01	0.28	2.27	1.93	0.36
<u>Classical Music</u>							
1. Frequency	54	20	17	15	23	7	5
2. Theoretical frequency	50	20	18	19	16	10	8
3. Chi-square	0.30	0.00	0.08	0.70	3.39	0.96	1.03
<u>Country and Western Music</u>							
1. Frequency	2	5	3	5	10	10	25
2. Theoretical frequency	21	9	8	8	7	4	3
3. Chi-square	17.49	1.57	2.91	1.06	1.64	7.52	14.44
<u>Spiritual Music</u>							
1. Frequency	51	21	19	15	25	18	10
2. Theoretical frequency	56	23	21	21	18	11	9
3. Chi-square	0.52	0.18	0.11	1.70	3.00	3.80	0.14
<u>Light Classical Music</u>							
1. Frequency	30	10	15	14	12	16	2
2. Theoretical frequency	35	14	13	13	11	7	6
3. Chi-square	0.75	1.31	0.38	0.06	0.08	11.13	2.23
<u>Soul Music</u>							
1. Frequency	445	156	126	144	102	65	36
2. Theoretical frequency	381	156	139	142	120	77	60
3. Chi-square	10.63	0.00	1.17	0.03	2.58	1.89	9.46
<u>Blues Music</u>							
1. Frequency	30	11	13	19	7	6	4
2. Theoretical frequency	32	13	12	12	10	6	5
3. Chi-square	0.11	0.32	0.16	4.26	0.91	0.03	0.20
<u>Rock and Roll Music</u>							
1. Frequency	250	112	116	106	72	52	48
2. Theoretical frequency	268	110	98	100	84	54	42
3. Chi-square	1.26	0.05	3.43	0.38	1.76	0.09	0.83
<u>Show Music</u>							
1. Frequency	13	11	6	7	9	4	1
2. Theoretical frequency	18	7	7	7	6	4	3
3. Chi-square	1.44	1.76	6.05	0.01	1.94	6.03	1.19
<u>Folk Music</u>							
1. Frequency	30	22	16	7	14	11	13
2. Theoretical frequency	39	16	14	15	12	8	6
3. Chi-square	2.24	2.17	0.00	3.99	0.21	1.15	7.52

 $\chi^2 = 272.962^{**}$ Kruskal-Wallis down = 111.487<sup>\*\*</sup>; across = 10.217

DF = 54

 $\phi = 0.1260$

Chi-Square Analysis of Preference  
Response for Folk Music

Table 62 revealed a significant difference between the preferred music category and preference for folk music. The degree of association was "very weak" between the preferred music category and preference for folk music.

Three cells, 1, 6, and 7, demonstrated significant chi-squares on the difference between the preferred music category and preference for folk music. The soul category displayed a more observed than expected frequency in cell 1 and less observed than expected frequencies in cells 6 and 7. Two categories, classical music and folk music, revealed a less observed than expected frequency in cell 1 and a more observed than expected frequency in cell 7.

The Kruskal-Wallis down and across variables indicated that the folk and classical music categories disclosed the strongest preference values for folk music as a preferred music category.

Chi-Square Analysis of Preference  
Response for Show Music

The null-hypothesis was rejected in Table 63 as revealed by the chi-square analysis. As in previous tables the degree of association was "very weak" between the preferred music category and preference for show tunes.

Two cells, 1 and 7, demonstrated significant chi-squares on the difference between the preferred music category and preference for show music. The classical music,

Table 62. Chi-square analysis of preference response for folk music by preferred music category

Preferred Music Category	Preference Scale						
	1	2	3	4	5	6	7
<u>Jazz Music</u>							
1. Frequency	60	44	39	51	61	28	32
2. Theoretical frequency	67	39	37	48	51	38	35
3. Chi-square	0.67	0.72	0.07	0.20	2.02	2.75	0.30
<u>Classical Music</u>							
1. Frequency	10	6	22	12	27	25	39
2. Theoretical frequency	30	17	17	21	23	17	16
3. Chi-square	<u>13.21</u>	7.40	1.69	4.14	0.79	3.61	<u>34.07</u>
<u>Country and Western Music</u>							
1. Frequency	6	9	6	14	8	7	10
2. Theoretical frequency	13	7	7	9	10	7	7
3. Chi-square	3.54	0.35	0.17	2.61	0.29	0.01	1.59
<u>Spiritual Music</u>							
1. Frequency	40	15	19	32	30	17	6
2. Theoretical frequency	34	20	19	24	26	19	18
3. Chi-square	1.18	1.05	0.00	2.54	0.73	0.27	7.83
<u>Light Classical Music</u>							
1. Frequency	8	9	9	19	24	22	8
2. Theoretical frequency	21	12	12	15	16	12	11
3. Chi-square	8.02	0.82	0.62	1.04	4.02	8.26	0.86
<u>Soul Music</u>							
1. Frequency	293	158	153	172	147	87	64
2. Theoretical frequency	228	132	127	163	173	130	120
3. Chi-square	<u>18.85</u>	5.12	5.27	0.47	4.00	<u>14.49</u>	<u>26.37</u>
<u>Blues Music</u>							
1. Frequency	28	10	7	12	11	13	9
2. Theoretical frequency	19	11	11	14	15	11	10
3. Chi-square	4.18	0.10	1.25	0.20	0.85	0.39	0.11
<u>Rock and Roll Music</u>							
1. Frequency	147	91	73	104	128	111	102
2. Theoretical frequency	160	93	89	115	122	92	85
3. Chi-Square	1.07	0.03	3.03	1.03	0.29	3.99	3.53
<u>Show Music</u>							
1. Frequency	3	3	2	8	10	12	13
2. Theoretical frequency	11	6	6	8	8	6	6
3. Chi-square	5.63	1.70	2.69	0.00	0.37	5.43	9.28
<u>Folk Music</u>							
1. Frequency	10	6	8	10	15	25	37
2. Theoretical frequency	24	14	13	17	18	13	12
3. Chi-square	<u>7.76</u>	4.28	2.00	2.79	0.47	9.82	<u>48.51</u>

$$\chi^2 = 313.134^{**}$$

$$\text{Kruskal-Wallis down} = 218.243^{**}; \text{ across} = 35.213^{**}$$

$$DF = 54$$

$$\phi = 0.1349$$

Table 63. Chi-square analysis of preference response for show music by preferred music category

Preferred Music Category	Preference Scale						
	1	2	3	4	5	6	7
<u>Jazz Music</u>							
1. Frequency	95	30	29	42	46	38	35
2. Theoretical frequency	98	36	29	40	39	33	39
3. Chi-square	0.10	1.05	0.00	0.14	1.11	0.80	0.46
<u>Classical Music</u>							
1. Frequency	28	10	12	15	18	22	36
2. Theoretical frequency	44	16	13	18	18	15	18
3. Chi-square	<u>5.81</u>	2.36	0.10	0.41	0.00	3.61	<u>19.31</u>
<u>Country and Western Music</u>							
1. Frequency	16	7	9	9	5	5	9
2. Theoretical frequency	19	7	6	8	8	6	7
3. Chi-square	0.39	0.00	2.04	0.28	0.83	0.25	0.30
<u>Spiritual Music</u>							
1. Frequency	67	20	13	14	19	17	9
2. Theoretical frequency	50	18	15	20	20	17	20
3. Chi-square	6.10	0.16	0.23	1.79	0.03	0.01	5.90
<u>Light Classical Music</u>							
1. Frequency	14	15	18	16	15	14	7
2. Theoretical frequency	31	11	9	12	12	10	12
3. Chi-square	9.23	1.15	8.26	1.01	0.55	1.30	2.31
<u>Soul Music</u>							
1. Frequency	415	142	103	142	113	78	81
2. Theoretical frequency	335	123	100	135	134	112	134
3. Chi-square	<u>19.07</u>	2.82	0.06	0.36	3.36	10.35	<u>20.88</u>
<u>Blues Music</u>							
1. Frequency	24	10	3	14	14	12	13
2. Theoretical frequency	28	10	8	11	11	9	11
3. Chi-square	0.59	0.01	3.48	0.63	0.67	0.72	0.28
<u>Rock and Roll Music</u>							
1. Frequency	208	83	65	94	107	86	113
2. Theoretical frequency	236	87	71	95	95	79	94
3. Chi-square	3.28	0.16	0.45	0.01	1.65	0.64	3.73
<u>Show Music</u>							
1. Frequency	7	0	4	1	6	9	24
2. Theoretical frequency	16	6	5	6	6	5	6
3. Chi-square	<u>4.99</u>	5.85	0.12	4.56	6.02	2.54	<u>48.96</u>
<u>Folk Music</u>							
1. Frequency	17	11	11	12	14	17	29
2. Theoretical frequency	35	13	10	14	14	12	14
3. Chi-square	<u>8.97</u>	0.23	0.03	0.27	0.00	2.53	<u>16.61</u>

 $\chi^2 = 246.578^{**}$ Kruskal-Wallis down = 163.547<sup>\*\*</sup>; across = 25.584<sup>\*\*</sup>

DF = 54

 $\phi = 0.1195$

show music and folk music categories revealed a more observed than expected frequency in cell 7. However, the soul music category revealed a more observed than expected frequency in cell 1 and a less observed than expected frequency in cell 7.

The Kruskal-Wallis down and across variables indicated that the show music category demonstrated the strongest preference values for show music as a preferred music category.

### Summary

The null-hypothesis was rejected in the data on preferred music category and music preference. Also, the degree of association was "very weak" between preferred music category and music preference. A list of the disclosures is as follows:

- (1) The rock and roll category disclosed the strongest preference values for rock and roll as a preferred music category.
- (2) The jazz category disclosed the strongest preference values for jazz as a preferred music category.
- (3) The jazz category disclosed the strongest preference values for blues as a preferred music category.
- (4) The soul category disclosed the strongest preference values for soul music as a preferred music category.
- (5) The spiritual category disclosed the strongest preference values for spiritual music as a preferred music category.

- (6) The classical category disclosed the strongest preference values for classical music as a preferred music category.
- (7) The classical category disclosed the strongest preference values for light classical music as a preferred music category.
- (8) The country and western category disclosed the strongest preference values for country and western music as a preferred music category.
- (9) The folk and classical categories disclosed the strongest preference values for folk music as a preferred music category.
- (10) The show music category disclosed the strongest preference values for show music as a preferred music category.

The data imply that the subjects perceived blues music and jazz music also classical and light classical music as one category, respectively. There was also evidence that the classical category displayed strong preference values for folk music and show music as preferred music categories.



## CHAPTER V

### SUMMARY, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

#### Summary

The main hypothesis of this study was that musical preferences were independent of socioeconomic status, race, musical experience, school level, geographical location and preferred music category.

A review of literature related to music preference studies disclosed several points. Some studies indicated that age, familiarity with the musical work, and musical training were influential in determining musical preferences. In addition, one study concluded that geographical location was influential in determining musical preference.

A review of literature related to socioeconomic class determinants revealed two common measures for determining socioeconomic status. The two most common types of measures were prestige ratings of persons and socioeconomic status scales. The three most commonly-used measures of socioeconomic status were income, education and occupation. Each measure consisted of a rank or scale order that would stratify a population from high to low status.

The sample consisted of 982 black and white subjects including junior high, senior high and college subjects throughout the United States. The data were gathered in single testing and questionnaire periods administered by previously identified testers throughout the United States.

A music preference inventory was developed to gauge preferences. The test consisted of 30 musical excerpts approximately 30 to 40 seconds each in length. The written questionnaire gauged age, grade, school, location, occupation, musical experience and the preferred music category. In addition the questionnaire included instructions on the use of the seven point preference scale and 30 preference scales to rate each musical excerpt.

Chi-square, Cramer's Contingency Coefficient, Kruskal-Wallis one-way analysis of variance and reference to specific cells were the procedures used in testing the null hypotheses set forth in Chapter I.

### Findings and Conclusions

The writer believes extreme caution should be exercised when adapting his conclusions to fit other situations. What has been found true in this study cannot be assumed to be true for other situations, because two important variables, musical exposure and environment, were not controlled, although admittedly musical exposure and environment are influential in determining musical preferences. Based on

the results of this investigation the following conclusions can be admitted:

1. There are no significant differences in music preference attributable to socioeconomic status.

### Findings

Socioeconomic status was influential in determining musical preferences. The "below lower Lower" and "no response" socioeconomic classes preferred jazz, blues, soul, and spirituals. The "Middle" and "Upper" classes preferred classical, light classical, country and western, folk, and show music. The "no response," "upper Middle," and "lower Lower" socioeconomic classes revealed similar preferences for rock and roll music.

### Conclusion

Lower socioeconomic classifications, i.e., "below lower Lower" and "no response" prefer music that is primarily accessible through mass media, whereas the "Middle" or "Upper" classes preferences are mainly those types of music accessible primarily through economic security.

2. There are no significant differences in music preferences attributable to race.

### Findings

Race was influential in determining musical preferences. The black subjects preferred jazz, blues, soul and spirituals. The white subjects preferred rock and roll,

country and western, classical, folk, and show music. There was a complete independence between race and preference for light classical music.

### Conclusion

Both races seem to prefer music, probably due to exposure and environment, that is performed primarily by members of their race. Culture, peer association, and racial pride are important variables in determining musical preferences by race.

3. There are no significant differences in music preference attributable to musical experience.

### Findings

Musical experience was influential in determining musical preference. The high experience groups, i.e., 4 and 5 years, 6 and 7 years, also the 8 or more years, preferred rock and roll, soul, classical, light classical, country and western, folk, and show music. The low experience groups, i.e., 0-5 months and 6-12 months preferred jazz, blues, and spirituals.

### Conclusion

High (quantity) musical experience groups possess a greater variety and wider range of musical preferences than low (quantity) musical experience groups.

4. There are no significant differences in musical preference attributable to school level.

### Findings

School level was influential in determining musical preferences. The college subjects preferred rock and roll, jazz, blues, soul, spirituals, classical, light classical, folk, and show music. The high school subjects preferred country and western music.

### Conclusion

Of the three school levels, junior high, senior high, and college, college subjects possess stronger and greater variety in their musical preferences.

5. There are no significant differences in musical preference attributable to geographical location.

### Findings

Geographical location was influential in determining musical preferences. The Eastern region preferred rock and roll, blues, and light classical music. The southern region preferred jazz, blues, soul, and spirituals. The northern region preferred classical, folk, and show music.

### Conclusion

Musical preferences vary according to geographical location. As a result, music educators should devise their own methods for gauging musical preferences.

6. There are no significant differences in musical preference attributable to the preferred music category.

### Findings

The preference music category was somewhat influential in determining musical preferences. The data implied that the subjects perceived blues and jazz, also classical and light classical music as one category, respectively.

### Conclusion

Precise definitions and examples should be used whenever music categories are discussed or used in teaching strategies.

### Implications for Music Education

The adoption of the present findings could have the following implications for music education:

1. Knowledge of what types of music, black and white students of different socioeconomic and musical backgrounds listen to might enhance the music education teaching success by proceeding from known to unknown musical preferences.
2. Possibility of expanding the music teacher's repertoire and materials for instructional purposes by including the musical preferences of culturally different races in teaching strategies.

3. Possibilities of relating musically to some of today's social problems by including ethnic music as a teaching resource and a foundation of cultural and racial pride.

The writer's implications for music education are somewhat consistent with two of the seven declarations adopted at the Tanglewood Symposium. The two statements are as follows:<sup>1</sup>

1. Music of all periods, styles forms and cultures belong in the curriculum. The musical repertory should be expanded to include music of our time in its rich variety, including currently popular teenage music, avante-garde music, American folk music, and the music of other cultures.
2. The music education profession must contribute its skills, proficiencies and insights toward assisting in the solution of urgent problems in the "inner city."

#### Recommendations

1. In view of this study, an extensive investigation into the perception of music categories is recommended. Such an investigation may determine what categories people perceive as synonymous.

2. A study of the musical preferences of other American ethnic groups excluding black and white subjects might constitute an acceptable research problem.

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<sup>1</sup>Murphy and Sullivan, op. cit., p. 56.

3. A study should be made investigating the effect of musical exposure on musical preference.



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## APPENDIX A

MASTER TABLE OF CHI-SQUARES FOR EACH MUSICAL  
EXCERPT AND VARIABLE TESTED

Table 64. Music preference inventory chi-squares<sup>a</sup>

Title of Music Excerpt	Socioeconomic Status	Race	Musical Experience	School Level	Geographical Location	Preferred Music Category
1. Aram	65.588	9.063	38.837	152.333	242.828	139.486
2. Fire	104.326	24.820	102.800	83.405	125.832	95.762
3. Just Beyond the Moon	72.930	3.274	131.585	63.039	127.141	83.662
4. Baby-Baby-Baby	173.951	256.680	77.343	87.429	406.492	333.151
5. Symphony No. 88 (3rd Movement)	82.566	9.741	64.443	246.344	265.299	187.667
6. Jet Song	110.930	39.448	29.684	133.061	267.750	108.096
7. Intermezzo	66.547	5.377	54.572	179.369	223.934	127.492
8. Tears Will Be the Chaser	74.164	15.576	124.447	85.529	124.136	140.061
9. The Seventh Son	80.696	24.358	56.497	118.646	185.846	133.019
10. Gone the Rainbow	143.334	115.512	105.706	156.513	362.754	175.808
11. Aisha	65.109	45.029	122.204	163.863	224.050	225.035
12. I'm the Greatest Star	119.338	77.034	77.019	156.519	348.888	161.734
13. Sixth Symphony (Theme from)	75.930	3.604	78.145	226.381	255.820	180.869
14. Sing Me Back Home	100.784	41.007	133.984	83.310	210.191	184.861
15. Why Did She Have to Leave Me	137.523	179.303	77.091	209.601	247.094	238.484
16. Sabre Dance	85.102	15.919	30.525	131.602	171.714	98.164
17. I Couldn't Hear Nobody Pray	143.657	212.616	59.610	221.622	548.684	235.413
18. I've Got News for You	69.084	73.542	161.687	106.701	261.658	165.279
19. Mornin' Reverend	58.979	38.991	63.899	91.661	327.136	134.115
20. Wanderlove	133.625	126.130	41.826	76.304	357.519	203.091
21. Six Man Band	94.284	100.772	113.693	87.772	248.843	115.997
22. The Monkey	82.865	64.732	64.311	77.297	283.886	77.033
23. My Favorite Things	103.356	61.697	118.698	109.394	294.707	120.492
24. Our Bread of Life	97.446	184.441	59.582	95.303	295.379	253.179
25. Symphony No. 4 (1st Movement)	74.509	8.395	66.726	209.696	207.369	149.047
26. Jesus Lover of My Soul	144.164	202.403	45.935	98.241	379.436	210.219
27. Mo-Mary	62.491	6.294	80.148	124.176	152.874	119.819
28. Lonesome Lover Blues	70.457	19.020	69.702	117.467	218.821	129.139
29. A Change Is Gonna Come	197.580	300.021	73.206	110.465	427.349	298.710
30. Greeting Prelude	109.026	6.297	109.771	185.386	217.649	156.435

<sup>a</sup>DF = 60 for socioeconomic status; DF = 6 for race; DF = 42 for musical experience; DF = 12 for school level; DF = 18 for geographical location; and DF = 54 for preferred music category.



## **APPENDIX B**

### **TABLE OF TESTED SCHOOLS, SCHOOL LEVELS, AND LOCATION OF SCHOOLS**

Table 65. The name, level, and location of all the schools tested

Schools	Level	Location
Pattengil	Junior High	Lansing, Michigan
Williamston	Junior High	Williamston, Michigan
Howard	Junior High	Nashville, Tennessee
Benjamin Stoddert	Junior High	Washington, D.C.
Fermi	Junior High	Chicago, Illinois
Drake	Junior High	Chicago, Illinois
Indian River	Junior High	Chesapeake, Virginia
Rosenwald	Junior High	New Roads, Louisiana
Williamston	Senior High	Williamston, Michigan
Eastern	Senior High	Washington, D.C.
Morgan Park	Senior High	Chicago, Illinois
Stratford	Senior High	Nashville, Tennessee
Rosenwald	Senior High	New Roads, Louisiana
Rancho	Senior High	Las Vegas, Nevada
Tennessee State U.	College	Nashville, Tennessee
Norfolk State	College	Norfolk, Virginia
Old Dominion	College	Norfolk, Virginia
Jackson State	College	Jackson, Mississippi
Michigan State	College	East Lansing, Michigan

## **APPENDIX C**

### **FACTOR ANALYSIS OF MUSIC CATEGORIES**

Table 66. Factor analysis of music categories<sup>a</sup>

Music Category	Factor Loadings							
	1	2	3	4	5	6	7	8
1. Jazz	..	..	..	..	..	..	.5929	..
2. Rock & Roll	..	..	..	..	..	..	..	.6815
3. Country & Western	..	..	..	..	..	.5069	..	..
4. Soul	..	..	..	..	..	.7917	..	..
5. Classical	..	.7192	..	..	..	..	..	..
6. Show	..	..	..	..	..	..	.8915	..
7. Light Classical	..	.5618	..	..	..	..	..	..
8. Country & Western	.7971	..	..	..	..	..	..	..
9. Blues	..	..	..	..	..	.6320	..	..
10. Folk	.5102	..	..	..	..	..	..	..
11. Jazz	..	..	..	..	..	..	..	.5712
12. Show	.5455	..	..	..	..	..	..	..
13. Light Classical	..	.7897	..	..	..	..	..	..
14. Country & Western	.6854	..	..	..	..	..	..	..
15. Soul	.6725	..	..	..	..	..	..	..
16. Light Classical	..	..	..	..	.7191	..	..	..
17. Spiritual	..	..	..	.7976	..	..	..	..
18. Blues	..	..	.6531	..	..	..	..	..
19. Jazz	..	..	.6344	..	..	..	..	..
20. Folk	..	.5969	..	..	..	..	..	..

<sup>a</sup> A factor analysis of the music categories suggested that several categories were loaded under the same factors. This table reveals the factor loadings above .40 of each of the ten music categories.

**APPENDIX D**

**WRITTEN QUESTIONNAIRE**

## QUESTIONNAIRE

Grade\_\_\_\_\_ School\_\_\_\_\_ Sex\_\_\_\_\_ Age\_\_\_\_\_

City\_\_\_\_\_ State\_\_\_\_\_ Date\_\_\_\_\_

Father's occupation\_\_\_\_\_ (Please be specific)  
(If no father, indicate the occupation of mother or guardian and circle whether mother or guardian)

Married couples, indicate husband's occupation\_\_\_\_\_

What musical instrument(s) to you play?\_\_\_\_\_

How long have you played the instrument(s)?\_\_\_\_\_

If you were exiled to an island, what ONE type of music would you like to hear:

- |                        |                  |
|------------------------|------------------|
| 1. Jazz                | 6. Soul          |
| 2. Classical           | 7. Blues         |
| 3. Country and Western | 8. Rock and Roll |
| 4. Spirituals          | 9. Show Tunes    |
| 5. Light Classical     | 10. Folk         |

**DIRECTIONS:** Under numbers I, II, and III, circle the appropriate letter of the alphabet that applies to you.

I. Which ONE statement best applies to your listening habits?

- a) I listen to music in order to relax.
- b) I listen to music only while dancing.
- c) It is mostly background for work, study, or play.
- d) I listen to music with attention to details (harmony, text, rhythm, etc.) in the music.
- e) I listen to music only when I am exposed or compelled to listen and not usually on my own initiative.

II. Which ONE place best applies to where you listen to your favorite music?

- |                  |                            |
|------------------|----------------------------|
| a) Home          | f) School dance            |
| b) Friend's home | g) Recital or concert hall |
| c) Church        | h) Parties                 |
| d) Music class   | i) Juke box                |
| e) Assembly      | j) Dance hall              |



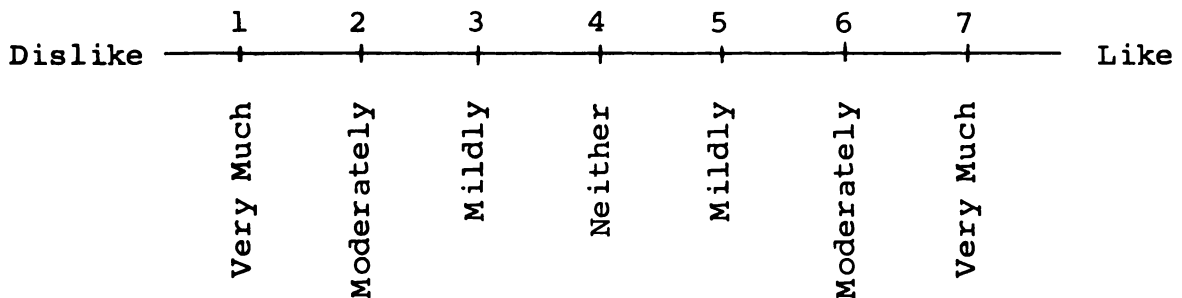
III. Which ONE of the following best typifies your listening to your favorite music?

- a) Radio
- b) Auto radio
- c) Television
- d) Phonograph records
- e) Live performances

### MUSIC PREFERENCE TEST

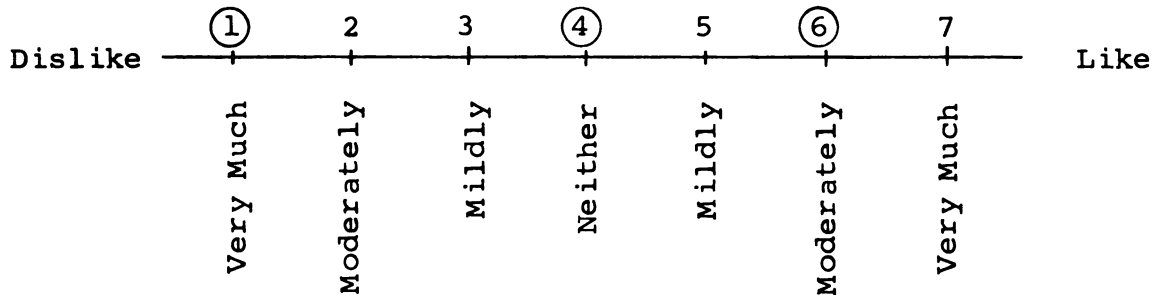
#### INSTRUCTIONS:

The purpose of this test is to determine what kinds or types of music you like and the degree to which you like them. You will hear a series of short, musical excerpts. After the completion of each excerpt, you are asked to rate how much you like that particular excerpt--to the best of your ability--by circling the appropriate number on the rating scale provided. Each scale consists of a number which corresponds with a degree of dislike or like. For example, if, after listening to a musical excerpt, you decide you "like mildly" that selection, then you would mark the appropriate rating scale in the following manner:



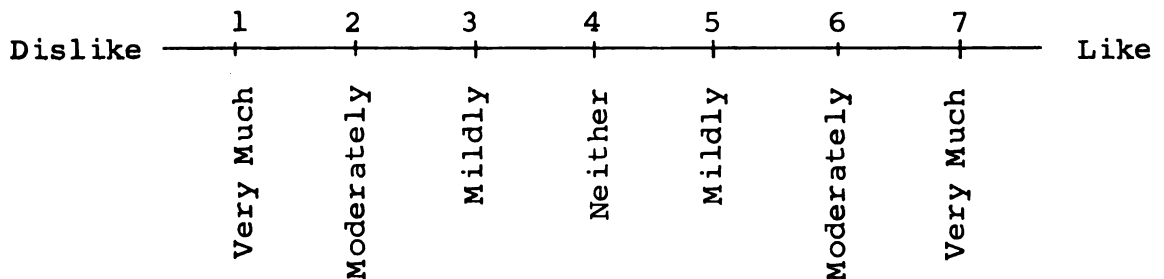


or if you dislike a composition very much, circle 1, if you are undecided about liking or disliking a composition, circle 4; finally, if you like it moderately, circle 6.



There will be a brief pause after each excerpt to mark your rating. DO NOT attempt to change a previously marked rating. First, one musical example will be given to help your understanding of the procedure.

Example No. 1



Now we will begin the test. Are there any questions?

- |             |           |            |          |          |          |            |           |      |
|-------------|-----------|------------|----------|----------|----------|------------|-----------|------|
| 1. Dislike  | <u>1</u>  | <u>2</u>   | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u>   | <u>7</u>  | Like |
|             | Very Much | Moderately | Mildly   | Neither  | Mildly   | Moderately | Very Much |      |
| 2. Dislike  | <u>1</u>  | <u>2</u>   | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u>   | <u>7</u>  | Like |
|             | Very Much | Moderately | Mildly   | Neither  | Mildly   | Moderately | Very Much |      |
| 3. Dislike  | <u>1</u>  | <u>2</u>   | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u>   | <u>7</u>  | Like |
|             | Very Much | Moderately | Mildly   | Neither  | Mildly   | Moderately | Very Much |      |
| 4. Dislike  | <u>1</u>  | <u>2</u>   | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u>   | <u>7</u>  | Like |
|             | Very Much | Moderately | Mildly   | Neither  | Mildly   | Moderately | Very Much |      |
| 5. Dislike  | <u>1</u>  | <u>2</u>   | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u>   | <u>7</u>  | Like |
|             | Very Much | Moderately | Mildly   | Neither  | Mildly   | Moderately | Very Much |      |
| 6. Dislike  | <u>1</u>  | <u>2</u>   | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u>   | <u>7</u>  | Like |
|             | Very Much | Moderately | Mildly   | Neither  | Mildly   | Moderately | Very Much |      |
| 7. Dislike  | <u>1</u>  | <u>2</u>   | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u>   | <u>7</u>  | Like |
|             | Very Much | Moderately | Mildly   | Neither  | Mildly   | Moderately | Very Much |      |
| 8. Dislike  | <u>1</u>  | <u>2</u>   | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u>   | <u>7</u>  | Like |
|             | Very Much | Moderately | Mildly   | Neither  | Mildly   | Moderately | Very Much |      |
| 9. Dislike  | <u>1</u>  | <u>2</u>   | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u>   | <u>7</u>  | Like |
|             | Very Much | Moderately | Mildly   | Neither  | Mildly   | Moderately | Very Much |      |
| 10. Dislike | <u>1</u>  | <u>2</u>   | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u>   | <u>7</u>  | Like |
|             | Very Much | Moderately | Mildly   | Neither  | Mildly   | Moderately | Very Much |      |

PLEASE DO NOT TURN UNTIL ITEM 10 IS COMPLETED



- |             |           |            |          |          |          |            |           |      |
|-------------|-----------|------------|----------|----------|----------|------------|-----------|------|
| 11. Dislike | <u>1</u>  | <u>2</u>   | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u>   | <u>7</u>  | Like |
|             | Very Much | Moderately | Mildly   | Neither  | Mildly   | Moderately | Very Much |      |
| 12. Dislike | <u>1</u>  | <u>2</u>   | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u>   | <u>7</u>  | Like |
|             | Very Much | Moderately | Mildly   | Neither  | Mildly   | Moderately | Very Much |      |
| 13. Dislike | <u>1</u>  | <u>2</u>   | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u>   | <u>7</u>  | Like |
|             | Very Much | Moderately | Mildly   | Neither  | Mildly   | Moderately | Very Much |      |
| 14. Dislike | <u>1</u>  | <u>2</u>   | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u>   | <u>7</u>  | Like |
|             | Very Much | Moderately | Mildly   | Neither  | Mildly   | Moderately | Very Much |      |
| 15. Dislike | <u>1</u>  | <u>2</u>   | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u>   | <u>7</u>  | Like |
|             | Very Much | Moderately | Mildly   | Neither  | Mildly   | Moderately | Very Much |      |
| 16. Dislike | <u>1</u>  | <u>2</u>   | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u>   | <u>7</u>  | Like |
|             | Very Much | Moderately | Mildly   | Neither  | Mildly   | Moderately | Very Much |      |
| 17. Dislike | <u>1</u>  | <u>2</u>   | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u>   | <u>7</u>  | Like |
|             | Very Much | Moderately | Mildly   | Neither  | Mildly   | Moderately | Very Much |      |
| 18. Dislike | <u>1</u>  | <u>2</u>   | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u>   | <u>7</u>  | Like |
|             | Very Much | Moderately | Mildly   | Neither  | Mildly   | Moderately | Very Much |      |
| 19. Dislike | <u>1</u>  | <u>2</u>   | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u>   | <u>7</u>  | Like |
|             | Very Much | Moderately | Mildly   | Neither  | Mildly   | Moderately | Very Much |      |
| 20. Dislike | <u>1</u>  | <u>2</u>   | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u>   | <u>7</u>  | Like |
|             | Very Much | Moderately | Mildly   | Neither  | Mildly   | Moderately | Very Much |      |

PLEASE DO NOT TURN UNTIL ITEM 20 IS COMPLETED

21. Dislike 1 2 3 4 5 6 7 Like  
 Very Much Moderately Mildly Neither Mildly Moderately Very Much
22. Dislike 1 2 3 4 5 6 7 Like  
 Very Much Moderately Mildly Neither Mildly Moderately Very Much
23. Dislike 1 2 3 4 5 6 7 Like  
 Very Much Moderately Mildly Neither Mildly Moderately Very Much
24. Dislike 1 2 3 4 5 6 7 Like  
 Very Much Moderately Mildly Neither Mildly Moderately Very Much
25. Dislike 1 2 3 4 5 6 7 Like  
 Very Much Moderately Mildly Neither Mildly Moderately Very Much
26. Dislike 1 2 3 4 5 6 7 Like  
 Very Much Moderately Mildly Neither Mildly Moderately Very Much
27. Dislike 1 2 3 4 5 6 7 Like  
 Very Much Moderately Mildly Neither Mildly Moderately Very Much
28. Dislike 1 2 3 4 5 6 7 Like  
 Very Much Moderately Mildly Neither Mildly Moderately Very Much
29. Dislike 1 2 3 4 5 6 7 Like  
 Very Much Moderately Mildly Neither Mildly Moderately Very Much
30. Dislike 1 2 3 4 5 6 7 Like  
 Very Much Moderately Mildly Neither Mildly Moderately Very Much

**APPENDIX E**

**OTIS DUDLEY DUNCAN SOCIOECONOMIC  
INDEX FOR ALL OCCUPATIONS**

# DUNCAN SOCIOECONOMIC INDEX FOR OCCUPATIONS

<u>Occupations</u>	<u>Socioeconomic Index</u>
<u>Professional, technical, and kindred workers</u>	
Accountants and auditors	78
Actors and actresses	60
Airplane pilots and navigators	79
Architects	90
Artists and art teachers	67
Athletes	52
Authors	76
Chemists	79
Chiropractors	75
Clergymen	52
College presidents, professors and instructors (n.e.c.)	84
Dancers and dancing teachers	45
Dentists	96
Designers	73
Dieticians and nutritionists	39
Draftsmen	67
Editors and reporters	82
Engineers, technical	85
Aeronautical	87
Chemical	90
Civil	84
Electrical	84
Industrial	86
Mechanical	82
Metallurgical, and metallurgists	82
Mining	85
Not elsewhere classified	87
Entertainers (n.e.c.)	31
Farm- and home-management advisors	83
Foresters and conservationists	48
Funeral directors and embalmers	59
Lawyers and judges	93
Librarians	60
Musicians and music teachers	52
Natural scientists (n.e.c.)	80
Nurses, professional	46
Nurses, student professional	51
Optometrists	79
Osteopaths	96

<u>Occupations</u>	<u>Socioeconomic Index</u>
Personnel and labor-relations workers	84
Pharmacists	82
Photographers	50
Physicians and surgeons	92
Radio operators	69
Recreation and group workers	67
Religious workers	56
Social and welfare workers, except group	64
Social scientists	81
Sports instructors and officials	64
Surveyors	48
Teachers (n.e.c.)	72
Technicians, medical and dental	48
Technicians, testing	53
Technicians (n.e.c.)	62
Therapists and healers (n.e.c.)	58
Veterinarians	78
Professional, technical, and kindred workers (n.e.c.)	65
<u>Farmers and farm managers</u>	
Farmers (owners and tenants)	14
Farm managers	36
<u>Managers, officials, and proprietors, except farm</u>	
Buyers and department heads, store	72
Buyers and shippers, farm products	33
Conductors, railroad	58
Credit men	74
Floormen and floor managers, store	50
Inspectors, public administration	63
Federal public admin. and postal service	72
State public administration	54
Local public administration	56
Managers and superintendents, building	32
Officers, pilots, pursers, and engineers, ship	54
Officials and administrators (n.e.c.), public administration	66
Federal public administration and postal service	84
State public administration	66
Local public administration	54
Officials, lodge, society, union, etc.	58
Postmasters	60
Purchasing agents and buyers (n.e.c.)	77



<u>Occupations</u>	<u>Socioeconomic Index</u>
Managers, officials, and proprietors (n.e.c.)--salaried	68
Construction	60
Manufacturing	79
Transportation	71
Telecommunications, and utilities and sanitary services	76
Wholesale trade	70
Retail trade	56
Food- and dairy-products stores, and milk retailing	50
General merchandise and five- and ten- cent stores	68
Apparel and accessories stores	69
Furniture, home furnishings, and equipment stores	68
Motor vehicles and accessories retailing	65
Gasoline service stations	31
Eating and drinking places	39
Hardware, farm implement, and building material, retail	64
Other retail trade	59
Banking and other finance	85
Insurance and real estate	84
Business services	80
Automobile repair services and garages	47
Miscellaneous repair services	53
Personal services	50
All other industries (incl. not reported)	62
Managers, officials, and proprietors (n.e.c.)-- self-employed	48
Construction	51
Manufacturing	61
Transportation	43
Telecommunications and utilities and sanitary services	44
Wholesale trade	59
Retail trade	43
Food- and dairy-products stores, and milk retailing	33
General merchandise and five- and ten- cent stores	47
Apparel and accessories stores	65
Furniture, home furnishings, and equipment stores	59
Motor vehicles and accessories retailing	70
Gasoline service stations	33
Eating and drinking places	37
Hardware, farm implement, and building material, retail	61
Other retail trade	49



<u>Occupations</u>	<u>Socioeconomic Index</u>
Banking and other finance	85
Insurance and real estate	76
Business services	67
Automobile repair services and garages	36
Miscellaneous repair services	34
Personal services	41
All other industries (incl. not reported)	49
<u>Clerical and kindred workers</u>	
Agents (n.e.c.)	68
Attendants and assistants, library	44
Attendants, physician's and dentist's office	38
Baggage, transportation	25
Bank tellers	52
Bookkeepers	51
Cashiers	44
Collectors, bill and account	39
Dispatchers and starters, vehicle	40
Express messengers and railway mail clerks	67
Mail-carriers	53
Messengers and office boys	28
Office-machine operators	45
Shipping and receiving clerks	22
Stenographers, typists, and secretaries	61
Telegraph messengers	22
Telegraph operators	47
Telephone operators	45
Ticket, station, and express agents	60
Clerical and kindred workers (n.e.c.)	44
<u>Sales workers</u>	
Advertising agents and salesmen	66
Auctioneers	40
Demonstrators	35
Hucksters and peddlers	8
Insurance agents and brokers	66
Newsboys	27
Real-estate agents and brokers	62
Stock and bond salesmen	73
Salesmen and sales clerks (n.e.c.)	47
Manufacturing	65
Wholesale trade	61
Retail trade	39
Other industries (incl. not reported)	50

<u>Occupations</u>	<u>Socioeconomic Index</u>
<u>Craftsmen, foremen, and kindred workers</u>	
Bakers	22
Blacksmiths	16
Boilermakers	33
Bookbinders	39
Brickmasons, stonemasons, and tile-setters	27
Cabinetmakers	23
Carpenters	19
Cement and concrete finishers	19
Compositors and typesetters	52
Cranemen, derrickmen, and hoistmen	21
Decorators and window-dressers	40
Electricians	44
Electrotypers and stereotypers	55
Engravers, except photoengravers	47
Excavating, grading, and road-machinery operators	24
Foremen (n.e.c.)	49
Construction	40
Manufacturing	53
Metal industries	54
Machinery, including electrical	60
Transportation equipment	66
Other durable goods	41
Textiles, textile products, and apparel	39
Other nondurable goods (incl. not specified mfg.)	53
Railroads and railway express service	36
Transportation, except railroad	45
Telecommunications, and utilities and sanitary services	56
Other industries (incl. not reported)	44
Forgemen and hammermen	23
Furriers	39
Glaziers	26
Heat treaters, annealers, and temperers	22
Inspectors, scalers, and graders, log and lumber	23
Inspectors (n.e.c.)	41
Construction	46
Railroads and railway express service	41
Transport, exc. r.r., communication, and other public utilities	45
Other industries (incl. not reported)	38
Jewelers, watchmakers, goldsmiths, and silversmiths	36
Job-setters, metal	28

<u>Occupations</u>	<u>Socioeconomic Index</u>
Linemen and servicemen, telegraph, telephone, and power	49
Locomotive engineers	58
Locomotive firemen	45
Loom fixers	10
Machinists	33
Mechanics and repairmen	25
Airplane	48
Automobile	19
Office machine	36
Radio and television	36
Railroad and car shop	23
Not elsewhere classified	27
Millers, grain, flour, feed, etc.	19
Millwrights	31
Molders, metal	12
Motion-picture projectionists	43
Opticians, and lens grinders and polishers	39
Painters, construction and maintenance	16
Paperhangers	10
Pattern- and model-makers, except paper	44
Photoengravers and lithographers	64
Piano and organ tuners and repairmen	38
Plasterers	25
Plumbers and steam-fitters	34
Pressmen and plate printers, printing	49
Rollers and roll hands, metal	22
Roofers and slaters	15
Shoemakers and repairers, except factory	12
Stationary engineers	47
Stone-cutters and stone-carvers	25
Structural--metal workers	34
Tailors and tailoresses	23
Tinsmiths, coppersmiths, and sheet-metal workers	33
Toolmakers, and die-makers and setters	50
Upholsterers	22
Craftsmen and kindred workers (n.e.c.)	32
Members of the armed forces	18
Apprentices	35
Auto mechanics	25
Bricklayers and masons	32
Carpenters	31
Electricians	37
Machinists and toolmakers	41
Mechanics, except auto	34
Plumbers and pipe-fitters	33
Building trades (n.e.c.)	29
Metalworking trades (n.e.c.)	33
Printing trades	40

<u>Occupations</u>	<u>Socioeconomic Index</u>
Other specified trades	31
Trade not specified	39
Asbestos and insulation workers	32
Attendants, auto service and parking	19
Blasters and powderman	11
Boatmen, canalmen, and lock-keepers	24
Brakemen, railroad	42
Bus-drivers	24
Chainmen, rodmen, and axmen, surveying	25
Conductors, bus and street railway	30
Deliverymen and routemen	32
Dressmakers and seamstresses, except factory	23
Dyers	12
Filers, grinders, and polishers, metal	22
Fruit, nut, and vegetable graders and packers, except factory	10
Furnacemen, smeltermen, and pourers	18
Heaters, metal	29
Laundry and dry-cleaning operatives	15
Meat-cutters, except slaughter and packing house	29
Milliners	46
Mine operatives and laborers (n.e.c.)	10
Coal mining	2
Crude petroleum and natural gas extraction	38
Mining and quarrying, except fuel	12
Motormen, mine, factory, logging camp, etc.	3
Motormen, street, subway, and elevated railway	34
Oilers and greasers, except auto	15
Painters, except construction and maintenance	18
Photographic-process workers	42
Power-station operators	50
Sailors and deck hands	16
Sawyers	5
Spinners, textile	5
Stationary firemen	17
Switchmen, railroad	44
Taxicab-drivers and chauffeurs	10
Truck- and tractor-drivers	15
Weavers, textile	6
Welders and flame-cutters	24
<u>Operatives and kindred workers (n.e.c.)</u>	
Manufacturing	18
Durable goods	17
Sawmills, planing mills, and misc. wood products	7

<u>Occupations</u>	<u>Socioeconomic Index</u>
Sawmills, planing mills, and mill work	7
Miscellaneous wood products	9
Furniture and fixtures	9
Stone, clay, and glass products	17
Glass and glass products	23
Cement; and concrete, gypsum; and plaster products	10
Structural clay products	10
Pottery and related products	21
Miscellaneous nonmetallic mineral and stone products	15
Metal industries	16
Primary metal industries	15
Blast furnaces, steel works, and rolling mills	17
Other primary iron and steel industries	12
Primary nonferrous industries	15
Fabricated metal industries (incl. not spec. metal)	16
Fabricated nonferrous metal products	15
Not specified metal industries	14
Machinery, except electrical	22
Agricultural machinery and tractors	21
Office and store machines and devices	31
Miscellaneous machinery	22
Electrical machinery, equipment, and supplies	26
Transportation equipment	23
Motor vehicles and motor vehicle equipment	21
Aircraft and parts	34
Ship and boat building and repairing	16
Railroad and miscellaneous transporta- tion equipment	23
Professional and photographic equipment and watches	29
Professional equipment and supplies	23
Photographic equipment and supplies	40
Watches, clocks, and clockwork-operated devices	28
Miscellaneous manufacturing industries	16
Nondurable goods	
Food and kindred products	16
Meat products	16
Dairy products	22
Canning and preserving fruits, vegetables, and sea foods	9
Grain-mill products	14
Bakery products	15

<u>Occupations</u>	<u>Socioeconomic Index</u>
<u>Private-household workers</u>	
Housekeepers, private household	19
Living in	10
Living out	21
Laundresses, private household	21
Living in	--
Living out	12
Private-household workers (n.e.c.)	7
Living in	12
Living out	6
<u>Service workers, except private household</u>	
Attendants, hospital and other institution	13
Attendants, professional and personal service (n.e.c.)	26
Attendants, recreation and amusement	19
Barbers, beauticians, and manicurists	17
Bartenders	19
Boarding- and lodging-house keepers	30
Bootblacks	8
Charwomen and cleaners	10
Cooks, except private household	15
Counter and fountain workers	17
Elevator operators	10
Firemen, fire protection	37
Guards, watchmen, and doorkeepers	18
Housekeepers and stewards, except private household	31
Janitors and sextons	9
Marshals and constables	21
Midwives	37
Policemen and detectives	39
Government	40
Private	36
Porters	4
Practical nurses	22
Sheriffs and bailiffs	34
Ushers, recreation and amusement	25
Waiters and waitresses	16
Watchmen (crossing) and bridge-tenders	17
Service workers, exc. private household (n.e.c.)	11
<u>Farm laborers and foremen</u>	
Farm foremen	20
Farm laborers, wage workers	6
Farm laborers, unpaid family workers	17
Farm-service laborers, self-employed	22



<u>Occupations</u>	<u>Socioeconomic Index</u>
Confectionery and related products	12
Beverage industries	19
Miscellaneous food preparations and kindred products	11
Not specified food industries	19
Tobacco manufactures	2
Textile mill products	6
Knitting mills	21
Dyeing and finishing textiles, exc. knit goods	8
Carpets, rugs, and other floor coverings	14
Yarn, thread, and fabric mills	2
Miscellaneous textile mill products	10
Apparel and other fabricated textile products	21
Apparel and accessories	22
Misc. fabricated textile products	17
Paper and allied products	19
Pulp, paper, and paperboard mills	19
Paperboard containers and boxes	17
Misc. paper and pulp products	19
Printing, publishing, and allied industries	31
Chemicals and allied products	20
Synthetic fibers	9
Drugs and medicines	26
Paints, varnishes, and related products	15
Misc. chemicals and allied products	23
Petroleum and coal products	51
Petroleum refining	56
Misc. petroleum and coal products	14
Rubber products	22
Leather and leather products	16
Leather: tanned, curried, and finished	10
Footwear, except rubber	9
Leather products, except footwear	14
Not specified manufacturing industries	16
Nonmanufacturing industries (incl. not reported)	18
Construction	18
Railroads and railway express service	15
Transportation, except railroad	23
Telecommunications, and utilities and sanitary services	21
Wholesale and retail trade	17
Business and repair services	19
Personal services	11
Public administration	17
All other industries (incl. not reported)	20

<u>Occupations</u>	<u>Socioeconomic Index</u>
<u>Laborers, except farm and mine</u>	
Fishermen and oystermen	10
Garage laborers, and car-washers and greasers	8
Gardeners, exc. farm, and groundskeepers	11
Longshoremen and stevedores	11
Lumbermen, raftsmen, and wood-choppers	4
Teamsters	8
<u>Laborers (n.e.c.)</u>	
Manufacturing	8
Durable goods	
Sawmills, planing mills, and misc. wood products	3
Sawmills, planing mills, and mill work	3
Miscellaneous wood products	2
Furniture and fixtures	5
Stone, clay, and glass products	7
Glass and glass products	14
Cement; and concrete, gypsum, and plaster products	5
Structural clay products	5
Pottery and related products	7
Misc. nonmetallic mineral and stone products	5
Metal industries	7
Primary metal industries	7
Blast furnaces, steel works, and rolling mills	9
Other primary iron and steel industries	4
Primary nonferrous industries	6
Fabricated metal industries (incl. not spec. metal)	7
Fabricated steel products	7
Fabricated nonferrous metal products	10
Not specified metal industries	9
Machinery, except electrical	11
Agricultural machinery and tractors	14
Office and store machines and devices	17
Miscellaneous machinery	10
Electrical machinery, equipment, and supplies	14
Transportation equipment	11
Motor vehicles and motor vehicle equipment	13
Aircraft and parts	15
Ship and boat building and repairing	2
Railroad and misc. transportation equipment	8



<u>Occupations</u>	<u>Socioeconomic Index</u>
Professional and photographic equip- ment, and watches	11
Professional equipment and supplies	10
Photographic equipment and supplies	16
Watches, clocks, and clockwork- operated devices	--
Miscellaneous manufacturing industries	12
Nondurable goods	
Food and kindred products	9
Meat products	8
Dairy products	13
Canning and preserving fruits, vegetables, and sea foods	6
Grain-mill products	6
Bakery products	10
Confectionery and related products	10
Beverage industries	16
Misc. food preparation and kindred products	5
Not specified food industries	14
Tobacco manufactures	0
Textile mill products	3
Knitting mills	4
Dyeing and finishing textiles, except knit goods	9
Carpets, rugs and other floor coverings	14
Yarns, thread, and fabric mills	1
Miscellaneous textile-mill products	6
Apparel and other fabricated textile products	9
Apparel and accessories	11
Misc. fabricated textile products	6
Paper and allied products	7
Pulp, paper, and paperboard mills	6
Paperboard containers and boxes	10
Misc. paper and pulp products	8
Printing, publishing, and allied industries	23
Chemicals and allied products	8
Synthetic fibers	4
Drugs and medicines	22
Paints, varnishes, and related products	8
Misc. chemicals and allied products	8
Petroleum and coal products	22
Petroleum refining	26
Misc. petroleum and coal products	3

<u>Occupations</u>	<u>Socioeconomic Index</u>
Rubber products	12
Leather and leather products	6
Leather: tanned, curried, and finished	2
Footwear, except rubber	10
Leather products, except footwear	12
Not specified manufacturing industries	8
Nonmanufacturing industries (incl. not reported)	7
Construction	7
Railroads and railway express service	3
Transportation, except railroad	9
Telecommunications, and utilities and sanitary services	6
Wholesale and retail trade	12
Business and repair services	9
Personal services	5
Public administration	7
All other industries (incl. not reported)	6
Occupation not reported	19



