# A STUDY OF THE PERSONALITY OF MUSIC STUDENTS AS COMPARED WITH OTHER STUDENTS ON THE BASIS OF NINE TRAILS 

THESIS

# Presented to the Graduate Council of the North Texas State Teachers College in Partial Fulfillment of the Requirements 

For the Degree of<br>MASTER OF MUSIC<br>By<br>> John I. Rodgers, Jr. > 140831 Bonham, Texas > August, 1946

table of CONTENTS
PageLIST OF tablesiv
LIST OF ILLUSTRATIONS ..... v
Chapter
I. PROBLEM FOR INVESTIGATION ..... 1
Introduction and Furpose Delimitation of the Concept of Personality
II. DESCRIPTION OF RELATED DATA ..... 7
III. SECURING DATA ..... 16
Nature of QuestionnairesTabulation and Averaging of Data
IV. RESULTS OF INVESTIGATION ..... 23
Composite Comparisons
Sex Comparisons
V. SUMMARY AND CONCLUSIONS ..... 32
Summary of ResultsConclusions
APPENDIX A ..... 35
APPENDIX B ..... 47
BIBLIOGRAPHY ..... 48

## LIST OF TABLES

TablePage1. Differences, Standard Error of the Differences of Means, and Critical Ratios for Three Iraits .....
2. Differences in Means of Self Ratings and Ratings of Others on Music Students as a Composite Group. . . . . ..... 27
3. Differences in Means of Men and Women Husic Students on Self Ratings and Ratings of Others ..... 29
4. Differences in Means of Self Ratings and
Ratings of Others for Men and Women Music Students ..... 30
5. Comparison by Sex of Means of Music and Non-Music Students on Self Rating ..... 31
Appendix B. Differences in Means of Music and Non-Music Students on Self Ratings (Composite Groups). . . . . . . . . . ..... 47

## LIST OF ILLUSTRATIONS

Figure Page

1. Comparison of Means of Music andNon-Music Students on the Basisof Self Ratings . . . . . . . . . . 23

## CHAP'IER I

## PROBLEIA FOR INVESTIGATION

## Introduction and Purpose

As early as 1919, Seashore said that "the musical mind is first of all a normal mind. . . . We must take it for granted that the musical mind is an aspect of a normal personality with endowments for a general mental life."1 He pointed out that the musician who is well physically, morally and mentally, who has a good disposition, who is socially attractive, reasonable and well-balanced is the musician with an advantage over the warped personality, and that such a well-balanced individual should represent the goal for musicians. ${ }^{2}$ But to anyone who has been in a community life that contains a large musical element, the fact that the popular conception of the personality of musicians represents almost the complete antithesis of the view of Seashore will come as no surprise. Music students are continually the subject of remarks that characterize them as "strange," "mad", "warped," and many other terms

[^0]popularly used to denote a maladjusted personality. Such attitudes are not altogether confined to persons outside the music group, but the writer has found similar attitudes to exist within the group as well.

This study was undertaken to try to determine if objective measurement of certain personality uraics would indicate that music students are characterized by marked differences in personality make-up. In carrying out this investigation, a group of 100 music students and a control group of the same size were used. The type of measurement used was of such objective nature that evaluations could be made by other persons on identically the same trait indicators as were used in securing information from the person himself. This fact is of great importance, as it makes possible an evaluation of a person's personality by the group in which he is striving for social acceptance.

Data for this study were obtained at North Texas State Teachers College during the spring semester of 1946 , using cases from the Music Department and the remainder of the college for the two groups.

## Delimitation of the Concept of Personality

The term "personality" is subject to such a wide variety of uses and interpretations that it is necessary to make a clear exposition of the writer's point of view in this study
in order that there may be a clear understanding of the methods used and the results obtained. Popular usage has assigned this term to everything from the frantic gesticulations of a three year old child singing "The Man I Love" to the aesthetic qualities of an inanimate object. It is necessary that this investigation be founded on a scientific point of view, and it is the point of view and definitions of Stagner that are used here. He says that "personality depends upon the individual differences in non-adaptive behavior." 4

Adaptive and non-adaptive behavior.--For a thorough understanding of this definition, it is necessary that one understand the difference in adaptive and non-adaptive behavior. Adaptive behavior is that behavior which is concerned with meeting the necessities of life; it is usually proper and conventional, and rarely presents any unusual or interesting aspects. Reflexes would be classed as adaptive behavior, as would biologically inherited traits. However, certain reflexes and biological traits may be said to contribute to the sum total of an individual's personality if they deviate so markedly from those of others in the

3
Ross Stagner, Psychology of Personality, Chapter 1.
4
Ibid., p. 7.
same social group that they constitute something peculiar and differentiating about the person. By non-adaptive behavior, then, is meant all other aspects of a person's behavior. It is that behavior used to meet and solve the conflicts encountered in the social group of which a person is a part. There may be great similarity in the nonadaptive behavior used by members of a group in meeting conflict situations, but it is only that behavior which is different Irom that of the rest of the group which contributes to a person's personality.

On the basis of differences in non-adaptive behavior and those aspects of adaptive behavior which are sufficiently different to contribute to personality make-up, Stagner's definition may be re-worded to read: "Personality depends upon the degree of individual uniqueness." A good, or acceptable personality will depend upon the degree of uniqueness that is within the bounds of acceptability of the group involved. An unpleasant personality represents a degree of uniqueness that is not acceptable by the group. It is felt that this study makes a definite contribution, as already stated, because the use of other students' ratings of music students gives a clear picture of how society evaluates that degree of uniqueness which characterizes the personality of music students.

Personality and habit.--If personality is to have a
degree of consistency, there must be something habitual about the behavior which makes it recognizable as belonging to a particular person. Personality may be seen to be a system of habits largely made up of non-adaptive ways of adjusting to conflict situations. What is habit? Habit is behavior directed toward a very familiar goal. It is not just repeating a thing until it becomes automatic, nor is it a true habit unless the goal toward which behavior is directed is a goal that has been set by an individual himself. It follows, then, that even though a person has an habitual type of behavior which is acceptable, and which is sufficiently different from that of the group to contribute to his personality, he may not be of much interest to the group because his behavior is so consistent within itself that he is highly predictable in almost all situations. His goals are unchanging and his behavior is of such a rigid pattern that he is in no way a source of surprise or new experience to his group.

Personality traits.--Personality is composed of various aspects known as "traits," and it is these traits which must be measured and studied in order to study personality. A trait is a composite of things, and it is only the indications of the trait which one sees. Just as one cannot see the "spoiledness" of a child, but only those actions and indications which lead him to the
conclusion that the child is "spoiled," so it is with personality traits. Specific actions precede and determine a trait, and it is these indicators which one must study in order to arrive at any conclusions concerning a trait of personality. One may criticize many "personality scales" on the basis that they do not really measure a trait by means of such overt indicators as are perceptible to the group by which an individual's personality is really evaluated. A discussion of the instrument used for trait measurement in this study will be found in Chapter III. It has been the purpose of this chapter to present the problem for investigation, and to give a delimitation of the concept of personality.

## CHAPTER II

## DESCRIPTION OF RELATED DATA

Although the importance of personality as related to success in many fields has long been recognized, and although increasing interest in the field of sociometry has produced many studies on the relation of personality and group acceptance and popularity, there has been almost no research conducted of the kind here presented. It seems rather strange, when one thinks of the progressively prominent place music has taken in public school education, that no one has been sufficiently interested or concerned about the personality of the potential leaders in this field to make a study of them during their formative state in such a school as North Texas State Teachers College, where training in nusic education constitutes a very important aspect of the music program. Because of the lack of much directly related data, the writer has presented here the results of similar studies that my contribute to the formation of a better idea about the personality of college students in general. They may also serve as bases for comparison of music students with other special groups studied.

In an effort to predict the quality of teaching, Odenweller studied 500 teachers, and concluded that personality has a closer relation to the quality of teaching
than successful student teaching, or any other trait. ${ }^{1}$
Ragsdale, in a study of men who were physical education majors and men from the fields of letters and science found physical education majors and others to be fairly equal, with the letters and science men tending more toward averages in scholarship, while the physical education group tended toward the extremes. ${ }^{2}$

In a similar study, Duggan found women physical education majors to be more emotionally stable than non-majors. They were more extroverted and dominating. ${ }^{3}$

From her study of a particular home economics group, Worley reported the home economics group to be lower in intelligence scores and in personality ratings than were 4 the other students.

From a comparative study of personality test scores of

1
A. L. Odenweller, Predicting the Quality of Teaching, p. 122.

2
C. E. Ragsdale, "Personality Traits of College Majors in Physical Education," Research Quarterly of the American Physical Education Association, III (1932), 243-248.

3
A.S. Duggan, A Comparative Study of Undergraduate Women Maiors and Non-Majors in Physical Education with Respect to Certain Personal rraits, p. 96.

4
Helen Worley, "Changes in Personality as Result of Hone Economics Training," Master's Thesis (1937).
rural and urban college women, Robertson and Stromberg concluded that the fundamental measurable personality traits of the college girl are formed before she enters college. ${ }^{5}$ This fact would be of interest to those who might criticise the inclusion in this study of first year college students.

Although concerned with a very highly specialized and rather isolating aspect of music, the study of Gross and Seashore on composers is of interest. ${ }^{6}$ In the various components of temperament, all their groups averaged "borderline" on the "normal" component, indicating that they were about halfway between persons who are extremely conservative in their emotional expressions and persons whose temperaments are so poorly controlled that they develop definitely recognizable mental disturbances.

The most significant findings on temperamental differences is on the cycloid components, 'manic' and 'depressive'; the composers rank in +3 or highest group in both cases, while the superior students also rank in the +3 'manic' group and in $\$ 2$ 'depressive' group, high positive steps on the scale.?

5
Arrie E. Robertson and Eleroy L. Stromberg, "A Comparison of the Personalluy lest Scores of Rural and Urban College Women," Journal of Social Psychology, XI (1940), 411-14.

6
Bethuel Gross and Robert H. Seashore, "Psychological Characteristics of Student and Frofessional musical Composer," Journal of Applied Psychology, XXV (1941),159-170.

7
Ibid., p. 167.

The personality traits of drama students were studied 8 by Golden, and a comparison of means on the Willoughby (Clark-Thurstone) Personality Schedule shows a very slight, but not statistically reliable difference in favor of the drama students' being more neurotic. In a study of values, the drama students were higher on aesthetic values than on theoretical values. The critical ratio on this difference in aesthetic values was statistically significant (11.03). Drama students were found to be more extroverted than nondrama students, but they were not really in the class of extroverts. On the basis of a questionnaire, which instrument this writer considers to be of little vafue, 9 Golden found drama students to admit being called ?queer duck" and other similar names; and he found that in general, drama school students possess attitudes in direct contrast to those of non-drama students in his

## 8

Alfred L. Golden, "Personality Traits of Drama School Students," The Quarterly Journal of Speech, XXVI (1940), 564-75.


This questionnaire contained such questions as "Do people consider you a 'queer duck'"?, and "Do you have bad personal habits you will have to break before you have success?", etc. Such questions could not, the writer feels, be considered as measuring personality traits, and highly questionable would be the answers to any questions which suppose one person to know what a group of other people thinks of him.
control group. However, he belleves the unusual conduct and attitudes to be largely the result of affectation on the part of the drama students.

When measuring by means of the Bernreuter Personality Inventory, Bryan found freshman art students to be no more and no less neurotic than college freshmen in general. 10

Before examining the findings of the one investigation which is directly related and very similar to this study, it is well to note two studies on factors relating to selection of friends and social success, as such factors are of great importance to this study.

Smith found that among high school students, the most important factor in the choice of Iriends was the fact that they were of the same sex. ${ }^{11}$

In a study of some factors related to social success among college students, Burks has presented some very important findings. ${ }^{12}$ Her results are based on the responses

## 10

Alice I. Bryan, "Grades, Intelligence and Personality of Art School Freshmen," The Journal of Educational Esychology, (1942), 50-64.

11
Mapheus Smith, "Some Factors in Friendship Selections of High School Students," Sociometry, VII (1944), 303-10.

12
Frances W. Burks, "Some Factors Related to Social Success in College," Journal of Social Psychology, IX (1938), 125-40.
of university students to a battery of tests invoiving some original solutions to difficult social situations, personal interests, and an inventory of personal characteristics and modes of benavior. She found that the following rather general behavior characteristics appear to facilitate successful social relations:

1. Natural, unforced humor that is based upon exaggeration, self ridicule, incongruity, and unexpected language.
2. A genuinely sympatnetic interest in people.
3. Vividness and originality of expression.
4. conservative ideas in relation to difficult situations.
5. Sincerily and directness of expression, but without impertinence.
6. An active sense of responsibility.
7. Adaptability.

The one work found which is closely related to this 13
study is that of Lawhon. This study of music students was made at North Texas State Teachers College in the summer of 1940. His problem was to see if advanced music students can be distinguished from non-music students on

13
John E. Lawhon, "A Study to Determine the Extent to Which Music Students Have a Well Adjusted Personality," Masters Thesis, (1940).
the bases of intelligence and personality as measured by specific objective tests. The study utilized a group of ninety advanced music students (forty-five who expressed preference for solo performance and forty-five who expressed preference for group performance) and fifty advanced students from other fields. By "advanced students" was meant students from the classifications of junior, senior and graduate. Because the study was made in the summer, at which time many teachers return to college to do additional work, the ages ran from fifteen to sixty-five years, which is a much wider range than would normally characterize the group of music students during their formative period of training in music. The writer feels that the inclusion of only "advanced" students gives an artificial "coloring" to the groups, which fact should be of some concern if one is to arrive at conclusions concerning a whole group of individuals when using only certain selected strata of the whole as a basis for study. As can be seen from the preceding discussion on personality, the writer's present investigation may be considered to make a definite contribution to that work already done by Lawhon because it is belleved that it represents an approach of greater objective value, an approach utilizing greater refinement in evaluation of traits, and one that is more closely related to the sociometric understanding of
personality as it relates to social success of the individual in his chosen group because of the use of ratings by others in evaluating the personality of music students.

The California Test of Personality was used as the instrument of measurement in this related study. The writer feels this is not really as accurate an instrument as the one used here because it is answered by "yes" or "no." A later discussion will show the improvement of the present questionnaire over the California test in degree of gradation of answers and refinement of evaluation. This same test is subject to criticism in the light of studying personality as it relates to others because it contains many questions dealing with the individual's Pfeelings" on a matter or situation. Lawhon places considerable value on this subjective evaluation of implicit attitudes and feelings, but to any student of psychology this must appear as a weakness when he considers how involved one's "feelings" may become, and to what extent a person is often completely unaware of his true attitude toward something. It must be evident that only overt indicators of traits, indicators which can be perceived and understood by the society to which an individual belongs, are of value in a truiy objective measurement of personality.

As measured by the California Test of Personality, the music students rated higher than the control group. Their
best scores were in self-reliance. They were lower than the control group in social standards and community relations. There was little difference on sense of personal freedom, anti-social tendencies and occupational relations; but in other items, the music students were definitely higher. Lawhon found music students to be lower in social adjustment than in personal adjustment. There was also little difference in men and women.

## CHAPTER III

## SECURING DATA

For measuring traits in this study, personality questionnaires were used which had been prepared by M.E.Bonney, head of the psychology department at North Texas State Teachers College. ${ }^{1}$ Two questionnaires were used, one a "self rating" and one a "rating by others." Each person filling out a self rating was asked to rate a friend of his, also. As these questionnaires were being used to obtain data for a larger study being carried on by the college, the writer did not administer all the tests personally. Previously, various departments of the college had been asked to devote one period to the completion of these questionnaires, and the writer used two "free" periods in the music school in order to try to reach all the music students who had not filled out questionnaires in other classes outside the department.

From the questionnaires received, the writer selected

1
The specific questions, grouped according to traits, will be found in Appendix. A.
only cases from among those students who were classified as music majors, not using those who were not full-time music students. All cases selected were such as had both a self rating and at least one rating by another person. All ratings of both types that had been received from testing outside the music department were checked to sort out all music students. These were checked against a list of music majors provided by the music department to be sure that they were music majors and not just interested in music. Though the actual number of students found to have both a selfrating and at least one rating by another person was slightly more than one hundred, the round figure of one hundred was chosen as a more convenient working group. Students from the classifications of freshman through graduate were included.

## Nature of Questionnaires

The self rating personality scale used was designed to obtain information in eleven categories. The completed first page provided information as to name, sex, age, classification, church preference, siblings, major supject, and ambition. The second half of Section III pertained to offices held in the previous three years. The remainder of the questionnaire was devoted to 170 questions pertaining to nine traits important in determining a person's
personality and the resulting degree of social acceptance as based on that personality. ${ }^{2}$ The questions used all pertained to overt indicators of the traits to be measured, making possible the type of questionnaire used when rating another person. In the scale for rating others, the questions were identical with those on the self rating scale except for the substitution of third person wording. They were numbered the same as on the self rating. Section IV of the self rating was not duplicated in the rating by others as it pertained to attendance at church and other group functions, and it was believed that this would not be subject to very great accuracy on the part of another person. The second half of Section III was also omitted from the rating by others. This information does not figure in this study. Page one provided substantially the same information as the corresponding page on the self rating scale.

The traits measured by this instrument were:

1. Physical appearance, health and vigor.
2. Emotional stability and control.
3. Social aggressiveness.
4. Tolerance and adeptability.

2
Eight questions were included which were not assigned as indicators of a particular trait, but the compiler of the scales was interested in a study of them to see if they had differentiating significance, and if they should be assigned to certain traits. 'l'hey did not figure in this study.
5. Dependability.
6. Dependence on others.
7. Being a source of new experience to others.
8. Social service motivation.
9. Abilities and skills.

Questions pertaining to a trait were distributed among those pertaining to other traits to avoid the possible "coloring" of successive questions by the answer made to the first one or two of a series. This arrangement was not used in respect to abilities and skills as the answer to one question would not color the answer to another concerning an entirely different skill.

Rating was done by circling one of five digits ${ }^{3}$ (one through five) following a question, " 3 " being taken as the scale norm, the degree of rating being in direct proportion to the size of the digit circled. Preceding the questions in each section was an interpretive scale for ratings by numbers as "seldom," "always," "about the same as most people you know," etc. ${ }^{4}$

3
In the first half of Seciion 111 and in Section IV, on "O" was added for the rating of "no ability at all" and "never," respectively.

4
The validity of the use of such categories for obtaining data has been established by M.E. Bonney in stuaies wiln school children. (Journal of Social Psychology, "The Validity of Certain Techniques of Gathering Psychological Data with Special Reference to Personality Questionnaires, "XIII (1941),
103- 21$)$.

Each person was asked to fill out a rating scale on himself and on a friend of the same sex who was also in school at North Texas State Teachers College. At the end of the rating of his friend, ne was asked to give the name of an additional friend of the same sex. This latter information figures in the larger study already mentioned, one aspect of which has to do with the number of times a person was selected as a friend, either for the rating of another or as an additional friend.

For the like number of cases to be used for comparison, a selection of 100 cases was made trom the non-music student group on file in the psychology department of the college. An effort was made to include in the non-music group a sufficient number of questionnaires from the group having the most choices, both first and second, as friends to make this group about equal to the music group in number of students with more than one rating by others. As it curned out, there were twenty-seven music students with two or more ratings by others and nineteen non-music students with two or more ratings by others. It is interesting to note that among music students there were two persons who had four ratings by others, and four persons with three ratings by others. In the non-music group only one person had as high as three raungs. In this selection, only eleven men were found in the non-music group and twenty-four in the
music group; but, because of the method of making the nonmusic group selection, no importance can be attached to this difference.

Tabulation and Averaging of Data
In order to record the data from these questionnaires, the writer made large charts from graph paper with squares of such size as to permit the easy writing of numbers, a sufficient number of sheets of paper being joined together horizontally to provide 170 squares, space for the person's name, and space for the averages on all traits. One horizontal line was assigned to each person, and one horizontal line to each of the ratings of him made by others. (Hhough space was provided for the ratings by others in the case of the non-music group, these were not recorded at this time.)

To facilitate the extraction of all questions pertaining to one trait at the same time, fenestrated overlays were made, one for each trait, with a separate column for each page in the questionnaire. On the charts, all questions pertaining to a particular trait were grouped together in numerical sequence in designated areas, and the rating digits (including "0"'s) were entered in the appropriate squares.

When this recording was completed, the horizontal sums of the figures in each trait division and on each line were divided by the number of questions actually answered in each case, and the averages were entered in the appropriate
squares on the extreme right-hand side of the chart.
Frequency distributions were made Ior each trait and for each of the three big divisions, i.e., self ratings of music students, self ratings of non-music students, ratings by others on music students, all being further subdivided by sex. In preparing frequency distributions on the ratings by others, all the averages on a particular trait were in turn averaged to provide only one figure to compare with the self rating. Median, mean, and range were derived from the trequency distributions in the customary manner. In all averaging, divisions were carried to the first two decimal places, and the sedond decimal place was not adjusted to the next nearest whole number.

Composite Comparisons
From Figure 1, it is apparent that as measured in this study, the personality of music students as a composite group of men and women shows no significant uniqueness when compared with non-music students on the basis of self ratings.


1. Physical appearance, health and vigor. 2. Emotional stability and control. 3. Social aggressiveness. 4. Tolerance and adaptability. 2. Dependability. 6. Dependence on others.7.Being a source of new experiemce to others. 8. Social service motivation. 9. Abilities and skills. 1

Fig. 1.--Comparison of means of music and non-music students on the basis of self ratings.?
${ }^{1}$ In all tables, this system of numbering traits is followed. ${ }^{2}$ For specific diflerences see table in Appendix B.

Taking 3.00 as the norm assumed in the construction of the scale, one finds music students and non-music students fall below normal in the traits of social aggressiveness and abilities and skills. The difference in the means on social aggressiveness is .03, but this is too small to be considerea signixicant. In abilities, music students show their most marked superiority, with a dirierence in the means of .55. This superiority is considered very signifcant since an examination of the questions pertaining to abilities will show that there is no "loading" in favor of music students by the inclusion of an unduly large number of questions dealing with musical abilities. One might have expected ralings on athletic abilities to have produced a significant lowering of music sudents' average rating, but such does not seem to be the case.

The next greatest difference in means was on dependability, with the non-music students surpassing music students by a difference of .18. It is interesting to note that on this trait, the ratings of others places music students at a higher level, with a mean of 4.10 , which is . 15 higher than the mean of self ratings. As the mean of ratings of others on non-music students on this trait is not available, too much cannot be made of the higher mean of music students, but it is significant, the writer feels, to see that on this particular trait, music stments
evaluated themselves somewhat lower than their actual practice of dependability would justify.

On social service motivation, the music students were higher than non-music students, with a difference in means of .17, with the mean . 82 above the scale norm. It should be encouraging to see that music students, a great majority of whom are preparing to be teachers, rate well in this trait, which is certainly necessary for happiness and success in public school teaching.

Using the formula $\left.\sigma_{d}=K O M_{1}\right)^{2}+\left(\sigma M_{2}\right)^{2}$, the standard errors of the differences between the means on traits 5,9 , and 10 were determined. ${ }^{3}$ Using the formula $C R=\frac{M_{1}-M_{2}}{\sigma_{d}}$, the critical ratio of the difference was obtained. The results are shown in table 1.

TAbLE 1
DIFFERENCES, STIANDARD ERROR OF THE DIFFERENCES OF IIEANS, AND CRITICAL RAI'IOS FOR there traits

| Trait No. | Music | Non-Music | Difference | $\sigma_{d}$ | CR |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | 3.95 | 4.13 | .18 | .061 | 2.95 |
| 9 | 3.82 | 3.65 | .17 | .053 | 3.20 |
| 10 | 2.60 | 2.05 | .55 | .095 | 5.79 |

The critical ratio on trait 5 is so close to statistical reliability that it may be included with the other

[^1]two to give three traits which show differences of such reliability that differences in the same direction could be expected to be found in studies of similar samples. It may be assumed that all other differences manifest in the comparison of music and non-music students are too small to be of statistical significance.

In addition to those significant differences already mentioned, non-music students rated slightly higher on physical appearance, health and vigor, and on emotional stability and control. On all other traits, the differences between music and non-music students were negligible.

Although the study of the relationship of ratings by others to self ratings will constitute another investigation which is not a part of this study, it should be of interest to examine the relationship between the means of self ratings and ratings by others on music students as set forth in Table 2.

The criticism is often made of self ratings that they are not a satisfactory instrument for collection of data because people tend to rate themselves as they think they should be. But it is apparent that such has not been the case in this particular study. In the trait of social aggressiveness, music students rated themselves .20 below the scale norm of 3.00 , but ratings of others placed them
at 3.40 , which is .40 above this norm, and .60 above their self rating.

TABLE 2
DIFFERENCES IN MEANS OF SELF RAIINGS AND RATINGS OF OTHERS ON MUSIC STUDENTS AS A COMPOSITE GROUP

| Trait No. | Self Rating | Rating by others | Difference |
| :---: | :---: | :---: | :---: |
| 1 | 3.50 | 3.81 | .31 |
| 2 | 3.66 | 3.81 | .15 |
| 3 | 2.80 | 3.40 | .60 |
| 4 | 3.83 | 3.74 | .09 |
| 5 | 3.95 | 4.10 | .15 |
| 6 | 3.56 | 3.45 | .11 |
| 7 | 3.19 | 3.19 | .00 |
| 8 | 3.82 | 3.68 | .14 |
| 9 | 2.60 | 2.55 | .05 |

Next greatest in difference were the means on physical appearance, health and vigor. Ratings of others placed the mean at 3.81 , which is .31 above the self rating of 3.50 .

On the traits of emotional stability and dependability, the ratings of others placed the mean .15 higher than that of the self ratings. There is agreement on the means for "being a source of new experience to others."

On the remaining four traits, the differences were in favor of the music students' self ratings being higher than those of others. However, none of these differences were as great as those already discussed. The greatest difference zas only . 14 on social service motivation, but the
ratings of others still placed music students . 68 above the scale norm.

From these comparisons it can be seen that the music student's rating of his personality shows no significant tendency toward over-evaluation, but that the greatest differences are to be found in the opposite direction. It would seem that the popular notion that "professional jealousy" and "egotism" on the part of music students cause them to underestimate the qualities of fellow students both within and outside the music group is an error in judgment, doubtless made on the basis of one or two known cases of such behavior.

## Sex Comparisons

An examination of Table 3 shows that in the music group women rated themselves higher than men in all traits except "Being a source of new experience to others," in which case men rated themselves . 03 higher than did women. All differences but one are smaller when the ratings of others are compared. On emotional stability and control, women rated themselves .23 higher than men, but the ratings of others show a difference in the opposite direction, with men rating . 22 higher than women. Women also rated themselves .40 higher on dependability than did men, but ratings of others reverse this difference to . 10 in favor of the men. On abilities and skills, women rated themselves

TABLE 3
DIFFERENCES IN MEANS OF MEN AND WOUEN MUSIC STUDENTS ON SELF RATINGS AND RATINGS OF OTHERS

| Trait <br> No. | Self Rating |  |  | Rating by Others |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Men | Women | Difference | Men | Women | Differ- <br> ence |
| 1 | 3.31 | 3.70 | .39 | 3.79 | 3.83 | .04 |
| 2 | 3.55 | 3.75 | .23 | 3.92 | 3.70 | .22 |
| 3 | 2.63 | 2.97 | .34 | 3.36 | 3.45 | .09 |
| 4 | 3.75 | 3.91 | .16 | 3.73 | 3.75 | .02 |
| 5 | 3.75 | 4.15 | .40 | 4.15 | 4.05 | .10 |
| 6 | 3.49 | 3.63 | .14 | 3.47 | 3.44 | .03 |
| 7 | 3.21 | 3.18 | .03 | 3.20 | 3.19 | .01 |
| 8 | 3.74 | 3.90 | .16 | 3.68 | 3.68 | .00 |
| 9 | 2.52 | 2.69 | .17 | 2.44 | 2.66 | .22 |

.17 higher than did men, and this difference is increased to. 22 as evaluated by others. All other differences are seen to be reduced to such small degrees as to de of little or no concern. The differences in means of men and women on these traits as measured by others are very small, with only the three cases cited above showing enough difference to warrant discussion. It is of interest to see, then, that as rated by the groups of which they are a part, men and women of the music school are found to be very similar.

An examination of Table 4 will show that self ratings of men of the music group tended toward very close agreement with the ratings of others, or to be rather markedly lower; and that though there is one very marked difference (trait 3 ), the general tendency was for women to overrate themselves
slightly as compared with the ratings of others.

TABLE 4
differences in meand of self ratings and ratings OF OTHERS FOR IEN AND WOMEN MUSIC STUDENTS

| Trait <br> No. | Men |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Self | Other | Differ- <br> ence | Self | Other | Differ- <br> ence |
| 1 | 3.31 | 3.79 | .48 | 3.70 | 3.83 | .13 |
| 2 | 3.55 | 3.92 | .37 | 3.78 | 3.70 | .08 |
| 3 | 2.63 | 3.36 | .73 | 2.97 | 3.45 | .48 |
| 4 | 3.75 | 3.73 | .02 | 3.91 | 3.75 | .10 |
| 5 | 3.75 | 4.15 | .40 | 4.15 | 4.05 | .10 |
| 6 | 3.49 | 3.47 | .02 | 3.63 | 3.44 | .19 |
| 7 | 3.21 | 3.20 | .01 | 3.18 | 3.19 | .01 |
| 8 | 3.74 | 3.68 | .06 | 3.90 | 3.68 | .22 |
| 9 | 2.52 | 2.49 | .03 | 2.69 | 2.66 | .03 |

When comparing self ratings by sex, music and nonmusic groups are again found to be very similar. The differences in means is shown by Table 5. In the case of men, only three differences are worthy of mention. On dependability, the non-music men rated themselves higher. The other two differences were on social service motivation and abilities, and in both cases, the music group rated higher.

There is only one difference between the means of self ratings of women that is large enough to warrant comment. This is on abilities and skills. The music group surpasses the non-music group by .74. The range of means
on this trait for the non-music group was from .41 to 3.67 , inclusive, and for the music students, it was from 1.05 to 3.88, inclusive. As has been pointed out, the questions

TABLE 5
COMPARISON BY SEX OF MEANS OF MUSIC AND NON-MUSIC STUDENTS ON SELF RATING

| Trait No. | Men |  |  | Women |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Music | NonMusic | Difference | Music | NonMusic | Difference |
| 1 | 3.31 | 3.46 | . 15 | 3.70 | 3.63 | . 07 |
| 2 | 3.55 | 3.69 | . 14 | 3.78 | 3.81 | . 03 |
| 3 | 2.63 | 2.73 | . 10 | 2.97 | 2.81 | .16 |
| 4 | 3.75 | 3.74 | . 01 | 3.91 | 3.89 | .02 |
| 5 | 3.75 | 4.02 | .27 | 4.15 | 4.24 | .09 |
| 6. | 3.49 | 3.46 | . 03 | 3.63 | 3.50 | . 13 |
| 7 | 3.21 | 3.15 | . 06 | 3.18 | 3.09 | . 09 |
| 8 | 3.74 | 3.52 | . 22 | 3.90 | 3.79 | .11 |
| 9 | 2.52 | 2.16 | . 36 | 2.59 | 1.95 | .74 |

on this trait were not unduly "loaded" in favor of the music student, so that one can see that women music students apparently surpass other women students in abilities and skills in general. Otherwise, the two groups are seen to be very similar.

## CHAPTER V

SUMMARY AND CONCLUSIONS

Summary of Results
From the foregoing study and the results given in Chapter IV, these findings may be considered important:

1. A comparison of the composite groups of music and non-music students on the basis of self ratings shows the personalities of the two groups to be very similar, but with the following statistically reliable differences manifest:
a. Wusic students were found to be higher in social service motivation and in abilities and skills.
b. Non-music students were iouna to be higher in dependability.
2. A comparison of the self ratings of music students with the ratings by others shows that music students did not tend to over-evaluate themselves to any marked degree in any trait, but that they did under-evaluate themselves on the traits of social aggressiveness; physical appearance, health and vigor; emotional stability and control; and dependability.
3. On the basis of self ratings, women of the music group were round to rate themselves higher than the men.
4. On the basis of ratings by others, men and women of the music group were found to be very similar, but with the following differences noted:
a. Men were rated higher on emotional stability and control and on dependability.
b. Women were rated higher on abilities and skills.
5. A great similarity was found between the self ratings and ratings of others on both men and women of the music group.
6. A comparison of the self ratings of men of the music and non-music groups shows the two groups to be very similar, but with three differences worthy of mention:
a. Non-music men rated themselves higher on dependability.
b. Music men rated themselves higher on social service motivation and on abilities and skills.
7. A comparison of the self ratings of women of the two groups shows only one marked difference. Music women were higher in abilities and skills.

Conclusions
From the results of this investigation, it is concluded that there is no significant degree of uniqueness found in the personality of music students, as measured on the basis of nine personality traits in the manner herein described,
that would characterize music students as being any difierent from other college students in personality make-up.

On the basis of comparison of self ratings and ratings by others, it is concluded that music students have a good sense of personal evaluation in terms of personality as well as an honest evaluation of others in their groups. In conclusion, the belief is presented that the popular tendency to characterize music students as anything other than students of normal personalities is the result of people's generalization on the basis of one or two unusual individuals.

Careful investigation reveals no very marked difference in personality between music and non-music students.

## APPENDIX A

## QUESIIONS USED IN PERSONALITY RATING

Physical Appearance, Health and Vigor ${ }^{\perp}$
Do you have a feeling of buoyancy and well-being? ${ }^{2}$
From the standpoint of physical vigor, do you feel "up to" the requirements of your work?

From the standpoint of physical vigor, do you feel "up to" your opportunities for social life?

Are you a lively, "on the go" type of person?
Do you feel refreshed and "ready to go" when you wake up in the morning?

Do you aress as well as others of your own sex?
How do you compare with others of your own sex in regard to general personal appearance, $1 . e$. , in being good looking, handsome, or beautiful?

Do you have a pleasing voice?

Emotional Stability and Control
Can you keep from "going to pieces" or "losing your head" in emergency situations, such as accidents, or any kind of situailon involving impending physical danger?

Can you take well-intentioned criticism from teachers, supervisors, or others in positions of authority over you

1
Trait headings were not used in the questionnaire, and related questions were not grouped together.

Questions were changed to third person wording in the form of the scale used to rate others.
without showing resentment or anger?
Are you calm and relaxed (not excitable and restless)?
When some very unexpected and shocking circumstance arises, such as reception of bad news, or a serious disappointment, do you adapt yourself to these facts without crying, making demands for sympanny,or excessive discourage-

Can you accept well-intentioned criticism from your friends or co-workers without showing resentment or anger?

Can you "brush off" slights and other minor offenses to your ego (feelings not easily hurt)?

Can you lose in a game without being irritated or upset?
When you have apparently lost a point in an argument over a matter of little importance, do you let the matter drop (rather than recurning to the point to try to prove that after all you were right)?

When you are irritated about sometning, do you avoid "taking out" your irritation on members of your family, or other associates, by some kind of unjustified attacks upon

When you are moved to anger, do you get it under control rather quickly (as contrasted with holding grudges or resentment over a long period of timej?

Can your friends depend upon you to treat them very much the same all the time (as opposed to being "hurty" or distant at times)?

Do you overlook minor offenses committed against you when the event nas "blown over"?

Do you keep from showing anger when involved in a conflict with other persons?

Do you keep from showing grief when you are sad or depressed (not easily moved to tears)?

When you suffer a disappointment, do you "rise above" it rather quickly (as opposed to letring it "get you down")?

Can you stand to be kidded or teased wi thout becoming
ated? irritated?

When you are distunbed or anxious over an unpleasant situation, do you "rise above" it rather quickly (as opposed to letting it "get you down")?

Do you think before you act when aroused to anger or fear (not impulsive)?

Are you in good spirits (optimistic, cheerful) when around others?

Social Aggressiveness
When you go to any kind of meeting place or public gathering, do you invite one or more other persons to go with you? (If married, include husband or wife.)

Do you endeavor to make newcomers into your groups feel welcome?

Do you effectively resist any efforts of others to take advantage of you?

When a new game is introduced at a parcy or a pienic, are you one of the first ones to volunteer to learn how to play its

When you are in an informal situation with one or more individuals, do you ofier suggestions as to what might be done for entertainment, change or novelty?

In a social situation do you take the lead in promoting games, stunts, or projects?

Do you remember people's names, and call them by their names on subsequent meetings?

Do you get what is coming to you (as contrasted to letting orners "run over you" or ignore your rights)?

When volunteers are asked for in a social situation, for the purpose of playing a game, putting on a stunt, or demonstrating some procedure -- do you volunteer?

In informal conversations with other persons, do you draw them out on things which are of particular interest to them?

When you are in an informal social situation, do you introduce yourself to persons you do not know?

Do you invite others to your living quarters (room, apartment, home) for companionship, or for some kind of entertainment?

Do you entertain groups in public performances, such as by taking part in plays, giving readings, putting on stunts and impersonations, etc.?

Do you stand up for what you think is right or true even when your views are contrary to those held by most other nembers of a particular group you are in?

Are you characterized by having a wide range of friends but with none of them meaning very much to you?

Do you take time out during your working nours to visit with friends?

Do you visit (call on) other people in their living quarters?

Do you establish friendiy contacts with members of the opposite sex?

In group situations, do you take the initiative in introducing people to others they do not know?

When in an informal group, do you initiate conversations about topics of general interest to the persons present, such as: sports, politics, ilterature, school
programs, etc.?

Do you take up, and participate in, the interests of your friends in order to have more in comon witn mens

Have you started any kind of club or project in your school or community?
(The following questions pertaining to frequency of attendance in group situations were not included in the scale

Sunday School
Church worship services
Church young people's society
Social dances

School club meetings for programs or business meetings, including sororities and fraternities.

Parties in school groups or clubs
Parties in church groups or clubs
Lectures (economics, politics, science, etc.)
Musical programs (including student performances, but not those in which you perform)

Picnics (in seasons when possible)
Sports events as a spectator (include both indoor and outdoor sports).

Picture shows
Stage and dramatic productions (including student productions, but not those in which you perform).

Tolerance and Adaptability
Are you friendly with associates who have weaknesses and faults which irritate you?

When you are around people you don't like, do you nevertheless hide your antagonism toward them?

When your personal plans are blocked due to such factors as a change in the weather, unexpected visitors, or illness in the family, do you adapt yourself to these facts without much fuss or irritability?

Do you react to the ordinary inconveniences of life with a sense of humor?

Are you tactful in dealing with people, so that you do not antagonize them or hurt their feelings?

When your usual activities are temporarily interrupted by others, do you adapt yourself to this fact without showing annoyance or irritability?

Do you get along quite well with all kinds of people (rather than just a few selected ones)?

Are you friendly with people whose ideas about what is right and wrong differ from yours?

Are you just as friendly with persons who belong to a different church from yours, as you are with those who belong to your own church?

Do you participate in an activity agreed upon by the majority of your group (when no important principles are involved) even though you are not much interested in the kind of thing being done?

Can you adapt yourself to the mood of an individual or group you are with, even though you do not really feel as the others do?

When you have to associate with someone who does a lot of little things (care of personal toilet, household chores, etc.) differently than you do, can you adapt yourself to these differences without showing annoyance?

Have you modified for a few days or weeks at a time any of your personal habits (time of eating or sleeping, smoking, etc.) in order to accommodate a roommate or a friend?

Do you try to see the best side or the humorous side of a bad situation, -- as when a trip, a picnic, or a party takes a bad turn and a lot of the people present are "feeling blue"?

Are you just as friendly with persons who belong to a different political party from yours as you are with those who belong to your own party?

Are you just as friendly with those persons who differ from you in their views on social and economic questions (labor unions, strikes, social reforms, etc.) as you are with those who agree with you on such matters?

When things don't go to suit you in a group situation, do you make the best of it and go along with the others (as opposed to pouting or sulking)?

Do you pretend to be interested in some topics just to be sociable with certain individuals or groups you are with?

Do you take up current fads in regard to clothing: hair styles, slang, wisecracks, etc.?

Do you return borrowed materials and borrowed money?
Are you loyal to your friends; do you stand up for them when they are not present?

Can your friends trust you to keep confidences which they have shared with you?

When you are involved along with others in some kind of difficulty, do you accept your full share of responsibility (rather than trying to shift blame)?

Do you carry out an obligation when to do so means that you are prevented from going somewhere else to have a good time?

When given a task to perform by a teacher or supervisor, do you carry it out to the best of your ability, even though you do not see any value to yourself in what you are asked to do?

Do you fulfill an obligation (such as taking a part on a program, playing in a group game, etc.) even though you do not feel like it at the time due to a minor health ailment or to mood changes?

When you have promised someone that you will do something for him, and it turns out to be more inconvenient or difficult to do it than you had expected, do you nevertheless fulfill your promise?

When you promise to help others do something, do you carry out your promise to the limit of your ability?

When you promise to meet someone at a certain time, are you there promptly at the time agreed upon?

When you are given a committee assignment, do you work hard at it in order to do the best job possible?

When you make an agreement with a person in respect to a mutual obligation (such as keeping a room clean, paying your part of a bill, etc.) do you keep your agreement?

Are your verbal statements to others true and accurate as far as you know?

When a group of which you are a member has a problem before it, do you offer suggestions on how it might be met (as contrasted to letting the others work it out unassisted by you)?

Dependence on Others
When you have a task to perform which involves working with others (such as committee assignments) do you make it a point to get others to help you, as contrasted with doing nearly all the work yourself?

Are you a good listener when another person is talking to you?

Do you trust your associates to do the right thing by you (not suspicious)?

If you find out that you have been wrong on some point involved in a disagreement with one of your associates, do you later admit to him that you were wrong?

When you disagree with a person do you suggest that he consider other viewpoints, as opposed to telling him flatly that he is wrong?

Do you modify your ideas about how something should be done as a result of suggestions offered by your associates?

Nould you rather work at something you are interested in with three or four other persons, as contrasted with doing it all by yourself?

Are you glad to have your friends or associates point out in a friendly manner ways of improving your work?

When a conflict arises between you and some of your associates, are you willing to make concessions on the stand you have taken in order to promote harmony?

Do you ask favors of your friends?
Do you ask your associates for advice and suggestions regarding your work (even though you do not always follow
the assistance offered)?

Are you characterized by having a few intimate friends who mean a lot to you?

Do you avoid talking about your own petty affairs, ailments, or troubles?

Do you avoid harping on one subject which is of great interest to you but not of equal interest to others?

Do you make confidants of some of your friends by telling them intimate details of your personal life?

Do you ask your friends for advice and suggestions regarding your personal affairs (even though you do not always follow the assistance offered)?

Are you modest in regard to your abilities or past achievements?

Being a Source of New Experience to Others
Can you relate experiences, or report things you have seen or read, in an interesting manner?

Is your ability to amuse others by humorous remarks, jokes, nonsense, etc., expressed only when you are with a few of your best friends (as contrasted to larger social groups)?

Can you think of a clever remark when you are kidded, or "put on the spot" about something you have done -- do you respond with a "snappy comeback"?

Do you amuse others by telling humorous stories?
Do you play pranks or practical jokes on others whom you know quite well?

Can you see the funny side of situations?
Do you tell jokes on yourself, or report embarrassing things you have done?

Do you have a stock of jokes, tricks, riddles, or stunts that you can draw upon to amuse others when opportunities arise?

Are you good at any one of the following: fortune telling, palmistry, hypnotism?

Are you good at one of the following: card tricks or parlor magic?

Do you amuse others by making wisecracks and clever remarks?

In talking to others, do you dramatize or obviously exaggerate things you have read or experienced just to make your account more interesting to your listeners?

Do you surprise or shock your associates by making unusual remarks, or by stating stimulating points of view?

Do you "kid" or tease others in a good-natured way?
Do you "act a fool", or "cut up," or engage in nonsense when among friends?

Social Service Motivation
Do you compliment others you know for their achievements?

Do you try to smooth out disagreements between two or more of your associates?

Are you triendly with all members of your usual groups regardiess of how low their social status may be (not cliquish)?

Do you try to console your friends when they are sad or depressed?

Do you express appreciation to others for their assistance or kindnesses to you?

Do you do your best in working on a group project, when you know that if success is attained the recognition will be given to the group as a whole rather than to you individually?

When a friend of yours has a personal defect which you consider to be a serious handicap to him, do you try to do something to help him over come it?

Do you get a lot of satisfaction out of the successes or your groups (in school, church, or community) even though you have contributed very little, or nothing, toward these successes?

If you do not like a person in one of your groups, do you nevertheless try to mix with him some just to understand him better, or to find out something about him you
might like?

When others have helped you carry out a task for which group approval is given, do you make sure to give the others recognition for their assistance?

Do you go out of your way to render assistance to friends and associates by such acts as loaning materials, helping them find things, doing part of their work, etc.?

Do you give your time (without expectation of pay) to various kinds of social service work, such as teaching a Sunday School class, singing in a church choir, working with under-privileged children etc?

Do you contribute money or materials to social service projects, such as those promoted by churches, the Red Cross, or charity groups?

Do you try to anticipate the wants (or needs) of others and endeavor to meet these wants without being asked to do

Do people come to you to tell you about their troubles?
Do you help raise money by taking part in drives for social service projects, such as for church functions, youth organizations, under-privileged children, etc.?

Do you speak well of others or praise them when they are not present (as contrasted with criticizing them)?

When you feel that some kind of unfairness is being done against members of your group, do you try to do some-
thing about it?

Abilities and Skills
"Large muscle" group games (football, basket ball, hockey, baseball, etc.)

Competitive "large muscle" sports not necessarily involving organized groups (track, tennis, boxing, wresting,
hand ball,etc.)

Competitive games not involving a high degree of "large muscle" activity (volley ball, golf, bowling, pool, ping pong, horseshoes, squash, etc.).

Individual sports, usually not involving competition (swimming, archery, hunting, fishing, rowing, horseback riding, skating, bicycling, etc.)
"Sitting down" games (bridge, checkers, chess, dominoes, poker, etc.)

Participation in competitive musical contests.
Participation in competitive writing contests.
Participation in debate or other forms of competitive speaking contests.

Planning social events and parties.
Dramatics
Writing for publication (include school publications).
Singing.
Instrumental music.
Management of a project (such as a school newspaper, athletic event, or program).

Conducting a meeting (as in the capacity of chairman or president).

Social dancing.

APPENDIX B
DIFFERENCES IN MEANS OF MUSIC AND NON-MUSIC STUDENTS ON SELF RATINGS (COMPOSITE GROUPS)

| Trait <br> No. |  |  |  |
| :--- | :---: | :---: | :---: |
|  | Music | Non-Music | Difference |
| 1 | 3.50 | 3.54 | .04 |
| 2 | 3.66 | 3.75 | .09 |
| 3 | 2.80 | 2.77 | .03 |
| 4 | 3.83 | 3.81 | .02 |
| 5 | 3.95 | 4.13 | .18 |
| 6 | 3.56 | 3.43 | .08 |
| 7 | 3.19 | 3.12 | .07 |
| 8 | 3.82 | 3.65 | .17 |
| 9 | 2.60 | 2.05 | .55 |

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[^0]:    1
    C. E. Seashore, The Psychology of Musical Talent, p. 6.

    2
    Ibid.

[^1]:    3
    Numbers of traits taken from Figure 1.

