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THE DEVELOPMENT AND APPLICATION OF AN INSTRUMENT TO IDENTIFY MUSIC-AFFECT SHIFT RESULTING FROM A COLLEGE MUSIC APPRECIATION COURSE

By

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ABSTRACT

THE DEVELOPMENT AND APPLICATION OF AN INSTRUMENT TO IDENTIFY MUSIC-AFFECT SHIFT RESULTING FROM A COLLEGE MUSIC APPRECIATION COURSE

By

Raymond Charles Wifler

This study was based on concern for affective learning in a college music appreciation course. The purpose of this study was to identify a shift in music affect by means of a newly developed test. The construct "music affect" was defined as behaviors that represent subjects' attitudes toward and valuing of music. The test, in two parts, was designed to determine the degree to which subjects 1) accept art music, (Art Music Acceptance Test, or AMAT) and 2) exhibit musical habits as part of their lives (Self-Appraisal of Musical Habits).

AMAT consisted of 30 recorded excerpts of art music to each of which subjects were asked to respond with one of five behavioral descriptions which represented from no to very high acceptance of the music. The Habits survey consisted of 25 questions which were designed to determine the existence of certain music-related habits in subjects' lives and the extent of their participation in these habits.

One hundred and fifty-two subjects were given the test of which eighty-seven, comprising the experimental

group, were enrolled in a one-semester music appreciation class. The remaining sixty-five subjects (control group) were drawn from English and speech classes and, during the time of the treatment, were neither music majors nor taking the music appreciation course.

AMAT and Habits were administered in a pretest-posttest design that yielded mean scores. Data were analyzed by Analysis of Covariance and the Pearson Product-Moment Coefficient of Correlation. The level of significance was set at .05. Analysis was performed using the Statistical Package for the Social Sciences, Version 6.0, and the Bastat program on the CDC 6500 computer at Michigan State University.

The following conclusions, drawn from this study, apply only to the sample from which the data were obtained.

1. The Habits survey is a reliable and valid instrument for determining the self-perceived music habits of samples from a two-year college population and the extent to which they participate in these habits.

2. The Art Music Acceptance Test is a reliable and valid instrument for determining the degree of acceptance of art music by college freshmen and sophomores.

3. AMAT and Habits are sensitive enough to measure 1) a change in degree in their respective areas that can occur over a period of slightly more than three months,

and 2) differences between samples of a two-year college student population.

4. After having attended a one-semester course in music appreciation, subjects scored significantly higher in art music acceptance as measured by AMAT than they had before the course.

5. After having attended a one-semester course in music appreciation, subjects perceived themselves as significantly more active in music habits, as measured by the Habits survey, than they were before the course.

6. If it is agreed that art music acceptance and music-related habits are behavioral indicators of music affect as pertains to music appreciation objectives, then it can be concluded that music-affect level and shift can be measured.

7. After having attended a one-semester music appreciation course, subjects registered a significant positive shift in music affect as measured by AMAT and Habits.

8. The degree to which subjects accept art music and participate in music habits was found to have a statistically significant, though low, correlation. While the treatment given to the experimental group improved the correlation, it was still low.

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Soli Deo Gloria.

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OVERVIEW OF THE PROBLEM

Need for Study

A continuing concern of music educators is how to reach the student that does not perform in a band, orchestra, or choir. This concern has been partially satisfied for a long time at the college level by courses generally called "music appreciation."[1] Traditionally these courses have had similar course content, that is, "classical music." Another similarity in the traditional music appreciation course was that the instructors usually had objectives which focused on students' attitude toward music as well as objectives concerned with the learning of historical and biographical facts and the development of aural-perceptive skills. In other words, the concern has been for affective learning as well as cognitive learning. Furthermore, it would appear that affective

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[1] A music appreciation course is defined for purposes of this study as a college-level introductory music course for non-majors which is oriented toward music literature and listening. Music theory, or the technical aspects of musical structure, may be studied to a limited extent but it is not the emphasis of the class.

objectives are generally held to be the most important. Even though teachers and authors in the subject area of music appreciation generally agree that the affective outcomes are more important than cognitive learning, very little has been done to evaluate affective progress.

The use of the term "affect" is derived from its definition and interpretation set forth in the book Taxonomy of Educational Objectives, Handbook II: Affective Domain.[2] The Taxonomy's continuum of the affective domain was derived from objectives "which emphasize a feeling tone, an emotion, or a degree of acceptance or rejection."[3] More specifically, the Taxonomy reflects interests, attitudes, values, appreciation, and adjustment. The Taxonomy is arranged in a continuum from behavior which exhibits a mere awareness of a particular subject to that which shows the subject is valued to a point where it characterizes a person's entire life. In other words it describes progressive levels of affective involvement in a particular subject. "Music-affect level", then, is the degree to which music is behaviorally represented in an individual's life. "Music-affect shift" should be a change in observable musical behavior. The problems facing people who endeavor to measure the

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[2]David R. Krathwohl, Benjamin S. Bloom, and Bertram B. Masia, Taxonomy of Educational Objectives, Handbook II: Affective Domain (New York: David McKay Co. Inc., 1964).

[3]Ibid., p. 7.

affective domain are: 1) the identification of behaviors that would indicate an affective state; 2) how to measure these behaviors so that the level of the affective state or a shift in the affective state can be identified.

A review of testing in music appreciation reveals that nearly all instruments deal with the cognitive and aural-perceptive areas. Although perception and discrimination are essential to aesthetic growth and may reflect affective levels, they do not necessarily reflect the affective state.

The need for this study is based on the importance of evaluation in the teaching process. In order to determine if the teaching process has been successful, the teacher must have means to evaluate whether or not objectives have been attained by students. This study focuses on the affective objectives of music appreciation courses. More specifically, the need for this study is based on the lack of suitable means of evaluation of the attainment of affective objectives in music appreciation instruction. This study will attempt to devise means of evaluation which will determine the progress of music appreciation students in affective learning.

Purpose of the Study

The purpose of this study is to identify a shift in music affect by means of a newly-developed test. The construct music affect is defined in this paper as

behaviors which represent subjects' attitude toward and valuing of music. The test is designed to determine the degree to which subjects 1) accept art music and 2) display musical habits as part of their lives. By means of a pre-post-test design, the test is expected to identify a shift in music affect.

Anticipated Findings

The following are the anticipated findings of this study:

1. A reliable and valid test will be developed to identify subjects' degree of acceptance of art music.
2. A reliable and valid test will be developed to identify subjects' musical habits and the extent to which they exhibit them.
3. As a result of music appreciation instruction, subjects' music-affect level will shift positively as measured by tests of art music acceptance and musical habits.
4. People who are found to be musically active will exhibit a high degree of acceptance of art music.

Theory

Musical Habits: Indicators of Music Affect

Musical activities or habits are frequently listed among behavioral objectives in music education. Leonhard and House specify as a broad aim of music education, "a society whose members use music more fully in daily

living."[4] They also list various musical activities. Again, in his own article, Leonhard strongly states: "The ultimate criterion for judging the success of music learning lies in the kinds of habits that are developed."[5]

Mursell refers to musical habits as "musical initiative" and includes "the wish to use and enjoy music in the concerns, settings, and activities of everyday life" as desirable musical growth.[6]

Colwell, in her discussion of music appreciation objectives, lists four main areas of objectives; Attitudes and Appreciations, Knowledges and Understandings, Skills, and Habits. Under Habits she states "How the student acts toward music and what he does with music after he leaves the appreciation course are the acid test of the course's affectiveness."[7]

If music appreciation instruction is successful, it is hypothesized that students will become more musically active; they will seek opportunities to perform, hear,

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[4]Charles Leonhard and Robert W. House, Foundations and Principles of Music Education (New York: McGraw-Hill Book Co. Inc., 1959), p. 154.

[5]Charles Leonhard, "Evaluation in Music Education," NSSE Yearbook (Chicago: University of Chicago Press, 1958), p. 332.

[6]James Lockhart Mursell, Music in American Schools (New York: Silver Burdett Co., 1943), p. 36.

[7]Ruth Ann Colwell, "The Development of a Theoretical Basis for a Course in Music Appreciation at the College Level," (unpublished Ph.D. dissertation, University of Illinois, 1961), p. 46.

and learn about music. All of these formal and informal musical activities will hereafter be referred to as musical habits.

As stated earlier, all the levels in the Taxonomy of the affective domain are described in behavioral terms.[8] Moving from the lower to higher levels of the domain, the representative behaviors become more frequent, more complex, and increasingly integrated with one's life until at last the affective state governs all behavior. If a person is musically active, it presumes music affect.

If the musical habits of a population could be identified, questions could be designed which would determine in what habits each of that population participates. Furthermore, the questions could be designed to determine the extent to which each of the population participates in a habit. If a change in the amount of musical behavior could be identified, a shift in music-affect level would be indicated.

The Acceptance of Art Music: An Indication of Music Affect

An important objective of music appreciation courses is students' acceptance of what can best be called "art music." The term art music refers to the body of music variously called classical music, concert music, or serious music. For purposes of this paper it includes

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[8]Krathwohl, Taxonomy, p. 99.

music of the western tradition beginning with Gregorian Chant and extending through the most avant-garde of the present generation. This objective of music appreciation courses is clearly established in the Taxonomy of the Affective Domain. The term appreciation, as described in the taxonomy, deals with acceptance, satisfaction, valuing, and preference. But this objective has not always been clearly evident.

Although educators have traditionally used the term "music appreciation" to label courses of the sort described earlier, the objectives of these courses have varied greatly. One method of determining objectives for music appreciation courses is by considering the tests that have been developed for them. These tests usually deal with aural-perception and discrimination between musical examples.

The concept of using response to aurally perceived examples in music appreciation testing is defensible: the course should be based on actual musical examples and it follows that testing should also be based on aurally perceived music. Students must be taught things about music; things they must be able to hear and discriminate among in aurally perceived examples. But these are clearly cognitive accomplishments and therefore do not satisfactorily identify music appreciation in students.

One of the concerns that generated this study was whether or not music appreciation students were growing

to accept, love, and value music as their teacher did. Or were they just learning about music? Many authors have pondered the effect of learning on liking. The authors of the Taxonomy agree that "under some conditions the development of cognitive behaviors may actually destroy certain desired affective behaviors."[9] Leonhard suggests "it's very possible for students to develop a whole catalogue of musical knowledge and skills without the merest inkling of appreciation."[10]

But Hartshorn assures us

> there need be no conflict between self-discipline, diligent effort, and intellectual achievement on one hand and enjoyment on the other. The development of insight and understanding through carefully directed, thoughtful listening, which is analytical in a non-technical way, can bring great enjoyment to the listener.[11]

He feels that deriving pleasure from music is a normal expectancy and is as basic to the listener "as tone is to the nature of music."[12]

Colwell feels "Love of music may be expected to grow with understanding if that understanding involves more than merely intellectual mastery."[13] On a similar tack,

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[9]Krathwohl, Taxonomy, p. 20.

[10]Leonhard, "Evaluation," p. 330.

[11]William C. Hartshorn, "The Role of Listening," NSSE Yearbook (Chicago: University of Chicago Press, 1958), p. 265.

[12]Ibid., p. 264.

[13]Colwell, Dissertation, p. 221.

Burmeister states "given proper guidance, that liking may be developed into refined aesthetic sensitivity."[14] Harry Broudy concurs. "I would argue that systematic reflection (Music Education) can extend the aesthetic experience, intensifying our interest in it, and enhance the enjoyment of it."[15]

Whereas learning does not necessarily exclude or hamper the acceptance and enjoyment of art music, it has not been proven that learning assures enjoyment. A response to music must be found that would reflect music appreciation in the terms of the Taxonomy; acceptance, satisfaction, valuing, and preference.

Recently "aesthetic response" has become the byword of educators but this is not discussed in the Taxonomy. And for good reason; aesthetic response deals with more than just affect and for that matter, more than just cognition; it includes both. Aesthetic response is, at its best, a gestalt of affect and cognition; of feeling and intellect; a hybrid of the two domains which is perhaps unique to the experience of music and the other arts.

But the purpose of this study is not to identify or

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[14]C.A. Burmeister, "The Role of Music in General Education," NSSE Yearbook (Chicago: University of Chicago Press, 1958), p. 221.

[15]Harry S. Broudy, "The Case for Aesthetic Education," Documentary Report of the Tanglewood Symposium, Edited by Robert M. Choate (Washington: MENC, 1968), p. 10.

evaluate aesthetic response, not to evaluate cognitive progress and ponder its relationship to affect, but rather, as stated earlier, to identify a shift in music affect. Part of the test developed for this study is designed to measure the acceptance of art music, assuming that this acceptance would reflect an affective state as it pertains to the objectives of music appreciation instruction. A discussion of the kind of response to music that can be expected follows.

Kneiter, writing on aesthetic education in music observes

> Almost no research in the affective domain has been done because the suggested research models are more appropriate for the physical sciences. The failure to develop unique research models for music education has resulted in an inability to come to terms with the relationship of the affective domain to the teaching and learning of music. We must explore the relationship of feeling to learning music.[16]

He explains that feeling, along with physiological change, comprises affective response. The feeling response to music could be repulsion or discomfort, but it would seem obvious that music educators would work toward acceptance, satisfaction, and pleasure.

There are two schools of thought relative to the objectives of music appreciation that need to be identified at this point. The first is held by the Pragmatists.

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[16]Jerry Kneiter, "Toward an Aesthetic Education," Aesthetic Education (Washington, D.C.: MENC Publication, 1971), p. 15.

> strengthening of positive appreciation is no part of the teacher's job. It is likely that good teaching will, in fact, produce in pupils a stronger liking for music. But this is not an essential part of criteria for judging the success of music education.[17]

Reimer warns that

> the idea that one's experience of art should be one of liking or judging actually gets in the way of aesthetic experience. Art does not exist in order to be "liked" in the sense of providing simple, transitory pleasure.[18]

In sum, educators need not be concerned with liking or valuing. If students are given the right tools, the aesthetic experience will evolve, and this will probably include liking or satisfaction and lead to valuing. These same people advocate teaching music in such a way as to avoid encouraging the development of taste for any particular kind of music: the students will arrive at their own values.

On the other hand, many authors recognize liking, loving, and valuing as prime objectives of music education. Even Reimer admits on another occasion, "The outcome behavior (of aesthetic education), valuing, includes admiring, approving, liking, cherishing, respecting, treasuring, finding satisfaction in, identifying

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[17]Foster McMurray, "Pragmatism in Music Education," NSSE Yearbook (Chicago: University of Chicago Press, 1958), p. 43.

[18]Bennett Reimer, A Philosophy of Music Education (Englewood Cliffs, New Jersey: Prentice-Hall Inc., 1970), p. 84.

with."[19] For even though Reimer claims in the preface to his music appreciation textbook "the goal is not to persuade you to prefer any particular type of music over any other," he does assure the reader he will "provide (you) with better skills for enjoying any music you choose to enjoy."[20] In an apparent contradiction to that statement, Reimer dedicates 229 pages of the text to western art music and 30 to various ethnic music.

Crickmore, in his effort to find a Music Appreciation Syndrome, lists the following characteristics of the music auditor:

> 1. Sustained interest. (Combination of liking, interest, and satisfaction.)
> 2. Desire for silence.
> 3. Relaxation.
> 4. Absence of mental pictures.
> 5. A syndrome of all previous factors combined with a feeling of increased happiness.[21]
>
> in the moments of profoundest involvement the enjoyment of music is felt as a kind of effortless awareness, more passive or receptive than active - an intuitive act which involves no discursive or reflexive process.[22]

This view, contrary to current aesthetic philosophy, stressing pleasure, was a result of a study with music

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[19]Bennett Reimer, "Aesthetic Behaviors in Music," Aesthetic Education (Washington, D.C.: MENC Publication, 1971), p. 82.

[20]Bennett Reimer and Edward Evans Jr., The Experience of Music (Englewood Cliffs, N.J.: Prentice Hall, 1972), p. v.

[21]Leon Crickmore, "An Approach to the Measurement of Music Appreciation," JRME, Vol. 16, No. 3 (1968) p. 252.

[22]Ibid., p. 239.

appreciation students.

Many of the authors of music appreciation texts cite one of their main objectives to be increased liking for or enjoyment of music. This objective is probably stated most directly by Joseph Machlis in the preface to his popular music appreciation text. He "strives never to lose sight of the main goal - to create music lovers."[23] Paul Apel: "The ultimate purpose of music must be to increase pleasure and understanding and give enjoyment and exaltation through its beauty."[24]

The Acceptance of Art Music: An Indication of Music Affect: Summary

The Taxonomy of the Affective Domain defines appreciation as acceptance, satisfaction, valuing, and preference. Based on that definition, the musical habit or behavior described as "the acceptance of art music" is an indicator of music affect particularly applicable to the objectives of music appreciation. If acceptance of art music is considered an indicator of music affect, the kind of response that constitutes acceptance must be determined in order to test for acceptance. The response indicative of acceptance is one of satisfaction, enjoyment, and the desire to hear the music again.

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[23]Joseph Machlis, The Enjoyment of Music (New York: W.W. Norton and Co. Inc., 1970), p. xviii.

[24]Paul H. Apel, The Message of Music (New York: Vintage Press, 1958), p. viii.

If a test could be designed to show a degree of acceptance or rejection of art music, it would indicate, for purposes of music appreciation instruction, music-affect level. Furthermore, the same test could be used to identify a shift in music affect by repeated measure.

To recapitulate, there is a need to identify music-affect level and/or shift so that instruction can be evaluated. It is proposed that by measuring musical habits and art-music acceptance, it will be possible to identify a relative music-affect level and shift.

A Rationale for the Use of Art Music in Music Appreciation Instruction

Because so much of this study is predicated on the "acceptance of art music" as being an important objective of music appreciation instruction as well as an indicator of music affect as pertains to music appreciation instruction, the following section of the paper will be dedicated to an investigation of the propriety of placing this importance on art music.

Current Thought on Course Content Although the use of art music in music appreciation courses is a foregone conclusion for many teachers, there are indications in writing and practice that this may not be the most popular viewpoint. One need only turn to the Music Educators Journal to substantiate this. Consider this list of topics from recent issues: the music of India, Africa,

and Hudson Bay; The Musical Resources of American Folklore; Youth Music-Rock; Urban Culture; American Indian Music; Music and Black Culture; Spring Fling for Jazz; Barbershop Singing; Music of Argentina; School of Ragtime.

In a similar vein, Reimer states

> Music of the many ethnic and cultural groups in American society, music of the past and much more of the present, music of various types - jazz, pop, folk, as well as concert - all should be considered "proper" sources for finding expressive music.[25]

This emphasis on diversity, sometimes including art music only in passing, could be a reaction to the "nineteenth-century orchestra-literature syndrome"; meaning that the nineteenth century and the orchestra was the standard fare for music appreciation instruction. The term art music encompasses a great variety of music; from medieval through today; from a Bach solo sonata for violin through the huge resources needed for Schoenberg's "Gurrelieder"; from a solo human voice through the newest, most comprehensive synthesizer. With such a huge resource of music to draw from, it seems inexcusable that in some music education situations only pop music, only ethnic music, or only folk music is taught.

A Catholic Taste But the element of diversity must not be overlooked when determining course content. This concern is expressed by many authors.

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[25]Reimer, Philosophy, p. 40.

> the individual will need to know a variety of music.[26]
>
> A student should have a creditable acquaintance with the most significant music literature and a catholic taste tempered by experienced discrimination.[27]
>
> Children deserve the richest, most diverse possible musical fare.[28]
>
> A perspective is developed and a sympathy awakened for perhaps unfamiliar modes of musical expression.[29]
>
> Experience in listening to music (should be) representative of a wide range of styles, cultures, eras, performance groups, and qualities.[30]

Each author is expressing the need to use a wide variety of music. Although the concept of catholicity of taste may seem to be contradictory to the position previously expressed, such is not the case. College students today are consumers of a great deal of music from radios, TV, their own stereos, "canned" music in stores and restaurants, and "live" performers at places of entertainment. Many have performed in high school bands and choruses; relatively few in orchestras. In spite of all this musical activity, it is this author's experience that

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[26]Leonhard, Foundations, p. 160.

[27]George S. Dickenson, The Study of Music as a Liberal Art (Poughkeepsie, New York: Vassar College Press, 1953), p. 33.

[28]Reimer, Philosophy, p. 102.

[29]Leonhard C. Ratner, Music-The Listener's Art (New York: McGraw-Hill Book Co. Inc., 1957), Preface.

[30]Colwell, Dissertation, p. 122.

college students have little familiarity with art music. Therefore, by using art music as course content, their taste expands, contributing to a catholic taste. Furthermore, the concept of catholicity should be applied within the category "art music." Music of many eras and many different performance media must be used. For example, the use of only orchestral music is not acceptable.

The Use of High Quality Music Assuming that it is agreed that "quality" music should be used in music appreciation instruction, an effort must be made to identify what "quality" in music is. Reimer stresses "that works of high quality be used - that is, works of structural excellence and expressive impact." He defines excellence as "syntactical craftmanship." He further states that there should be "a constant movement toward . . . music of more refinement in structural excellence and depth in expressive power."[31] Mueller states "high and good in the aesthetic world assumes a certain intellectual complexity, a certain seriousness, a certain permanence, in contrast to the transient, the light, and the simple which are easily comprehended by the unsophisticated."[32] Based on these definitions of "quality" music, an objective analysis should show that the relatively-more-complex art

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[31]Reimer, Philosophy, pp. 162 and 105.

[32]John H. Mueller, "Music and Education: A Sociological Approach," NSSE Yearbook (Chicago: University of Chicago Press, 1958), p. 109.

music will best qualify for music appreciation instruction. But must complex art music be used exclusively? Can we not arrive at aesthetic experiences with pop music? Reimer explains:

> Pop music does not primarily exist to serve aesthetic purposes. It exists primarily to serve social and psychological needs of teenagers. One chooses art works because of their aesthetic qualities, knowing that the higher this quality the more satisfying, the richer, the more powerful can be the aesthetic meanings shared.[33]

This is not to assume that all pop music is poor and unacceptable for music education, but it does point up the value of complex music.

Colwell complains that "most of the music (the student) has heard is extremely obvious in its appeal."[34] McMurray, espousing a pragmatist point of view, contends that interest is necessary for a learning situation, and that the all-too-familiar pop music will not hold the students' interest. "Music perceived as already familiar and as easy to hear with pleasure is not a stimulant to growth in musical perception."[35] Reinhold, discussing musical hearing explains:

> if the music is too devoid of the ambiguity, surprise and mystery of aural play, if the proposed game is to patent, too easily surveyed, and lacks the motility and tension he desires, then the game (of listening) breaks

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[33]Reimer, Philosophy, p. 68.

[34]Colwell, Dissertation, p. 143.

[35]McMurray, "Pragmatism", p. 48.

> up on the superiority, or at least on the sense of superiority, of the auditor, to whom the game seems banal.[36]

To paraphrase and summarize these authors; students must be challenged with new and more complex styles of music if learning is to continue.

The Connoisseur Next it must be determined who is qualified to define what quality music is, to make an objective analysis of music, and finally to decide what music should be used in music appreciation instruction.

Broudy states: "we rely upon the expert or the consensus of the learned and, hopefully, the wise. The expert is the only practical source of standards we have."[37] In listing objectives for music appreciation, Colwell states: "The student attempts to understand the judgements of the connoisseur."[38]

Where does one find an expert or connoisseur? Authors of books for use in music appreciation, usually people with much teaching experience, should qualify. In a review of twenty-five music appreciation texts, only eight dedicated any space to anything outside of the realm of western art music. Those eight authors variously covered jazz, pop, folk, ethnic, or functional music in as

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[36]Helmut Reinold, "On the Problem of Musical Hearing," Reflections on Art, Susanne K. Langer, ed. (London: Oxford University Press, 1968), p. 295.

[37]Broudy, "Aesthetic Education," p. 10.

[38]Colwell, Dissertation, p. 83.

little as two and as many as thirty pages. (Texts reviewed are listed separately in the Bibliography.)

Our Musical Heritage Another rationale for the use of art music emanates from a traditional value system; the need to perpetuate our musical heritage. Machlis feels we must "help him (the student) respond to the works that constitute our musical heritage."[39] Leonhard agrees: music education must "give every citizen the key to his musical heritage."[40]

In Music in General Education, the following "musical outcomes" are listed:

> He will relate music to man's historical development. He is familiar with the major historical periods in that development and the styles of music which they produced. He has acquaintance with some of the musical masterpieces of the past and the men who composed them.[41]

Broudy explains why music of our heritage is good study material. Art which has survived many generations is due

> to the fact that the object somehow expresses a profound and permanent insight into the import of human life. The concept of connoisseurship encourages the use of materials that the experts of successive ages have regarded as good and important. It does not exclude the contemporary and experimental, but it does

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[39]Machlis, Enjoyment, p. xvii.

[40]Leonhard, Foundations, p. 160.

[41]Karl Ernst and Charles Gray, ed., Music in General Education (Washington D.C.: MENC Publication, 1965), p. 6.

> evaluate them in terms of musical knowledge and cultivated taste.[42]

McKay states that we must

> stimulate (in students) a humility before the vastness of human experience and a gratitude toward the artist for his gift to mankind.--explain the relation of our immediate culture to basic European tradition--utilizing masterworks of the past and music created by the geniuses of our own age.[43]

Obviously care must be taken in choosing music from the past: quality is not relative to age. With the proliferation of recordings of nearly all of everybody's works, the responsibilities of the music teacher are even greater. Broudy suggests guidelines to follow.

> the introduction of the young to the artistic culture of the past must be through . . . those works that in each epoch supplied the models from which the rules and principles were derived. This might be classed as 1) summating works, 2) bridging works, and 3) anticipating works.[44]

Teacher Attitude A consideration of no small magnitude is the attitude of the teacher toward the subject matter. It can be assumed that by the time a person becomes a music teacher, he or she has developed a taste for at least some types of art music. Very likely his education

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[42]Harry S. Broudy, "A Realistic Philosophy of Music Education," NSSE Yearbook (Chicago: University of Chicago Press, 1958), pp. 83-86.

[43]George F. McKay, "The Range of Musical Expression," NSSE Yearbook (Chicago: University of Chicago Press, 1958), pp. 139.

[44]Broudy, "Aesthetic Education," p. 12.

has also lessened his enthusiasm for more transient music. It follows that the teacher will do a better job teaching the music he or she values most highly.

In an interview with veteran music literature teacher Professor Gomer Jones of Michigan State University he stated, "What the teacher is enthused about must be taught. Students don't want their level from the teacher; don't ape their ways."[45]

Hickok, in his music appreciation book comments:

> Most students enjoy learning about something their instructor thinks is vital and to which he is dedicated.[46]

Mursell agrees:

> His (the teacher's) own feeling, his own liking, his own enthusiasm is an essential ingredient in what he does and in the effectiveness of his teaching.[47]

Preference for Art Music As evidenced by numerous research studies, preference for art music over other music often is considered a goal for music appreciation instruction. However, some authors feel that preference as an instructional goal is undesirable and improper. Furthermore, it is probably impossible to change students' musical preference in a one semester course.

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[45]Dr. Gomer Llewelyn Jones, private interview held at Michigan State University, July 15, 1973.

[46]Robert Hickok, Music Appreciation (New York: Appleton-Century-Crofts, 1971), p. 111.

[47]Mursell, Music in American Schools, p. 218.

Reimer warns of a real danger in enforcing preference.

> many music educators inadvertently cause a conflict between pop music and the development of musical sensitivity when they insist that pop music be compared with music of an aesthetic intent and force a choice between the two. This causes resentment, musical insecurity, and an inevitable erosion of confidence in the music educator.[48]

On another occasion Reimer asserts:

> we have no right or obligation to force people to value what they do not find valuable.[49]

Ruth Colwell speaks on the matter of preference:

> The student should be brought to a total enjoyment of music in its many forms and many activities.[50]

A realistic objective of music appreciation is to expand musical taste, rather than change it, with no intent to exclude previous taste.

Art music need not be taught to the exclusion of other music, but it should be the core of the appreciation class. All other music can be used in varying amounts, dependent on time and place, to gain access to, stimulate, and broaden the students in our culturally pluralistic society.

A Rationale for the Use of Art Music in Music Appreciation Instruction: Summary

The preceding has dealt with subjects which relate to the propriety of using art music in music appreciation

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[48]Reimer, Philosophy, p. 324.

[49]Ibid., p. 211.

[50]Colwell, Dissertation, p.

instruction. This rationale was presented because there is a possible philosophical conflict between the position represented by the teaching and research of music appreciation as described in this study and by some current thought and practice.

On one hand, the class in which this research will be applied has art music for most of its course content. Acceptance of art music is a major goal of these classes. One of the two tests used in this research will attempt to measure students' acceptance.

On the other hand, a great deal has been written recently on the inclusion of just about every kind of music other than art music in the general music curriculum. As an example of practice, in some colleges and universities, music appreciation courses are taught which use rock exclusively or largely for course content.

To support the position of this paper, the following subject areas were discussed. Quality music should be used for music appreciation instruction. Complexity and syntactical craftmanship, along with expressiveness, should be considered when determining what quality music is. Music scholars are qualified to determine what is quality music. Music educators are committed to make people aware of our musical heritage. Assuming that music instructors value art music, it follows that they will teach most effectively when they use the music they value

most highly. Preference for art music over other music should not be an objective of music appreciation instruction. Rather, students should be led to a catholic musical taste that includes art music.

Overview of the Thesis

Chapter II will be given to a review of tests and research in music appreciation, concentrating on those that are in the affective domain.

In Chapter III there will be a description of the two tests to be used in this research and an explanation of their development. This will be followed by a discussion of the design and procedure of the research, including a description of the sample and testing procedures, the hypothesis in testable form, and the analysis of data that will be used.

The analysis and interpretation of the data will be presented in Chapter IV with a summary and the conclusions in Chapter V.

CHAPTER II

RELATED RESEARCH

A discussion of the problems of testing in the affective domain will open Chapter II. A review of existing tests intended for use in music appreciation instruction will follow. This review will try to ascertain what these instruments test for and what their applicability is to the present research.

The relationship of music preference and mood reactions to music affect will be investigated along with tests and research in these two areas.

The nature of the affective response to music, physiological and feelingful, will be discussed next along with the difficulties incurred in testing for it.

The next part of the chapter is comprised of reviews of three recent pieces of research which are closely related to the present study. They respectively deal with a syndrome of music appreciation, attitude toward music, and musico-aesthetic attitude. All three are research done with college music appreciation courses.

The chapter will close with a "Conclusions" section which will briefly comment on the impact of the related research on the present study.

Testing for Affective Learning

Goals stressing affective objectives or outcomes are prevalent in writings on music appreciation and general education. Because music appreciation is part of the general education program, the same objectives and outcomes could apply to both. Broudy states: "general education (is) the cultivation of capacities for realizing value."[1] And values, by definition of the Taxonomy of the Affective Domain,[2] are the ingredients of affect. Unfortunately, affective objectives are very often ignored or eventually dropped for a number of reasons. Lack of effective means of evaluation is one: there are virtually no standardized tests in the area of affective learning. Teacher-made tests are difficult and time-consuming to construct and equally difficult to grade objectively. Students are not usually given grades for their affective accomplishments, therefore tests are not demanded by the school routine. And finally, this type of test is very fakeable; when the student realizes the nature of the

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[1]Harry S. Broudy, "A Realistic Philosophy of Music Education," NSSE Yearbook (Chicago: University of Chicago Press, 1958), p. 76.

[2]David R. Krathwohl, Benjamin S. Bloom, and Bertram B. Masia, Taxonomy of Educational Objectives, Handbook II: Affective Domain (New York: David McKay Co. Inc., 1964).

test, it is very easy to answer in a way that would create a high score.

Many educators are concerned with the propriety of investigating individual's attitudes, beliefs, values, and personality characteristics. These are considered to be very personal and private matters and privacy is a cherished value in the democratic world. Teaching for attitudes, beliefs, and values could be considered indoctrination.

At the same time, affective objectives are very important in music and the only way to determine if these objectives have been attained is by evaluation. "Affective behaviors develop when appropriate learning experiences are provided for students much the same as cognitive."[3] Likewise, evaluative procedures must be developed for this domain.

> What is missing is a systematic effort to collect evidence of growth in affective objectives which is in any way parallel to the very great and systematic efforts to evaluate cognitive achievement.[4]

This complaint from the authors of the Taxonomy succinctly sums up the state of testing in the affective domain in music. A review of testing in music appreciation will bear this out.

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[3] Ibid., p. 20.

[4] Ibid., p. 16.

Testing in Music Appreciation

To better understand the need for and purpose of the test designed for this research, existing tests designed for music appreciation will be reviewed.

Charles Leonhard defined music appreciation as the apprehension and enjoyment "of the aesthetic import of music." Appreciation can be measured by the "student's ability to evaluate the expressiveness of the performance."[5] Apprehension, or perception, the key word, is the basis of many existing music appreciation tests. However, "expressiveness of the performance" is usually replaced in testing with "correctness of the performance" and therefore is more in the cognitive than affective domain.

Kate Hevner (Mueller) designed an instrument in 1934 which deals with discrimination between a musical example played twice, once with improper melody, rhythm or harmony. The subject must choose which example was better and identify what was wrong with the poorer one. This test was revised by Newell Long in 1965.[6]

Schoen's "Tests of Musical Feeling and

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[5]Charles Leonhard, "Evaluation in Music Education," NSSE Yearbook (Chicago: University of Chicago Press, 1958), pp. 330-31.

[6]Richard Colwell, The Evaluation of Music Teaching and Learning (Englewood Cliffs, New Jersey: Prentice-Hall Inc., 1970), p. 132.

Understanding"[7] and Kwalwasser's "Tests of Melodic Sensitivity and Harmonic Sensitivity"[8] likewise asks the subject to discriminate between a better and poorer version of a musical example.

George Kyme developed a battery of tests for his doctoral dissertation. Subjects are asked to comment on the quality of solo and ensemble performance relative to tone, phrasing, intonation, balance, and rhythm. In other tests they must discriminate between better and poorer performances, and in still others, select the best descriptive adjective for a musical example.[9]

All of these tests, and many other similar ones, deal with music played right and wrong or better and poorer. The subject's response is directed by his knowledge of a particular composition or certain musical tradition. While musical literature and traditions are important to teach and test for, it is not affective learning. Nor do these tests give us any sure indication of affect-level. "Much of the research on the relationship between cognitive achievement and attitudes and values shows them to be statistically independent. . . . The relationship between the domains is too low to predict

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[7]Ruth Ann Colwell, "The Development of A Theoretical Basis for a Course in Music Appreciation at the College Level," (unpublished Ph.D. dissertation, University of Illinois, 1961), p. 132.

[8]Ibid., p. 134.

[9]Ibid., p. 157.

one type of response, effectively, from the other."[10] Students can acquire a great deal of knowledge about music in order to pass a course and never change their music-affect level.

Moving away from tests of music appreciation which are usually too broad in meaning and content for this topic, some areas of testing that deal more specifically with affect will be reviewed.

Music Preference as an Indicator of Music Affect

Preference for one kind of music over others is certainly part of music affect. In the Taxonomy, 3.2 Preference for a Value is the highest level of the affective domain which is associated with the term "appreciation." (See Appendix C.)

Many studies have been done on music preference and the variables affecting it. A study by Bartlett is characteristic of those studies which deal with repeated listenings as a major variable.[11] Subjects were given popular music and art music and asked to respond preferentially to it after each of nine auditions spread over a period of three weeks. While interest in popular music tends to wane after the first few auditions, art music

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[10]Krathwohl, Taxonomy, p. 7.

[11]Dale L. Bartlett, "Effect of Repeated Listenings on Structural Discrimination and Affective Response," U.S. Dept. of Health, Education, and Welfare Project No. 80F-032, Grant No. PEG-6-9-008032(057).

gradually became more accepted.

Evans'[12] study showed that repeated listening improved "attitude" toward music while increased knowledge of structure had no significant effect in a music preference study by Schuessler.[13] Meadows' study dealt with the relationship between music preference and musical experience, socioeconomic status, race, school level, and geographical location.[14]

But preference is not necessarily an objective of music appreciation classes and, as discussed in Chapter I, may be an improper objective. The difference between expanding taste and changing taste is great and an important consideration in a democratic society. Preference for art music as an outcome of music appreciation instruction may occur, but as an objective it is questionable.

Mood Reactions

Studies dealing with mood reaction to or descriptions of various pieces of music, culminating with Hevner's Adjective Circle and Farnsworth's revision, could be

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[12]Jesse Evans, "The Effect of Especially Designed Listening Experiences on Junior High School Students' Attitudes Towards Music," (unpublished Ph.D. dissertation, Indiana University, 1965).

[13]Karl Schuessler, "Musical Taste and Socioeconomic Background," (unpublished Ph.D. dissertation, Indiana University, 1947).

[14]Eddie Spencer Meadows, "The Relationship of Music Preference to Certain Cultural Determiners," (unpublished Ph.D. dissertation, Michigan State University, 1970).

construed as being indicative of affect.[15] Subjects are asked to choose an adjective, from a prepared list, which best describes a musical example. Subjects are expected to choose adjectives which are usually identified with the music by experienced listeners. While this type of identification is further from recalling learned, specific facts which characterize tests in the cognitive domain, the subject still must make associations with the music which depend largely on his experience, possible at a very young age. Furthermore, used as a test, mood responses would have extremely little value. Research has shown that the ability to identify mood successfully is not "closely related to intelligence, tested musical aptitude, musical training, or age level above sixth grade."[16] Music is abstract and needn't stimulate the same descriptive responses from everyone. There is no one correct description: the description of an inexperienced listener is no less correct than another description by an experienced listener. Comparing descriptions of subjects to those of experienced listeners is valuable in determining what the subject can do. But the affective response is what the perceptor does do; will do; whether or not he chooses to do something.

So while mood descriptions might appear to identify

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[15] Robert W. Lundin, An Objective Psychology of Music (New York: Ronald Press Co., 1967), p. 164.

[16] Ibid., p. 166.

an affective response, it is just as likely they are a cognitive response. They do not necessarily describe the perceptor's feelings, but rather what he thinks or knows the music is supposed to project. This does not reflect the perceptor's willingness to perceive, satisfaction in perception, or desire to perceive again. In short, there is no certain indication of music-affect level.

Affective Response to Music

The affective response to music is one in which there is some definite change in the organism. This change is both physiological and psychological or feelingful. Considerable research has been done in the area of physiological response. Lundin summarizes the findings as follows:

> Music tends to cause changes in breathing, cardiac blood pressure, and blood supply. The tendency is more to increase the rate of these activities than to decrease it.
>
> Music that is strongly vigorous and rhythmic has a greater tendency to increase these physiological processes than other kinds of compositions.[17]
>
> A galvanic response considered to be affective in nature is elicited by musical stimuli.[18]

Lundin further observes that such responses were greater for people interested in music than those who were not. Even if this type of testing were refined to the point

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[17] Ibid., p. 156.

[18] Ibid., p. 160.

where individuals could be identified as responding to a musical stimulus at a quantifiable level, the application to a class in music appreciation presents insurmountable problems. The equipment needed, the time consumed, and the Hawthorne Effect would prohibit practical application.

Affective Response: The Feelingful Reaction

How to express or verbalize about the "feelings" of the affective response is a great problem. These "feelings" are not gross emotions such as joy, anger, sadness, love, or hatred. But they are at a much more personal, subtle, almost subliminal, plane of the senses. Consequently, the feelingful reaction provides serious problems in testing and research.

Lundin states:

> the observable feeling reactions are so subtle and difficult to measure directly, that we must simply depend on the introspective reports of the subject.[19]

Similarly, Reimer, discussing evaluation of the "seven aesthetic behaviors" in music appreciation, observes that "reacting . . . is notoriously recalcitrant to measurement."[20]

In discussing what affective reaction is comprised of, Kneiter states "affective responsiveness may range

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[19] Ibid., p. 151.

[20] Bennett Reimer, "Aesthetic Behaviors in Music," Aesthetic Education (Washington D.C.: MENC Publication, 1971), p. 84.

from relative indifference to intense anger or rapture."[21] Leonhard describes the affective response to music as one of "absorption." "A person who is deeply immersed in and profoundly moved by the expressive force of musical experience" is appreciating music.[22]

Crickmore's Music Appreciation Syndrome

Crickmore has endeavored to verbalize about the mental state when listening to music.[23] He contends that music appreciation cannot be measured by tests of aural acuity needed to solve musical problems, or tests that ask you to identify mood or other descriptive adjectives of musical examples. Instead, he identifies music appreciation with enjoyment. Furthermore, it is an enjoyment which does not necessarily require intellectual involvement as in the aesthetic response. "The enjoyment of music and knowledge about music are distinct, though usually complimentary." He refers to the total experience of listening as an "insight", a "simple intuition", "a gestalt - an unfragmented whole which is more than the sum of its parts."[24] The "insight" he proposes, "should be

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[21]Jerry Kneiter, "Toward an Aesthetic Education," Aesthetic Education (Washington D.C.: MENC Publication, 1971), p. 202.

[22]Leonhard, "Evaluation in Music Education," p. 331.

[23]Leon Crickmore, "An Approach to the Measurement of Music Appreciation," Journal of Research in Music Education, Vol. 16, No. 3, (1968).

[24]Ibid., p. 240.

accompanied by certain signs, observable to a listener through introspection."[25] On the test he devised to measure music appreciation, he identifies these signs as follows: 1) Liking: On a seven degree scale the subject must identify the degree to which he likes or dislikes a recorded musical example. 2) Interest: Does the music interest him, or is he indifferent or bored. 3) Mood: Is he happier, no change, or sadder. 4) Tension: Is he more tense, no change, or more relaxed. 5) Verbalization: Does he desire to talk, no change, or desire to remain quiet. 6) Satisfaction: Is the subject satisfied, no change, or confused. 7) Pictures: Does he or does he not have mental pictures. His hypothesis is that the complete music appreciator will demonstrate the following characteristics:

Liking 6 - 7 (Liked or liked very much)
Interested
Happier
More Relaxed
Desires to remain quiet
Satisfied
Has no mental pictures

Together these form a "syndrome of music appreciation."

Between 1960 and 1962, 70 engineering students, enrolled in a one-hour-weekly music appreciation class, were used in Crickmore's experiment. Subjects were asked to respond to 22 recorded musical selections relative to the seven identifiable "signs" listed above. Comments

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[25] Ibid., p. 244.

were also solicited which, in some cases, explained why a selection was responded to the way it was. These comments served to interpret responses which otherwise would have been vague in meaning. For example, tension is usually considered by musicians to be a necessary ingredient in music to sustain interest. Yet many comments indicated that music the subjects liked very much was accompanied by a relaxed feeling. So relaxation rather than tension was considered an appropriate sign of the syndrome.

To support his theory that the syndrome was characteristic of all listeners, whether musically trained or not, 29 music majors were tested on one of the examples. "Sixteen produced the complete syndrome; eight had only one response incorrect; four had two; one had three; none responded with less than four-sevenths of the syndrome."[26]

Using the scores of each of the seven components of the syndrome and adding to it an eighth, the number of complete syndromes on an individual's test, five components were extracted by Varimax Rotation.

Factor I was characterized by high loadings on Liking, Interest, and Satisfaction. Because of similarity of loading for Liking and Interest, Liking was dropped because of its more complex seven-degree scale. Satisfaction played a stronger part in a later factor. Factor I was designated as "sustained interest."

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[26] Ibid., p. 246.

Factor II had a high loading on Verbalization and was designated "desire for silence."

Satisfaction and tension were prominent in Factor III. Because Satisfaction presented some problems of interpretation the Factor was entitled "Relaxation", in other words, a negative response to tension.

Factor IV was designated as "absence of mental pictures" because of the high loading on negative Pictures. Crickmore explains that "the highest aesthetic rapture demands the silence of the imagination (no mental pictures) as well as of verbalization (Factor II, desire for silence)."[27] This is similar to Leonhard's comments about being absorbed by or immersed in the musical experience.

Factor V had high loadings on Mood and G; G being an indication of the number of complete syndromes. A positive response to Mood was considered to be "increased happiness." This factor was described as "a syndrome of all previous factors combined with a feeling of increased happiness."[28]

These five factors constitute the music appreciation syndrome. The factor analysis by Varimax Rotation served to validate the test.

Crickmore's reason for developing this test was

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[27] Ibid., p. 256.

[28] Ibid., p. 252.

to use it to identify growth in music appreciation, a goal similar to that of this paper. Seven of the original 22 selections were played a second time at an unspecified interval. Five of the seven selections showed significant mean gain scores as calculated by a t test.

Of two selections by Beethoven, the first movement of Symphony #5 and Egmont Overture, the former showed a significant increase and the latter didn't. This was credited to a recorded lecture on the Symphony that was played for the students previous to the retest.

Two more of the records, Bernstein's "I Feel Pretty" and Schubert's "An die Musik" were also dealt with in class. Both themes were performed on the piano "immediately" previous to the retest. Both were responded to with increased appreciation. Likewise in both cases the piano version was preferred over the recorded version. Crickmore concludes from this phase of the experiment that the use of the piano as an aid to teaching music appreciation is "extremely desirable." The response to a current pop selection, also performed on the piano, showed no significant increase. In this case the recorded version was preferred over the piano version. The reason given was that "young people consider the timbre of guitars and percussion an essential ingredient of pop music."[29]

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[29] Ibid., p. 295.

The remaining two selections used on the retest were a traditional jazz and a modern jazz selection. Both showed significant increases in appreciation.

The final part of Crickmore's research was a study of the relationship between the syndrome test and the Maudsley Personality Inventory, the Wing Standardized Tests of Musical Intelligence, and Ravens Progressive Matrices, a test that measures a student's "intellectual capacity" and "the rate at which he may be expected to progress."[30] A summary of the findings are as follows: 1) Music appreciation is largely independent of basic personality characteristics. 2) Music appreciation is not directly related to intellectual capacity. 3) Music appreciation is fairly independent of musical intelligence.

Comments on Crickmore's Research

Crickmore identifies music appreciation with enjoyment. It follows that instruction in music appreciation classes should result in increased enjoyment of music. While this is a worthy objective of music appreciation, perhaps objectives of level higher in the affective domain should be sought. Enjoyment compares to 2.3 in the taxonomy, Satisfaction in Response. (See Taxonomy, Appendix C.) Because people are willing to respond (2.3) and find satisfaction in response (2.3) does not assure

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[30] Ibid., p. 296.

that they will seek out opportunities to respond. The urge to use music comes with valuing (3.1).

A contradiction is raised by some of Crickmore's findings. On one hand he states that music appreciation, as he defined it, is "fairly independent" of musical knowledge as defined by Wing's tests. Yet from the experience or knowledge accrued from his music appreciation instruction, the subjects became better "appreciators". This could be explained by the fact that the Wing tests involve aural acuity and musical sensitivity of quite a high degree; probably higher or at least different than would be dealt with in most music appreciation classes. But the fact that some musical knowledge must have been imparted in Crickmore's teaching would contradict the statement; "Thus a lack of analytical or practical ability in music need not be judged as a serious obstacle to the development of a lively interest in listening to music."[31] A description of his course content and methods would have helped to clarify his position.

Crickmore's attempt to establish known group validity was based on the responses of 29 music majors to one musical example which only assures the appropriateness of the syndrome to that one example. This highlights the problem of the musical examples used. A summary of the

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[31]Crickmore, "Measurement," p. 301.

examples (Table 1) shows a limited number of styles represented.

Table 1.--Musical Selections Used in Crickmore's Research

Baroque Instrumental	1
Baroque Vocal	1
Classical Instrumental	1
Romantic Instrumental	7
Romantic Vocal	2
Post-Romantic Instrumental	2
Sousa March	1
Jazz Instrumental	2
Musical Comedy Vocal	3
Popular Vocal	1
Instrumental	14
Vocal	7

Some important styles and composers omitted are pre-Baroque, Bach in the Baroque, Mozart in the Classical Era, Impressionism, art music of the 20th century, and chamber music.

While the syndrome described by Crickmore may adequately represent the styles of music he used, different syndromes may be needed for more widely divergent styles, such as 20th century art music.

Crickmore used the syndromes test as a measure of growth in music appreciation by administering it as a posttest also. While the original test included 21 different examples, only 7 examples were used on the posttest. Out of those 7 examples, 5 were responded to with increased appreciation by the subjects. The seven examples used on the posttest were not representative of the original 21. Out of the seven, three were art music

while there were 14 art music examples in the original 21. Of the three art music examples in the posttest, two were by Beethoven and one by Schubert, with no representation from four other eras or styles which were on the original test.

Hermetz on Attitude Toward Music

A study similar in intent to the present research was done by Hermetz.[32] Concerned about the changes other than cognitive that take place in students as a result of music appreciation instruction, Hermetz attempted "to ascertain the nature of attitudinal change occurring toward music."[33] Proposing that "appreciation is determined largely by inculcation of positive attitudes," two scales of the Oregon Test for Attitude Toward Music by Kate Hevner and Robert Seashore was used to quantify attitude. Music appreciation classes at junior colleges in Florida were given scale A of the Oregon Test as a pretest, and scale B as a posttest. In addition, instructors were asked to complete two questionnaires, one at the pretest and one at the posttest. The first questionnaire referred to the learning condition; course length; text and other instructional materials; percent of class time dedicated to

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[32]Robert Anthony Hermetz, "Attitudinal Change Toward Music in General Education of Students in Twenty Florida Public Junior Colleges," (unpublished Ph.D. dissertation, Florida State University, 1972), p. 1.

[33]Ibid., p. 1.

lecture, listening, class performance, class discussion, and concert attendance; means used to evaluate appreciation, taste, preference, and attitude. In addition, instructors were asked their opinion of the class attitude toward music at the beginning of the semester. The questionnaire at the end of the course asked the instructor to state what attitude development had occurred in the class, what methods had been used to change attitude, and what procedures were used to evaluate attitude change.

Results showed that out of twenty schools completing the project, one had a significant positive change in attitude; one had a significant negative change; four had an insignificant positive change; four had an insignificant negative change; and ten had little or no change. The instructor's evaluation of attitude change were generally contrary to the results of the test. An attempt was made to associate the groups having positive or negative change with class methodology as described by the instructors. Although the author observed there was "no positive correlation," he did point out the following tendencies: classes which registered a negative attitude change had experienced a high percentage of class-time dedicated to record listening, an average of 50% by instructors' estimates; classes which had a positive change had experienced more class performance, discussion, and lecture than the negative classes.

Comment on Hermetz's Research

The problem with this study emanates from the very nature of an attitude. An attitude is not an act or behavior, but a predisposition, something that precedes the act. The verbalized presence of an attitude does not assure an act will follow. The presence of an attitude does not necessarily indicate an affective state.

While the development of positive attitudes toward "serious or concert music" is mentioned as a goal of music appreciation courses,[34] a review of the statements on the Oregon Test shows that only two out of fifty have a direct reference to art music. The rest mention music in general or refer to concert attendance. A "concert" to today's young adults is more likely to mean rock or pop concerts than chamber or orchestral concerts. So perhaps the Hevner Test is not appropriate to the above stated goals. "The music courses investigated were not effective in developing in students a more positive attitude toward music."[35] This conclusion by Hermetz should be qualified in such a way as to express a reliance on Hevner's test as the criterion for defining attitude.

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[34] Ibid., p. 5.

[35] Ibid., p. 98.

Bullock's "Musico-Aesthetic Attitude"

A dissertation by Bullock deals with the problem of testing in the affective domain.[36] Bullock uses the phrase "musico-aesthetic attitude" to characterize the music appreciator's response to music. His work is based on the premise that "A significant objective of every music appreciation course ought to be positive modification of student attitude toward music."[37] He further states that methods of instruction should be developed to achieve this modification of student attitude and subsequently evaluated by testing students for that change. Bullock states the purpose of his research is to construct a test that will measure actual response to music. The type of music used was called "concert music" and is identical to what is referred to as "art music" in the present research. The test was "constructed on the basis of empirical evidence rather than a priori criteria of music appreciation."[38]

The total aesthetic appreciation response to music is described as being evaluative (cognitive) and valuative (involving affective rejection or acceptance). He explains that his study deals with "attitudes resulting

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[36]William Joseph Bullock, "Construction and Evaluation of a Test of Musico-Aesthetic Attitude," (unpublished Ph.D. dissertation, Florida State University, 1971).

[37]Ibid., p. 4.

[38]Ibid., p. 8.

from evaluative and valuative reactions of listeners" and this is called "musico-aesthetic attitude."[39]

To determine what musical styles would be most important to have represented on the test, junior college music appreciation instructors were polled. A list of 24 styles of concert music was sent out with the request that 10 be chosen which were considered to be essential for "minimum familiarity" for music appreciation students. "Concert music style" was defined as a combination of historical period and performance medium. The following ten styles, determined by frequency of response on 166 (55%) returned questionnaires, resulted: Renaissance Choral; Baroque Choral; Baroque orchestral; Classical orchestral; Classical chamber; Romantic Keyboard; Romantic opera; Romantic orchestral; Contemporary electronic; Contemporary orchestral.

The individual selection to represent each of these styles was chosen by Bullock based on the following criteria: 1) "Complete sections of movement constituting the expression of a fully articulated musical idea be used." 2) "Brief in length." Selections chosen varied in length from 1:34 to 3:23 minutes. 3) "Likely to be unfamiliar." 4) "Moderate in tempo."[40] Although "Moderate in tempo" implies all selections had a similar

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[39] Ibid., p. 10.

[40] Ibid., p. 90.

tempo, it in fact meant there were no extremely fast or slow tempi. The range of tempi on the final test was 66 to 128 with all but two lying between 80 and 108.

Regarding 3) "Likely to be unfamiliar", Bullock asked all of the groups that took the test to register what selections were familiar to them. The percentage of those familiar with each selection was recorded but this information never entered into the statistical analysis of the test. Two of the selections were familiar to 7% and 5% respectively of the sample (N=265) while the rest were less.

The final tape of musical examples was sent to 7 qualified judges (college and university music professors), who were asked to approve 1) the order of the selections, 2) the selection's appropriateness relative to the four criteria they were chosen by, and 3) the selection's appropriateness to the ten styles they were supposed to represent. One selection was changed as a result of this exercise in validity.

The complete tape of musical examples was then played for experienced and inexperienced listeners who were asked to write down comments on their "opinions and immediate feelings and thoughts."[41] The comments, both valuative and evaluative, were sorted and 361 were chosen to use on an experimental test. Again experienced and inexperienced

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[41] Ibid., p. 86.

listeners were asked to agree or disagree with the comments. Each item was then analyzed for its ability to discriminate between experienced and inexperienced listeners. Items that discriminated between the two groups at the .05 level of significance or better were accepted. Two hundred items qualified.

The correct answer for each item was determined by the response of the majority of the experienced listeners, i.e. graduate music students. If the majority of the experienced listeners agreed with the comment, it was assigned the answer, true; and vice versa. So the score of a subject would be determined by the degree to which he agreed with the experienced listener.

For cross-validation of the test, scores of two groups of inexperienced listeners were compared. One out of ten examples was responded to with significant difference.

Known-group validity was established by the following comparisons: 1) Freshmen music majors scored significantly higher than freshmen non-majors and lower than graduate students. 2) In a group of inexperienced listeners, i.e. freshmen non-music majors, subjects with more than a year of high school musical organization experience scored significantly higher than those that had only a year or none at all.

In another attempt to determine construct validity, the sensitivity of the test to detect change in

musico-aesthetic attitude was investigated. Several students from an inexperienced group which had been tested before taking a music appreciation class were retested after the class. Although the scores on the posttest were all slightly higher, only two examples were responded to significantly higher, .01 level.

Reliability for the entire test, determined by the Pearson Product-Moment Correlation Coefficient, was .91, partially due to the large number of items. The Reliability of each individual musical example was above .57.

Reliability by Kuder Richardson Formula 20 was high enough for the two inexperienced groups, .77 and .78, to warrant its use, inasmuch as this was the population for which the test was designed. The reliability for three experienced groups was .68, .59 and .48. All subjects rated the test moderately to highly interesting.

Comment on Bullock's Research

In the final paragraph of his summary, Bullock states: "The most important factor contributing to a subject's scores on the test appears to be tolerance or acceptance of various styles of concert music."[42] He speaks of the test as an indicator of tolerance for and acceptance of concert music. A review of the items on the test gives a different impression. In addition to valuative and evaluative questions, which are usually quite

[42] Ibid., p. 206.

distinct in their meaning, there are many comments which fit neither category. These comments, best described as "descriptive", neither reflect cognitive learning nor a statement of acceptance or rejection. Some examples are: "Sounds like a Christmas hymn";[43] "Reminds me of someone completing a huge, important task";[44] "Makes me think of psychedelic lights";[45] "Sounds Russian in places."[46] The first three are correctly answered false because the majority of experienced listeners would not make that comment. The last one is correctly answered true, again because of the typical response pattern of experienced listeners. Yet they are all descriptive and do not reflect values or evaluative behavior. By empirical review of the items, the following observations can be made: Out of 200 items, 29 or 14.5% are descriptive, 61 or 30.5% are evaluative, and 110 or 55% are valuative. The question is raised: Can the test positively identify acceptance of concert music when 45% of the questions deal with cognitive learning or noncommittal subjective descriptions? While the test does indicate the similarity of subjects to experienced listeners, the assumption is that because experienced listeners can identify

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[43] Ibid., p. 130.

[44] Ibid., p. 131.

[45] Ibid., p. 133.

[46] Ibid., p. 134.

formal aspects of the music, they also value it. The tenuous relationship between the cognitive and affective domains has already been discussed.

Also in the summary, Bullock projects the use of the test as a detector of change in musico-aesthetic attitude as a result of instruction. This projection was based on the following research procedures. Out of a pretest N of 75, 25 were used in the posttest. This is a small number from which to draw conclusions, attrition being a source of invalidity. No control group or placebo was used; therefore one can only assume that any change was due to instruction. The results showed that in the majority of cases, the change in musico-aesthetic attitude was statistically insignificant. Based on these findings, the suggestion that this test be used as a detector of change in attitude seems premature.

Conclusions

In spite of concern for "affective" learning in music appreciation, most existing tests which purport to measure music appreciation deal with aural-perceptive and cognitive learning only. These tests include such things as discrimination between better and poorer, or correctly and incorrectly performed musical examples. Hence their relationship to the type of objectives this study is dealing with is minimal.

While research into music preference relates to music

appreciation as defined in the Taxonomy, the position of this study is that preference for one kind of music over another is not an appropriate objective for a music appreciation course. Taste should be expanded to include new kinds of music but need not exclude that music which was esteemed by the student before he enrolled in a music appreciation course.

Mood responses have not been proven to be a reliable indicator of musical training. There has been research which shows them to be dependent on the musical experiences acquired at a very young age.

The physiological part of the affective response to music seems to relate to the kind of learning that is being measured in this study. However, measuring the physiological response to music is not yet refined to the point where its application to a large population is practical.

While Crickmore's concept of the appreciation of music being the same as the enjoyment of music is similar to the thinking in this study, his research methods were not well structured. Also the selections used to initiate subjects' response were limited in style and medium of performance.

Hermetz, in trying to identify positive attitude change resulting from music appreciation instruction, found that Oregon Test for Attitude Toward Music identified a positive change in only five out of twenty schools

tested. The Oregon Test refers to art music only briefly and therefore is not well suited to the objectives of a music appreciation class as defined in this study.

Bullock also tried to identify a positive change in attitude. But, unlike Hermetz, he relied on subjects' response to actual musical examples. He used only ten musical examples but they were carefully chosen after considerable research into what music appreciation instructors typically present in their classes. The construction of the test was thorough but it was not applied to a very large number of subjects or used on a concurrent placebo group.

Literally no research was found in "Musical Habits" as described in Chapter I. Although a number of authors discussed "Musical Habits" as objectives or outcomes of music appreciation instruction, it would seem to be an unexplored area.

CHAPTER III

DESIGN OF THE STUDY

Development of the Instrument

The instrument developed for this research to detect music affect shift is in two parts. Part one is the Self-appraisal of Musical Habits, referred to in this paper as Habits, and part two is the Art Music Acceptance Test or AMAT. Part two is entitled Response to Music Examples on the test booklet in order to avoid the negative bias that the term art music might engender in some musically inexperienced subjects.

AMAT consists of thirty recorded musical examples to which subjects are asked to respond. Having espoused Broudy's concept of the connoisseur or expert, the writer assumes responsibility for identifying appropriate examples for AMAT.

The music examples, intended to cover a wide range of art music, were chosen to represent the following categories:

1. Historical period: Renaissance; Baroque; Classical; Romantic; Twentieth Century.

2. Medium: orchestra, large and small; chorus with orchestra; chorus acapella; solo instrument; solo instrument with orchestra; solo voice with piano; solo voice with orchestra; Renaissance consort; string quartet; band.

3. Rhythmic characteristics: various degrees of rhythmical activity from passive to very active; various tempi from adagio to presto.

A list of the examples can be found in Appendix B. The examples, each forty to fifty seconds in length, were carefully chosen to represent the style and character of the work from which it was taken. Where possible, a complete unit of form was represented. For example, care was taken to avoid interrupting a phrase. Rather, complete phrases were represented. In the case of a minuet by Mozart, the first section, up to the repeat, was used. Sometimes an interruption was unavoidable because of time limitations. In such cases a fade-out was used to lessen the feeling of interruption.

The examples were recorded on high quality magnetic tape from records using an AR turntable, a Scott StereoMaster 299F amplifier, and a Sony TC-850 tape deck. The musical examples were separated by a ten-second interval during which time the subjects made their response.

Content Validity In an effort to establish content validity and overall acceptability of the prepared tape, eight experts were asked to evaluate the test on the following criteria: 1) the quality of the composition as

an example of art music; 2) the quality of the performance; 3) the quality of the recording in regard to distortion or extraneous noise. The group of experts was comprised of four professors of music and four Ph.D. candidates at Michigan State University. The experts were asked to evaluate each musical example by the three aforementioned criteria on a 1 through 5 scale in the following manner:

Unacceptable 1 2 3 4 5 Acceptable

The evaluation form given to the experts may be found in Appendix D.

Results of the Experts' Evaluation The average rating given all the selections by all the judges for criterion one, quality of the composition as an example of art music, was 4.5. The lowest average rating given an example was 3.87 and the highest was 5.00. The reliability of the experts' ratings was .926 as determined by Ebel's "Estimation of the Reliability of Ratings."[1]

The average rating given criterion two, quality of the performance, was 4.75. The lowest average rating given an example was 3.87 and the highest was 5.00. The reliability of the experts' ratings was .93.

The average rating given criterion three, quality of the recording was 4.48, with individual selections

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[1]William A. Mehrens and Robert L. Ebel, ed., Principles of Educational and Psychological Measurement, (Chicago: Rand McNally and Co., 1967), pp. 116-131.

ranging from 3.62 to 5.00. Reliability of the judges' ratings was .93.

Development of the Answer Format for AMAT

In the early stages of the development of AMAT, a five-level Likert scale was used as responses to the music examples:

1. Dislike very much
2. Dislike
3. No Opinion
4. Like
5. Like very much

Following early pilot studies using AMAT, a decision was made to design an answer format that would coincide with the relationship of the term "appreciation" to the Taxonomy of Educational Objectives in the Affective Domain. This relationship can be seen on the chart in Appendix C. These "behavioral" responses and the corresponding levels of the Taxonomy can be found below.

	Taxonomy Level	Response on Test
1.3	Controlled or Selected Attention	(Assumed)
2.1	Acquiescence in Responding	2) Although I don't particularly like this, I would listen to it again.
2.2	Willingness to Respond	3) I would like to hear this selection again before I make up my mind.
2.3	Satisfaction in Response	4) I would enjoy hearing this again.
3.1	Acceptance of Value	5) I will make an effort to hear this again.

Level 1.3, Controlled or Selected Attention will have to be assumed in order for the subjects to respond to the examples. The first response, "If given the choice I would not listen to this again", is clearly a negative answer and represents an affective state which would, on future occasions, reject the activity described by the lowest category of the Taxonomy, 1.0, Receiving.

The second response, "Although I don't particularly like this, I would listen to it again," corresponds to 2.1 of the Taxonomy, Acquiescence in Responding.

Some comments from the Taxonomy will clarify the meaning of this.

> At this level we are concerned with what might be thought of as the first level of active responding after the learner has given his attention. We might use the word "obedience" or "compliance" to describe the behavior. . . . There is the implication here that, should the conditions be such that other alternatives of response were open, and were there no pressures to conform with teacher-held standard or social norm, the student might well choose an alternative response.[2]

> Acquiescence in responding is indicated when the student chooses such response alternatives as "I don't like to do it, "Doing it bores me," "I only do it when I have to," "I only do it when a friend suggests it."[3]

On AMAT the subject first states he doesn't "particularly like this" and then consents to listen to it again. The

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[2]David R. Krathwohl, Benjamin S. Bloom, and Bertram B. Masia, Taxonomy of Educational Objectives, Handbook II: Affective Domain (New York: David McKay Co. Inc., 1964), p. 199.

[3]Ibid., p. 122.

implication is that he would do this only under certain conditions. For example, perhaps he recognizes the value other persons have put on this music and he would respect their feelings by listening to the music again.

The third answer, "I would like to hear this selection again before I make up my mind," indicates, like 2.2 of the Taxonomy, a willingness to re-hear the example. It is explained in the Taxonomy:

> The key to this level is in the term "willingness," with its implication of capacity for voluntary activity. . . . the element of resistance or of yielding unwillingly, which is possibly present at the previous level, is here replaced with consent or proceeding from one's own choice.[4]

Satisfaction in response, 2.3, is registered in the fourth answer, "I would enjoy hearing this again."

> The additional element in the step beyond the Willingness to respond, the consent, the assent to responding, or the voluntary response is that the behavior is accompanied by a feeling of satisfaction, an emotional response, generally of pleasure, zest, or enjoyment.[5]

The fifth answer is a commitment of sorts by the subject. His response to the music is so strong that he is willing to state "I will make an effort to hear this again." This is a statement of affect stronger than an expression of satisfaction. In the discussion of taxonomy level 3.1, Acceptance of a Value, the authors state that this level is represented by

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[4] Ibid., p. 125.

[5] Ibid., p. 130.

> those behaviors which can be taken as evidence of seeking or wanting an object because it has worth and is considered to be important in its own right.[6]

Although it would not be reasonable to assign a subject this level of affect because of his response to a specific example or a few of them, it would seem appropriate to assign him this level if most of the examples were responded to by the fifth answer.

> one of the distinguishing characteristics of this behavior (acceptance of a value) is the consistency of response to the class of objects, phenomena, etc., with which the belief or attitude is identified."[7]

The next level of the Taxonomy, 3.2, Preference for a Value, was not included because, as discussed in the previous chapter, to change preference is a questionable objective in music education.

The first draft of the behavioral answers was presented to two music appreciation classes and a graduate music education seminar for their criticism and was subsequently revised. The instructions and answer format for AMAT are given in Appendix E.

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[6] Ibid., p. 141.

[7] Ibid., p. 141.

Statistical Comparison of the Likert and Behavioral Answers

Response	Likert Format	Behavioral Format
1	Dislike Very Much	If given the choice I would not listen to this again.
2	Dislike	Although I don't particularly like this, I would listen to it again.
3	No Opinion	I would like to hear this selection again before I make up my mind.
4	Like	I would enjoy hearing this again.
5	Like Very Much	I will make an effort to hear this again.

Having developed the two answer formats, Likert and Behavioral, the next problem was to determine if they were significantly different in actual practice. An analysis of variance was done between pilot studies 1, representing the Likert format, and a combination of 3 and 4, representing the Behavioral format. (See Table 2.) They were found to be not significantly different. Because the two formats were given to different groups at different times and places, the decision was made to run another pilot that would control these variables. Pilot studies 2 and 5 were done in two sections of a second-term "Introduction to Music Literature" class. The Likert and Behavioral formats were distributed randomly in both sections. Once again no significant difference was found between the two formats, but one important observation was made; the

standard deviation of the total scores for the Behavioral format was 19.19 while only 11.98 for the Likert. An important benefit of the Behavioral format was the negation of the "No Opinion" category resulting in a greater spread in the response pattern. (See Table 3.) Although both of the comparisons on Table 3 show this, the second has the most dramatic difference. A greater spread in the response pattern produces higher reliability. The impressive reliability in pilot 5 warranted the decision to use the Behavioral format on the finalized test.

Table 2.--AMAT Pilots

Location and Class	Date	Answer Format	Number
1. University of Wisconsin Center, Fond du Lac Music Appreciation	1971-72	Likert	52
2. Michigan State University Introduction to Music Literature II	Spring 1973	Likert	17
3. Michigan State University Two Sections of Introduction to Music Literature II	Winter 1973	Behavioral	25
4. Michigan State University Introduction to Music Literature I	Spring 1973	Behavioral	41
5. Michigan State University Introduction to Music Literature II	Spring 1973	Behavioral	19

Table 3.--Distribution of Response Patterns on Likert and Behavioral Formats

Pilot and Format	Response in frequency and % 1	2	3	4	5	Mean Rating	Mean Total Score	Standard Deviation of Total Scores	Hoyt Internal Consistency Reliability
1 Likert	107	326	383	577	166	3.23	97.03	11.46	.817
N = 52	6.9%	20.9%	24.6%	37.0%	10.6%				
3 & 4 Behavioral	233	408	349	799	187	3.15	94.53	13.38	.823
N = 66	11.8%	20.6%	17.6%	40.4%	9.4%				
2 Likert	29	77	109	219	76	3.46	103.88	11.98	.856
N = 17	5.6%	15.0%	21.3%	42.9%	14.9%				
5 Behavioral	64	109	69	252	76	3.29	98.78	19.19	.926
N = 19	11.2%	19.1%	12.1%	44.2%	13.3%				

Development of the Self-Appraisal of Musical Habits

In the Habits survey, the subjects are given a group of items which asks them to identify the existence of and appraise the frequency of certain musical habits in their lives. Each item deals with some kind of musical behavior from casual daily experiences to those which exhibit a high level of affect. To respond, the subject must choose from five alternatives which represent a none-to-high continuum of activity in the musical habit in question. Most items, nineteen out of twenty-five, have the following response pattern:

1. Never
2. Seldom
3. Occasionally
4. Frequently
5. Very frequently

This continuum was arrived at after experimenting with various patterns in two early pilots. Finally a graduate music education class at Michigan State University was presented the problem (See Appendix F) and after considerable discussion the class reached a consensus on the above continuum. Six of the Habits questions required special answers which were designed to fit the five degree scale. See questions 4, 8, 13, 21, 22, 23 in Appendix A.

Items for the Habits survey were generated from the following sources: 1) Individuals, who identified themselves as musically active, were asked to list past and present musical habits and those activities which they would like to do. (See Appendix H.) 2) Goals in music

education as suggested by the State of Michigan Department of Education. 3) The "Habits" section of Objectives for Music Appreciation in Colwell's dissertation.[8] 4) A music appreciation class at Michigan State University was asked to list their musical habits (N = 37). All the items were designed to determine what the subjects actually do or, in some cases, will do in the future regarding a particular musical habit.

The items were submitted for criticism to a music appreciation class at Lansing Community College and to a graduate music education seminar at Michigan State University. The first form of the test was given to two sections of a second term music appreciation class for non-music majors. (Table 2, Pilot 3.) As a result of these activities, extensive revisions were made in item wording and, to a slight extent, content.

The Habits survey was given with AMAT in two pilot studies. (Table 2, Pilots 2 and 4-5.) By the second pilot the response pattern was established at five alternatives and, in general, the survey had arrived at its finalized form. (See Appendix A.)

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[8]Ruth Ann Colwell, "The Development of a Theoretical Basis for a Course in Music Appreciation at the College Level," (unpublished Ph.D. dissertation, University of Illinois, 1961), pp. 102-4.

Correlation of the Habits Survey and AMAT

Both the Habits survey and AMAT were being developed to measure the same variable, a shift in music affect. Increased musical activities and increased acceptance of art music both seemed to be representative of behaviors which would indicate a positive shift in music affect. It could also be assumed that subjects might score in a similar way on both tests. Hence one test would serve as concurrent validity for the other. In order to test this assumption the following correlation studies were done.

Using an earlier version of the Habits survey and AMAT, a pilot study was run on twenty-five subjects in a second-term music appreciation course for non-majors. (Table 2, Pilot 3.) A rank order correlation of .36 made acceptance of the above assumption very tenuous. But the need to change and improve the questions and answer format on the Habits survey seemed to justify pursuing this means of concurrent validity.

The next pilot (Table 2, Pilot 4), using a greatly changed set of Habits questions, proved no better as concurrent validity. Rank order correlation was again .36. The final revision of the Habits survey featured few changes except the consistent use of five answer response pattern for each question. The next pilot, (Table 2, Pilots 2 and 5) used two forms of AMAT, Behavioral and Likert. A Pearson Product Moment correlation was done for each: Habits - AMAT (Behavioral format) = -.02;

Habits - AMAT (Likert format) = -.22; Habits - AMAT (Both formats combined) = -.07.

Factor Analysis of the Habits Survey

Clearly the Habits survey could not serve as concurrent validity to the AMAT. The very low correlation between Habits and AMAT was an indication that people who are musically very active are not receptive to art music and vice versa. It would appear that the Habits survey and AMAT measure two different things. However, the Habits survey deals with many kinds of musical activities and never specifies the kind of music involved. Perhaps the acceptance of art music is really just another musical habit, equal, in a sense, to any of the other habits. The "acceptance of art music" habit has taken on great significance in this study because of the objectives specified for music appreciation instruction.

It was evident that the Habits in the survey could be grouped into like categories and that one or more of these categories might show a greater correlation to AMAT. Some of these categories could be delineated empirically as:

1. Listening activities.
2. Performance activities.
3. Learning and growth activities, formal and informal.
4. Activities that require spending money.
5. Activities that require interaction with other people.

In order to do a computerized factor analysis, the Habits survey was given to the sample described in Table 4

Table 4.--Habits Pilot, Summer 1973

	Answer Distribution by %					
	N.	1	2	3	4	5
Graduate Music Students	29	3.4	8.3	21.2	24.4	42.6
Under-Graduate Non-Majors in music courses	100	21.0	20.0	26.4	16.7	15.8
Youth Music Students*	127	6.6	14.8	23.0	21.8	33.7
Total Sample	256	11.8	16.1	24.1	20.1	27.7

*High school band, orchestra, and chorus members at a summer music camp at Michigan State University.

during the summer of 1973. Of the four factors determined by Varimax Rotation Analysis, the first two each strongly indicated a describable factor.

The nine questions which were highly loaded in Factor 1 (loadings from .50 to .81) are as follows:

4. Do you intend to enroll in another class in music?

6. Do you ever play a musical instrument for your own entertainment?

7. Do you perform with any musical organization? i.e. church choir, university band, folk or rock group, etc.

11. How often do you initiate music activities? i.e. Encouraging or arranging for two or more people to get together to play or sing, or go to a concert.

13. How many instruments can you play, even a little?

15. Do you ever make-up melodies to play or sing?

19. Do you seek out friends who are interested in music?

21. Are you learning, either on your own or with the help of a teacher, how to play an instrument or sing, or to improve your present ability?

24. How often do you get together with friends to sing or play instruments?

Factor 1, with the exception of questions 4 and 19, deal with Performance. Considering the population of the pilot, question 4 is appropriate to the factor because the Youth Music students would all be subsequently taking a class in performance. Question 19, although not so obvious as 4, would fit with 11 and 24; if one sought other people to perform with, they might well be his friends.

The following seven questions were highly loaded on Factor 2 (loadings from .43 to .73).

1. How often do you listen to music critically or seriously as opposed to using it for "background"?
2. How often do you read about music or musicians?
3. How often do you discuss music with other people?
8. Do you subscribe to any music periodicals?
9. How often do you borrow records from a library or a friend?
16. How often do you buy records or tapes?
18. Do you seek out music that you are unfamiliar with?

All represent informal ways toward musical self-improvement or broadening; Factor 2 was labelled Musical Curiosity.

Factors 3 and 4 had only high negative loadings; no factor was identifiable which attracted the remaining nine statements.

The Habits Survey on Pilots 2 and 5 were rescored to get raw scores for Factor 1 and 2 and a correlation was computed for each Factor and AMAT.

Factor	Pearson Product Moment
1 Performance - AMAT	.21
2 Curiosity - AMAT	.11
Total Habits - AMAT	-.07

Although an improvement over the total Habits survey, neither Factor could serve as concurrent validity to AMAT. Although Habits and AMAT clearly measure different things,

it could also be argued that they measure different aspects of the same thing. They are both behavioral representatives of music affect, but do not show any substantial commonality.

An important attribute of the Habits survey found in the Summer 73 Pilot (Table 4) was known-group validity. Of the three groups represented, one would hypothesize that the graduate music students would be the most musically active, the Youth Music students next, and the under-graduate non-majors least; the answer distribution bears this out. (Table 4.) To quantify the responses of each of the three categories of students, the response number was used as a weight and multiplied times the percentage of responses in that weight. For example, of the graduate music students, 21.2 percent of their responses to the Habits questions were a 3 (Occasionally). 3 x 21.2 = 63.6. The figures for each of the five responses were then added to arrive at the totals given below.

Graduate Music Students	394.2
Youth Music Students	360.9
Undergraduate non-majors	286.0

The Habits survey was determined to be a valid instrument for determining degree of musical activeness.

Reliability of Habits and AMAT

Reliability of Habits, as computed by Hoyt Internal Consistency measure, on the various pilot studies are as

follows:

A. Table 2, Pilot 4-5 non-music majors .874

B. Table 4, Undergraduate non-majors .90

C. Table 4, Youth Music Students .86

D. Table 4, Graduate Music Student .77

E. Total sample of B, C, and D .91

Because reliability is dependent on spread of the answer pattern or variance, the graduate music student, who would all score similarly, exhibit the lowest reliability. A similar situation exists with the musically-active Youth Music students. Reliability is highest for undergraduate non-music majors who would be expected to produce the largest variance.

The reliability of Habits when used in the actual research was .90 and for AMAT .93. Both tests combined had a reliability of .931. N = 152.

Experimental Design

The design of this research is the "nonequivalent control group design" in the terminology of Stanley and Campbell.[9] It is a "quasi-experimental" design and is symbolically represented as follows, where O = measurement and X = treatment:

$$\frac{O}{O} \quad X \quad O$$

[9]Donald T. Campbell and Julian C. Stanley, Experimental and Quasi-Experimental Designs for Research (Chicago: Rand McNally and Co., 1963), p. 47.

Whereas it is very similar to the pretest-posttest control group design,

$$\begin{array}{lll} RO_1 & X & O_2 \\ RO_3 & & O_4 \end{array}$$

it lacks the randomization (R) procedure which makes the latter a "true experimental" design. Rather the experimental and control groups "constitute naturally assembled collectives such as classrooms."[10]

Campbell and Stanley further cite two versions of Design 10, nonequivalent control group design, the second of which applies to this research.

> there are instances of Design 10 in which the respondents clearly are self-selected, the experimental groups having deliberately sought out exposure to X; with no control group available from this same population of seekers.[11]

Although less desirable than Design 4, the pretest-posttest control group design, it is "one of the most widespread experimental designs in educational research" and "should be recognized as well worth using in many instances in which" true experimental designs are impossible.[12]

Sample

This study included 152 subjects during the fall and spring semester of 1973-74. All subjects were students at

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[10] Ibid., p. 47.

[11] Ibid., p. 50.

[12] Ibid., p. 47.

the University of Wisconsin Center at Fond du Lac, Wis., a campus offering the first two years of most Baccalaureate programs. The experimental group consisted of 87 students who were enrolled in Music Appreciation, 46 in the fall semester, and 41 in the spring semester. These figures represent somewhat fewer students than the actual totals enrolled in the class for the following reasons: 1) a few students dropped the course, 2) Some students added the course after the first sessions when the initial testing was done. In neither semester did this amount to more than ten per cent.

Humanities credits are required of all students in the University of Wisconsin System. Of nine required credits, students must take three credits in one of art, music, or drama appreciation. (In practice, the course titles are not consistent but they all mean the same as the traditional term "appreciation.")

The control group consisted of 65 students. The 38 fall semester students were enrolled in four sections of freshmen English Composition and 27 spring semester students were enrolled in two sections of English Composition and one section of Speech.

Table 5.--Data Describing the Subjects Used in the Research

Experimental Group	Fall '73 Spring '74	2 sections of Music Appreciation 1 section of Music Appreciation Total	46 41 87
Control Group	Fall '73 Spring '74	4 sections of English Composition 2 sections of English Composition 1 section of Speech Total Total Sample	38 27 65 152

Whereas the Music Appreciation Classes were comprised of an equal mixture of freshmen and sophomores, fewer sophomores were included in the Control group with the exception of the Speech section. Music majors and persons currently taking Music Appreciation were excluded from the Control group, because the control group represented students with no structured music-learning experiences during the semester.

Because the campus offers only freshmen and sophomore courses, the students were largely in the 17 to 20-year-old range with the exception of a few veterans and, in the case of the speech class, some older persons who were in a non-degree program ostensibly for self-improvement.

The campus, which enrolled 710 students during 1973-74, has no dormitories, so nearly all the students are

Fond du Lac residents or commuters from the many small communities within a thirty-mile radius of Fond du Lac.

The Independent Variable

By eliminating all music majors and current enrollees in Music Appreciation, the Control group was free of persons experiencing a structured music-learning situation during the application of the independent variable to the Experimental Group.

The teaching procedure in the Music Appreciation class was directed toward increased aural perception of music: developing the ability to listen in greater depth to musical events. The first few days of the class were given to discussion and explanation of basic musical concepts arrived at by the students' reaction to recorded musical examples. These basic musical concepts include pitch, duration, timbre, rhythm, tempo, pulse, meter, melody, harmony, and so forth. After this the same procedure was used to "discover" additional musical concepts of form, style, medium, texture, as well as those already discussed. Art music examples, beginning in the Renaissance and continuing chronologically to contemporary 20th century, served as course material. Historical, biographical, and sociological facts were presented to the extent that the author felt they would enhance the listening experience. The students were required to purchase and encouraged to read, "The Enjoyment of Music" by Joseph

Machlis, a text used to broaden their background on the styles and composers studied in class.

In addition to regular attendance at class, the students were required to attend three concerts; a professional symphony orchestra, a chamber concert performed by university faculty, and a third concert of their choice and agreed to by the instructor. Additional concert attendance was encouraged by awarding extra credit. Rock, pop, and folk concerts were not included.

Two short papers were required in which the students were asked to describe the musical events of approximately ten minutes of music chosen from a list of suggested sources. There was required listening outside of class which helped the student prepare for three tests given during the semester. The test questions were about equally divided between those that deal with understanding of terms and historical-biographical facts and those that require a response to recorded musical examples.

Very little music theory was presented. For example, in dealing with meter, the students were only asked to discriminate between duple and triple: meter signatures were never discussed. While music reading was not attempted, score following was presented once to reinforce visually the aural perception of varying density of texture and to show the responsibilities of the conductor.

Test Procedure

The experiment employed a pretest-posttest design. The pretest was given to the Experimental group at the first meeting of the class. It was introduced as research aimed at improving the course they were about to take. No mention was made of the posttest to be given at the end of the semester. The course is allowed two periods (100 minutes) at a specially assigned time at the end of the semester for a final exam. Previous to the exam time, the students were informed that the entire period would be taken for testing. This was done to avoid negative bias when the class test was over and they then found out there was another test.

The control group received the test within four class periods of the beginning and end of the semester, depending on the convenience of the instructor involved. The test was introduced by asking their cooperation in a research project which would benefit certain music courses.

In all cases the test was given in a non-threatening environment. Subjects were asked to identify their answer sheets with only the last six digits of their social security number. Some method of identification was necessary so that the pre and posttests could be paired. Subjects were assured that the test results would in no way affect their grade.

The test site for the experimental group was in the music room which is equipped with high-quality stereo

components for playing the tape of musical examples: Scott Stereo Master 299F amplifier, Sony TC-850 tape deck, and AR speakers. The control groups were given the test in their regular classrooms. To assure nearly identical representation of the tape, the aforementioned components were taken into the classroom. Even though the room size differed the accoustical environment was quite similar.

Testable Hypotheses

Listed below are the testable hypotheses which were subject to analysis.

Null Hypothesis I: There will be no significant difference at the posttest between the experimental and control groups in their acceptance of art music as measured by AMAT.

Null Hypothesis II: There will be no significant difference at the posttest between the experimental and control groups in musical habits as measured by the Self-Appraisal of Musical Habits.

Null Hypothesis III: There is no significant relationship between the degree of art music acceptance and musical habits of the subjects.

Analysis of the Data

Raw data were transferred from the answer sheets to computer cards by the Evaluation Services at Michigan State University. The data suitable for statistical analysis consisted of mean scores on each test, Habits

and AMAT. The scores were computed for the experimental group and the control group on the pretest and posttest.

Analysis of covariance was chosen for analysis of the data. The program used for the analysis was the Statistical Package for the Social Sciences, Version 6.0. Correlations and other data in the following chapters were derived from the Bastat AOV program. All computer work was done on the CDC 6500 computer at Michigan State University.

The level of significance for rejection of the null hypothesis was set at $p = .05$.

CHAPTER IV

PRESENTATION OF THE DATA

In Chapter IV there will be a discussion of the type of analysis used to test the hypotheses followed by a review of the hypotheses and a report of the results of the statistical analysis. The last section of the chapter presents additional data derived from the testing that may serve to help interpret the statistical findings and exhibit the effect of the treatment on the experimental subjects.

Discussion of the Analysis of Covariance

Frequently, when a pre-posttest design is used, gain scores are used as the raw data for analysis. Gain scores are the difference scores between the pretest and the posttest. The experimental and control group gain scores of an experimental study could be tested for significance by a "t" test or an analysis of variance. But because the experimental design of this research did not include randomization, a more robust analysis was used: The analysis of covariance was chosen as an appropriate

statistical tool. This technique computed an analysis of variance on the group means of the posttest with the pretest as covariate. The covariate analysis adjusted for a priori differences between the groups designated as experimental and control. In summary, analysis of covariance enables the researcher to arrive at valid conclusions through statistical allowances when true experimental design, i.e., randomization, is not possible.

Hypotheses

Null Hypothesis I: There will be no significant difference at the posttest between the experimental and control groups in their acceptance of art music as measured by AMAT.

Table 6.--Descriptive Data for Sample on AMAT

	Pretest	Posttest
Experimental Group	$\bar{X}$ = 82.66	$\bar{X}$ = 92.64
	s = 18.29	s = 18.63
Control Group	$\bar{X}$ = 73.47	$\bar{X}$ = 78.18
	s = 20.64	s = 21.27

Table 7.--ANOVA between Experimental and Control Groups on Pretest AMAT

Source of Variation	Degrees of Freedom	Mean Square	F	P
Group mean Scores	1	3141.9242	8.4072	.004
Within	150	373.717		

Table 8.--Analysis of Covariance for AMAT using the Post-test Scores as the Main Effect and the Pretest Scores as Covariate

Source of Variation	Degrees of Freedom	Mean Square	F	P
Covariate Pre AMAT	1	36748.941	205.104	.001
Main Effect	1	1928.733	10.765	.002
Within	148	179.173		

The data in Table 6 compare the experimental and control groups on the pretest and posttest mean scores. While the difference between the two groups is much larger at the posttest, the possibility that this is due to pre-experimental dissimilarities must be accounted for. Table 7 shows statistically the pretest difference between the control and experimental groups is significant. Using the pretest means as a covariate, the posttest means (Table 8) were found to differ significantly based on the acceptable level of significance stated in Chapter III, P = .05. The

null hypothesis was rejected.

Had the analysis been a "t" test or an analysis of variance on the gain scores, this initial difference in the two groups would not have been allowed for and would have greatly increased the possibility of a type one error, rejecting the null hypothesis when it should have been accepted.

Null Hypothesis II: There will be no significant difference at the posttest between the experimental and control groups in musical habits as measured by the Self-Appraisal of Musical Habits.

Table 9.--Descriptive Data for Sample on Habits

	Pretest	Posttest
Experimental Group	$\bar{X}$ = 64.94	$\bar{X}$ = 70.82
	s = 15.68	s = 16.03
Control Group	$\bar{X}$ = 65.10	$\bar{X}$ = 67.00
	s = 14.67	s = 16.25

Table 10.--ANOVA between Experimental and Control Group on Pretest Habits

Source of Variation	Degrees of Freedom	Mean Square	F	P
Group mean Scores	1	1.0149	.00436	.947
Within	150	233.0197		

Table 11.--Analysis of Covariance for Habits using the Posttest Scores as the Main Effect and the Pretest Scores as Covariate

Source of Variation	Degrees of Freedom	Mean Square	F	P
Covariate Pre Habits	1	30344.380	526.502	.001
Main Effect	1	631.148	10.951	.002
Within	148	57.634		

Table 9 shows that the experimental and control groups' mean scores were very similar at the time of the pretest in regard to musical habits. While the groups differed significantly on AMAT, this was not the case with Habits (Table 10). Results of the analysis of covariance again indicate that the experimental treatment, not the pretest differences between the two groups, were responsible for their difference at the time of the posttest. Again the null hypothesis was rejected.

Null Hypothesis III: There is no significant relationship between the degree of art music acceptance and musical habits of the subjects.

Table 12.--Correlation of AMAT and Habits

	Correlation Coefficient	N	P
Pretest	r = .3309	151	.001
Posttest	r = .4692	151	.001

Table 12 shows the Pearson Correlation Coefficient (r) of AMAT to Habits and a statement of the probability of the significance of that correlation. The statistical analysis was to determine if the subjects scored similarly on AMAT and Habits. The analysis shows that the correlation of the scores was within the accepted significance level for this research. Based on this statistical finding, Null Hypothesis III can be rejected.

Further Data on the Correlation of AMAT and Habits

As a point of interest, correlations are given below for AMAT and the individual items of Habits.

Table 13.--Correlation of AMAT to Individual Items of Habits on Posttest

Item	r	Item	r	Item	r
1	.22	9	.31	17	.15
2	.41	10	.41	18	.33
3	.34	11	.28	19	.29
4	.34	12	.06	20	.22
5	.09	13	.25	21	.16
6	.25	14	.15	22	.63
7	.26	15	.38	23	.38
8	.21	16	.16	24	.23
				25	.18

AMAT and Habits on the posttest had an overall correlation of r = .46 and, as shown in Table 13, few of the individual items of Habits correlated that highly with AMAT. Item number 22 had the highest correlation: "Do you intend, in the future, to learn more about "classical" music?" Other relatively strong correlations were: Number 2, How often do you read about music or musicians?; Number 10, How often do you attend concerts?; Number 15, Do you ever experiment with instruments which you haven't studied seriously?; Number 23, Do you intend to continue, after this class, to learn more about music structure or theory? Numbers 2, 10, 22, and 23 reflect subjects' activities and interest in the music appreciation class they have just completed. Number 15 appears to have little relationship to the other items that correlate relatively high to AMAT.

Numbers 5 and 12 showed the least correlation to

AMAT: Do you use music on the radio or recordings as a background to working? Do you sing or whistle when you are alone, either working or relaxing? The low correlation on these items simply indicates that the practice of using background music was not consistent among those subjects who scored high on AMAT or those who scored low. For the complete Habits survey, refer to Appendix A.

Additional Data of General Interest to The Study

Although not related to the hypotheses, it may be of interest to review the responses of the experimental group to the individual items of AMAT and Habits. The purpose of this review is to show the effect of the treatment on the experimental subjects as evidenced by the subjects' altered responses on the posttest. In Tables 14 and 15 the mean gain score is given for each item. The gain score is the difference between the mean score on the pretest and the mean score on the posttest. In some cases the "gain score" represents a lower score on the posttest. The t of the mean is given along with the significance of the t.

In Table 14 it is reported that the following musical examples from AMAT exhibited a significant negative gain score; i.e., the posttest scores were significantly lower than the pretest scores.

Table 14.--Mean Gain and Obtained "t" Values for Individual Items on AMAT for Experimental Group
N = 87

Item	Mean Gain	t of the Mean	P
1	-.609	-3.83	<.0005*
2	-.632	-4.86	<.0005*
3	.724	4.24	<.0005*
4	.586	3.89	<.0005*
5	-.011	-0.05	.960
6	.126	.86	.389
7	.252	1.46	.148
8	.183	1.20	.233
9	.344	1.98	.050*
10	.793	5.75	<.0005*
11	1.609	10.65	<.0005*
12	-.034	-.24	.809
13	.195	1.40	.165
14	.931	5.70	<.0005*
15	.494	3.49	.001*
16	.195	1.23	.221
17	-1.505	-10.37	<.0005*
18	.459	2.54	.013*
19	.264	1.74	.084
20	.172	1.01	.314
21	-.678	-4.07	<.0005*
22	1.689	9.46	<.0005*
23	-.505	-3.28	.001*
24	.287	1.97	.051
25	.701	4.26	<.0005*
26	1.022	6.35	<.0005*
27	-.057	-.41	.678
28	.954	6.97	<.0005*
29	.436	2.88	.005*
30	.298	1.88	.063

*significant at .05

Example Number
1. Chopin, Waltz in E^b
2. Wagner, Overture to the Flying Dutchman
17. Shostakovich, Symphony # 5, Finale
21. Stravinsky, Petrouchka
23. Brahms, Symphony # 3, First Movement

The following musical examples exhibited a significant positive gain score.

Example Number
3. Verdi, La Traviata, Soprano-Baritone Duet
4. Vivaldi, Concerto Grosso
9. Mendelssohn, Violin Concerto, Opening
10. Mozart, Eine Kleine Nachtmusik, Opening
11. Schubert, Erlkonig
14. Rossini, Barber of Seville, Finale Act 2
15. Tchaikovsky, Piano Concerto, Third Movement
18. Bach, Christmas Oratorio, Choral Number
22. Verdi, La Traviata, Soprano Aria
25. Webern, Five Pieces for Orchestra
26. Vivaldi, Gloria, Choral Opening
28. Bartok, Concerto for Orchestra
29. Bach, Fugue in E Major

In an effort to find some tendencies among those examples which exhibited a significant gain score, the examples were separated into vocal and instrumental categories. Of the twenty instrumental examples on AMAT, five had a significant negative gain score and seven had a significant positive gain score. By comparison, of the ten vocal examples on AMAT, six of them had significant positive gain scores and none had significant negative gain scores. All ten of the vocal examples received scores below the mean on the pretest: Of the two

categories, vocal and instrumental, the experimental subjects were the least accepting of vocal music at the time of the pretest. The observed tendency was that the greatest change in acceptance of art music was among the vocal examples.

The complete list of musical examples used on AMAT may be found in Appendix B.

The following items on the Self-Appraisal of Musical Habits exhibited a significant positive gain score as reported in Table 15.

> Example Number 1. How often do you listen to music critically or seriously as opposed to using it for "background"?
>
> 2. How often do you read about music or musicians?
>
> 3. How often do you discuss music with other people?
>
> 4. Do you intend to enroll in another class in music?
>
> 6. Do you ever play a musical instrument for your own entertainment?
>
> 9. How often do you borrow records from a library or a friend?
>
> 10. How often do you attend concerts?
>
> 11. How often do you initiate music activities? i.e., Encouraging or arranging for two or more people to get together to play or sing, or go to a concert.
>
> 12. Do you use music on the radio or recordings as a background to working?
>
> 14. Do you ever make up melodies to play or sing?

Table 15.--Mean Gain and Obtained "t" Values for Individual Items on Habits for Experimental Group
N = 87

Item	Mean Gain	t	P
1	.379	3.56	.001*
2	.321	3.13	.002*
3	.356	4.45	<.0005*
4	.632	4.29	<.0005*
5	.091	1.11	.270
6	.287	2.59	.011*
7	.080	.92	.357
8	.034	.38	.698
9	.482	5.15	<.0005*
10	.195	2.50	.014*
11	.172	1.98	.050*
12	.344	3.30	.001*
13	.149	1.71	.091
14	.310	3.10	.003*
15	.103	1.15	.251
16	.114	1.51	.131
17	.011	.12	.904
18	.149	1.60	.113
19	.126	1.18	.240
20	.218	2.38	.019*
21	.206	1.33	.186
22	.597	5.36	<.0005*
23	.344	3.08	.003*
24	.057	.63	.525
25	.114	1.14	.254

*significant at .05

20. When you listen to music, do you respond feelingfully or emotionally?

22. Do you intend to continue, after this class, to learn more about "classical" music?

23. Do you intend to continue, after this class, to learn more about music structure or theory?

None exhibited a significant negative gain score.

Again an effort was made to find a tendency among those items that received a significant gain score. In Chapter III it was reported that a factor analysis was done on Habits and that two factors had been identified, Performance and Musical Curiosity. Of the nine items found in the performance factor, three of them exhibited significant positive gain scores; numbers 4, 6, and 11. Of the seven items in the Musical Curiosity factor, four had significant positive gain scores; numbers 1, 2, 3, and 9. The tendency toward increased musical curiosity may be noted.

The complete Self-Appraisal of Musical Habits may be found in Appendix A.

CHAPTER V

SUMMARY AND CONCLUSIONS

Summary

The purpose of this study was to identify a shift in music affect by means of a newly developed test. The construct "music affect" was defined as behaviors that represent subjects' attitudes toward and valuing of music. The test, in two parts, was designed to determine the degree to which subjects 1) accept art music, (Art Music Acceptance Test or AMAT) and 2) exhibit musical habits as part of their lives (Self-Appraisal of Musical Habits).

AMAT consisted of 30 excerpts, each less than a minute long, representing many different styles and media of art music. These excerpts, chosen by the author and judged by a panel of experts to be suitable for the test, were re-recorded on magnetic tape. To each excerpt subjects were asked to respond with one of five behavioral descriptions which represented from no to very high acceptance of the music. The acceptance of art music was demonstrated to be an important indicator of music affect

for the subjects of this test; college-level music appreciation students.

The Habits survey consisted of twenty-five questions designed to determine the existence of certain music-related habits in subjects' lives and the extent of their participation in these habits. Reliability of AMAT and Habits was determined by Hoyt's internal consistency technique. Validity of Habits was determined by the known-group method, and content validity of AMAT was verified by a panel of experts.

One hundred and fifty-two subjects were given the test during fall semester 1973 and spring semester 1974. Eighty-seven students, comprising the experimental group, were enrolled in a one-semester music appreciation class. The independent variable or treatment was the music appreciation class. The remaining sixty-five subjects (control group) were drawn from English and speech classes and, during the time of the treatment, were neither music majors nor taking the music appreciation course. All subjects were students at a two-year college of the University of Wisconsin Center System at Fond du Lac, Wisconsin.

AMAT and Habits were administered in a pretest-posttest design that yielded mean scores. Data were analyzed by Analysis of Covariance and the Pearson Product-Moment Correlation. The level of significance was

set at .05. Analysis was performed using the Statistical Package for the Social Sciences, Version 6.0, and the Bastat program on the CDC 6500 computer at Michigan State University.

Conclusions

The conclusions drawn from this study apply only to the sample from which the data were obtained. Furthermore, the treatment used in this research is unique to the researcher: the same tests used in a music appreciation class with a different instructor may net different results. Based on the findings of this study, the following conclusions are presented.

1. The Habits survey is a reliable and valid instrument for determining the self-perceived music habits of samples from a two-year college population and the extent to which they participate in these habits.

2. The Art Music Acceptance Test is a reliable and valid instrument for determining the degree of acceptance of art music by college freshmen and sophomores.

3. AMAT and Habits are sensitive enough to measure 1) a change in degree in their respective areas that can occur over a period of slightly more than three months, and 2) differences between samples of a two-year college student population.

4. After having attended a one-semester course in music appreciation, subjects scored significantly higher

in art music acceptance as measured by AMAT than they had before the course.

5. After having attended a one-semester course in music appreciation, subjects perceived themselves as significantly more active in music habits, as measured by the Habits Survey, than they were before the course.

6. If it is agreed that art music acceptance and music-related habits are behavioral indicators of music affect as pertains to music appreciation objectives, then it can be concluded that music-affect level and shift can be measured.

7. After having attended a one-semester music appreciation course, subjects registered a significant positive shift in music affect as measured by AMAT and Habits.

8. The degree to which subjects accept art music and participate in music habits was found to have a statistically significant, though low, correlation. While the treatment given to the experimental group improved the correlation, it was still low.

Discussion

An important consideration a researcher must deal with is whether or not the experimental and control sample groups are from the same population. Are the students who elect to take music appreciation different from their peers who, concurrently, are not taking the course?

It was reported in Chapter IV that the experimental and control groups were found to be not significantly different on pretest Habits. However, that was not the case for AMAT. At the pretest, the two groups appeared to be from different populations in regard to art music acceptance. An informal view of the experimental group at the time of the pretest may help to shed some light on this inconsistency.

Of the approximately fifty students who enroll in the author's music appreciation class each semester, it is clear that some students take the course only because it is required and convenient, and others because they are very interested in music. Representative attitudes include a range from belligerence to eagerness. Likewise, musical background varies from none at all, in the opinion of the student, to extensive.

It can only be assumed that most students enrolled for a music appreciation class would have some idea of the kind of music that would be studied which would account for the higher score of the experimental group. Yet there is evidence that some do not. For example, after listening to AMAT at the pretest, a few subjects complained of the music as being "all the same". This would seem to indicate considerable unfamiliarity with art music considering the variety included on the test. But many students could have talked to former students of the class or looked into the text to find out what kind of music to expect.

Care was taken not to influence the response of the experimental subjects at the time of the pretest. The pretest was given on the first day of class, previous to any class discussion, listening, or presentation of objectives. Yet it appeared that, as a group, the experimental subjects were somewhat more accepting of art music than their peers in the control group. But an analysis of the control group may alter this reasoning. Although ostensibly the same population as the experimental group, the control group would be likely to show negative bias against the AMAT for the following reasons: 1) Control subjects were not expecting to hear thirty minutes of art music in their English or speech classes. 2) Even though they weren't identified as a control group, the area of research in which they were asked to participate had, in most cases, nothing to do with their current studies. 3) The Habits survey was first and only ten minutes long. AMAT was second and took nearly the rest of a fifty minute period. The students' resentment and boredom was obvious at times. The attitude of resentment and boredom was not evident in the experimental group. Some students of the control group didn't come to class when they knew the test wasn't course-related.

After weighing all of the conditions which might have influenced the subjects' response to AMAT on the pretest, it is the opinion of the researcher that the single most important condition was that the music appreciation

students, or experimental group, were somewhat disposed toward art music upon entering the class the first day. This does not invalidate the findings of research however. The analysis of covariance technique was used to compensate for these a priori differences.

Although Null Hypothesis III was reported rejected in Chapter IV, the low correlation between the Habits and AMAT scores is reason to review the findings. It is generally accepted that correlations over .70 represent a high correlation and that correlations in the .30s and .40s do not allow the researcher to predict one variable by knowing the other. The reason the correlation coefficients found in this research, .33 and .46, are interpreted as significant is due to the sample size. The larger the sample size, the lower the r needed to be significant. For example, with an N of 151, the r that is considered significant at P = .05 is .159, a correlation no researcher would use for predictions. Another way of interpreting a correlation coefficient is by deriving a percentage from it. This can be done by squaring the r and multiplying by 100. Therefore the percentage interpretation of r = .33 is 10.89% and r = .46 is 21.46%. In other words, at the posttest, only 21.46% of the variance in the Habits scores can be explained by the variance in the AMAT scores.

It must also be remembered that in the four pilots where a correlation was computed between Habits and AMAT,

the r ranged from -.07 to .36. In all cases the N was too small for these correlation coefficients to be significant.

The low correlation between AMAT and Habits proved to be an interesting adjunct to this study. Null Hypothesis III was not considered during the initial planning of this research. Then, as the tests were developed, it was thought that each test might function as concurrent validity to the other: the results of one test could be predicted by the results of the other. The Art Music Acceptance Test and the Habits survey would both measure the same thing: music affect. The low correlation between the two was not expected and merits some discussion.

Art music acceptance is apparently a unique musical condition, not related to the rest of the habits as a whole or individually. As reported in Chapter IV, the habit on the survey with which art music acceptance correlated highest was one that asked the subject if they intended "in the future, to learn more about 'classical' music". The correlation was .63. Because of the reference to classical music, the reason for the relatively high correlation is apparent.

Based on the findings of this research, two assumptions can be made: 1) People not musically active can exhibit a high degree of art music acceptance. 2) People who are musically active are often not receptive to art music. Among these musically active college freshmen and

sophomores, one might expect to find many people who have participated in high school music performance programs. The implication may be that high school music experiences do little to stimulate interest in art music.

A question that must be posed in this research is: Do the two tests measure the same thing? The only way that can be answered is by reviewing the construct "music affect". In Chapter I music affect is defined as "behavioral representation of music in an individual's life". This definition leaves room for all kinds of musical behaviors, including experiences with art music. The construct "music affect" is very broad and Habits and AMAT, though exhibiting little relationship, measure different aspects of the same construct. The Habits survey measures a much larger part of the construct because of the diversity of its items. The rather select area of music affect measured by AMAT does, however, have great importance in this study.

The rejection of Null Hypothesis I, regarding the increased acceptance of art music, was anticipated by the researcher. Nearly all the music used in the class was art music, not the same, but similar to that used on the test. Besides developing listening skills the intent of the instructor was to present the music in such a way that it would be accessible to and enjoyed by the subjects. These two classroom conditions, the music used and the fostering of acceptance of the music, substantially limit

the generalizability of this part of the study. This limitation is due to the fact that teaching for affective shift is not a universally accepted goal of music appreciation instructors and neither is the extensive use of art music universally practiced. Therefore the results of this research could, at best, be generalized to music appreciation courses having similar goals to the one stated in this research; the positive shift of music-affect level. Another variable arises in regard to teaching for affective shift. Whereas the methods for teaching in the cognitive or aural-perceptive areas are quite established and similar from instructor to instructor, no standard methodology exists for teaching in the affective area. Methods will vary greatly as will the results.

In regard to the rejection of the Habits hypothesis, the question may be asked, did the subjects really become so much more musically active in a period of one semester? During the development of the Habits survey, the researcher asked the same question. The possibility of Habits registering a significant change in the experimental group in the period of one semester seemed slim. Yet the findings show that all items on Habits showed a positive gain, thirteen of twenty being significant. (Chapter IV, Table 15.)

Many items on the survey could refer to activities done in, or for, the music appreciation class. An attempt was made to control this by including the following phrase

in the instructions read to the subjects at the time of the test: "All activities refer to those done outside of this class." (See Appendix G, Section E-5, first paragraph.) In spite of this instruction, the subjects' class-related activities undoubtedly influenced their answers.

If one were to consider the responses to the posttest Habits survey to be spuriously high, its value can be rationalized by considering Oppenheim's comments on this kind of survey. Oppenheim discusses questions of the following sort which are very similar to the Habits survey: "How often . . . in the last week (month, etc.)? "How often do you . . . on the average?" "When did you last . . . ?" He states:

> many people tend to answer all three types of questions in terms of what they think they habitually do or aim to do rather than in terms of facts. There is, however, one consolation: although such questions often yield divergent results in terms of absolute frequencies of, say, magazine reading or cinema (visiting), they may show similar trends in terms of relative group differences, such as age trends, social class distinctions, or regional variations.[1]

The Habits survey had already shown what Oppenheim refers to as "relative group differences" in the pilot described in Chapter III, Table 4. And the difference between the pretest and posttest could also be considered "relative

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[1]Abraham N. Oppenheim, Questionnaire Design and Attitude Measurement (New York: Basic Books, Inc., 1966), p. 57.

group differences" because the experimental subjects at the end of the semester were, by merit of the treatment, a different group. This difference was found to be significant. The question remaining is, what was different? Were the subjects more musically active or did they perceive themselves as more active, or did they aim to become more active? Any of these three conditions may reflect a shift in music affect, though the latter two reflect an attitude change rather than a change in behavior. Whereas an attitude change is desirable, it may not be as strong an indication of valuing as is behavior.

The question may be raised why there was no effort made to stratify the subjects according to musical experience, age, sex, or other variables. The answer is that the researcher was concerned with one independent variable, the treatment or method of instruction. Characteristically music appreciation classes are open to the general student, regardless of background. The music appreciation instructor must develop a course that applies to this homogenous group. Therefore it was the treatment or instruction, not any variables within the sample, which was of paramount importance to this research although interactions are sure to exist. If there was to be a shift in music affect, it would be as a result of the treatment. If there was to be any generalization made from this research, it would be to characteristically

homogenous groups such as the one used in this research.

Suggestions for Further Research

1. This research was based on the premise that art music acceptance and music-related habits are behavioral indications of music affect. The first suggestion for further research would be to conduct an experimental survey study to determine the factors in the construct "music affect". Instructors of college music appreciation courses could be polled to see if a positive shift in music affect was a goal of their instruction and, if so, what they perceive as indications of a shift.

2. Because the sample used in this research was representative of a small population, the research should be replicated using a larger and more diverse sample. In the replication, some important variables, possibly derived from the survey mentioned above, could be incorporated. The sample could be dichotomized by the objectives and teaching methods of the instructors; i.e., those that seek an affect change; those that don't seek an affect change. These variables could produce information regarding the effectiveness of instruction that would be of value to the instructors.

3. A suggestion perhaps more practical than one or two above deals only with the Habits survey. The Habits survey, because of its brevity and simplicity of construction, and because of a dearth of similar instruments,

could be given to a large number of variously aged subjects, standardized, and used to evaluate music affect or, at least, self-perception of music-related habits. The test could then be made available to the public.

4. A more cogent use of the Habits Survey, if it were again used in a pre-post design, would be to incorporate it in a longitudinal study. Surveying the subjects' habits six months or a year after the course is over may yield a much better indication of the effect of the course.

APPENDICES

APPENDIX A

SELF APPRAISAL OF MUSICAL HABITS

Instructions: In response to each question, choose which one of the alternatives best applies to you and record that number on your answer sheet. All activities refer to those done outside of this class. (The last sentence was included only on the Experimental group's questionnaire.)

1. How often do you listen to music critically or seriously as opposed to using it for "background"?
    1. Never.
    2. Seldom.
    3. Occasionally.
    4. Frequently.
    5. Very frequently.

2. How often do you read about music or musicians?
    1. Never.
    2. Seldom.
    3. Occasionally.
    4. Frequently.
    5. Very frequently.

3. How often do you discuss music with other people?
    1. Never.
    2. Seldom.
    3. Occasionally.
    4. Frequently.
    5. Very frequently.

4. (Wording for experimental group) Do you intend to enroll in another class in music?
(Wording for control group) Do you intend to enroll in a music class while in college?
    1. No.
    2. Probably not.
    3. I'm not sure.
    4. Probably.
    5. Yes.

5. Do you sing or whistle when you are alone, either working or relaxing?
    1. No.
    2. Yes, but seldom.
    3. Yes, occasionally.
    4. Yes, frequently.
    5. Yes, very frequently.

6. Do you ever play a musical instrument for your own entertainment?
    1. No.
    2. Yes, but seldom.
    3. Yes, occasionally.
    4. Yes, frequently.
    5. Yes, very frequently.

7. Do you perform with any musical organization? i.e. church choir, university band, folk or rock group, etc.
    1. No.
    2. Yes, but seldom.
    3. Yes, occasionally.
    4. Yes, regularly.
    5. Yes, more than one.

8. Do you subscribe to any music periodicals?
    1. No.
    2. No, but I would like to.
    3. No, but I intend to.
    4. Yes.
    5. Yes, more than one.

9. How often do you borrow records from a library or a friend?
    1. Never.
    2. Seldom.
    3. Occasionally.
    4. Frequently.
    5. Very frequently.

10. How often do you attend concerts?
    1. Never.
    2. Seldom.
    3. Occasionally.
    4. Frequently.
    5. Very frequently.

11. How often do you initiate music activities? i.e. Encouraging or arranging for two or more people to get together to play or sing, or go to a concert.
    1. Never.
    2. Seldom.
    3. Occasionally.
    4. Frequently.
    5. Very frequently.

12. Do you use music on the radio or recordings as a background to working?
    1. Never.
    2. Yes, but seldom.
    3. Yes, occasionally.
    4. Yes, frequently.
    5. Yes, very frequently.

13. How many instruments can you play, even a little?
    1. None.
    2. One.
    3. Two.
    4. Three.
    5. Four or more.

14. Do you ever make-up melodies to play or sing?
    1. Never.
    2. Yes, but seldom.
    3. Yes, occasionally.
    4. Yes, frequently.
    5. Yes, very frequently.

15. Do you ever experiment with instruments which you haven't studied seriously?
    1. Never.
    2. Yes, but seldom.
    3. Yes, occasionally.
    4. Yes, frequently.
    5. Yes, very frequently.

16. How frequently do you buy records or tapes?
    1. Never.
    2. Seldom.
    3. Occasionally.
    4. Frequently.
    5. Very frequently.

17. How often do you watch concerts on TV?
    1. Never.
    2. Seldom.
    3. Occasionally.
    4. Frequently.
    5. Very frequently.

18. Do you seek out music that you are unfamiliar with?
    1. Never.
    2. Yes, but seldom.
    3. Yes, occasionally.
    4. Yes, frequently.
    5. Yes, very frequently.

19. Do you seek out friends who are interested in music?
    1. No.
    2. Yes, but seldom.
    3. Yes, occasionally.
    4. Yes, frequently.
    5. Yes, very frequently.

20. When you listen to music, do you respond feelingfully or emotionally?
    1. Never.
    2. Yes, but seldom.
    3. Yes, occasionally.
    4. Yes, frequently.
    5. Yes, usually.

21. Are you learning, either on your own or with the help of a teacher, how to play an instrument or sing, or to improve your present ability?
    1. No.
    2. No, but I would like to.
    3. No, but I intend to.
    4. No, but I've made arrangements to do so.
    5. Yes.

22. (Wording for experimental group) Do you intend to continue, after this class, to learn more about "classical" music?
    (Wording for control group) Do you intend, in the future, to learn about "classical" music?
    1. No.
    2. Probably not.
    3. I'm not sure.
    4. Probably.
    5. Yes.

23. (Wording for experimental group) Do you intend to continue, after this class, to learn more about music structure or theory?
    (Wording for control group) Do you intend, in the future, to learn about music structure or theory?
    1. No.
    2. Probably not.
    3. I'm not sure.
    4. Probably.
    5. Yes.

24. How often do you get together with friends to sing or play instruments?
    1. Never.
    2. Seldom.
    3. Occasionally.
    4. Frequently.
    5. Very frequently.

25. How often do you get together with friends to listen to music?
    1. Never.
    2. Seldom.
    3. Occasionally.
    4. Frequently.
    5. Very frequently.

APPENDIX B

MUSICAL EXAMPLES USED ON AMAT

1. Chopin, Waltz in E^{b}, Op. 18, "Grande Walse Brillante"
   Adam Harasiewicz - Pianist - Philips PHC 9034

2. Wagner, Overture to the Flying Dutchman, Beginning
   George Szell - Cleveland Orchestra - Columbia
   MS 68 84

3. Verdi, La Traviata, Act I duet
   Anna Moffo - Richard Tucker RCA, LSC - 6154

4. Vivaldi, Concerto for Two Oboes, Two Clarinets and
   String Orchestra, 3rd Movement, Beginning
   M.H.S. 588

5. Roger Nixon, Nocturne, Middle
   Mark Hindsley - University of Illinois Concert Band
   Columbia Record Production XCSV - 121988

6. Dowland, Galliard: Can She Excuse Me
   Elizabethan Music - The Julian Bream Consort
   RCA LSC 3195

7. Johann Walter; Joseph, Lieber Joseph Mein
   Renaissance Choral Music for Christmas
   Nonesuch H - 71095

8. Mendelssohn, Elijah, "Is not His word like a fire"
   Tom Krause - Baritone, Ormandy - Philadelphia
   Orchestra RCA - LSC - 6190

9. Mendelssohn, Violin Concerto, Beginning
   Isaac Stern - Violin, Ormandy - Philadelphia
   Orchestra
   Columbia Special Productions XSV 148389 CSS 1211

10. Mozart, Eine Kleine Nachtmusik, Third Movement
    Columbia Special Productions XSV 148389 CSS 1210

11. Schubert, Erlkonig,
    Thomas Palmer - Baritone, Martin Katz - Piano
    Columbia Special Productions XSV 148382 CSS 1208

12. Stravinsky, Symphony of Psalms, Near Beginning
    Ansermet - L'Orchestra de la Suisse Romande
    London CS 6219

13. Ponce, Valse
    Andres Segovia - Guitar Decca DL 9795

14. Rossini, The Barber of Seville, Finale of Act I
    Callas - Gobbi - Alva Angel 35936

15. Tchaikovsky, Piano Concerto #1, Third Movement
    Beginning
    Gilels, Reiner - Chicago Symphony RCA VICS - 1039

16. Mozart, String Quartet in B flat K.589, Movement II
    The Fine Arts Quartet Concert Disc 259

17. Shostakovitch, Symphony #5, Op. 47, Movement IV
    Bernstein - New York Philharmonic Columbia
    MS 6115

18. Bach, Christmas Oratorio, Chorale: Schaut hin
    Karl Munchinger - Conductor London OSA 1386

19. Rimsky-Korsakov, Sheherazade, The Festival of Bagdad
    Silvestri - Bournemouth Symphony Orchestra
    Capital SP 8678

20. Handel, The Water Music, Air
    Szell - London Symphony Orchestra London CS 6236

21. Stravinsky, Petruska Suite
    Stravinsky - Conductor, Columbia Symphony
    Orchestra
    Columbia ML 6411

22. Verdi, La Traviata, Act I, Soprano Aria
    Anna Moffo RCA LSC - 6154

23. Brahms, Symphony #3, Movement I
    Szell - Cleveland Orchestra Columbia MS 6685

24. Vaughn-Williams, Folksong Suite, Seventeen Come Sunday
    Fennell - Eastman Wind Ensemble Mercury SR 90388

25. Webern, Five Pieces for Orchestra, Op. 10 #3
    Columbia Special Productions XSV 148399 CSS - 1216

26. Vivaldi, Gloria, Beginning
    Scherchen - Vienna State Opera Orchestra
    Westminister Gold WGS - 8132

27. Gluck, Orfeo ed Euridice, Dance of the Blessed Spirits
    Richter - Munchener Bach Orchester DG 139268169

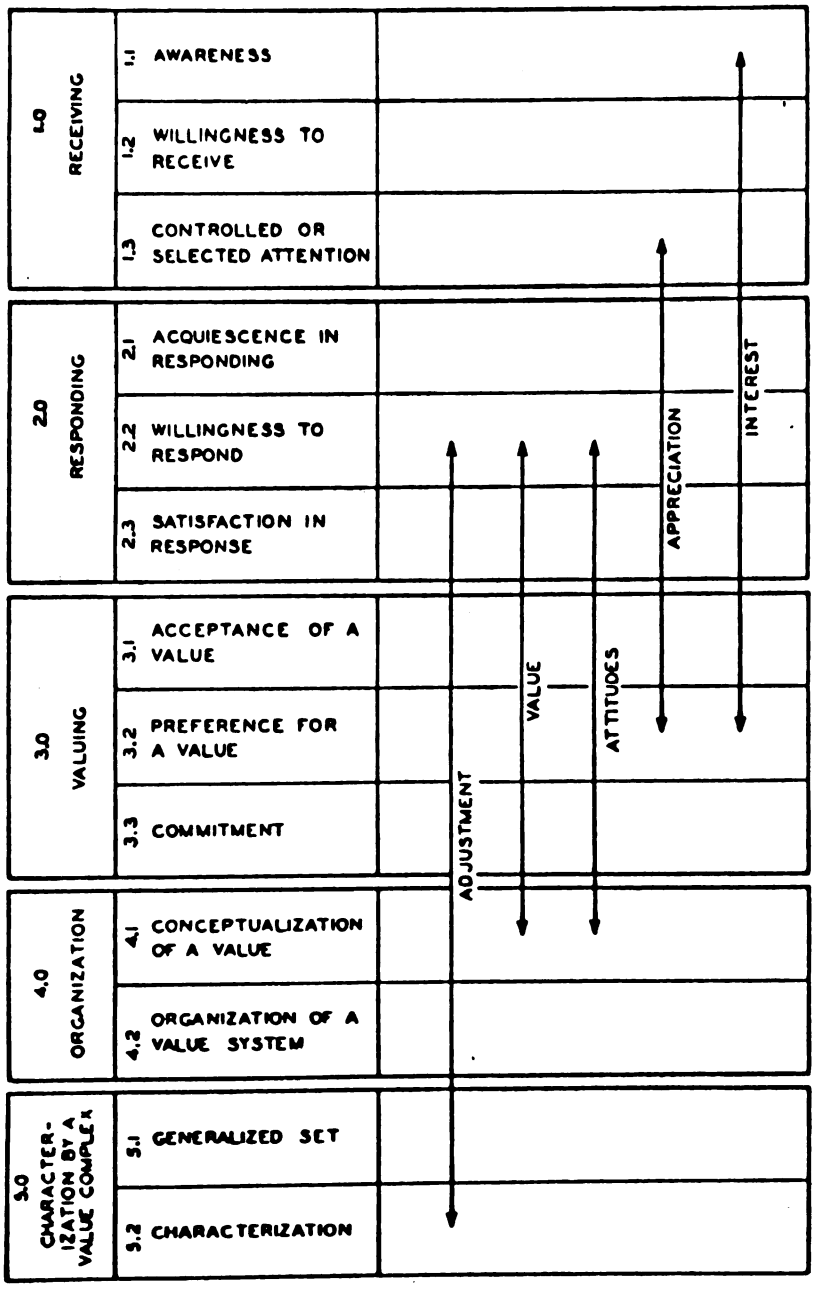
28. Bartok, Concerto for Orchestra, Fifth Movement
    Reiner - Chicago Symphony RCA VICS - 1110

29. Bach, Prelude and Fugue in E Major, BWV 552
    E. Power Biggs - Organ Favorites Columbia MS 6748

30. D. Medley, O Happy Souls
    Robert Shaw Chorale - Sing to the Lord RCA LSC 2942

APPENDIX C

THE RANGE OF MEANING TYPICAL OF COMMONLY USED AFFECTIVE TERMS MEASURED AGAINST THE TAXONOMY CONTINUUM[1]



[1]David R. Krathwohl, Benjamin S. Bloom, and Bertram B. Masia, Taxonomy of Educational Objectives, Handbook II: Affective Domain (New York: David McKay Co. Inc., 1964).

APPENDIX D

EXPERTS EVALUATION OF AMAT TAPE
OF MUSICAL EXAMPLES

In constructing a test for research in music appreciation instruction, I have prepared a recording of thirty examples representing a wide range of art music. You are asked to evaluate each selection on the basis of the following criteria:

1. The quality of the composition as an example of art music.

2. The quality of the performance.

3. The quality of the recording, i.e., extraneous noise.

Each selection is forty to fifty seconds long and is followed by ten seconds of silence during which time you may evaluate it by the three criteria on a 1 through 5 scale in this manner:

(Unacceptable) 1 2 3 4 5 (Acceptable)

Selection Number	Composition	Performance	Recording
1			
2			
3			

(Continued through 30)

APPENDIX E

INSTRUCTIONS FOR ART MUSIC ACCEPTANCE TEST

You will hear thirty short musical examples. At the end of each example you will be given a few moments to appraise your reaction to the music. Beginning at number 26 on your answer sheet record your response, 1 through 5, according to the following descriptions.

1. If given the choice I would not listen to this again.
2. Although I don't particularly like this, I would listen to it again.
3. I would like to hear this selection again before I make up my mind.
4. I would enjoy hearing this again.
5. I will make an effort to hear this again.

APPENDIX F

QUESTIONNAIRE USED IN DETERMINING
ANSWER FORMAT ON HABITS

Instructions:
Choose which group best represents a continuum of frequency. If you perceive a better continuum than any listed, please list the terms in H. You may use any terms or phrases.

A.
1. Never
2. Seldom
3. Occasionally
4. Frequently
5. Very frequently

B.
1. Never
2. Occasionally
3. Often
4. Frequently
5. Very frequently

C.
1. Never
2. Once in a while
3. Quite often
4. Frequently
5. Very frequently

D.
1. Never
2. Seldom
3. Quite often
4. Often
5. Very often

E.
1. Never
2. Infrequently
3. Quite frequently
4. Frequently
5. Very infrequently

F.
1. Never
2. Infrequently
3. Not very often
4. Frequently
5. Very frequently

G.
1. Never
2. Seldom
3. Occasionally
4. Often
5. Frequently

H.
1. Never
2.
3.
4.
5.

APPENDIX G

INSTRUCTIONS FOR ADMINISTERING THE TEST

Read A, B, or C as appropriate.

A. Instructions for the Pretest (Beginning of the semester) Experimental Group (Music Appreciation class) - Question booklet with a white front page.

Begin reading

> Today I am asking your cooperation in a research project in music education. The goal of this research is the improvement of instruction in Music Appreciation. If you are a music major, you are excused from today's project and may now leave the room.

Go to D.

B. Instructions for the Pretest (Beginning of the semester) Control Group (not Music Appreciation students) - Question booklet with a yellow front page.

Begin reading

> Today I am asking your cooperation in a research project in music education. The goal of this research is the improvement of instruction in certain music courses. While we are also working with students in music courses, we need students who are not in those courses so that comparisons can be made. If you are a music major or are taking Music Appreciation (Introduction to Music Literature) during the current semester, you are excused from today's project and may now leave the room.

Go to D.

C. Instructions for the Posttest (End of Semester) for both groups: Experimental Group (Music Appreciation students) - White booklet; Control Group (not Music Appreciation students) - Yellow booklet

Begin reading

Once again I would like your cooperation in a research project in music education. If you are a music major, or didn't participate in this project at the beginning of this semester, you are excused from today's phase of the project and may now leave the room.

Go to D.

D. Pass out the pencils and the question booklets with the answer sheets inverted and placed between pages one and two. When you (and possibly a student assistant) begin to pass out the booklets, read the following:

Please do not begin until I have given you the instructions.

E. After you have completed passing out the materials, read the following instructions:

1. Remove the answer sheet which is inserted into your question booklet.

2. In the upper left corner of the answer sheet, do not write your name; write the instructor's name; write the section number of this class.

3. In the lower right corner of the answer sheet, find the box marked student number. In it write the last six digits of your social security number. Fill in the appropriate numbers below the boxes where you have written your social security number.

   (Read the following only if a student tells you he doesn't have his social security number: If you don't have your social security number, enter your name in the box above.)

4. Find the box labeled "Course". At the top of the left column of numbers write the number:

   5 (Experimental Group)

   or

   6 (Control Group)

5. Take the question booklet and read the instructions with me. (Instructions) In response to each question, choose which one of the alternatives best applies to you and record that number on your answer sheet. All activities refer to those done outside of this class.

   Please begin answering the questions. Be sure to answer each one. When you finish, read the instructions on page five for the second part of the project which will begin in about ten minutes.

F. After ten minutes, or when everyone finishes, read the following:

   Please turn to page five and read the instructions with me. (Instructions) You will hear thirty short musical examples. At the <u>end</u> of each example you will be given a few moments to appraise your reaction to the music. Beginning at number 26 on your answer sheet record your response, 1 through 5, according to the following descriptions.

G. Begin the tape.

APPENDIX H

QUESTIONNAIRE TO IDENTIFY THE
MUSICAL ACTIVITIES OF COLLEGE STUDENTS

1. Please list all musical activities that you have recently or are presently engaged in. Consider the following areas:

   Performance
   - Singing or playing an instrument by yourself.
   - Rehearsing and/or performing with a group.

   Listening
   - Radio, records, tapes, TV concerts.
   - Purchase records, tapes, radio, stereo, etc.

   Responding
   - How do you feel when you listen to music?
   - What do you listen for?

   Creating
   - Do you make up melodies?
   - Do you compose?

   Organize
   - Do you organize playing or singing around friends?
   - Do you encourage friends to go to concerts?
   - Do you seek friends interested in music?

   Learning
   - Reading about, taking classes in, discussing music.
   - Do you subscribe to music periodicals?
   - Do you seek out new kinds of music?

   Supporting
   - Contributing time or money to musical organizations.

2. In what ways would you like to expand or increase your musical activities in the future?

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