PREDICTION OF SELF-PERCEIVED PERFORMANCE ABILITY
AMONG JUNIOR HIGH STUDENTS
THROUGH THE RELATIONSHIP OF MUSICAL APTITUDE AND SUCCESS

by

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ABSTRACT

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This study's central purpose was to develop selection
devices for junior high instructors to use in building con-
fident performance groups. An additional purpose was to help
the instructor to understand learning potentials of individual
participants in order to provide a sufficient music program.

Instructors faced with deciding who participates in a
musical performance group must look at various attributes of
the participants. One such attribute, self-perceived per-
formance ability, was defined as an indicator of potential
talent. How one anticipates he/she will perform, known as
expectancy for success, and musical aptitude defined as one's
potential capabilities in music regardless of innate ability
or formal training, were selected as predictors of self-per-
ceived performance ability by the investigator. These were
used as selection devices and aids in identifying individual
capabilities. The testing devices chosen for this task were
Gordon's (1965) Musical Aptitude Profile, which measured
musical aptitude; Fibel and Hale's (1978) Generalized
Expectancy for Success Scale measured the success variable,
and the criterion variable, self-perceived performance

ability, was measured by the investigator's own tool Musical Performance Confidence Scale (MPCS).

Students in three rural Eastern Kansas schools were administered the MAP, GESS, and the MPCS for three consecutive weeks, the same day, same time each week.

The statistical design for this study consisted of the summary statistics, mean and standard deviation, zero-order correlations among variables, and a multiple regression analysis.

The summary statistics revealed School Three's superiority among the three variables which suggested perhaps the class instruction paralleled the measurement of the tests more than the other two schools. Differences in test administration, attitude, motivation, class instruction or presence of fewer extreme scores could account for this variability.

The statistical evidence from the correlations and regression equation were low and allowed little explanatory power in the model. Weaknesses determined from these low relationships were: (1) MPCS designed to measure only performance tendencies not actual ability; and (2) the success variable was too generalized, not specific enough to measure musically.

Recommendations for further research or replication include the following: an attitude measurement regarding musical ability should be developed to indicate any differences

in environment or cultural background; a musical ability
rating scale of actual performances could provide stability in
measuring musical ability; and an investigation to determine
the possibilities of combing these notions for use as ob-
jective selection devices for performance groups.

ACKNOWLEDGEMENTS

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CHAPTER I

INTRODUCTION

A concern with the degree of success of music programs is
apparent in extensive literature published in the educational
journals. Much of this literature relates success with possible
prediction through various testing vehicles (Hufstader, 1974),
school social climate (Brookover, et al., 1978), musicality
(Helwig & Thomas, 1973), various individual personality attri-
butes (Sample & Hotchkiss, 1971), and performance (Stipek &
Hoffman, 1980). These non-instructional factors influence
student learning and achievement, and the multitudes of studies
surrounding classroom climate and environment have made
extracting and analyzing results an overwhelming and tedious
task.

These studies have served their intended purposes, by
providing an adequate amount of background literature as a
foundation for additional inquiries surrounding the component
parts of musical success. One relatively neglected component
appears to be musical aptitude of the junior high school
student (Young, 1971). This suggests a need for research using
success and musical aptitude as predictors of performance
ability in junior high school students. Scant literature is
available to describe the concept of musical performance

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ability. A wealth of material is available on performance in
psychological and educational journals. However, those
journals define performance to coincide with specific disci-
plines. In this study the researcher elected to define
musical performance ability as potential talent to be predicted
through musical aptitude and expectancy for success.

The research hypothesis was: There is no relationship
between performance ability and two predictor variables--
musical aptitude and a general expectancy for success among
seventh grade students. An additional question is posed:
Which variable is the better predictor of performance ability
if a relationship exists?

In face of pending budget cuts in public schools pre-
cipitated by events such as spiraling inflation, Pro-
position 13 (Geiogue, 1982), a tax revolt in California,
Proposition 2 1/2 (Morgan, 1982), a similar tax revolt in
Massachusetts, cuts in federal spending for educational pro-
grams, a reduction in program and teacher force could leave
deficiencies in the music program. Teacher cut-backs could
allow greater numbers in the classroom and a less tolerable
student-teacher ratio resulting in a need to defend measure-
ments and devices to determine who should and should not
participate in a junior high school music performance program.
The aptitude testing device may be one tool which will facilitate

the program and provide the teacher with data when confronting the administration with reasons to allow some students to participate while others are asked not to enroll.

In relating students' expectancy for success with musical aptitude, the empirical data can help a teacher eliminate waste of money, time, and man power and still continue to have a successful program. These data can aid the teacher in the selection process of who to place in what performing group, as well as aid the teacher in deciding what teaching technique to use to best fit the participants' needs. It is the researcher's aim to use these data as both an aid in the selection process for the performance area and as an aid in best fulfilling the needs and abilities of junior high school students. This study also may contribute to future research involving junior high school performance ensembles.

Performance Ability

Many decisions have to be made in a selection process in any given situation, and deciding who participates in a musical performance group is no exception. Instructors faced with selection decisions must consider various attributes of the participants. One attribute is performance ability, which can range from attaining a specified skill or concept to indicating a potential talent. Potential talent or ability is identified through musical aptitude and expectancy for success. The ability

of a junior high school student to perform has four guidelines:
(1) self-motivation-(the student's involvement in the music
program because he/she desires to be), (2) performance group
participation (which includes both instrumental and vocal
programs), (3) musical "literacy" (able to identify and compre-
hend fundamental music reading), and (4) past musical experiences.

Performance ability, of course, implies the ability to
"make music" by singing or playing instruments. Ability is a
broad term; it includes past experiences, formal instruction,
and what is likely to happen given further opportunity (Radocy
and Boyle, 1979, p. 263). One aspect of musical performance
ability is how the performer views his or her own performance
skills, i. e., perceived self-confidence in music performance
ability. In the study, the concern was not for actual per-
formance but for the junior high school student's self-
confidence in performance ability, developed by prior experience
and possibly predictable through measures of musical aptitude
and generalized expectancy for success.

<div align="center">Success</div>

A person is regarded as successful if he/she completes
goals or tasks that prove to be favored by some clientele or
evaluator. In the music field, success:

seems to be a function of a particularly fortuitous

combination of ability, training, hard work, per-
sonality factors, the availability of opportunities
to perform, the correspondence of one's performing
style and the current mood, and breaks, and luck.
(Brown, 1976, p. 338)

Whether in performance ensembles or general music class, any
one of these factors, either alone or in combination, could
contribute to the program's success.

In this study, how one anticipates he/she will perform or
produce is known as expectancy for success. The degree of
expectancy for success could be highly specific and technical
or, when necessary, more broad and general in nature. Most
situations, unless produced in an experimental atmosphere,
usually deal with the general or broad expectancy for success.
Success, as Fibel & Hale (1978) define it, is "the expectancy
held by an individual that in most situations he/she will be
able to attain desired goals." (p. 924) As a predictive factor,
an expectancy for success scale could facilitate information on
the impact of such expectancies on self-perceived performance
ability. According to Fibel & Hale (1978), who developed the
generalized expectancy for success scale (GESS), possible
relationships could be with "measure of other personality
variables . . ." (p. 929)

Musical Aptitude

Musical aptitude, which is distributed normally rather

than dichotomously, deals primarily with a person's potential

capabilities in music regardless of past experiences or innate

ability (Gordon, 1971, p. 5). Everyone has some degree of

musical aptitude.

> From an examination of score distributions provided
> with a musical aptitude tests, we.   .realize that
> a majority of persons have average musical aptitude,
> fewer persons have above or below average musical
> aptitude and only very few persons have very little
> or exceptionally high musical aptitude." (Gordon,
> 1970, p. 5)

With such diverse potential, it can be difficult for the music

educator to teach music successfully or to achieve the program's

full potential. Students tend to learn most efficiently when

their levels of potential can be met with utmost accuracy on

the part of the instructor. Using the demonstrated normal

distribution, an instructor might best place students in a

performance group based on normal distribution of aptitude.

However, the aptitude levels themselves may not predict changes

in ability, especially as students vary in their expectancies

for musical success.

Summary

Although it appears there are insufficient empirical data

to support significant relationships among self-perceived

performance ability, success, and musical aptitude, the re-

searcher believed that current trends toward budget cuts in

education made it necessary to complete this study to enable
the teacher of junior high school performance groups to select
confident students more efficiently and facilitate a successful
program. A student's expectancy of attaining desired goals
coupled with a high level of musical aptitude logically should
suggest achieving a desired self-confidence in the junior
high school music student. On the other hand, a student's
expectancy that he/she will not attain desired goals augmented
by a low musical aptitude should suggest low self-perceived
performance ability. It appeared to this researcher that the
data gathered by this study would aid in developing performance
classes at the junior high school level.

CHAPTER II

REVIEW OF THE LITERATURE

In reviewing the relevant research pertaining to the
relationships among performance ability, expectancy for success,
musical aptitude, several studies appeared to amplify the three
constructs. This chapter discusses significant literature
pertaining to both predictor variables and performance ability.
From the basis of these studies the researcher will develop a
need for the present study.

Performance Ability

One of the most difficult tasks in research is developing
a tool that sufficiently evaluates human behavior. Reliability
and validity should instill confidence in tests, scales, and
other measurement devices. One pertinent problem is using
humans as evaluators because of their tendency to be lenient, be
influenced by peers, and/or exhibit a lack of knowledge of
content.

In discussing a doctoral study designed, in part, to create
a measure of vocal production, Schmalstieg (1972) outlined six
steps which were successful in obtaining reliability and validity
necessary for her research project. She developed a programmed
course to teach development and recognition of sung vowels. A

Uniform Vowel Production Test was used to assess the sung
vowels ay-ee, ee, ah-ee, oh-oo and oo. The six steps in test
construction were (1) specifying definitions of behavior,
(2) providing exact descriptions and examples of accurate
behavior as bases for evaluation, (3) simplifying and making
consistent the divisions in the measurement scale, (4) ran-
domizing subject performance order to counteract rating errors,
(5) conducting a pilot study to evaluate the measures of
reliability and validity, and (6) selecting judges after much
consideration and giving explicit instructions regarding use
of the scale.

The Schmalstieg review enhanced the need for objective
measures of musical behaviors to establish standards of quality.
With this thought and process in mind, the researcher developed
the Musical Performance Confidence Scale as a criterion measure
to assess self-perceived performance ability.

In a recent study, Brand and Burnsed (1981) used five
predictor variables to assess music error-detection in pre-
recorded instrumental performances. They are number of instru-
ments played, ensemble experience, ability in music theory,
skill in sightsinging and ear training, and pre-college years
of private instrumental instruction. The purpose was to develop
a tool that would help band instructors to conduct efficient
rehearsals by evaluating student performance errors.

The experimenters developed assessment tools for musical background and music error-detection. The Music Background and Information Form mainly contained items regarding private instruction, which the subjects received prior to their college experiences. The Music Error-Detection Inventory (MEDI), adapted from the Choral Performance Rating Scale (Cooksey, 1977), was based on six evaluative categories; interpretation and musical effect, precision, tone control, tempo, balance and blend, and dynamics. The instrument was administered to a selected group of undergraduate instrumental music education majors (n=21) at the University of Houston. The empirical data on the other variables, ability in music theory, skill in sight-singing and ear training, were based on grades received in the respective classes. The number of instruments played was based on evaluations by both the subjects and experimenters.

Means and standard deviations were computed for all predictor variables. Next, correlations were calculated between the MEDI and each of the five predictors. Correlations between all variables were used to assess any possible relationships.

The results showed no significant relationships between the MEDI and the five predictors and among the five predictors themselves. There are two possible reasons why the results were insignificant: First, the authors suggested that the MEDI was not a reliable measure and did not actually measure skill in

error-detection. Second, perhaps not enough subjects were used to increase the validity of the study. Data analysis seemed inadequate for the study's intended purpose. Further analysis such as a multiple regression equation might enable more accurate prediction and help make the study relevant.

Brand and Burnsed cited musical background as important in the development of music error-detection. The researcher assigned as much importance to musical background as part of the self-perceived performance ability assessment tool. If an instructor can obtain as much knowledge of the student's past experience as possible, then perhaps the chances of success by the performance group can be enhanced.

Performance is bounded by success and failure. Successful completion of a task allows one to rally toward the next performance experience with renewed vigor while failure causes frustration and a desire not to repeat the happening. Such an experience can hinder optimal learning and performance. Stipek and Hoffman (1980) studied this problem by comparing high, average, and low achieving first and third graders on their expectancies for success before a task, their expectancies of future success, and reasons for failure at a task. The subjects (n=20) consisted of ten males and ten females randomly selected from a lower-middle class, racially mixed elementary school. The first and third grade teachers placed

their students into three groups on the basis of their own appraisal of each student's academic achievement. Teacher evaluation was used instead of a standard test to more closely replicate a classroom experience. A graduate student tested each subject individually in a private room. The test consisted of three trials. Before the first trial, the subject saw a card containing the numbers from zero to ten and predicted how many words he/she could form out of ten possibilities. The response was recorded. Next, the child was given ten sets of scrambled letters and asked to form a word from each set. Forty-five seconds were allotted for completion of each set. If time expired and the task was not completed, the subject went on to the next set. The test was designed so that failure at the task was assured. After each trial, the subject responded to six questions which were designed to determine the reason for their failure. At the end of the test, the children predicted how well they would do if they have ten more sets to do. The investigator conducted an analysis of variance on the expectation for success before the task and on the causes for failure and computed correlations of the four causal aspects of failure and expectations for future success.

Stipek and Hoffman's results were of particular interest and relevance to the present study. Comparison of the males and females was important, as was comparison of expectation

of success with previous academic success. The findings
indicated no significant differences in the girls, but
significant difference among the boys. For the most part,
luck, task, difficulty, and effect were not attributable to
failure; however, ability showed a relationship for the boys,
but proved insignificant for the girls. The correlations
suggested that attributing lack of ability to past failure
was associated with low expectations for future success, but
only in low-achieving students.

In contemplating Stipek and Hoffman's results and their
pertinence to the present research, the investigator believed
ascertaining expectancy for success as a determinant of ability
was worth pursuing. Children of self-proclaimed low ability
reported low expectations for future success. An interesting
augmentation of the study would be to parallel the relationship
of expectancy for success and self-perceived musical performance
ability with a child's self-proclaimed low ability and low
expectations for future success.

Hedden (1982) examined the predictability of music
achievement through four variables: Academic achievement,
attitude toward music, self-concept in music, and music back-
ground. Standardized tests were used to operationally define
the variables. For musical achievement, Hedden used the Music
Achievement Test, Level One (MAT) (Colwell, 1969); for the

attitude variable, Hedden's own Attitude Toward Music Scale
(ATMS) was administered; the Iowa Tests of Basic Skills (ITBS)
(Hieronymus, Lindquist, and Hoover, 1978) was the measurement
tool for general achievement; Svengalis's (1978) Music Back-
ground scale (MB) evaluated musical background; and, finally,
another Svengalis tool, the Self-Concept in Music scale (SCIM)
(1978) assessed self-concept.

The subjects were fifth and sixth grade students from
two Midwest elementary schools. Two music specialists, having
at least five years of experience, administered the ATMS,
SCIM, and MB. The investigator administered the MAT one week
later.

Multiple regression techniques were used to analyze the
data. Each school was evaluated alone since preliminary
statistics proved it necessary. At school one, academic
achievement and self-concept in music were found significant
for the MAT. At school two, the academic achievement and
attitude toward music were the most significant. Academic
achievement at both schools proved to be the most accurate
predictor of music achievement.

The multiple regression procedure in Hedden's research
indicated the magnitude of the relationship between a
criterion variable and several predictors. The author expli-
citly described the procedure and suggested that it be

replicated at other grade levels. The investigator planned to follow a multiple regression design.

Hedden speculated positively about music aptitude as a possible predictor of musical achievement and implied that the significant predictors, attitude toward music and self-concept in music, be emphasized by music specialists to heighten music achievement. The author's study attempted to predict self-perceived performance ability by expectancy for success and musical aptitude, and thereby apply Hedden's implication.

There seems to be a parallel between music achievement and musical performance ability: both are traits of music behavior. Music achievement has been extensively studied, the other, as of yet, is a vague subject. The proposed plan was to pursue and establish one aspect of the subject as another possible avenue in helping junior high music specialists design successful programs.

Success

One of Hufstader's (1974) main assumptions was that using one test alone did not suffice as a predictor of success. The variables in this study were musical aptitude, academic achievement, intelligence, and psychomotor skills as measured by using various techniques such as a tapping board, a

tachistoscope, a rotary pursuit apparatus, and a visual
choice reaction timer. The study's purpose was to use these
variables to predict success in beginning instrumentalists.
Four urban North Carolina band directors classified their
students from a set of criteria as having either top, medium
or low achievement. The subjects were primarily fifth
graders (n=34). Using the top one third and the bottom one
third of the subjects, Hufstader administered Gaston's (1954)
A Test of Musicality and several psychomotor tests. The
composite scores of these two tests, plus the student scores
on intelligence and academic achievement tests, subsequently
were entered in a discriminant function analysis in which the
results showed that each variable contributed to the
prediction of success as indicated by teacher ratings in
beginning instrumentalists.

A major emphasis of Hufstader's study was to show the
importance of using more than one variable to help predict
success of a musical group. This emphasis coincided with
that of the researcher's proposed study to use another variable
beside musical aptitude to investigate a relationship between
predictor variables and self-perceived performance ability in
a junior high school performance group.

Sample and Hotchkiss (1971) investigated whether certain
personality characteristics and vocational interests were

associated with success in instrumental study. The devices
used to measure the respective variables were the Kuder
Preference Record, Vocational Form C, and the IPAT Junior-
Senior High School Personality Questionnaire. Some of the
vocational categories were musical, mechanical, scientific,
and clerical. A few of the personality characteristics were
enthusiasm, intelligence, control and tension. Subjects were
268 seventh graders having previous instrumental experience
of up to two years in six schools located in Ohio and Pennsyl-
vania. Students from Youngstown State University administered
the tests in places where they were associated with junior high
music programs. F and t tests were used in order to determine
significant differences between variances and the mean on the
tests. The results have implications for further research
with the following findings: Sex differences on most of the
scales were great; band boys were significantly higher than
non-band boys in various scales, and the same held true for
the girls; heterogenous instrumental groups showed no
significant differences in personality characteristics and
vocational interests.

A suggestion by the authors was that a subsequent research
plan could include definition of relationships between musical
participation and measureable traits of interests and personality.
The authors proposed this possibility:

It would be desirable to conduct further research in the predictive value of interest and personality measures with respect to musical participation of junior high school students. (p. 309)

The writer's study related a predictive value of interest, expectancy for success, and musical aptitude in performance groups of junior high school students.

Lehman (1969) discussed the sharp decline in the interest of musical aptitude testing, a notion notable in view of the intense activity of the earlier decades of the century. In Lehman's view, it appeared that an increasing number of music educators questioned the validity of the aptitude tests and the basic assumptions on which the tests were predicated.

One of the most commonly used and questioned aptitude tests was developed by Carl Seashore. According to Lehman, Seashore argued that his battery of tests was valid and that his tests must be validated "only in terms of how successfully the factor being measured has been isolated." (p. 17) Even so, many music educators feared that the validity and reliability of the Seashore test and other musical aptitude tests available were not high enough to justify giving them.

Lehman's notion was fueled by the feeling that testing constituted an immoral and possibly an illegal invasion of privacy. One of his arguments stated:

Each individual should have the right to present his intellectual and artistic credentials to his

> colleagues, to potential employers, and to society
> in the most advantageous light, without the handicap
> of being forced to testify against himself, so to
> speak, in the form of prejudicial test results.
> (p. 19)

Another consideration was cultural deprivation, allowing that students from cultural backgrounds not experiencing adequate musical fundamentals had less chances of success on aptitude testing than students from an enrichened musical background.

Lehman maintained that it would be helpful to identify musical talent by an early age and that an aptitude test could be most beneficial in doing this, yet, the tests of the past have been disappointing in reaching this end.

At the time of Lehman's article, the Edwin Gordon (1967) test, Musical Aptitude Profile, was relatively new and Lehman felt it was well constructed and well standardized. He called it an "extremely important contribution to the study of musical aptitude", and felt it was "particularly notable for the thoroughness and care that have characterized its preparation." (p. 21)

Lehman briefly mentioned Bentley's (1966) Measures of Music Ability test which included pitch discrimination, tonal memory, chord analysis, and rhythmic memory, and was designed for children aged seven through twelve. The author felt it was the only technically adequate, standardized music test for the

age group.

The reported trend at this time was in music achieve-
ment testing rather than in music aptitude testing, and
leaned toward an evaluation of the instructional programs
rather than an evaluation of how the individual learns. The
feeling was that excellent scores on traditional tests were
no indication that a program was successful, and the converse
was true. Yet, Federal intervention with allocations of
federal dollars into the public school programs required some
tangible evidence that money spent promoted measureable results;
a device was necessary to assess the effectiveness of Federally
supported programs.

Lehman continued to discuss the advent of behavioral
objectives in constructing music education programs and supply
evidence for educational accountability. He stated that
behavioral objectives are important in the evaluation process
of music education and necessary for its competition within the
realm of academia.

Lehman closed by stating that aptitude testing was an
important problem and required consistent study. He felt
that existing testing instruments had limitations and require
patience if the proper amount of information is to be gained
from them.

Lehman expressed interesting and provocative views about

aptitude testing, achievement testing, and the use of
behavioral objectives for evaluative and accountability
purposes. The events of history, especially economic history
in this country, have supported his convictions while esta-
blishing firm ground for the need of testing devices. The
present budget cutting attitude forces the need for documented
data, and indicates a grave need for such as aptitude testing
in the public school to keep alive the junior high music pro-
gram.

Musical Aptitude

The Seashore Measures of Musical Talents (1939), a
group of tests designed to show possible musical prediction,
was used by Dawkins and Snyder (1972), who compared the norms
of the Seashore measure with those of disadvantaged junior high
school students. The Seashore was chosen for its ability to
measure an individual's ability, and the possible instructional
efforts that satisfy that ability. A Title I school, located
in a suburb of Washington, D. C., was selected as the source
for the subjects, including 120 poverty-stricken blacks and
whites. Music grades and scores on the Seashore tests were
used as a predictor of success; scores were compared for black
and white students, male and female; black males and white
females; and white males and black females. These Seashore

scores were compared with the national norms by using a t test to identify any significant differences. The study revealed significant difference between the national norms and the culturally deprived student. Yet there are no significant differences between the sexes, grades, and Seashore scores.

The importance of this study is in the criteria set for using the Seashore measure, which allow music to be available to all who might benefit from it and "at the same time to seek and encourage the more talented students to make use of the enrichment that music can offer." (p. 444) Dawkins and Snyder reveal that more than one set of criteria is necessary for the selection process. Their research recommends that all who desire to participate in a music program should be allowed to do so. Yet, they speculate that if there is a lack of facilities, funds, or equipment, the use of musical aptitude tests and observation of various student attributes must be of considerable importance when limiting a program.

The findings of this study and the recommendations of the authors support the rationale for the present study because 1984 finds the junior high music teacher faced with funding problems, lack of facilities, and reduced equipment budgets.

Williams (1972) endeavored to ascertain what effects instruction, socio-economic status, and musical aptitude

have on attitudes toward music. Williams divided the
research into four purposes. The first was to determine
if there was a difference in attitude toward current popular,
folk, serious chamber, serious symphonic, and serious vocal
music between experimental students, who received musical
instruction, and control students, who did not. The study's
second purpose was to determine if experimental students of
three different socio-economic strata differed in attitude
toward the selected types of music before and after instruc-
tion. The next purpose was to determine if experimental
students of two classifications of musical aptitude had
different attitudes toward the selected types of music before
and after instruction. The last purpose was to determine
which of the variables used in assessing socio-economic
status and musical aptitude accounted for the greatest variance
in attitude toward the selected types of music.

It was found that for the population studied, instruction
had no significant influence on attitudes toward folk, serious
chamber and serious symphony music, thereby indicating that
the instructional program was less effective in attitude develop-
ment in the aforementioned areas than in the areas of current
popular and serious vocal music.

The three levels of socio-economic status of those who
had instruction did not significantly influence the attitudes held

toward the five established categories. Hence, discovering

the socio-economic status may be of little assistance in

curriculum planning for attitude development. The discovery

that the two levels of musical aptitude used as classification

of subjects had no significant effect on attitude, thereby

proposing that musical aptitude is of little aid in the

development of curriculum.

None of the measures used to assess musical aptitude

and determine socio-economic status relates as a high predictor

variable of musical attitude on the five selected types of

music.

Young (1971) combined three types of standardized test

batteries to predict success; the Physical Aptitude Profile,

the Lorge-Thorndike Intelligence Test, and the Iowa Test of

Basic Skills. This testing demonstrated that "those achieve-

ment criteria that did not demand the ability to read music

showed a greater relationship with tests from the Musical

Aptitude Profile battery than did those that required music

reading ability." (p. 388) The most apparent in predicting

success were the Musical Aptitude Profile scores which required

the students not to interpret musical notation. When one test

is used as an indicator of success in music, the Musical

Aptitude Profile in conjunction with either achievement or

intelligence scores, provides good information; yet a more

accurate identification of success is good scores on a
combination of all three tests.

The study finds that musical aptitude's role in deter-
mining musical attainment is important, but less influential
on most kinds of musical achievement than academic achieve-
ment. The role of musical aptitude in musical attainment
increases with years of study, while the relationship of
intelligence and academic achievement to musical attainment
becomes less noticeable with additional years of music study.

Young based this work on an elementary school control
group with findings that indicate the success predictive
force of the MAP increases with years of study. The focus
of this present study was the junior high school. The hope
was to use the findings of the Young study and allow the
Musical Aptitude Profile to predict the success of the instru-
mental and vocal music students in the junior high program.

Schleuter's study (1978) was designed to determine the
effect of high or low music aptitude levels, sex differences,
handedness, eyedness, and footedness on music achievement
and executive skills of elementary instrumental music students.

The music aptitude data were provided by composite scores
of 104 elementary instrumental music students on the Musical
Aptitude Profile. The findings show the students' physical
dexterity with musical instruments is significantly affected

by music aptitude, although high aptitude students scored

high on rhymthic, tonal, and performance skills.

The results show "no conclusive evidence that combina-

tions of handedness, eyedness, footedness, sex differences,

and musical aptitude levels, or sex differences on the

executive skills of instrument performance." (p. 29) Hence,

the beginning stages of instrumental training "is (sic)

influenced mainly by the music aptitude level of the student

and not by handedness, eyedness, and footedness dominance

or sex differences when considered individually or in combina-

tions including music aptitude." (p. 30)

Since the beginning stages of instrumental training

are mainly influenced by musical aptitude, the researcher

tends to believe that musical aptitude mainly influences the

success of the performance-oriented student, which in turn

influences the student's self-confidence in his or her per-

formance ability.

Summary

In assimilating the conclusions, recommendations, and

suggestions from prior literature for possible further

investigations into the problem of using expectancy for success

and musical aptitude as predictors of self-perceived performance

ability among junior high students, the researcher has ascertained

the need for the study. In support of the success variable,
the importance of using more than one variable to help predict
success of a musical group was emphasized; the need to define
relationships between musical participation and measureable
traits of interests and personality measures was utilized
and the use of musical aptitude testing, while not totally
conclusive, is useful if skillfully handled. The support
for musical aptitude testing was demonstrated four-fold by
suggesting that: (1) the use of more than one set of criteria
for the selection process to provide the fullest opportunity
for musical experience is recommended; (2) musical aptitude
mainly influences the success of the performance-oriented
student; (3) musical aptitude can help guide considerations
of attitude and curriculum; and (4) musical aptitude's role
is important in determining musical attainment. An apparent
need for developing a tool to qualify the perceived performance
ability as one indicator of a "successful" junior high
instrumental student led the researcher into proposing this
study for the purpose of evaluating prediction of self-
perceived performance ability.

CHAPTER III

METHODS

This study's purpose was to determine the relationship
between generalized expectancy for success, musical aptitude,
and self-perceived performance ability among junior high
students. A multiple regression equation was designed to
relate the scores from the Generalized Expectancy for Success
Scale (GESS) developed by Bobbi Fibel and W. Daniel Hale (1978),
the Musical Aptitude Profile (MAP) by Edwin Gordon (1965), and
the Musical Performance Confidence Scale (MPCS) developed by
the investigator. The MPCS was the criterion variable. The
information from the equation was supposed to answer the
question: Is there a relationship between a generalized ex-
pectancy for success and musical aptitude and will they
accurately predict junior high students' perceptions of
their performance ability.

Variables

Performance Ability

The Musical Performance Confidence Scale (MPCS) was
designed to evaluate perceptions of talent in seventh and
eighth grade students. The 27 items used the Likert scale
technique in which the subjects were asked to respond to the

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stems with "Yes", "No", or "Sometimes" (or Y, N, and S
respectively). The subjects were asked to circle the letter
that best fits their response. The options were kept to a
minimum to simplify measurement. This scale was built on
four guidelines. First, the scale was geared toward the
average, self-motivated student. This was based on the
assumption of normal distribution in which most students are
found to be in the middle of the curve than at the extremes.
Secondly, the scale was not limited to one musical discipline,
but includes the instrumentalists and vocalists. Third, it
included the musically literate and illiterate student.
Finally, the MPCS accounted for the musical background of
the respondent. The items written for each guideline were
in no particular order. The items were scored by using the
following key: Y=3, N=1 and S=2. The reasons for this mode
of scoring was to reflect positiveness toward the behavior in
question. The greater the student's self-confidence in per-
formance, the greater the total score would be.

Reliability and validity were demonstrated in a pilot
study conducted before the actual testing. The split-half
procedure, followed by the Spearman-Brown prophecy formula,
was used to estimate reliability. Comparison of music grades
received the previous year with the MPCS showed predictive
validity.

Success

The Generalized Expectancy for Success Scale (GESS),
developed by Fibel and Hale, was used to assess "the
expectancy held by an individual that in most situations
he/she will attain desired goals." (p. 924) The scale con-
sisted of thirty items, each stem beginning with, "In the
future I expect I will . . ." (p. 925) Responses to the items
were based on the Likert scale with a range from one (highly
improbable) to five (highly probable). The respondents were
asked to circle the number that best fits their response to
the item. The seventeen positive and thirteen negative stem
items were ordered randomly. The direction of the items were
in the positive direction of success, meaning that a high
score designates a high expectancy for success. (p. 925)

The main reason this scale was chosen for this study
was that it was a generalized measure and used to broadly
define need or novel areas. Another reason was due to its length
and ease of administration.

One problem with the GESS is that its reliability and
validity were demonstrated for only the college student
population. This procedure is outlined in the methods section.

Musical Aptitude

The Musical Aptitude Profile was selected as the measure
of musical potential a junior high student may have because of

the Profile's major purpose, which "is to act as an ob-
jective aid in the evaluation of students' basic musical
aptitude so that the teacher can better provide for individual
needs and ability." (Colwell, p. 158) Another purpose was to
help improve music instruction to meet these needs and
abilities. Junior high students were a part of the stand-
ardization norms, and eighteen small communities comprised
the sample. This study used small towns as a basis for the
population source.

The MAP consisted of three parts. Part I, "Tonal Imagery,"
contained twenty pairs of items in each of two subtests,
"Melodic Variations and Harmonic Variations." Each subtest
was instructed and responded to in similar ways. Two
musical examples were played for each item, the second of which
may or may not have showed a melodic or harmonic variation of
the first, depending on the subtest. The subject then was
asked to indicate whether or not a change had occurred in the
second repeated example. Part II, titled "Rhythm Imagery,"
consisted of two subtests, "Tempo and Meter". These subtests
were handled in similar ways as Part I. There were paired
musical examples, and the subject indicated whether or not
the tempo or meter changed from the repeated example to the
first example. Part III, entitled "Musical Sensitivity,"
contained three subtests, "Phrasing, Balance, and Style."

In the first subtest, contrasts in musical expression were
identified by the subject; the second subtest contrasted
rhythmic and melodic endings; the third subtest measured a
subject's ability to interpret style. (pp. 195-196)

Students can understand the items easily whether or not
they have had previous music training. The instructions and
test items were on a recording, and the test was designed to
be easily administered during three fifty-minute periods
(Colwell, p. 196).

Success Pilot Study

Twelve seventh grade students, from one school similar
to those of prospective schools for participation in the main
study, were chosen randomly for testing the reliability and
validity of the GESS. The reliability was tested by the
split-half procedure in which the scale was split into two
halves (odd-numbered and even-numbered items), then corre-
lated. Then the Spearman-Brown prophecy formula was used
to predict the whole test reliability.

To test for validity, the investigator supplied the
counselor, psychologist, or principal at the participating
school with a list of students' names. That person supplied
composite scores on standardized tests given in the re-
spective school. Then the GESS was administered to those
twelve students. A rank-order correlation between the GESS

score and academic achievement composite score was completed
to show concurrent validity (Tuckman, 1978, p. 164). After
the reliability and validity were determined, then the main
study procedure began.

Musical Performance Confidence Pilot Study

The same procedure for the GESS in testing reliability
was used for the MPCS: The split-half technique followed
by the Spearman-Brown formula.

To establish concurrent validity, the MPCS was
correlated with percentiles from music grades received the
spring term of the previous year by means of a rank-order
correlation.

Procedure

Subjects

Eighty seventh grade students were selected from three
different Eastern Kansas junior high schools to participate in
the study. The eighty subjects were selected randomly, via a
table of random numbers, from the total population of students
involved in junior high instrumental and vocal performance
groups. The investigator administered the GESS, MAP and MPAS
to the respective groups.

Method

In April, at one week intervals, the population from

two schools was administered the GESS and the MAP (Parts I,

II, and III respectively). The following August these same

groups were administered the MPCS. The testing administration

occurred on a given week, a given day of each week, at a

given time. The answer sheets were numbered to ensure anony-

mity of the subjects. A list of names corresponding with

numbers was completed and kept by the instructors of each

school so the students were given the same sheet and number

each time. The numbers on the GESS, MAP, and MPCS corre-

sponded and each school given a range of numbers so the data

were easily located in case of misplacement or loss. The

third school followed this same testing procedure in August.

The test order varied from the other two schools in that the

MAP, GESS, and MPCS was administered as GESS, MPCS, and MAP.

This was an effort to control for possible order effects.

Data Collection Procedures

Upon completion of each scale, the test administrator

collected answer sheets and put them in the envelopes provided.

The researcher then collected each envelope from the parti-

cipating schools and kept them until the next testing procedure.

The music instructors, administrators, and other faculty did

not have access to the material.

The same process for the scales sufficed for the MAP

except collection of the answer sheets required three trips

by the researcher to each school because the profile had

three parts. Collection was every day the part of the profile

was given rather than waiting for the total completion of the

profile. This guarded against possible loss of data.

Data Analysis

The data analysis process consisted of obtaining raw

scores for the criterion and predictor variables. From the raw

scores, the means and standard deviations were computed and

recorded for each variable. The large differences between

means and standard deviations suggested an analysis of

variance procedure should be the next step in data analysis.

The third step in analysis determined the correlation

coefficients of the GESS, MAP; MPCS, MPAS; and MPCS, GESS.

The final step in the analysis process was multiple regression

analysis. This technique predicted scores on the dependent

variables; generalized expectancy for success and musical

aptitude. The algebraic equation for the single analysis used

was: $Y'=a+b_1X_1+b_2X_2$. The algebraic equation for the combined

analysis was: $Y'_i=a_i+b_{1i}X_{1i}+b_{2i}X_{2i}$ $(i=1-4)$.

The total possible range of the scores on the GESS was

30-150, with the higher scores showing a higher expectancy

for success. These scores were known as X_1. The composite

scores of the MAP used for this analysis are known as X_2.

The bipolar format of the MPCS had the range of 27-81 with

the high scores reflected a positive performance ability. The multiple regression analysis determined the formula for the Y scores from X_1 and X_2. Each set of data was computed first by school then in combination of all schools.

This data analysis was conducted by using the "Spring" program from Statistical Analysis Systems (SAS). This program was chosen due to the accessibility, ease of design, and amount of information received from the system.

CHAPTER IV

FINDINGS

In reporting the findings of this study, the empirical data of the MAP, GESS, and MPCS are considered alone and in combination. The multiple regression analysis is presented as the final segment of the data analysis.

Variables

Success Pilot Study

The first step in the data analysis was computation of raw GESS scores. Next, the split-half reliability, corrected by the Spearman-Brown prophecy formula, was computed at .947. Based on the premise that predictive validity is important for an instrument purporting to predict future performance based on present performance, the GESS validity was evaluated by acquiring the composite percentile scores of the selected students on the Iowa Test of Basic Skills (ITBS) (Hieronymus, Lindquist, and Hoover, 1978) and comparing them to the percentiles of the GESS. The availability of the scores on the ITBS and as a result of Hedden's research, the suggestion that "academic achievement and intelligence are important predictors of success . . ." (p. 63) supplied the investigator

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with sufficient evidence to use the GESS tool. The raw

scores of the GESS were converted to percentile ranks by means

of cumulative percentage frequency. The rank-order correlation

technique was employed to compare the GESS and ITBS. The

resulting coefficient was r=.63, deemed adequate by the

researcher.

Performance Ability Pilot Study

Raw scores for the Musical Performance Confidence Scale

(MPCS) were computed. The split-half reliability, with the

Spearman-Brown correction was .99. To establish concurrent

validity, raw scores of the MPCS were converted to percentile

ranks by means of cumulative percentage frequency to compute

a rank-order correlation with the music grades received from

the previous year. Music grades were converted to the four-

point system of grading, whereby A=4, B=3, C=2, D=1, F=0, then

converted to percentages.. The computation resulted in a rank-

order correlation coefficient of r=.74. The comparison is made

based on the assumption that music grades are measurement of

performance achievement, although in fact music performance is

measured by attitude and attendance. A valid measure of self-

perceived performance ability logically should correlate with

a measure of musical performance.

Self-Perceived Performance Ability

The Musical Performance Confidence Scale (MPCS), consisting

of twenty-seven items, was administered as the final step of

the testing process. The scale, similar to the GESS, was
designed to show positive direction of performance confidence.
The total range of possible scores was 27 to 81. Scoring
was completed by the investigator by hand following the test.
Raw scores were obtained by addition of: the number of "yes"
responses multiplied by three, the number of "no" responses,
and the number of "sometimes" responses multiplied by two.
Preliminary statistics of mean, median, and mode were computed
for each school. Table I presents the results of these
statistics.

Table I

Preliminary Statistics of Sample

School	GESS			MAP			MPCS		
	$\overline{X}_1$	Md	Mo	$\overline{X}_2$	Md	Mo	$\overline{Y}$	Md	Mo
One	93.65	93	89	71.77	69	63	49.10	49	51
Two	94.31	95	96	76.15	72	58	48.81	47	45
Three	97.45	95	89	82.90	81	76	54.90	52	48
Combined	94.76	94	89	75.88	76	63	50.36	49	48

Next, means and standard deviations were calculated for
each school and variables. The $\overline{Y}$ represents performance
confidence, the criterion variable. School One obtained
$\overline{Y}$=48.8 and S_y=12.10; School Two obtained $\overline{Y}$=49.10 and S_y=9.06;

and School Three's computations were $\overline{Y}=54.90$ and $S_y=13.81$. In combination, the resulting scores were $\overline{Y}=75.88$ and $S_y=17.60$. Table II shows the results of the summary process.

Table II

Elementary Descriptive Statistics of Sample

School	GESS		MAP		MPCS	
	$\overline{X}_1$	Sx_1	$\overline{X}_2$	Sx_2	$\overline{Y}$	Sy
One	93.65	9.72	71.77	22.00	49.10	9.06
Two	94.31	4.71	76.15	15.26	48.81	12.10
Three	97.45	12.02	82.90	8.22	54.90	13.81
Combination	94.76	8.94	75.88	17.60	50.35	11.38

Musical Aptitude

The three parts of the Musical Aptitude Profile (MAP) were administered according to the written instructions contained in the test booklet. The instructions suggested the test be administered with a lapse of a day between testing; however, this was optional. The testing schedule of one day a week for three consecutive weeks, on the same day of each week, at the same time was the most feasible due to class schedules at participating schools, occupation obligations, and the established methodology of the investigator.

Scoring was completed by hand after completion of the

three-part test. Raw scores were obtained by counting the
number of correct items for the entire test and dividing by
two. Each item on the test was a pair, thus the two hundred
fifty item test was actually one hundred twenty-five questions.
The mean and standard deviation were computed. School One
obtained scores of $\overline{X}=76.15$ and $S_x=15.26$ respectively. School
Two obtained scores of $\overline{X}=71.77$ and $S_x=22.00$. School Three
scores resulted in a mean of 82.90 and a standard deviation
of 8.22. In combination, the mean equalled 75.88 and the
standard deviation of 17.60.

Success

The Generalized Expectancy for Success Scale (GESS), a
thirty-item test, was administered following the final day of
MAP testing. The scale was designed to indicate positive
direction of success. The total possible range of scores was
30 to 150. Scoring was completed by hand following the test.
Raw scores were compiled by adding the number circled for each
item. For School One, $\overline{X}=94.31$ and standard deviation, 4.71
were obtained. A mean of 93.65 and $S_x=9.72$ were computed for
School Two. School Three had a mean equalling 97.45 and stan-
dard deviation of 12.02. The three schools, combined, had a
mean of 94.76 and a standard deviation of 8.94.

Data Analysis

After the summary statistics were completed and recorded,

large differences between means among the three schools for

all variables made an analysis of variance seem necessary.

Since the process is completed, in a sense, as a result of

the R^2 (coefficient of determination) total variability in

the multiple regression equation, this procedure was abandoned.

The researcher, as planned, conducted correlations for the

variables for each school and in combination as a preliminary

step in the regression analysis. These coefficients are

listed in Table III by school and in combination.

Table III

Zero-order Correlations Among Variables

Variable Pair	School One	School Two	School Three	Combination
GESS MAP	.466	.193	.027	.222
MAP MPCS	.011	.296	-.077	.164
GESS MPCS	.180	.587	.209	.384

The final step of the data analysis was the multiple

regression. Tables IV, V, VI, and VII list the results of the

multiple coefficients, R and R^2, individually by school and in

combination. The variables were added stepwise to the equation

representing change in the size of R. Change as a result
of variable order in the equation is also indicated in the
tables.

Table IV - School One (n=20)

Variable	Multiple R	R^2
MAP	.011	.000121
MAP + GESS	.209	.043800
GESS	.180	.032400
GESS + MAP	.197	.039000

Table V - School Two (n=16)

Variable	Multiple R	R^2
MAP	.296	.876
MAP + GESS	.615	.379
GESS	.587	.379
GESS + MAP	.625	.379

Table VI - School Three (n=11)

Variable	Multiple R	R^2
MAP	-.0770	.00592
MAP + GESS	.2207	.04873
GESS	.209	.04360
GESS + MAP	.220	.04877

Table VII - Combination (n=47)

Variable	Multiple R	R^2
MAP	.164	.027
MAP + GESS	.390	.153
GESS	.384	.147
GESS + MAP	.392	.153

Table VIII summarizes the results of the multiple regression analysis. All variables were added to the equation and resulted in R (correlation coefficients), R^2 (coefficient of determination), and sample estimate (with a subheading of t values).

The "Spring" program from the Statistical Analysis System (SAS) was used to calculate the results of the means, standard deviations, correlations, and regression. This program

was chosen due to the accessibility, ease of design, and amount
of information received from the system. The SAS is a
standard regression model that may include anywhere from a
few variables to several that may be needed in a multiple
regression equation.

Table VIII

| School | R | R^2 | a (intercept) | Sample Estimate | |
				b_1 (MAP) (t values)	b_2 (GESS)
One	.1977	.0391	-4.585 (-.271)	.0780 (.9742)	.5134 (2.8313)
Two	.6163	.3799	.3786 (.0060)	-.0737 (-.3030)	.5731 (.7260)
Three	.2236	.0500	-42.7800 (.7021)	-.1399 (.2421)	.2434 (.6151)
Combined	.3648	.1331	5.6621 (.3273)	.0581 (.6252)	.4250 (2.3210)

In review, the statistical design of this study consisted
of summary statistics, mean, median, mode and standard deviations
for the MAP, GESS, and MPCS. The next step contained the
computations of zero-order correlations among the variables
for the individual and combined schools. The multiple re-
gression was the last step of the design completed by the re-
searcher.

Interpretations and conclusions of the statistical
evidence are included in the next chapter.

CHAPTER V

CONCLUSIONS

In reporting the conclusions of this study, the purpose, procedures and findings were reviewed and aided the research process in determining the problems, suggestions, and replication of this research study, testing the null hypothesis that there is no relationship between self-perceived performance ability and two predictor variables--musical aptitude and a generalized expectancy for success among seventh grade students.

This study's central purpose was to develop selection devices for junior high school instructors to use in building confident performance groups. An additional purpose was to help the instructor understand learning potentials of individual participants in order to provide a sufficient music program.

Instructors faced with deciding who participates in a musical performance group must look at various attributes of the participants. One such attribute, self-perceived performance ability, was defined as an indicator of potential talent. How one anticipates he/she will perform or produce, known as expectancy for success, and musical aptitude defined as one's potential capabilities in music regardless of innate ability or formal training, were selected as predictors of

self-perceived performance ability by the investigator. These were used as selection devices and aids in identifying individual capabilities.

The selection devices chosen for this task were Gordon's (1965) Musical Aptitude Profile (MAP) and Fibel and Hale's (1978) Generalized Expectancy for Success Scale (GESS). The investigator's own tool, Musical Performance Confidence Scale (MPCS) was used as a criterion measure of self-perceived performance ability. Using rhythm and tonal imagery and musical sensitivity, the MAP measured musical aptitude or potential capabilities. The GESS indicated one's anticipated performance success.

Preliminary statistics were completed to establish reliability and validity for the GESS and MPCS. Three rural Eastern Kansas schools participated in the study. Subjects were selected randomly from existing performance groups and administered the MAP, GESS, and MPCS.

The statistical design for this study consisted of the summary statistics, mean and standard deviation, completed for each variable in each school and for the schools combined. Zero-order correlations among variables were computed for each school and in combination. Finally, the regression process included the stepwise addition of the variables which indicated multiple R (correlation coefficients) and R^2 (co-

efficient of determination) as a measure of the degree to which the MAP and GESS accounted for variability in self-perceived performance ability as indicated by MPCS.

The statistical evidence suggests a few specific conclusions about possible use of success and musical aptitude as means of demonstrating performance proficiency. The summary statistics, mean and standard deviation, are presented in Table II. The subjects in School Three performed better than the subjects in School Two or One on all tests. This could be attributed to class instruction paralleling the measurement capabilities of the tests more than Schools One or Two. The widest margin appeared in the MAP test, followed by the MPCS and GESS respectively. School Two followed Three in average results for the MAP and GESS, but obtained a lower mean on the MPCS than School One. A small difference existed between Schools One and Two on the GESS and MPCS. A larger difference appeared between Schools One and Two on the MAP.

The discrepancy among the results implies possible differences in test administration, attitude, motivation or quality of class instruction. Therefore, further research is necessary to account for these differences.

An examination of standard deviations revealed that for the GESS test, School Three obtained the highest average score

and variability, therefore reflecting more extreme high
scores. School Two had the next highest mean but the lowest
standard deviation which still indicated a positive skewness
of distribution. School One obtained the lowest mean but the
second highest variability. This indicated negative skewness
of the distribution or presence of more extremely low scores.
In positive skewedness of distribution, most of the scores
were lower than the mean. Conversely, in negatively skewed
distributions, most of the scores were higher than the mean.
The MAP was more consistent in terms of positive skewness among
all three schools. School Three obtained the highest mean,
but the lowest standard deviation which indicated absence of
extreme scores. School Two trailed with the next highest mean
and standard deviation indicating presence of some extreme
scores. School One obtained the lowest mean, coupled with the
highest standard deviation. This indicated the presence of more
extreme scores than School Two.

A similar problem with the GESS existed in MPCS in that
School Three obtained the highest mean and standard deviation.
School One had the next highest mean but the lowest standard
deviation. School Two obtained the lowest mean but the second
highest variability. The distributions of School Three and Two
revealed positive skewness, while School One's scores reflected
a negative skewness.

In general, in most cases, most scores on the GESS,
MAP, and MPCS fell below the mean of each test indicating
presence of more extremely low scores than high ones. Ex-
ceptions to this were found in School One with the MPCS and
School Two with the GESS which indicated the presence of
extremely high scores on the cited variables.

Fairly strong relationships surfaced in some zero-order
correlations in the schools. The strongest relationship was
in School Two, r=.587, between the GESS and MPCS. The next
strongest relationship was in School One with the correlation
between GESS and MAP of .466. The combined school coefficient
revealed a weaker relationship (r=.384) between GESS and MPCS.
Correlations of this magnitude do not account for good
prediction between the two cited as predictor variables:
this is desirable because it shows that the testing devices
are measuring different things and probably relate to different
aspects of the criterion variable.

An examination of the stepwise regression indicates only
slight growth in R with the addition of the GESS variable.
However, these slight increases are not significant at the .05
level. In case of School Two, there is a dramatic increase
with the addition of the GESS. When reversed in the order
entered in the equation, there is negligible increase in the
size of R. An additional examination of the t values, does

indicate significance of the GESS at the .05 level. A
similar increase is cited in the combined schools coefficient.
The t value also shows significance at the .05 level. The
reasons concerning the sole significance of the GESS at School
Two and subsequently in combination are not known. Perhaps
an attitude measurement may account for differences.

The correlations and regression equation were unusually
low and allowed little or no explanatory power in the model.
The results of the comparative study which analyzed the three
variables show little positive predictability of self-
perceived performance ability from success or musical aptitude.

The model selected for the study was designed to show the
relationship between expectancy for success and musical apti-
tude as predictors of performance ability. Several weaknesses
appeared through examination of the evidence presented. First,
self-perceived performance ability (MPCS) functioned as a
potential performance indicator, even though "ability" includes
what can be done on the basis of what has been done. This
ability did not pertain to the mechanics of music, rather it
was designed to evaluate such performance tendencies as self-
confidence, self-worth, musical background, family involvement,
and music literacy. A more specific measurement such as an
arrangement of performance by a researcher in order to evaluate
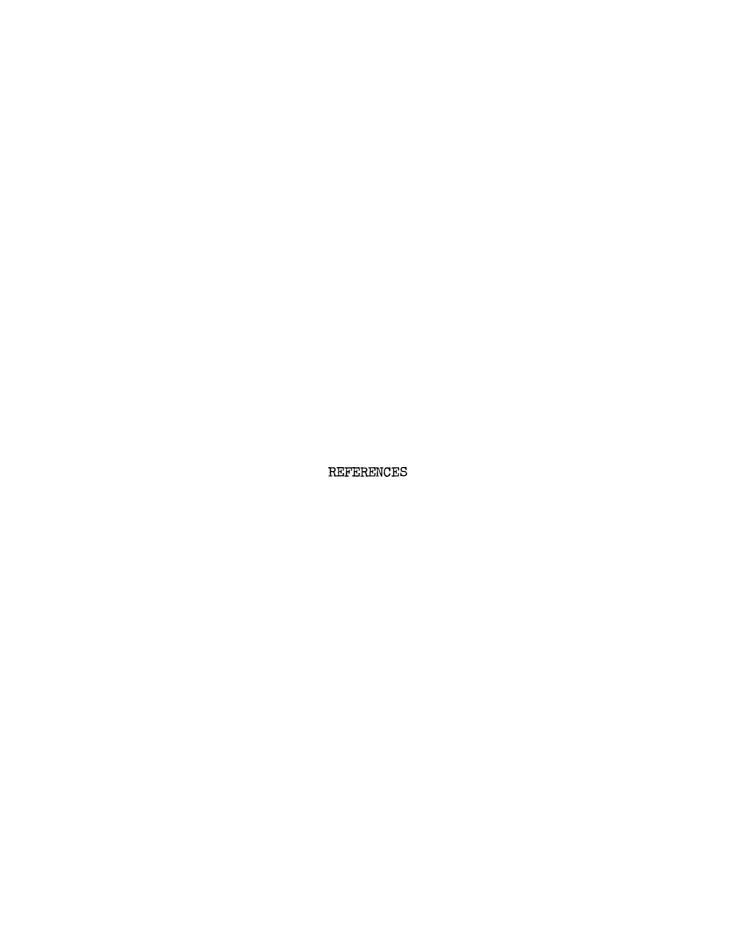specific student achievement with a rating system, for example,

may have been a more stable indicator of performance ability.
Secondly, anticipated success was generalized to aspects of
musical performance, but anticipated success may not be linked
sufficiently to the musical discipline. The researcher then
concluded that one's perceived success may not be pinpointed
to a certain discipline unless used in a more directed manner.
The confidence one attains in succeeding in a certain area
could override success in another area. The fact these areas
were not more specific in the GESS may have led to a
generalized result which depleted relationships of aptitude and
self-perceived performance ability. Thirdly, the musical ap-
titude portion revealed the person's musical capabilities
regardless of innate ability or formal training. More specified
mechanics of music were included in this area of the design
which included rhythm and tonal imagery and musical sensitivity.

An attitude measurement regarding musical ability should
be developed to indicate any differences in environment or
cultural background. This could account for differences within
the MPCS such as attitude, motivation, and musical opportunities
which could have weakened the relationship of success as measured
by the MPCS and musical aptitude.

One may conclude from the evidence that measurement of
success and musical aptitude to predict performance ability is
not sufficient to obtain an objective, feasible way of selecting

participants for a performance organization in junior high

school, nor is it imperative in ascertaining and maintaining

adequate levels of potential among the personnel. However,

it does provide a foundation for developing research in several

areas of music education that may affect performance groups.

Some of these avenues could include musical achievement,

environmental and cultural background, and attitude. Al-

though research is being done on these various aspects, there

seems to be a need for additional study to determine the

possibilities of combining these notions for use as objec-

tive selection devices for performance groups. Measurement

of performance group capabilities is necessary in guiding

the instructor to sustain a successful music program.

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APPENDICES

No. _____

The Hale-Fibel Generalized Expectancy for Success Scale

Directions: Please indicate the degree to which you believe
each statement would apply to you personally by circling
the appropriate number, according to the following key:

    1 = highly improbable
    2 = improbable
    3 = equally improbable and probable, not sure
    4 = probable
    5 = highly probable

In the future I expect that I will
1. find that people don't seem to understand what
I am trying to say 1 2 3 4 5

2. be discouraged about my ability to gain the
respect of others 1 2 3 4 5

3. be a good parent 1 2 3 4 5

4. be unable to accomplish my goals 1 2 3 4 5

5. have a stressful marital relationship 1 2 3 4 5

6. deal poorly with emergency situations 1 2 3 4 5

7. find my efforts to change situations I don't
like are ineffective 1 2 3 4 5

8. not be very good at learning new skills 1 2 3 4 5

9. carry through my responsibilities
successfully 1 2 3 4 5

10. discover that the good in life outweighs
the bad 1 2 3 4 5

11. handle unexpected problems successfully 1 2 3 4 5

12. get the promotions I deserve 1 2 3 4 5

13. succeed in the projects I undertake 1 2 3 4 5

14. not make any significant contributions
    to society 1 2 3 4 5

15. discover that my life is not getting much
    better 1 2 3 4 5

16. be listened to when I speak 1 2 3 4 5

17. discover that my plans don't work out
    too well 1 2 3 4 5

18. find that no matter how hard I try, things
    just don't turn out the way I would like 1 2 3 4 5

19. handle myself well in whatever situation
    I'm in 1 2 3 4 5

20. be able to solve my own problems 1 2 3 4 5

21. succeed at most things I try 1 2 3 4 5

22. be successful in my endeavors in the
    long run 1 2 3 4 5

23. be very successful working out my
    personal life 1 2 3 4 5

24. experience many failures in my life 1 2 3 4 5

25. make a good first impression on people I
    meet for the first time 1 2 3 4 5

26. attain the career goals I have set for
    myself 1 2 3 4 5

27. have difficulty dealing with my superiors 1 2 3 4 5

28. have problems working with others 1 2 3 4 5

29. be a good judge of what it takes to get
    ahead 1 2 3 4 5

30. achieve recognition in my profession 1 2 3 4 5

Source: Reprinted with permission from Fibel and Hale
(1978, p. 931)

Musical Performance Confidence Scale   Name _____

Directions: Circle the letter that best   No. _____
                describes your response to
                the questions.

                Y = Yes   N = No   S = Sometimes

1. Do you find your present placement in the
    performing group comfortable?   Y   N   S

2. Do you take various exercises breathing
    and warm-ups seriously?   Y   N   S

3. Do you practice at home?   Y   N   S

4. Do you practice after school or during
    free time?   Y   N   S

5. Do you attend all concerts, rehearsals
    because you 'want' to?   Y   N   S

6. Could you carry your part in a performance
    alone?   Y   N   S

7. Do you get upset when people do not show up
    to concerts or rehearsals when they knew well
    in advance about them?   Y   N   S

8. Can you read music (notes and note values)?   Y   N   S

9. Can you sightread music?   Y   N   S

10. Do you get a 'nervous' feeling before a
    performance?   Y   N   S

11. Do you like performing in front of people you
    know better than strangers?   Y   N   S

12. While performing, do you watch the crowd
    rather than watch the conductor?   Y   N   S

13. Do your parents make you practice?   Y   N   S

14. Do you want to be in a musical group next
    year?   Y   N   S

15. If a new musical group was being formed
    at your school, would you audition for a
    part?   Y N S

16. If your school had a select choir in which
    you had to audition to participate, would
    you audition for it? Y N S

17. Is your family, whether older or younger
    brothers and sisters or parents involved
    in some way in music? Y N S

18. Do you take private music lessons of any
    kind (voice, instrument, piano)? Y N S

19. Given a piece of staff paper, could you
    compose a melody? Y N S

20. Could you write lyrics to fit the melody? Y N S

21. Can you tell when a musical performance
    is not up to par? Y N S

22. Are you performing in musical groups
    because your friends are? Y N S

23. Have you been a member of a special
    performing group before? Y N S

24. Do you like your instructor to be more
    lenient than critical about your performance? Y N S

25. Are your parents actively involved in the
    school music program? Y N S

26. Does your performing group meet on a
    daily basis? Y N S

27. Do you look forward to your performance
    group class? Y N S