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## An Analysis of the Differential Responses of a Group of Nursery School Children to a Variety of Musical Presentations

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AN ANALYSIS OF THE DIFFERENTIAL RESPONSES  
OF A GROUP OF NURSERY SCHOOL CHILDREN  
TO A VARIETY OF MUSICAL PRESENTATIONS

by

Eva Louise Godfrey

A thesis submitted in partial fulfillment  
of the requirements for the degree

of

MASTER OF SCIENCE

in

Child Development

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## INTRODUCTION

### Statement of problem

The problem of what kinds of music provide the most meaning for the young child has long been a concern of the author. It arises not only out of close experience with young children, but also out of a concern for the responsibility of providing them with meaningful aesthetic experiences. From this background of experience the problem is not purely an academic one. Its first and ultimate concern is an experiential one. Because it arises out of this particular background, the analysis of the problem and its study is less concerned with academic and scientific validity than might otherwise have been the case.

Stated in its broadest dimension, this study of necessity asks these kinds of questions: What does music mean to young children? Does meaning from sounds derive solely from cultural learning? Is there an inherent quality in certain sounds (tempo patterns, tone, volume, pitch, intensity) which directly tends to influence children's behavior? The answers to these and similar questions provide answers regarding children and the provision of a musical environment for them.

It would be folly to conclude that the answers to these questions can easily and simply be attained. Indeed the problems inherent in a study of human behavior and its relationship to music are extremely complex and pose monumental problems which may never be solved.

The general thesis asserted its importance first when the author was attempting to build a philosophy of nursery school curriculum. It seemed



that while much had been theorized and written regarding the kinds of experiences that children enjoyed and benefited from, little of this theory had arisen from actual experience and experimentation with children and music. In short, the kinds of experiences described and prescribed for children seemed to be very limited and based on a culturally-determined construction of theory and presumptions (3, 10, 37, 44). Much of the literature in the area of nursery school programs (3, 10, 37, 44, 19) has attempted to define musical experiences as being "suitable" for the young child. The use, by these writers, of an absolute criterion whereby music was presented as recommended for children seems unfortunate to the author. Because of the author's desire to experience and discover the wisdom or limitations of these theories personally, this study was made.

It became important also, as basic questions were posed, to attempt to provide musical experiences for the children which had never been provided for them before. While it is realized that every experience of life is on-going and unique, thereby deserving the right to be called "new," it is hoped that these experiences while being "new" in this sense will also be "new" in a more total contextual way. Only after such an attempt to provide these experiences could one hope to discover the fullest possibilities of what music does, and what it could mean to the child.

The problems involved in the analysis of this kind of research are obvious. It is not hoped that any scientific finds of validity capable of being used for prediction or other such purposes will result. Rather, it is recognized that such will probably not be the case. The greatest value of this study, or the execution of the problem into an experiential

experiment, will undoubtedly be its contribution to the increasing of insight in an understanding of music and its relationship to young children. It is hoped that resulting from this study will be valuable hypotheses and theories for suggested studies. Also of merit, it is hoped, will be a suggested curriculum of music for nursery school children.

Specific objectives at the outset are: (a) To explore the use of a variety of musical works with nursery school children; (b) to somewhat discover the kinds or types of music which elicit the most positive responses from the children; (c) to investigate the influence of certain kinds of music on movement and play activity; and (d) it is hoped that the study will yield an increased understanding of the use of music in planned or structured activities and in unplanned and unstructured situations.

In an attempt to implement the study of these objectives, some thirty musical experiences will be presented to children in the nursery school. Musical experiences will vary widely from structured to unstructured rhythm experiences, from the use of music mechanically reproduced, to the interaction of children with a "live" performance of a piece of music. Music representing different periods of Western music, music from the Orient, and primitive drum rhythms will be introduced.

#### Review of literature

A review of existing literature relevant to this study can be divided into three areas: (a) Child development with specific reference to material on nursery school curriculums. (b) The influence of music

on behavior as discussed and studied in the area of music therapy. The literature cited here also includes the known physiological influence of music on the human organism. (c) Ethnomusicology provides most clearly the anthropological approach to the problem of how and why music has meaning for all humanity. The literature in this area provides a broad base for an evaluation or application of the problem of what music means to the young child.

Child development.--Medical scientists contributing to the knowledge of child development have established several facts with regard to the sensory organs of the newborn. From this contribution it is now known that unlike the visual sense organs, the auditory organs are complete and begin functioning at birth. The newborn reacts to sound stimuli with a much higher level of differentiation than to visual stimuli, and it is felt by some authorities that the baby is first frightened by loud and cacophonous sounds (20, p. 197). Acousticians have discovered that the young child has the most complete capacity to experience the greatest pitch range possible to the human being and that this ability is lessened or narrowed with the coming of middle age (21, p. 33).

With regard to the subsequent development of the child, Nettl (29) has stated in a recent publication that infant speech development parallels sound and syllable content in primitive music. This is also the theory adopted by the German musicologist, Sachs (35, p. 5).

Apart from the vast accumulation of theory and research in the field of music education and included in the small contribution concerning music and children as made by child development as a discipline, is the literature regarding nursery school curricula.

Bordering between the early elementary and nursery school literature is a book devoted entirely to the subject of music for children. Sheehy in her book, There's Music in Children, attempts to develop a philosophy of musical education (37). The book's emphasis is practical as compared to the development of theory. It does not attempt to ask questions in the traditional scientific manner. Sheehy presents many techniques and specific ideas for the presentation of music for the child. The emphasis is in the "how" of facilitating the music in children to be experienced most fully. While a section deals with the presentation of phonograph records, there is not a great deal said about the repertoire of music recommended for children, with the possible exception of a section concerning folk music (37, p. 141). While the book presents a well-written philosophy of the importance of recognizing that all children are inherently musical, it does not, in the opinion of the author, presume to present a curriculum of music for young children which has grown out of scientific research. Thus while making a valuable contribution, it does not, however, question its own assumptions with the fervor that would befit a book of this nature. The book does provide in the appendix a list of records for use with children. The list draws heavily from folk music and what might be called "popular classical."

Another basic book in the field of nursery school education is Parents and Teachers Go to School by Baruch (3). Baruch presents a spirited and enthusiastic philosophy for working with young children in the areas of rhythm, singing, and listening to music. Her suggested kinds of music valuable in use with children also draws from the large number of available folksong collections and the more familiar classical

works (3, p. 493-497). The book is written from an experiential emphasis rather than from an experimental one and does not deal directly with the problem of children's musical preferences.

A review of another of the early books (1930's) in nursery school curriculum would include Updegraff's book Practice in Preschool Education (44). While the philosophy of music education differs very little from that of Baruch, Updegraff's list of records in the appendix (44, p. 359-364) draws much more heavily on classical music and less on folk music. She expands her repertoire of records beyond such composers as Beethoven, Brahms, and Mozart to include such composers as Stravinsky, Berlioz, Gounod, Gluck, Chabrier, and Ravel. In review of the book it might be said that Updegraff shows more concern with the provision of a greater variety of musical listening experiences than any of the previous books mentioned.

Dixon in her book High, Wide, and Deep describes some of her experiences with children, but makes no recommendations regarding the kind of music to be played for the young child (10, p. 171-180).

Not until the publication of Landreth's book, Education of the Young Child, in 1942 was a concern shown for the cultural influence and meaning of music (19). The book attempts briefly to discuss some of the different ways music is used and valued from culture to culture with resulting implications for the development of a nursery school musical curriculum. Landreth does not, however, provide any suggested record lists.

In the book, Nursery-Kindergarten Education, Brown authors a short chapter on music time for small children (6). A small section of the article is directed toward the provision of recorded music. The repertoire

of listed records is only inclusive of semi-classical to "popular" classical works and at that, the list is composed of only twelve selections (6, p. 142). Recognizing the purposes of the article as not representing a presentation of suitable music, one can still note the small base of suggested musical listening experiences.

Of particular interest to this thesis is a study conducted by Rogers in which he asked the following questions (34, p. 433):

- (1) What are the musical preferences of children of succeeding grade levels? (2) What factors are related to these preferences and what is the extent of these relationships?

He was also concerned with determining what ages children are most open-minded or receptive to all kinds of music. After an arbitrary division of music into four categories--seriously classical, popular classical, dinner music, and popular music--a test was devised incorporating excerpts from musical works representing these four classifications. The test was administered to some 635 pupils in grades IV, VII, IX, and XII. Results indicated that children increased their preferences for popular music and dinner music as they grew older. Their preferences for seriously classical and popular classical music decreased as they advanced from grade IV to XII so that by the twelfth-grade level, their preferences for popular music were so strong that critical ratios well beyond the .001 level of significance were found. These are some of the resulting implications according to Rogers (34, p. 435):

Music educators are faced with a tremendous task if we accept the idea that "open-mindedness" toward music is good. that is, that children ought to enjoy listening to many kinds of music and ought to value serious music to the same degree as they do popular music. It would seem that music programs in the schools ought to be revamped so that children may be exposed

to all kinds of music at the earliest possible time, thus counteracting the rather one-sided influence of our mass media of communication.

With reference to this thesis Rogers' findings have significance as they point to the validation of the theory that musical preference is culturally determined. Of significance is the finding that the younger the child the greater the preference for classical music which contradicts the theory to some extent that appreciation for such music develops with maturity.

Musical therapy.--The importance and value attached to music by our culture has prompted its extensive use. The fact of its influence can readily be established by observation. The exacting and more specific ways it exerts an influence have been investigated by those concerned with its pragmatic use. At the turn of the century and during the early 1900's, an intense interest in the psychology of sound and its relation to the physiology of man prompted a series of studies correlating the influence of music on the heart beat, respiration, blood pressure, and galvanic skin responses (9, 11, 13, 18). According to Farnsworth in his recent book, The Social Psychology of Music, the thesis that music can elicit and modify moods needs no further defense (14, p. 254). Its modification of body processes, i.e., blood pressure, pulse, respiration rate, etc., has also been seen, but the intensity of effect as well as the specific effects elicited are not nearly as dramatic and clearly defined as once was thought.

Diserens and Fine give the following conclusions after reviewing the literature up to the 1930's (9, p. 253):

Music . . . increases bodily metabolism . . . increases or decreases muscular energy . . . accelerates respiration and decreases its regularity . . . produces marked but variable effects on volume, pulse, and blood pressure . . . lowers the threshold for sensory stimuli of different secretions.

While the evidence can clearly be shown that human physiological processes are affected by the presence of music, it cannot be demonstrated that certain kinds of music produced certain changes, as the results tended to differ from individual to individual. In general, the scientific world has been skeptical of these studies in view of the difficulty of distinguishing music as the determining variable (14, 38). The evidence seems to indicate that while the music itself initiated the response, it was the cultural or associative value that determined the kind and intensity of the emotional and physiological change.

Awakened to the power of music to "sooth the savage beast" or influence the human organism, scientists began experimenting with music in hospitals (45), in industry (38), and with the mentally ill (31). Shoen attempted to establish a relationship between emotional mood change and music, ascribing to music the power to determine or change an emotional state (36). He presented the theory that emotions are as music sounds. The theories of just how music affects these mood changes, etc., go beyond the scope of this review of literature. Such theories are best represented, however, by Meyer in his book, Emotion and Meaning in Music (47), in which he attempts to develop a sound theory explaining how music communicates meaning. It is sufficient for purposes of this study to note that music does influence the behavior of man both physiologically and psychologically.

In connection with the influence of music on mood change, it has also been shown that music has a relationship to the state of mind or emotional



mood as reflected by figure drawing(2). The ever-increasing literature in this field of music therapy, along with its rapid growth in the United States, evidences to some extent its growing respectability. Music is being used currently with stated success in school rooms (41, 27) and with juvenile delinquents (1, 32). Its use with the mentally ill is prominent. Music therapy as a professional discipline is steadily gaining ground. This may be evidenced by the current publication of a journal and the establishment of programs in several universities leading to a degree in music therapy. Michigan State University and the University of Kansas are representative of colleges implementing this new type of program. The increasing flood of material concerning music therapy appearing in the professional journals or in book form also testifies of its increasing popularity (7, 28, 43, 42, 46).

The limitations of the contributions made by the discipline of music are many and somewhat obvious. The paramount problem facing musical therapists is developing a standard repertoire of music that is guaranteed to elicit a specific response. Meaning is highly relative and individual to the person. Nor can it be determined that music is the element which exacts the change of behavior. Illustrative of the skepticism of many scientific persons and art critics with regard to the exuberant claims of the many music therapists is this statement written by Barzun (4, p. 84):

Its (music) latest application, as a therapeutic agent faithfully reflects the characteristic blend of naive and subtle in our democratic commitment to welfare. The 250 experts in musical therapy who gathered in New York in October, 1954, hears how musical training can aid mentally deficient children by giving them self-confidence and the opportunity to "rub shoulders with people on the outside." Similarly, children for whom ordinary school work is difficult because of emotional

stress and other environmental factors find in musical accomplishment a counterweight to inferiority, and so do juvenile delinquents who suffer during periods of detention. Music improves their relations with their jailers (though this blunt term is not used in the description) and by extension it is argued that mankind as a whole could do with a little music.

Ethnomusicology.--Ethnomusicology, the study of music as expressed and experienced by man--ancient, and modern, primitive and civilized--provides the broadest and most comprehensive understanding of man and his relationship to musical sounds. As a discipline it precedes in importance all the other disciplines of psychology, physiology, and musicology which have also concerned themselves with music. Its contribution in terms of a more universal understanding of music as experienced by the bulk of humanity is the most significant and profound one. Ethnomusicologists have attempted to transcend culturally defined and executed research and have assumed little ethnocentrism in their studies of the meaning and value of music in other cultures.

Ethnomusicology was perhaps born when Rousseau wrote his Dictionary of Music. At this early date in 1768 he called for the study and classification of music to be categorized into three areas: oriental, folk music, and primitive music. Soon after Rousseau's forward-looking book, several things were done in the study of oriental music. Philosophers and literary artists such as Goethe and the Grimm brothers fostered and perpetuated interest in folk music (30, p. 169). The German philosopher and psychologist, Stumpf, began the recording of primitive music with a short monograph on the music of the Bella Coola Indians of British Columbia (39).

From the beginning the approach to the music of other cultures has been a physiological one in which scale intervals, tonal relationships, etc., were studied. It was early discovered that scales, intervals, and relationships differed, i.e., the traditional diatonic scale of the West was not the universal scale as other cultures employed pentatonic, tetratonic, etc., scales with different pitch intervals (29, p. 48). Thus it became necessary to develop a refined instrument to measure and analyze scale intervals. It was the British physicist and acoustician, Ellis, who as a result of being active in the study of tone systems and in measuring the intervals of non-European scales, introduced the cent system of measuring tones (12). Stumpf and Ellis were the pioneers of modern ethnomusicology and categorized by Nettl in his book on primitive music (30, p. 28) as representing the German School. The German School was primarily concerned with melodic and pitch phenomena and also scales, intervals, and tone systems as well as with the elements of rhythm, form, and vocal technique (30, p. 29).

The inspiration provided by the German School when brought to America saw fruition in the camps of the anthropologists who had a vast field of primitive music available to study in the Indian cultures. Since then American ethnomusicologists have emphasized the anthropological concern for the understanding of the meaning, role, and value music has in relation to the total culture (15, 22, 23, 26).

Such people as Herzog, Densmore, Roberts, and Boas were instrumental in the collection and notation of hundreds of Indian songs, melodies, and dances (8, 16, 33, 5).

It is not the place of the author here to go into the details of the research methods and techniques of ethnomusicology or to deal much further with its history except perhaps to point to its prominence in the field of scientific research. In 1955 the Society of Ethnomusicology was founded and has since published a journal.

One might question the necessity for a review of the literature of ethnomusicology with regard to a study of music with small American children. Its value may be seen in several ways. From such a study one can easily detect the immense differences between cultures and the emotive meaning given to music through different sound patterns. One might note, for example, the religious and mythological symbolism in much of primitive music as opposed to music purely for its aesthetic value in the Western tradition (30, p. 6). To illustrate this point, Nettl uses the example of the Yuman Tribes of Arizona and southern California where songs are interspersed throughout tribal myths which carry religious significance (30, 17, p. 7), and the Peyote cult of North America where occasionally religions consist almost entirely of song (22, p. 18).

In a recent correspondence with McAllester (24), he indicated that music has a cultural context and meaning which is highly individual to particular cultures. The differences in the meaning music has for one culture compared with that of another, along with the differences in the sound patterns of the music, tends to validate the theory that most, if not all, musical human behavior is learned. Such a theory applied to this study of nursery school children provides a question as to the extent of cultural indoctrination of three and four-year olds in our

culture. It also cautions the researcher to beware of superficial correlations. For example, while the young nursery school child may accept music of another culture, it would seem possible to conclude that it is highly probable that the music has little of the same meaning to the young American child as it does, for example to the Oriental or Indian child or adult.

### Discussion

When the author considered these various points of emphasis in the review of literature, it was with the following correlations in mind. This study posed several questions at its inception. First, it seemed important to determine what meaning music has for the young child. It also seems important after an attempt to answer the first question, to determine to a degree why certain kinds of music are accepted and others rejected. Just how meaning is communicated from the music to the individual is not of major concern to this study.

In the area of child development it can be shown that the infant is highly sensitive to sound. Sound then becomes an integral part of the child's perception of the world. His subsequent development in the utilization of sound shows somewhat universal tendencies toward the arrangement and use of sound patterns.

A look at literature concerning nursery school education somewhat establishes a concept of the variety of music for listening that has been recommended for nursery school children in this culture. The consistent avoidance of major areas of music indicated by an extensive lack of representation of music from these areas reflects a rather shallow core of

music being used in nursery schools. Namely, those areas which have lacked sufficient representation are seriously classical, baroque, and modern music, not to mention operatic music or the vast amounts of music not belonging to the Western tradition. When this is viewed in light of the study by Rogers (34) which indicates that the younger the child the greater the preference for classical or any kind of music, it points to the need for a more extensive musical nursery school curriculum. In correlation with the purposes of this study, this literature provides challenging questions and a background theory which may be considered in the study's results.

The review of literature concerning music therapy can be seen to provide the background theory needed when one asks the question: Does music influence behavioral changes? The mass of material in this field tends to support the theory that music by its inherent nature influences behavior. With reference to this study it needs to be seen if young children are behaviorally influenced by music.

With cautionary emphasis the literature representing ethnomusicology proposes that the influence on behavior by music is determined by the cultural values associated with the particular piece of music. In other words, this literature places music inside a total cultural context and indicates that its influence represents the total cultural influence rather than the inherent formal pattern of the music itself.

This literature considered, the interpretation of the study's observations at its conclusion becomes different from an interpretation solely on the basis of theory from music therapy, for example.

The relationship of all the material represented becomes an important aid to the most comprehensive evaluation of the purposes and questions posed by the study.

## METHOD OF PROCEDURE

Because this study was highly exploratory in nature, it was not structured in a traditional research design. No attempt was made to closely control the large number of variables involved in such a study.

The nursery school at Utah State University, composed of two separate groups of children, was used for the presentation and observation of a group of musical experiences. The two groups of children differed from each other most notably in age, with the morning group consisting of children three to four years of age, and the afternoon group composed of children four years of age and over. A list of the names of the children in the nursery school, including their age and sex, will be included in the Appendix of this thesis.

No attempt was made to establish a control group. In analyzing the results of the recorded observations, no attempts were made to control the variables of the children's background experience, or sex differences. The only controls established were those necessarily imposed by the specific size and time of the nursery school groups.

The number of children involved was arbitrarily determined by the existing size of the nursery school groups. The participants in the study were chosen then, because they were attending nursery school. No attempt was made to statistically analyze the recorded observations resulting from the experiments.

Even as the experiments differed from each other, so the methods of



recording these experiments also differed from each other. Experiments followed no pre-planned structure. It was hoped that the contents of an experience would evolve naturally out of the existing environment.

Much of the structure was provided in the method of presenting the music to the children. For example, the presentation of recorded music provided a kind of structure inherently different from the presentation of a "live" performance of a piece of music. Just as there were significant differences between these two kinds of musical experiences, so also were there many differences between specific and individual experiences of the "live" or recorded variety. With the recognition of these complexities, the writer did not attempt a comparative study of the differences in presentation technique. Observations were interpreted only as they alluded to the specific situations they represented.

The method of procedure for the study commenced with the presentation of approximately thirty musical experiences. The structure of the experience included: (a) The unstructured presentation of recorded music which involved the playing of a record with no introduction of it in any way to the children. (b) The structured presentation of recorded music which called for a type of introduction and organized activity in which a record was presented to a group of children gathered together for this purpose. (c) The unstructured presentation of a "live" musical performance where the individual and his instrument were not in any way introduced to the children. The children were not brought together for the purpose of listening. (d) The structured presentation of a "live" performance in which the performer and his instrument were formally introduced to a group of children in an organized group experience.

The observations of the experiences were recorded by the author and assistant who was Dixie Francis.

## STATEMENT OF LIMITATIONS

A true evaluation of any study can be made only if the limitations of the study are honestly recognized and considered. This particular study admits to many limitations which, when properly understood, enable the author to make a more realistic evaluation of the study's contribution to the fund of knowledge. By its nature the study has many inherent limitations. Perhaps the most obvious of these is the lack of the use of a control group. The difficulty in setting up a controlled study in the area of child behavior and music explains partially the absence of a more structured research design. The lack of controlled variables and of a patterned research design limits and restricts the derivation from the study of any absolute conclusions concerning the meaning of music to young children. The recorded material cannot be used for a statistical analysis of the problem. Any theories or hypotheses suggested by the data can only be evaluated on the basis of an intuitive interpretation.

The time element presents a definite limitation in the following ways. The study would have been more meaningful if it could have covered a longer period of time. The study, conducted during the spring of the year, undoubtedly yielded different results than a similar study conducted over a year period to include all seasons.

The number of times a particular piece of music was played may be a factor influencing the children's response to it. Also a limitation was the absence of an understanding of the children's background experiences with music.

One must note also the limitations imposed by the selection of the music presented. A much broader selection or a more carefully planned presentation of music in accordance with a more structured research design would have yielded more definite conclusions.

Other factors which helped to limit and define the scope of the study included the following. The physical plant of the nursery school including the indoor and outdoor floor plans influenced the nature of the experiments. The size, shape, and color of the rooms along with the arrangement and provision of furniture and materials and other visual stimuli played an important part in shaping the over-all environment of the experiences. The kinds of musical equipment used, i.e., record player, records, etc., undoubtedly influenced the quality of the musical experience for the child.

To some extent, the study was also limited and controlled by the personality and philosophy of the individual presenting the music.

Aside from these more obvious and specific limitations and factors, there existed the over-all limitation or influence of culture and of the meaning it attached to music in general and to different kinds of music specifically.

With a recognition of these factors and with an awareness of their influence, the study was conducted.

Further limitations are represented in the recorded observations which, to some degree, unavoidably reflect the understanding and intuitive feelings of the author and the assistant observer. An analysis of the recorded observations also reflected an emphasis on intuitive interpretation rather than an emphasis on statistical and/or comparative analysis. With

further reference to the recorded observations perhaps the greatest limitation lies in determining with any degree of accuracy the meaning any experience has for a child. The problem is intensified in the child who does not articulate his experiences as the adult. The real problem then becomes one of observation. Observation always occurs from a bias or a "set." The best that can be hoped for is a recognized attempt for honesty in describing any particular situation. This study leans heavily on observation and the subjective analysis of that observation by the author which, of course, admits to many weaknesses. Perceiving and identifying reality is a very complex problem in that "reality" in most, if not all, human situations admits of no absolute dimensions.

While the author recognizes the definite limits and weaknesses of the study, she does not seek to apologize for its scope and purposes. The study's significance lies in its allusions to greater possibilities for the understanding of human experience. This, for the author, justified its execution.

## EXPERIMENTS

For convenience the author has devised the following method for the presentation of experiments: The experiments will be classified into two groups. Those experiments conducted with the morning nursery school group will be labeled with Arabic numerals. Those experiments conducted with the afternoon group will be labeled with the same set of Arabic numerals, but each numeral will be followed by the letter A. Cases labeled 1, 2, 3, etc., will then refer to experiments from the morning group. Cases labeled 1A, 2A, 3A, etc., will refer to those from the afternoon group.

Each case will be headed by the case number, the date, the time of day, and the title or description of the music presented. The complete list of recordings used will be presented in the Appendix.

In the text of the experiments the author will rely on the use of a note-form sentence structure rather than the total use of complete sentences. For example, a child's name may be listed followed by a colon and an incomplete sentence indicating in note-form the child's response or reaction to a piece of music.

## Case 1

Time: April 4, 10:10 a.m.

Music: "Rite of Spring" by Stravinsky

The record was played as a background to the already existing activities.

The following were the only observed responses which seemed to occur in relation to the music:

Ben: Looked up as the music changed and said, "There it goes again."

Sherilyn: Progressed from flour to clay nearer to the music. She seemed to manifest some similar movement patterns congruous to the music.

Ben to Lynn: These two boys were painting side by side at the easel-- painting the same paper. Their movements with the brushes up and down the paper coincided with the music during a very fast part. Ben also painted the floor and the easel casing during parts of the music.

Lynn: Looked up from washing his hands to the music area when the music ended.

David made the following comment when the music was over, "Don't take the music. I want to hear more music."

Aside from these possible responses in relation to the music there was a considerable amount of negative behavior in the block area.

## Case 2

Time: April 19, 9:30 a.m.

Music: "Rite of Spring" by Stravinsky

The record was played as a background to the already existing activities. Children were painting egg cartons, easel painting, and playing in the blocks, etc.

Observable reactions in direct relationship to the music:

One child at the easel looked up at the change modulation of sound.

Other responses which may have been related to the music:

Lynn: Painting at the easel seemed to be doing so in movement to the music.



## Case 3

Time: May 4, 10:00 a.m.

Music: "Fifteen Two-Part Inventions for Harpsichord" by Bach

The record was played as background to the already existing activities.

There were, as far as the observers could detect, no observable responses to this music.

## Case 4

Time: May 6, 10:00 a.m.

Music: "Fifteen Two-Part Inventions for Harpsichord" by Bach

The children (Ben, Carolyn, Kerry, Michael, Christy, David, Brian, Sherilyn) were listening to a flannel-board story when the record was introduced the following way: "I've brought some music into the nursery school today. I want you to listen to it and then tell me if you like it or not."

All of the children stayed and listened with rather rapt attention while the first band on the record was being played. Afterward several drifted away. After about three bands there were six children remaining. This attention span was of a twenty-minute duration.

Responses directly associated with the music:

Michael: (Before the music was played) "Let's say we don't like it." (After the music was played) "I like this." This was said several times with affirmative expressions.

Ben: "Play some more." This response came twice. At one point he left the area to tell some of the other children to come and listen and returned to do just that.

Carolyn: "I like this." After which she ran for a dancing skirt. After returning she apparently decided it wasn't "dancing" music and left. Later she returned to the rug to lay head in hands listening.

Linda: Hands clasped together she moved them up and down to the movement of the music.

Brian: Sat absorbed looking up wide-eyed at the phonograph listening.

Kerry: Stayed close and listened for some time then got a couple of drums and occupied herself beating them.

David: Several times attempted to pull Michael away, unsuccessfully. Finally he seated himself to listen.

There were no overtly negative responses. The loss of several children after one band may be indicative of loss of interest, dislike, or greater interest in other objects and activities.

## Case 5

Time: May 10, 10:00 a.m.

Music: "National Music of India"

The music was introduced much the same way as the harpsichord music. The children were all seated on the rug following a story presentation. The record that was played was Indian music which involved a woman's voice. There were no words or lyrics on the record--simply sounds.

The children listened with awe and rather surprised faces of someone experiencing something very new. Interestingly enough the following direct associations were made:

Carolyn: "Yow!"

Craig: Beat sticks together in time to the rhythm.

Ben: Put fingers over his ears. "That's a real big noise."

Carolyn: "I have a picture of a witch at home. Teacher is that a witch?" This question was repeated several times by several children. At one point it became necessary for them to come over to the record player to see if the witch was inside.

"It sounds like a witch, teacher."

When asked if they liked the music, the answers were definitely in the affirmative.

Some other reactions:

Carolyn: Beat drum with a stick and then stick in hand in time to the rhythm.

Michael: "This is a spooky record." After Michael said this several of the children referred to the music as spooky.

David: "Yes, I like it."

Frequently the children will say, "I like it" before the music is played or, "Let's say we don't like it." This element should surely be considered before conclusions are drawn on the basis of the verbal responses being completely valid.

## Case 6

Time: May 10, 10:30 a.m.

Music: "Folk Songs of the Carribean" sung by Harry Belafonte

Following the Indian music, Harry Belafonte was played for Michael, Pen, David, and Carolyn.

The boys played instruments and tried some "brief" movements, but mostly listened with expressed enjoyment.

It appeared to the observer that they liked these folk songs a great deal.

## Case 7

Time: May 10, 10:45 a.m.

Music: "With A Little Bit of Luck," from My Fair Lady.

Following the Belafonte record this excerpt from My Fair Lady was played.

Ben and Michael tried some kinds of dance movements.

Michael danced with a teacher--then alone--then he and Ben danced together.

David and Michael didn't want to leave for home until the music had ended.

## Case 8

Time: May 11, 11:00 a.m.

Music: "Rite of Spring" by Stravinsky

The record was played without any formal introduction of it to the children. The record player was resting on one of the low nursery school tables. The record jacket had been left near the phonograph. The cover design is an almost surrealistic portrayal of the earth god and quite foreboding.

The following reactions were recorded:

Ben: Sitting in the rocking chair listening.

Linda: Turned to look as the music began.

Carolyn: Heard the sounds and came into the record area.

Michael: Sat nodding his head to the music's movement.

Carolyn: "What's the name of this?" She then put her hands over her ears.

Linda: "What's that?"

Lynn: Began moving his fingers in time with the music.

Lorrie: Came over to the music area and stood swinging before the record player. At this point there were eight children listening on the rug.

Carolyn: Discovering the record jacket her comment was "Scary--  
Uhn! A scary giant."

There was some conversation among the children regarding the giant. Their response to the music was much more overtly observable than on



previous occasions.

Carolyn: Hands over ears again.

At a change of modulation the children looked at the speaker. At one point when the music rose sharply, Carolyn screamed out in fright.

Linda: Hands over ears.

Carolyn: "It's a giant. It's a skeleton. It's spooky!"

Linda: "I don't like it. It's a big noise. It's scary."

Whether these association with spooks, giants and skeletons would have been made if the record jacket had't been left available for the children is purely a matter of speculation. The statements of the children seemed to be related to both the cover design and the music.

## Case 9

Time: May 11, 11:00 a.m.

Music: "Pictures at an Exhibition" by Moussorgsky

Following the Stravinsky record the children requested a record about animals. "Pictures at an Exhibition" was played. As the music proceeded, a teacher asked Carolyn and Linda what kinds of animals the music reminded them of.

They thought of a chicken for one part.

"What kind of animal is this?" the teacher asked when the music changed.

Carolyn: "A gorilla."

## Case 10

Time: May 12, 11:00 a.m.

Music: "Skins" by Les Baxter

The children were all gathered on the rug for a group activity. Kay Taylor took the children on a jungle hunt with all the actions. It was following this experience that the drum rhythms record was introduced. The record was played with the comment or suggestion that they do what the music told them to do.

This was one of the most interesting and creative experiences the author has ever seen among a group of small children. They surged forward to the instrument shelves and with very little comment aside from "What does this music tell you to do," began marching, dancing, moving all over the nursery school--around the toilet area into the block area, etc.

The author has never seen a group of children moving when the movements were so stylized and individual to each child as this experience demonstrated. They were playing their instruments in unique ways also. It looked much like a primitive tribal dance of some sort. Body movements were not confined to arms, legs, but hips, shoulders, heads, waists, etc., were moving also.

## Case 11

Time: May 17, 11:00 a.m.

Music: "Rite of Spring" by Stravinsky

The children were scattered throughout the nursery school playing in various activities. The record was started at high volume.

Barby: Look up at the music.

Ben: "Oh!" Looked up and cried, "Teacher, teacher."

Jeff: To another child in the block area, "Is that scary? It's scary to me." He began to stomp his feet in rhythm.

Ben: Became involved with another child and started randomly hitting him.

Jeff: Jumped up and ran across the floor throwing his weight at another child grabbing him. They both fell to the floor.

David: Began running and ran from activity to activity with a teacher following him.

Craig: As the drums in the record became louder, Craig said, "What's that?"

David and Lynn: Became involved again and started hitting each other.

Jeff: Jeff began crawling around the floor making "tiger" sounds. He raised his hands shaping them like a bird's claw and began making threatening sounds at teachers and children.

Craig, Lorrie, Julie: These three children almost instantaneously ran for the piano and began pounding on it with their fists making much

noise. It looked almost as if they were trying to drown out the music.

Craig: Craig then ran from the piano to the speaker with his hands over his ears. From there he ran to the block area and kicked a truck calling out, "Naughty boy."

Jeff: Jeff picked up two blocks and began hitting them together.

Craig: Craig ran constantly for the next ten minutes, part of the time with blocks in hand hitting them together.

Subjective analysis: During the space of time that the record played, voices were raised and actions paced themselves accompanying the sounds. Within the space of ten minutes there was rash hitting, crying, kicking, and a great deal of random behavior. The facial expressions were indicative of heavy emotion and tension.

The teachers also were trying to initiate clean-up time. This became an impossibility as children were throwing blocks, interacting with each other at an almost feverish pitch. One teacher kept asking if the sound couldn't be turned down.

It seemed to the author that there was so much activity foreign to a general nursery school day to attribute it all to other variables. It seemed that some of the responses occurred in direct relation to the music.

## Case 12

Time: May 18, 10:00 a.m.

Music: Mr. Weaver singing and playing a guitar and harmonica

The children were gathered together seated on the rug when Mr. Weaver entered the nursery school and began to play his guitar. He asked the children questions about cowboys, Indians, and horses, and then proceeded to play and sing several cowboy ballads. After playing and singing for a period of about fifteen minutes he put a harmonica in a shoulder brace and played the harmonica and guitar at the same time. During the course of the experiment he played several pieces which were very familiar to the children, i.e., "Silent Night," "Twinkle Twinkle," etc. He also sang a medley of nursery school rhymes.

Observable responses: Open mouths, wide eyes, smiles, and requests from the children came as indications of a positive feeling for the experience. The most striking observation was the length of attention. After forty-five minutes Mr. Weaver got up to leave and left almost all of the children still seated quietly in a circle. For those acquainted with a group of three-year old nursery school children, this would seem somewhat remarkable and unusual.

Subjective analysis of the experience: While many of the songs presented a contextual content that was foreign to the children of this age, i.e., jails, hangings, etc., the enjoyment and involvement came, it is felt, as a result of two things: (a) The actual rhythm involvement with the music itself, and (b) the presence of the individual singing and playing in "live" performance.

## Case 13

Time: May 23, 10:00 a.m.

Music: Orchestral Selections of Bach

This particular morning the phonograph speaker was placed in the observation booth in order to observe whether the children would react to this change. They immediately responded to this by congregating around the table and shelves directly below the speaker. The author asked the children what the music made them want to do.

Carolyn: "It makes me want to sleep." She lay down on the rug and closed her eyes.

The children had had an exciting morning running outside and had been unable to converge into groups to play. The effect of the music was definitely a quieting one, causing a great many of the children to relax on the rug and scatter to quiet activities.

## Case 14

Time: May 23, 10:30 a.m.

Music: "Skins" by Les Baxter

After the quieting Bach, the drum rhythms record was played.

There was a definite transition in movements and feelings.

Lynn: This child began to move his hips and shoulders.

Christine immediately went to get a drum.

Jeff got a drum and began beating it.

Sherilyn began hitting a stick on the table in time with the rhythm.

Brian kicked and moved his legs in time with the rhythm also.

Christine took a handful of bells.

Brian clenched his fist and placed it on his forehead and then began pounding it with the other clenched fist.

Lorrie began bouncing on one foot.

Ben wiggled his hips and body in rhythm.



## Case 15

Time: May 24, 10:00 a.m.

Music: Bongo Drums

Gary Irwin came into the nursery school with a set of bongo drums. He took the drums outside and began to play rhythms. The children immediately congregated around him pulling up chairs, barrels, etc., to sit on.

Michael: "Why did you bring them here? A man on Captain Kangaroo had bongo drums."

Carolyn: Ran into the nursery school to get a skirt to dance.

David: "I'll bring that home. We'll get a stick and get you then we'll have the drums."

Ben: Playing the bongos with intense absorption.

Carolyn: Made the association with Hawaii and began to hula dance. Susan and Barby began imitating Carolyn while sitting on the boxes. The children's attention lasted twenty minutes, approximately.

## Case 16

Time: May 24, 10:30 a.m.

Music: "Madame Butterfly" by Puccini

Michael: "It's a man singing."

David: "It's a girl singing--a mother girl."

The children were asked if they liked the music.

Lynn: "Yes."

Barby: "Yes."

Neita: "No." Later she said, "I believe I like it."

There was no fright or real negative feelings expressed by these children. Their interest span was not particularly long, but intense.

One of the children outside made the following comment when he heard one of the solos, "What is that man yelling for?"

The music was not formally introduced into a group situation, but rather played as background to already existing activities.

## Case 17

Time: May 24, 10:40 a.m.

Music: "Beethoven String Sonata No. 3"

The record was not formally introduced into a group situation, but rather played as background to already existing activities.

There were no responses observed which were made in relation to the music.

## Case 18

Time: May 25, 10:00 a.m.

Music: "The Peanut Vendor" played by Stan Kenton

The children were all seated in a circle on the rug before the piano. They had just listened to a story. The phonograph was sitting on one of the small tables by the side of the piano in front of the shelves which housed the rhythm instruments. The music was introduced the following way: "I'm going to play some music. I want you to show me what the music tells you to do." After putting the record on and turning the volume up to a sufficient level, the children began to respond rhythmically.

The most dramatic response was made by Ben who immediately began working his arms and shoulders to the movement of the music. He first expressed this movement by beating his hands on the big drum. These movements were whole-body movements, i.e., shoulders, head, waist, etc., all moving in a kind of calypso rhythm to the music.

Other children showed definite movement patterns in their arms, legs, and body movements. Most of the children crawled under the phonograph table to the instruments. They were never at any time told to do this by teachers. It was interesting to note the transference of those sounds to the rhythm instruments and to see how spontaneously the children ran for the instruments as soon as this music began.

As the next number came on the record, the movements and action noticeably declined, indicating the influence and effect of the particular rhythm and pattern of musical sounds.

## Case 19

Time: May 26, 10:00 a.m.

Music: Anita Baird playing her flute

David: "Hey, what is this going to be?" After looking the situation over he ran to get Michael to come in.

All of the children in the room came over to the rug to look. When Anita started playing the flute, three or four others came in from outside. All stood around watching.

She told the children that she was playing a flute.

David: "We didn't know that did we?"

Carolyn: "Last night my brother taught me to play the piano."

Jeff: "It's Hankle Doodle."

Following the playing of "Yankee Doodle," Anita began playing "Three Blind Mice." A few of the children started singing it with her.

David stayed in the background holding his hands behind him.

Linda: "Old Santa Claus! My daddy knows that."

Carolyn: "I know one." She sang "My Little White Kitty." All the children then wanted to tell an experience about a kitty.

Jeff: Watched intently and then moved head around to look at the end of the flute to see how the sound came out.

All of the children recognized "Farmer in the Dell" and "Jingle Bells."

Anita asked the children, "Now what does this song make you want to do?" She then played the familiar Brahms "Lullaby."

"Rock-a-bye baby. Go to bed baby. It makes me lay down in the hay."

Michael sat and watched intently, although two children were fighting next to him. One little boy sat with his hands behind him and didn't move his eyes from her.

Four or five of the children left after she started playing a long piece which was unfamiliar to them. Soon there were only two left, and then only Christine and she sat and watched, never moving her eyes. Finally she looked to see that all the other children had gone, but just turned her eyes back to the flute. After several moments she left also.

Subjective analysis: The children enjoyed this experience very much as indicated by their interaction with Anita and their participation through singing. The familiarity of the songs and game of guessing the song contributed to their involvement, it seemed to the author. It seemed fairly obvious that they lost interest when a more difficult and unfamiliar piece was played. However, this was only true for the majority of children. There were several (Michael, David, and Christine) whose interest and involvement was just as intense if not more so when the more serious and "adult" type of music was played.

This experience would seem to point to the individuality of different children as well as again to the value of children actually experiencing an instrument in their presence.

## Case 1A

Time: April 5, 2:30 p.m.

Music: "Rite of Spring" by Stravinsky

The music was not formally introduced but simply played as background to already existing activities. The music begins slowly to build to climaxes. There seemed to be very little observable responses to the music during this playing with the possible exception of the following incidents:

Hollie began to dance with wild excited movements, swinging and gyrating her arms and legs. At one point in this excited movement she ran over to Jeannie and began pounding on her chest with doubled fists.

Michael was swinging her apron around her head in movement with the music. She also dressed herself in scarves and twirled in rhythm with the music. At one loud point she walked across the room with her hands over her ears.

One child who was playing with the puzzles stood up quite unexpectedly at one point and began spinning herself around. This came at a rather loud and tumultuous part of the record.

The most obvious reactions came from the teachers, where the tension and displeasure were verbally expressed as follows:

"Why don't you play the one they like after this."

"I was gloomy anyway and then you play this, and now I feel like screaming."

"Just play anything but that."

## Case 2A

Time: April 12, 1:30 p.m.

Music: "Capriccio Espagnol" by Rimsky-Korsakov

After setting up the record player outside on a sunny balmy day, the author began a series of experiments. The majority of the children with the exception of four were outside playing.

The introduction of the phograph mesnt a new element in the life of the nursery school day and may have been a determining factor in influencing the interest of the children in the music and the sounds.

The experiment began with the playing of "Capriccio Espagnol" which is decidedly nationalistic and would be classified as a very spirited and stimulating piece of music as contrasted with a very quiet more pensive work. It also has considerable modulation in terms of louds and softs, fasts and slows.

Observations: Those responses which were a direct result of the music or made in direct relationship to it.

Sherrie: This child seems very sensitive to sounds and reacts negatively to loud and fast music. At the introduction of this music, Sherrie held her hands over her eyes and quinted with tensed facial expression. When asked if she liked these sounds her response was, "No." During the course of the record several parts are violin obbligatos of a more quiet and serene mood. When these parts would start, Sherrie would say, "I like this part." At other louder points when again asked her feeling, the answers were decidedly, "No."



John and Kent: At one point the music reached a pulsating crescendo in the percussive instruments. This rise and activity followed a very calm interval. Immediately when the drums began, John and Kent ran across the yard to one of the speakers to listen. Their interest was only momentary, but definite.

John: When asked if he liked the music for the day, his response was a very positive "Yes."

David and Kent: Both children looked over to the player at one point when the music changed tempo and modulation rapidly.

## Case 3A

Time: April 12, 1:30 p.m.

Music: "With a Little Bit of Luck" from My Fair Lady

Immediately following the playing of "Capriccio Espagnol," "With a Little Bit of Luck" was played.

There was instantaneous reaction all over the playground which manifested itself in clapping, hopping, walking, etc. This may have been due in part to the teacher participation in rhythm activity with the use of scarves. The following children participated in the dancing: Hollie, Sherrie, Debbie W., Jeannie, and Betsy.

Subjective analysis: The author's feeling was that with the music came almost immediate release. This was realized also with the scarves. The children whirled, jumped, skipped, bounced, ran and waved arms, etc., and achieved a great variety of movement to this music. There were very distinct patterns developed by Jeannie and Sherrie in relation to the music. There was also a great deal of laughing, smiling, and what seemed to be complete enjoyment experienced by the children. This subjective feeling was shared by the other teachers.

Charles: Came walking across the lawn, his arms outstretched, bouncing in time to the music.

At the end of the band on the record, Hollie and Jeannie asked twice for it to be repeated.

Hollie made the following comment during the "Luck" band while dancing, "Teacher, wouldn't it be fun if we could take off our shoes outside and dance?"

Mark raised his head and propped it in his hands listening for some time.

At one point the band of "The Rain in Spain" was played. This piece has a more complex and less pronounced rhythm pattern. Children stopped dancing and became concerned with putting the scarves on. While there was still movement, it was scattered and did not seem to involve the child's complete involvement.

## Case 4A

Time: April 12, 1:30 p.m.

Music: Orchestral Selections by Bach

Immediately following My Fair Lady, the record of Bach orchestral music was played. The reactions in direct relation to the music were:

Debbie: "That's not very fun music! I hate it." Debbie listened with her face to the speaker.

Sherrie: "Turn it down." When at first it seemed too loud, this was the comment. Then a moment later she said, "It's just right." When asked, "Do you like this music?" her answer was a very positive, "Yes."

LaRae: "I like it."

Debbie: Listened to both speakers and then said: "It's too loud." Later she said, "This one is louder than the other." At the conclusion of all the music, Debbie knelt by the speaker with a stick and her comment was, "I've got to wind it up again."

Subjective analysis: The children sat directly in front of the music on the edge of the cement and had juice all together. There seemed to be a definite "calming" of behavior and an immediate quieting over the sounds made earlier.

After juice as the record continued, the children all moved to other areas away from the phonograph and speaker, whereas earlier groups of children were playing in the area. This may be indicative of the nature of the music and its influence on children's activity.

## Case 5A

Time: April 19, 2:00 p.m.

Music: Bongo Drums

Steve Giles entered the nursery school equipped with a set of bongo drums. The children were scattered throughout the nursery school. Four were playing at the nearby table in clay. Others were across the room out of sight of the blocks. Others were outside. Teachers were instructed not to ask or request children to come to the music area.

At the start the four girls at the table stopped their activity immediately turning to look--all four with large smiles. Shortly after several children cautiously approached the rug. Scott came across the floor from the block area to ask, "Why is he doing that?"

Gradually children came to sit on the rug until most of the children were there from outside. When John, Kent, Hollie and the others came in from outside they came immediately across the floor to lie stretched out, head in hands. For the fifteen minute period following there were no distractions made by children--no adult comments--simply absorption and intense involvement. The rhythms had an entrancing effect and could be seen in the children's attention span.

Sherrie was asked, "Do you like this?"

Emphatically she answered, "Yes."

Scott asked to have a story read. He was directed to another teacher. She moved to leave the area. He protested and seemed anxious to remain there.

Children seemed most interested in and seemed to react most positively to the rhythms themselves as an intensive listening experience.

## Case 6A

Time: April 19, 3:30 p.m.

Music: "Songs of the Carribbean" sung by Harry Belafonte.

Jeannie, Debbie, LaRae, and Hollie were dancing in movement to the music.

Debbie: Was notably slapping her thighs with hands in relationship to the bongo drum player seen earlier.

The other children demonstrated considerable movement, but did not illustrate as distinctive a style of movement in relation to the music as Debbie did.

Subjective analysis: Bands of less movement rhythmically elicited less body movement.

## Case 7A

Time: April 21, 2:00 p.m.

Music: Bongo Drums

Robbie said, "Let's go over and see the show."

Charles said, "That man's here again."

Jana looked up from painting.

John stretched out on the floor, head in hands after an almost flying leap from outside to inside.

Sherrie seated herself on the rug and showed intense interest.

Debbie caught the rhythm in her movements as she walked across the room.

Jill said, "What are those called?"

Sherrie put her hands over her ears when the children made undue noise.

With the playing of Indian drum rhythms, several of the children pulled out drums and other instruments. At this point there was much conversation about Indians.

While Steve remained in the nursery school on the rug, Jimmie, Kirk, and Debbie stayed very close and began experimentally hitting, poking, and feeling the drums.

Steve then took the drums outside. Again many of the children were attracted to the area. After some minutes, however, only a few remained, notably Jimmie and Debbie. Jimmie after some encouragement from Steve played "Tom Dooley" on the drums in correct rhythm. Jana did much experimentation also with them.



Subjective analysis: Jana's interest seemed in the possessive element of holding the drums in a social sense rather than in the instruments themselves. Jimmie's involvement was intense and was focused, it seemed, to the author on the instruments themselves and the sounds they made.

There were several elements that seem to have a relationship to the interest level of the children in the drums. When almost all of the children were seated on the rug, Kirk came running in from outside and said, "Come out! The men are working." Several children immediately ran outside. Others followed, leaving just a few listening to the drums. Since this was the second time for the bongos in nursery school, there was more experimentation with the drums. There was more concern with other instruments and the desire to "have one too" was clearly seen.

## Case 8A

Time: May 6, 3:00 p.m.

Music: "Fifteen Two-Part Inventions" by Bach for Harpsichord

At the outset the children were seated in the group at the piano. The music was introduced the following way: "I've brought some music into the nursery school. I'm going to play it for you now. I want you to listen to it and tell me if you like it."

The general response was affirmative as the majority of the children said, "Yes" when asked, "Do you like this?"

The interest span was also indicative of an acceptance of the music in enjoyment.

## Case 9A

Time: May 10, 2:00 p.m.

Music: "Music from the Romantic Era" played by Almeida on guitar

After setting up the record player this guitar record was played. It was not formally introduced to the children in a group situation.

Sherrie, who is very sensitive to sound, immediately responded with favor to this rather quiet music.

Other children reacted favorably also. Michael and Charles both indicated that they liked this music.

Charles said, "It's dumb."

Sherrie said, "I like it. It's pretty." She sat with her head in her hands.

Debbie ran over periodically during the course of the afternoon yelling, "Will you please shut that off."

Charles said, "I think records are the best of all."

## Case 10A

Time: May 10, 2:30 p.m.

Music: "National Music of India"

Immediately following the guitar record the Indian record with the voice on it was played. It was not played in a group situation, but the responses of the children were solicited as they came into the area. The teacher reaction was quite negative as almost every teacher listening made some negative comment.

The following comments were recorded as they were made by the children:

Charles: "I don't like it."

Mark: "Turn that down."

Debbie: "Please turn that off. Put on a record that I like."

Sherrie: Put her fingers in her ears.

Michele: "It's too noisy. I hate it."

Subjective analysis: There seemed a marked difference in verbal response from the afternoon group to the morning group--the afternoon children being verbally negative while the morning children were verbally affirmative. In both groups there seemed to be an element of awe or fear with respect to the strangeness of the sound.

## Case 11A

Time: May 10, 2:45 p.m.

Music: "Mozart Violin Concerto #5"

Following the Indian music this violin concerto was played.

Sherrie when asked if she liked this music made the following comments: "Yes. It's *more* prettier." During a louder part she said, "No, no. This is a loud one. I don't like loud ones. I'll plug my ears."

## Case 12A

Time: May 10, 3:00 p.m.

Music: "Rite of Spring" by Stravinsky

The record was played as a background to the already existing activities. As the music began to build itself into a climatic state, the following was observed:

John, Kent, Kirk, Robbie were playing quite quietly in the sandpile. Finally as the music grew louder John frequently looked in the direction of the phonograph. At one point he jumped up "pulling" the rest of the children with him. They ran over and stood looking at the speaker and began saying things like, "She's trying to scare us." Following this they ran randomly around the yard, their faces and bodies contracting with the pulsation, rise, and fall of the music.

The emotional impact of the experience as experienced by teachers and children is very difficult to describe. At one point the author attempted to enter their jail (the shrubs on the west end of the play yard) to dispel some of their fear which had been directed toward her in the form of hostile aggression. After entering the shrubs the author soon withdrew in fright as the children were throwing handfuls and fistfuls of dirt at her and in the air.

The children kept running at Dixie, the assistant observer, with such comments as follows:

"You teased us and scared us!"

"You stay out."

Hollie: "Are those kids scared of you? They're scared of you!"

Robbie: "You get out of here. You go hom--go, go, go home!"

Children were jumping up and down, rocking and swinging, and running from place to place. The tension was a sensed thing and was monumentally heavy. Toward the end of the record, Sherrie came over to the phonograph, opened the lid, and jerked the arm off, scratching it across the record with the following comment: "You take that off!"

This experience completely disrupted the ease and tenure of the nursery school much as an explosion. To help ease tension and induce a more calm state of mind for both children and teachers, Brahms "Lullaby" was played. After some moments of this music, tension eased and the children began to relax and enter into more typical nursery school play. John was the last child to relax.

The boys kept saying, "She scared us."

The repercussions of this experience lasted several days. The next day when the phonograph was brought into the nursery school, several of the boys ran toward the author with these kinds of comments:

"Here they come again with that scary music."

"Let's get 'em."

"Don't bring that in here."

Several days later it took an hour or so to dispel John's fear by playing less "scary" music and by letting him select a record. His interest in the music may have been in large part due to the other experience. He made the following comment as he was inside with Kent, "Come on, Kent, let's go outside and listen to the music the teacher's making." As Kent lingered he said again, "Come on, Kent, let's go out and hear the music."

## Case 13A

Time: May 17, 2:30 p.m.

Music: "National Music of India"

This record was played as a background to already existing activities. Debbie, Jeannie, Jill, and Hollie were sitting at a nearby table cutting out paper and coloring. The following comments were recorded in relation to the music:

Hollie: "Take that off. I can't stand that. I hate it."

Jeannie: "I like it."

Jill: "I like it."

Debbie: When asked if she liked it replied, "Uhn--uh. I don't like it. It's dumb."

Jeannie: "Two of us like it and two of us don't."

Later after some moments:

Debbie: "Do you like the record, Hollie? I think it's dumb."

Hollie: "No, I don't."

Debbie picked up the wail with her own voice and began imitating the record in a mimicking way.



## Case 14A

Time: May 17, 2:45 p.m.

Music: "Fifteen Two-Part Inventions" by Bach for Harpsichord

Following the Indian music this record was played.

There was no verbal response to the music. When asked if they liked the music, the responses without exception were in the affirmative.

## Case 15A

Time: May 18, 2:00 p.m.

Music: Mr. Weaver singing and playing a guitar and harmonica

Much as he did in the morning group, Mr. Weaver entered the nursery school, sat on the piano bench, and began to play his guitar. The children were already gathered in a group at the time.

Mr. Weaver sang much the same repertoire of music and followed the same pattern of presenting it as he had done in the morning group. After singing the nursery rhymes, the words of which had been changed somewhat to fit the context of the song, Sherrie made the following comment most emphatically: "That was all wrong." The words and music had both been different from the versions of the nursery rhymes with which she was familiar.

The children in this group as in the morning group reacted very positively with lots of smiles and several "sing it agains." There were no observable negative verbal responses. Several of the children left the group to re-enter and leave again, indicating lack of interest. The interest span for the entire group was over a half hour.

Subjective analysis: It seems inevitable at this point to draw some comparisons between the morning group and the afternoon groups. On the whole the afternoon group interacted more with Mr. Weaver. There seemed to be more of a concrete awareness of likes and dislikes in general as reflected by Sherrie's comment.

In terms of concise and clear-cut differences, there were none

observed which could not be attributed to many other variables. There were then no significant differences between the two groups.

In contrast with other listening experiences there seems to be, however, quite a difference in the attention span of the children with the "live" performance. In other words, when a person is playing an instrument in front of the children their interest span is markedly longer than when records are used for listening purposes.

## Case 16A

Time: May 26, 2:00 p.m.

Music: Anita Baird playing her flute

The experience was not formally introduced to the children into a group situation. After seating herself on the piano bench, Anita began playing her flute. As soon as the music began the children became quiet and started coming to the music area.

Anita began playing familiar tunes while the children attempted to guess what she was playing. They all listened carefully to see if they could guess first. With the playing of "Rock-a-bye Baby" all were quiet.

Charles and Jennie felt the end of the flute.

Sherrie, Robbie, John, Jana, and Jimmie watched intently. Others looked around the room and visited with their neighbors.

At this point the children became extremely curious to discover more about the instrument. After discovering that when the end was covered up, the sound stopped, several children kept trying to do this.

Jimmie sat all of the time watching without saying anything. Mark sat watching with his mouth open and acted somewhat spellbound.

Sherrie lay down on a chair, crouched on her forearms with her rear end up listening intently.

John stayed all the time lying on the floor, head in hands, never making a sound.

When Anita left there were still three children in the area listening.

Subjective analysis: In contrast with the earlier experience in the

morning group, it seemed that these children were concerned more with the instrument and the guessing game than they were with the musical content of the experience. There were, however, children who seemed very engrossed with the music. The majority lost interest rapidly when Anita began playing music which was unfamiliar and more difficult.

## FINDINGS

The following section will be devoted to the presentation of several findings that are suggested possibilities. As such they should not be attributed any immutable value or validity, but instead recognized as possibilities open for use in further experimentation.

1. The younger the child the greater will be his ability to accept musical sounds regardless of their form. Cases 4, 5, 11, 16, and 8A as compared with cases 12A, 10A, and 13A tend to substantiate this finding.

2. In contrast to #1 or in conjunction with it, i.e., the culture determines that certain kinds of music sound frightening and foreboding, the study suggests that certain forms of music are frightening to children and elicit responses indicative of fear. This was suggested by cases 5, 8, 9, 11, and cases 1A, 10A, and 12A.

3. In general the study indicated that children respond individually and uniquely to music, i.e., one child responds positively concurrent with a negative response to the same music by another child. Cases 2A, 4A, 9A, 10A, 11A, and 13A tend to substantiate this finding.

4. The study also suggested the possibility that children will demonstrate more interest and involvement, as seen through longer attention spans, in a "live" performance of a musical piece as compared with a mechanical reproduction of similar music. Cases 1, 2, 3, and 17 as compared with cases 12, 15, 19 or cases 1A, 4A, 8A, 14A as compared with 5A, 7A, 15A, and 16A indicate the above finding to be the case.

5. Specific kinds of musical patterns seem to stimulate specific kinds of reactions or responses from the children. This is particularly true with regard to body movement. For example, drum rhythms or music with dominant rhythm patterns elicit movements from the children which differs from the movement inspired by other types of music. This was indicated by cases 6, 7, 10, 13, 14, 15, 18, and cases 2A, 3A, 5A, and 6A.

6. The above is true also with regard to overt behavioral responses. For substantiation of this finding, contrast case 13 with case 12A.

7. Children tend to show greater interest in the machine or recording mechanism than the music when the experience is first introduced. This can be seen verified in cases 2A, 4A, and 8.

8. Following the presentation of a "live" performance, the children want to handle and play the instrument themselves. This was evidenced in cases 16A, 15A, 5A, 7A, and 15.

9. Unstructured presentation of "live" performances attracted and held as many children as did the structured presentation of a similar performance. The appearance of a performer with an instrument in the nursery school, almost without exception, instantaneously brought the majority of children immediately to the area. This can be seen in cases 5A, 7A, 15A, 16A, 12, and 19.

10. Differences in responses to the different presentations of recorded music were not dramatic enough to indicate that the method of presentation was a controlling variable.

11. During the progress of the study the author felt strongly that

teacher preferences tend to control the kinds of music presented to the children. See cases 1A and 10A for examples.



## SUGGESTED STUDIES

The following possibilities seem to the author worthy of consideration for future study.

1. In conjunction with Finding #1, it would be possible to empirically test the validity of such a theory with the recorded responses of very small children as contrasted with responses of older children. Such a study would require the controlling of background variables in that children could be correlated as per sex, socio-economic background, etc. The control and patterning of music presented and observations recorded might then enable a statistical analysis of the data. From the author's point of view this theory is being verified daily with the increasing data collected by the ethnomusicologists.

2. It would prove valuable to investigate the influence of visual stimuli on the perception of sound stimuli. In other words, the playing of music in a room devoid of toys, materials, etc., for young children may yield more definitive results with regard to musical interest span.

3. It was also suggested to the author that some kinds of music existing in the contemporary Western world require and elicit more attention than other forms. For example, an organ work of Bach makes greater demands of the listener than an orchestral arrangement of Percy Faith. It would be interesting to study the attention span of children to these different kinds of music. Perhaps the conclusions would be more valid if the music were introduced in a barren visual environment as

described in the preceding suggestion for study. Such a study could be more easily controlled and recorded than this one.

4. Of interest also would be a look at the difference between the interest span of young children in the same piece of music played "live" or reproduced mechanically.

5. Certainly a study conducted over a long period of time recording children's evolvment of musical taste would be rewarding.

6. The tracing of a child's background of musical environment and the correlation of this information with the child's current responses to music would also be of some value.

7. The study of how music gives meaning to man could well begin with the study of the infant and his relationship to sound and his culture.

8. Asking children to interpret the music by having them describe it in terms of "What kind of animal does this sound like?" might reveal the emotional tone attributed to a certain kind of music by our culture.

## SUGGESTED APPLICATION

Contemporary nursery school or child development theory admits no auspicious tradition in the field of music education. And most people concerned with the field have, it is felt by the author, provided children with the music they have felt to have meaning. Too little of this aesthetic philosophy on the part of nursery school curriculum writers is based on actual experiments. Of greatest significance to the author is the one intuitive observation growing out of the study--that, generally speaking, music libraries for children have been very restrictive and limiting of the vast amounts of music which could be experienced by children with valuable results. It is then suggested by the author, as a result of the study, that music representing many periods in Western culture as well as music representing other cultures can have meaning and value for children, if they are not discriminated against by the administrators of the nursery school program.

## SUMMARY AND CONCLUSIONS

To determine the responses of a group of nursery school children to a variety of musical experiences this exploratory study was conducted. The purposes of the study were: (a) To discover in general what kinds of music children responded most positively to; in other words, to determine how open-minded these children were to the kinds of music presented. (b) To determine whether or not music had an influence on the children's overt behavior. (c) To determine the difference between responses to an unstructured presentation of a musical experience and those elicited by a more structured presentation.

The data were recorded by the author and an assistant through the method of observation. Some thirty-five experiences were conducted and observed in the nursery school. The recorded observations were not subjected to a statistical analysis in view of the absence of a traditional research design. The data were subjectively analyzed and interpreted by the author to yield the findings and conclusions.

As a result of the nature of the collection and interpretation of the data, the author feels that no findings or statements of conclusion can be attributed any degree of finality or great scientific validity.

With this reservation in mind the author feels that the following conclusions can be made:

1. Children react overtly as a result of hearing musical sounds.
2. Younger children appear to accept a greater variety of musical works.

3. The phenomena of music and its relationship to children in our culture is extremely complex.

4. Music is so completely related to the total cultural context that its influence or meaning or value as a separate element is difficult to distinguish.

5. Whether or not the influence of music on the behavior of young children is determined by the cultural associative or referential meaning of the sound patterns or by the inherent nature of the sounds themselves remains a profoundly difficult and unsolved problem.

6. Children respond more completely to a musical experience which is "live" than they do to a mechanically reproduced one.

7. Differences in response to unstructured and structured presentations of music were too varied and individual to yield any comparative significant findings.

8. Each child responds to a musical experience in a unique manner.

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## APPENDIX

List of Records

- Bach - Played by the Philadelphia Symphony Orchestra  
Columbia ML-5065
- Beethoven String Quartet - Quartet #3 in D, Op. 18  
Budapest Orchestra  
Columbia ML-5394
- Capriccio Espagnol by Rimsky Korsakov  
Columbia recording
- Fifteen Two-Part Inventions by Bach - Landowska 3 Part  
Victor ML-2389
- Madame Butterfly by Puccini - Tebaldi, Bergonzi, Cossotto, Serafin,  
St. Cecilia  
Academa (1) 3-London A-4337
- Mozart Violin Concerto #5 - Oistrakh  
Decca 9766
- Music from the Romantic Era  
Capitol P-8341
- My Fair Lady  
Columbia OL-5090
- National Music of India - Compiled by Erich M. von Hoinbostel  
Parlophone MC-108 CE-6438 #17 and 18
- Pictures at an Exhibition by Moussoursky  
Columbia recording
- Rite of Spring by Igor Stravinsky  
Columbia ML-5277
- Skins by Les Baxter  
Capitol T-774
- Songs of the Carribean sung by Harry Belafonte  
Victor LPM-1505
- Stan Kenton - in Hi Fi  
Capitol W-724

College of Family Life  
 Child Development Laboratory  
Spring 1960

Morning Nursery Group

<u>Name</u>	<u>Age</u>	<u>Parents</u>
Bryon	3 years 4 months	Clifford R. Andreason
Carolyn	3 years 8 months	Caseel Burke
Barbara Anne	3 years 7 months	G. Richard Burton
Lynn	4 years 1 month	John Chidester
Sheri Lynn	4 years 1 month	H. Dean Eyre
Michael	3 years 5 months	Andrew Galos
Susan	3 years 7 months	Norman B. Jones
Brian Lee	3 years 3 months	Von H. Jarrett
Benjamin	3 years 11 months	James A. Jarvis
David	3 years 9 months	Marshall Levin
Anita	4 years 1 month	Rodney S. Nyman
Craig	3 years 4 months	Mose Reese
Julie	3 years 5 months	Wayne Rich
Kerry Anne	3 years 9 months	Gerald S. Rosenthal
Jeffery	3 years 9 months	Loyal H. Sesholzer
Lori	3 years 7 months	John Squires
Kristine	3 years 11 months	Eldredge Webb
Linda Kay	4 years 1 month	John Willis

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Afternoon Nursery Group

<u>Name</u>	<u>Age</u>	<u>Parents</u>
Kirk	4 years 4 months	Keith C. Anderson
John	4 years 10 months	Richard L. Clayton
Rachelle	4 years 5 months	Ross L. Covington
Charles	4 years 6 months	Donald W. Davis
Kent	4 years 8 months	William Arthur DeHart
Mark	4 years 4 months	S. George Ellsworth
James	4 years 3 months	Harrison Groutage
LaRae	4 years 3 months	Deon W. Haslem
Stephanie	4 years 4 months	Stephen John
Robert	4 years 10 months	Glen Lucherini
Michelle	4 years 1 month	Stanford E. Mathews
Jana	4 years 3 months	Carl G. Nelson
Kirk	4 years 11 months	Thomas A. Nielson
Jill	4 years 10 months	Jay Skidmore
Hollie	4 years 11 months	Loyal Seeholzer
Scott	4 years 2 months	Gordon A. Steele
Elizabeth	4 years 11 months	Golden R. Stettler
Sharon	4 years 1 month	Bruce O. Watkins
Debra	4 years 11 months	Clair Wilson
Jean	4 years 8 months	B. Clark White