

A STUDY OF THE EFFECTS OF MUSIC  
ON AUDIENCES' PERCEPTIONS OF A  
SLIDE-TAPE PRESENTATION

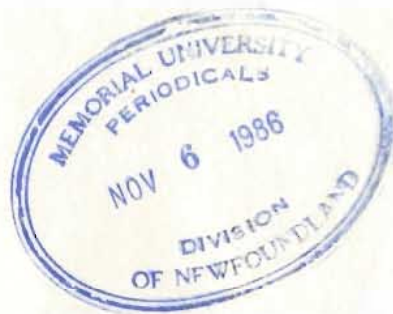
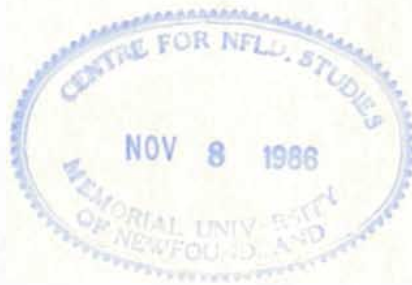
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**A Study of the Effects of Music on  
Audiences' Perceptions of a Slide-Tape Presentation**

By

© K. Bruce Lane, B.Sc. B.Ed.

**A Thesis submitted to the School of Graduate Studies  
in partial fulfillment of the requirements  
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## ABSTRACT

This study attempted to determine if the music which accompanies a slide-tape presentation affects an audience's perception of the production.

Three versions of a slide-tape presentation were produced: one contained music which the producer considered to be an integral element of the production, another contained music which was considered dissonant with the intended mood and theme, and the third contained no music whatsoever.

Each was administered to a group of university students, and data was collected on a questionnaire, which recorded responses on twenty 7-point semantic differential scales, personal information, and a rating of the program. This data was used to analyze audiences' perceptions of the production.

It was found that music had no significant effect on evaluative factors such as beauty, worth, and meaning, but did affect perceptions of factors such as activity and complexity.

The methodology used in this study has proven to be effective and can be used as it stands or modified to facilitate further research by producers of slide-tape productions.

### Acknowledgements

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## Chapter I

### INTRODUCTION

The majority of media productions contain music and producers spend a great deal of time and energy in the selection of the most "appropriate" piece. At present, however, producers rely on their intuition in making the selection since no useful criteria are available to help them determine whether their choice is appropriate or not.

Media productions are attempts to communicate messages and this chapter will briefly discuss the communication process, the visual and audio elements of a slide-tape presentation, and the nature of audiences.

#### The Communication Process

Shannon and Weaver (1949) proposed a model which attempted to illustrate the communication process (see Figure 1).

Though this model was designed to analyze nonhuman communication, it has been commonly adopted by analysts of human communication. The "Informational Source" can be changed to "Sender", "Transmitter" to "Encoder", "Signal" to "Meaning", "Receiver" to "Decoder", and "Destination" to "Receiver". Noise is defined as anything which interferes with the communication process.

Ross (1965) expanded this idea and developed a model of the communication process (see Figure 2). This model includes the concept that communication is a two-way process in which feedback is an important element.

For the purposes of this research, communication can be defined as the dynamic process involving the sending and receiving of

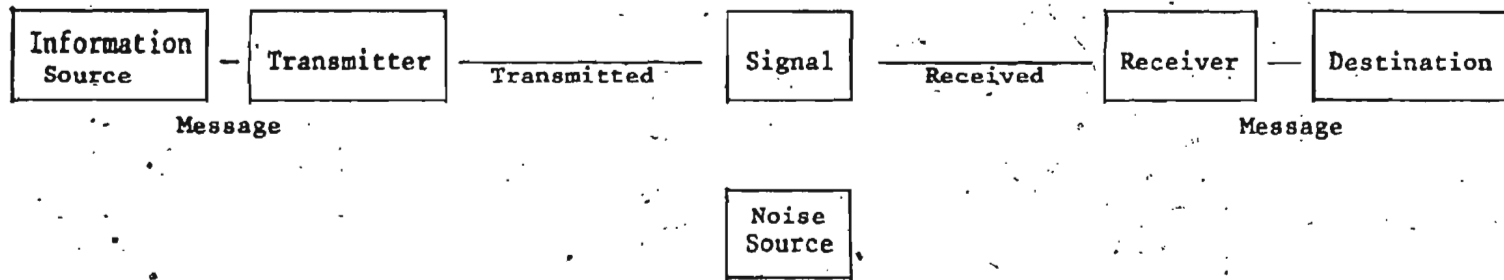


Figure 1. The Communication Process (Shannon and Weaver, 1949).

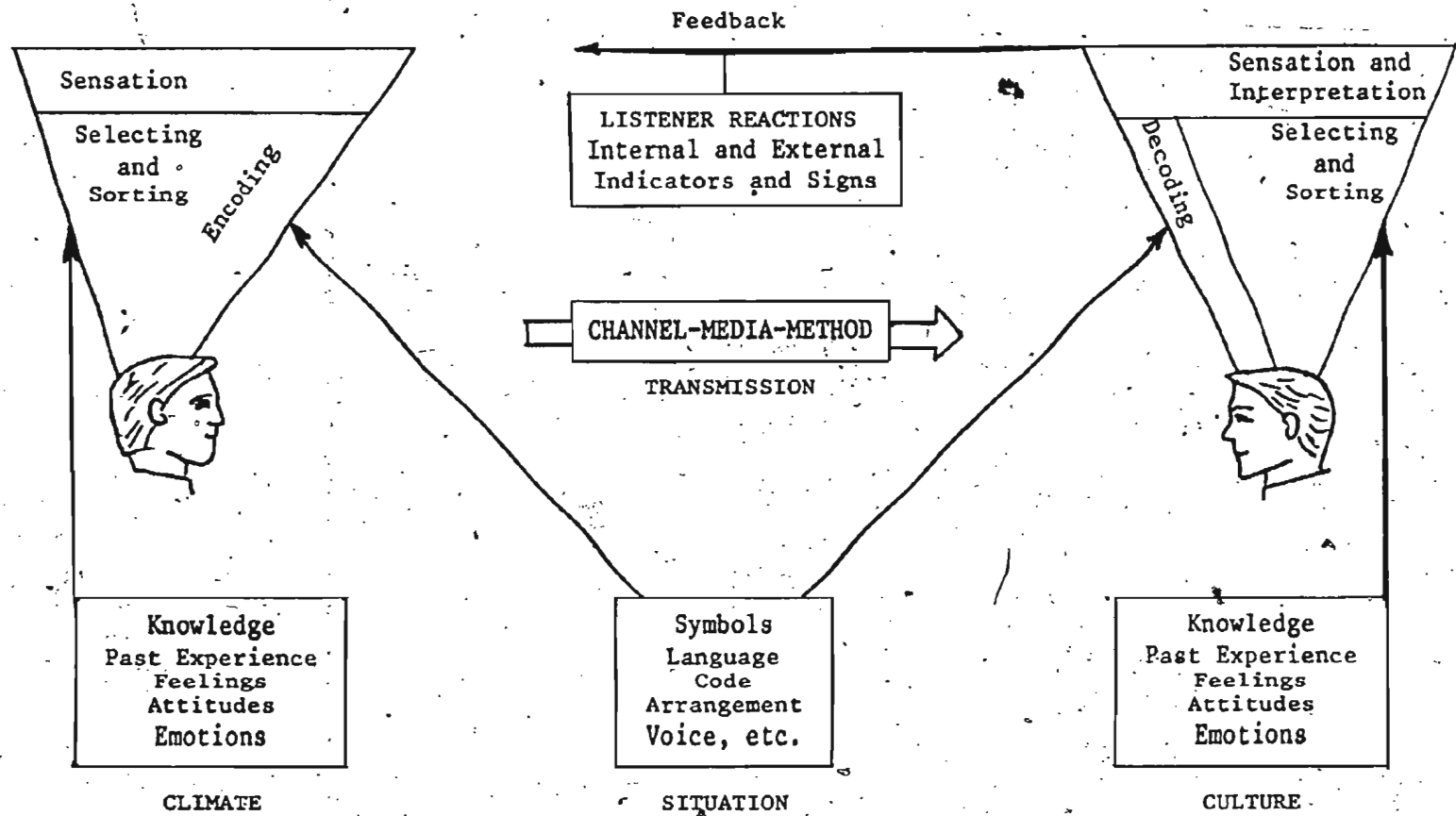


Figure 2. Model of Human Communication Process (Ross, 1965)



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messages. Included in this process are both the verbal and nonverbal modes of communication.

### The Slide-Tape Medium of Communication

McLuhan and Fiore (1967) stated:

Media, by altering the environment, evoke in us unique ratios of sense perceptions. The extensions of any one sense alters the way we think and act - the way we perceive the world. (p. 44)

Tannenbaum (1971) was in agreement

It seems intuitively obvious that most human communications are produced with the intent of causing some effect ... each time we send a message we, at least implicitly, hope to affect the way our audience perceives some part of his world, relates and responds to some part of his environment. (p. 391)

In recent years the slide-tape medium has become an increasingly popular medium in educational, industrial and commercial contexts through which to communicate ideas and feelings. When shown in an appropriately darkened room, the slide-tape production provides an audiovisual experience which can be expected to change the audience in some ways.

Generally, the slide-tape is an audio and visual medium consisting of a series of colour and/or black and white transparencies with an accompanying sound track. It is usually produced with a specific set of objectives and both the visual and audio elements serve to bring about the desired outcomes.

### An Historical Background of Slide-Tape Productions

During the Renaissance it was first discovered that by drilling

a hole in the wall of a darkened room, what was outside would be projected onto the opposite wall as a detailed, inverted image. The image in this "camera obscura" was preserved by tracing it on paper. In the mid-nineteenth century, light-sensitive chemicals were discovered which allowed an image to be captured on paper, and smaller, more portable varieties of cameras were invented. Szarkowski (1966) related the interesting fact that "in 1853 the New York Daily Tribune estimated that three million daguerrotypes were being produced that year" (p. 5).

At the turn of the twentieth century, the professionals and serious amateurs were joined by an even larger host of casual photographers. This was brought about by the development of the dry-plate process, which could be purchased ready-to-use. The messy wet-plate process, which demanded that the plate be prepared just before exposure and processed before the emulsion had dried, was soon totally replaced by the new process. This brought about the smaller hand camera.

The technology continued to develop and boom to the point that photography was cheap and available to just about anyone. Today, most people in North America have been exposed to the camera and have probably used one. From this visual technology came the media of slide-tape, film, and television which have become so accessible that nearly every household has at least one television and one camera, and the slide-tape is rapidly becoming one of the most commonly used media in schools.

#### What is a Photograph?

It is important to point out that a photograph is more than a piece of paper with an image that is the result of a photo-chemical

process.

Sontag (1978) stated that "photographs are experiences captured, and that the camera is the ideal arm of the consciousness in its acquisitive mood" (p. 55). Lowrey (1978) felt that "as with any language form, the photograph is an interpretation of reality" (p. 69). Case-Grant (1973) stated:

...visuals are a language. Underlying each intentional communication is an idea. When you transmit that idea by visual means, you are talking visually without words. (p. 2)

Fransecky and Debes (1972) agreed:

The camera is a visual pen we use to write about the world we see and to record some portion of reality that will transmit our thoughts by visual representation to another person in another time. (p. 3)

Thus, it can be stated that a photograph is a visual statement about an individual's perception of the world. The image produced on a photograph comes from within an individual. The process involved in photographing a subject is more than pointing a camera and "snapping" a picture. The photographer must, as a result of his observations, choose a subject, concentrate on that subject, identify his feelings about the subject, decide how he can best capture his feelings on film, and then take the photograph.

Feininger (1955) pointed out:

... because specific stimuli produce different reactions in different people - depending on a person's background, training, sensitivity, perceptiveness, interest, and imagination - different people see different things in one and the same subject. (p. 51)

Thus a photograph has to have meaning for its maker.

Feininger (1955) also states:

... it also stands to reason that it (the photograph) will also have meaning to some other people. No person is so unique that he can not find others to share of his interests. (p. 50)

It is interesting to note that in recent years, semiology has evolved as the science of signs and meaning in this context.

The series of photographs in a slide-tape presentation is selected because each individual transparency has a visual message, and when organized appropriately they communicate a message to the audience.

#### The Audio Element of a Slide-Tape Production

It is usual for producers of slide-tape presentations to choose an appropriate sound track to accompany the visuals. This may include music, narration, sound effects, or any combination of the three.

Narration and sound effects usually communicate additional information or reinforcement to the visual element. They are tied to the particular visual, or sequence of visuals that are being projected, and the combination of visual and aural elements communicate a specific message to the audience.

The role of music, however, is not as clear and has attracted the attention of many researchers. They have tried to determine if music really contributes to heightened enjoyment, enhanced motivation, and/or to learning by the viewer.

Seidman (1971) concluded:

After consideration of much experimental evidence a message designer would feel justified in

excluding music from a production if factual learning or attitude change was its main purpose. It seems likely that a major reason for using music in instructional programs is that the learner, as well as the buyer of their products, simply expect such embellishments as music and color to be present. (p. 49)

The extent to which music is used in media presentations has also been questioned. Herman (1965) stated that "music should have limited use in educational films. The moods that music can create can have validity only in certain dramatic films, in which attitudes and opinions have to be rectified" (p. 142). Zuckerman (1949) pointed out that unlike dramatic films, "for informational and instructional motion pictures, music is just "there", without any "raison d'etre". (p. 1). Reid (1979) showed agreement with these authors when he gave the following instructions:

As you produce more sound/slide programs, add a little flair, and some gimmicks. For example, try two or more voices, incorporate lively music as a background, and add sound effects ... (p. 50)

Palmer (1972) also agreed:

Although music for bridges and background is not absolutely essential, it gives the program a professional touch ... (p. 264)

Zuckerman (1949) had this to say about film music:

It is commonplace that a motion picture, whether it has been produced for entertainment, information, or instruction, contain some kind of music. Music is included in films partly because of traditions of accompanying silent pictures with musical background played by piano, organ, or orchestra; the practice has persisted. (p. 194)

Kemp (1968) has stated that "evidence indicates that background music is not essential to effective communication with audio-visual material" (p. 129).

Others, such as Gillis (1973), felt that music serves as a function in that it helps hold the interest of an audience. He distinguishes between background and mood music. Background music should:

provide a sonic scenery against which all the audio and visual materials are presented. It shouldn't distract from the message. Mood music can create a mood which enhances other production elements. Of itself, it can evoke emotional responses from an individual or a group. (p. 151)

Rotha (1963), Evans (1975), Hevner (1936), Vinovitch (1975), and Berg and Infante (1976) have pointed out and argued that music is an essential element in media productions. The fact that it is a medium which can affect one's emotions causes it to influence one's perception of visual images.

Tannenbaum (1956) said the following:

That music hath charms is a generally accepted fact. Perhaps not so much a subject of consensus, it is also generally agreed that music can communicate meaning - at least to the extent that a particular person exposed to a particular musical composition will experience certain connotations. (p. 93)

Berg (1975) also pointed out why the role of music in media productions is not specifically defined:

...complicating the problem of media investigators is the fact that music has its own vocabulary, a vocabulary little understood except in the most general terms. Another difficulty is that music is not a concrete element in the same way that images and dialogue are. (p. 4)



Kracauer (1960) attempted to define the role of music:

Music is not just sound; it is a rythmetical and melodious movement - a meaningful continuity.

... no sooner does music intervene, than we perceive structured patterns where there were none before. Confused shifts of positions reveal themselves to be comprehensible gestures, scattered visual data coalesce and follow a definite course. Music makes the silent images partake of its continuity. (p. 135)

Infante and Berg (1979) felt that "music appears to stimulate affective responses in people which influence other salient objects of judgement" (p. 135).

Kemp (1968) had this to say about music in media:

...it may help in creating a desirable mood and in building continuity. Music as background for titles will assist the projectionist to set the volume level for the narration which follows. When music is used under narration, maintain it at a low enough level so it does not interfere with the commentary or compete with the picture for the viewer's attention. (p. 129)

Bornhoff (1972) criticized the rôle of music in film:

From the beginning, the role of music has been a menial one: from creating moods in silent films to becoming an indispensable ingredient to talkies, music in motion picture has existed solely to accompany an action on the screen. (p. 196)

He felt that "music can influence the sense of a picture, and, therefore, the audience's reaction to it" (p. 197).

Seidman (1981) and Berg (1975) agreed that the role of music in media productions has had less to do with the visual image than getting the attention of the audience and masking distracting noise and silence.

Others, such as Berg (1975), Bobker (1974), Valentino (1978)

and Zuckerman (1949) agreed that when properly used, film music can establish atmosphere, reflect actions, maintain and alter emotions and moods, define characters and emphasize their unstated thoughts.

It is clear that there is much confusion among people in the field about the role of music in media productions and the effects of using music to accompany visual images.

#### Related Research

Tannenbaum, a pioneer in this area of research, carried out a study in 1956. He attempted to measure the effects of music on three versions of a play. He used a semantic differential and selected ten separate scales intended to measure the amount of meaning derived from each version. He concluded:

Music background, then, can be considered to have an influence on the rating of a drama, with the influence being most pronounced on the con-  
nitive dimensions of potency and activity, but not to a significant degree in terms of changing the evaluation of the play. (p. 99)

Rink (1976) also carried out research in this area and concluded:

... there was a significant difference in a student's perception and retention of a dramatic television presentation's content when different music background music treatments were employed in the presentation. ... no significant difference was found in students' perception and retention of a dramatic television presentation's cognitive content with either background music treatments or the no-background treatment employed in the presentation. (p. 201)

Infante and Berg (1979) found:

This experiment supported our central hypothesis as to the effect of music modality on the perceived favourableness of a situation in a videotape; i.e. the major mode caused the favourable situation to be perceived as more favourable and the minor mode caused the favourable situation to appear less favourable and the unfavourable situation to be perceived as more unfavourable. (p. 16)

Hoban and Van Ormer (1970) and May and Hamilton (1977) carried out research and concluded that music did little or nothing to improve learning in audiovisual materials.

A review of the literature has indicated that to date no research has been carried out on the effects of music on perceptions of slide-tape productions.

### The Nature of the Audience

The potential for providing information and shaping attitudes depends on a wide variety of factors which function to influence whether and how communications affect and/or change the attitudes of the audience.

Tannenbaum (1971) labels these "message factors, situation factors, and audience factors". Message factors include such things as the organization of the message, its source, the content, and so on. Situation factors include the setting and the extent to which it adds or distracts from the message. Audience factors include the intellectual ability to comprehend the message, their values, their needs, interests, and personality characteristics.

The purpose of communicating in any medium is to send a

message to a receiver. The nature of the message is controlled to a large extent by the producer, but how the message is perceived is dependent upon the individuals who receive it. Thus, the message of the slide-tape presentation, indeed of any form of communication, can not be isolated from the personality of the receiver.

Usually slide-tape presentations are presented to a group of people who either have an interest in the topic or theme of the production, or who are required for some reason to receive the communication. However, each member of the audience is an individual with his own interests, likes, dislikes, and so on.

Merrill and Lowerstein (1971) described some of the difficulties of analyzing an audience:

...the members of these audiences are scattered, fluid, anonymous, unseen, and heterogeneous. It is impossible for us to know much about their inconsistencies. The very nature, therefore of a mass audience defies careful analysis... (p. 120)

They went on to say:

Not only varying numbers comprise different audiences, but different persons are involved. Although, undoubtedly, there is some overlap among members comprising mass audiences, we can say that each audience is different in composition. .. having within it not only different individuals but different types of persons. (p. 124)

Reilly and Flowerman (1971) advanced the theory that any given person in an audience reacts not merely as an isolated personality, but as a member of the various groups to which he belongs and with which he communicates.

Schramm and Roberts (1971) had this to say about the audience:

... the audience is very active, although there may be nothing overt about it. This is in the selection, rejection, and interpretation that goes on in the mind of the receiver. (p. 192)

Krech and Crutchfield (1971) discussed the audience's reception of media messages in terms of perception:

What we perceived as well as how we interpret what we perceive, is not only a function of those processes which can be specifically defined as motivational ones. Our immediate perceptions are also a function of the "higher order" cognitive organizations - of beliefs, of morals, of cultural frames of reference. (p. 248)

They also stated:

The functional factors of perceptual organizations on the other hand, are those which derive primarily from the needs, moods, past experiences, and memory of the individual. (p. 236)

Friedson (1971) agreed:

... it follows that the two really important variables in mass communication are individual traits of the audience and the content itself. Content is studied as a set of stimuli from which members of the audience as individuals create "objects" in terms of their individual interests. (p. 205)

Thus, it can be seen that it is important for producers of media messages to have some understanding about the interaction of the elements of a production and the audiences' perceptions of the message.

#### Summary

The slide-tape medium of communication is comprised of visual and audio elements, both of which contribute to the intended message.

The role of music in media presentations has been questioned and previous research has failed to provide a definite answer to the problem. This researcher will attempt to investigate whether music affects an audience's perception of a slide-tape presentation.



## Chapter II

### STATEMENT OF THE PROBLEM

#### Need for the Study

A review of the literature indicates that there is a difference of opinion among media producers and researchers about the importance of music in media productions. A review of the literature has indicated that there has been no empirical research on the effects of music on audiences' perceptions of slide-tape presentations.

It is important for designers and producers of media messages to have some knowledge about what works in the commercial world, of musical variables and their connotative meanings, and how musical pieces interact with the other elements of a production. With greater knowledge about ways music can be used with media messages and audiences, the effectiveness of media productions can be increased.

Rink (1976), Tannenbaum (1971), and Berg and Infante (1976) saw the importance of investigating the role of music in media messages and recommended research in this area. Merrill (1971) felt that this area of study had been avoided because it was difficult to carry out empirical research. Lewell (1980) made this suggestion for research:

It would be helpful if an enterprising producer experimented with the visual images and their effect upon an audience when accompanied by varying sound images. (p. 130)

Since in recent years the slide-tape medium is commonly used

to transmit educational, informational, and motivational messages, and the majority of these include musical accompaniment, the present study has been designed to investigate the role music plays in this medium and the extent to which it affects audiences' perceptions of the intended media message.

The results of this study should provide some guidance and direction to producers of slide-tape presentations in selecting the most appropriate piece of music that is consistent with the theme of the production. When producers have a better understanding of the effects of music, productions will become more effective in communicating the intended messages to the viewer.

Though this study is confined to one slide-tape presentation and the results may have limited generalizability, the methodology used is likely to be useful to both producers and researchers who may be interested in applying it to their own productions and/or research.

It is also expected that this study will raise relevant questions for further research.

#### Purpose of the Study

Since there are two extremes to the argument - either music is an essential element of a media production, or it is nothing more than a gimmick, used because it is expected to be there, not because it may influence audiences' perceptions of the media message - this researcher carried out a study which attempted to determine the answer. More specifically, it was hoped to answer the following:

- (1) What role does music play in a slide-tape presentation?

- (2) To what extent do the personal demographic characteristics of members of an audience affect their perceptions of the media production?
- (3) Which of these characteristics, if any, contribute to differences between individuals in an audience?
- (4) Is it the presence of music, or the type of music which exerts an effect on audiences' perceptions of the production?

This researcher believes that music is an important element of a slide-tape production. In addition, it was predicted that it is not the mere presence of music which affects an audience, but a specific piece of music selected to accompany a specific set of visuals which will make the visuals more meaningful.

The demographic characteristics of an audience were also expected to influence an audience's reaction to a production.

## Chapter III

### DESIGN OF THE STUDY

In the past, researchers have attempted to study the effects of music on audiences' perceptions of various media messages. In all cases, however, these studies have taken into consideration only two variables - the music and the audiences' attitudes toward the message being studied.

When designing the present study, this researcher decided to investigate a third variable in addition to these two - the personal characteristics of the audience. It was felt that the audience is an important element in the communication process, and the demographics of the audience may affect their perceptions of the intended media message.

Inclusion of this variable allowed this researcher to investigate differences in audiences reactions across (a) attitude scales and music, (b) attitude scales and demographics of audience (c) music and demographics of audiences (see Figure 3).

#### Variables of the Study

##### Independent Variable

The independent variable in this study was the type of music which accompanied the visuals. Three versions of the soundtrack were produced:

1. Version I - contained soft music and lyrics
2. Version II - contained rock music
3. Version III - contained no music (See Table 1)

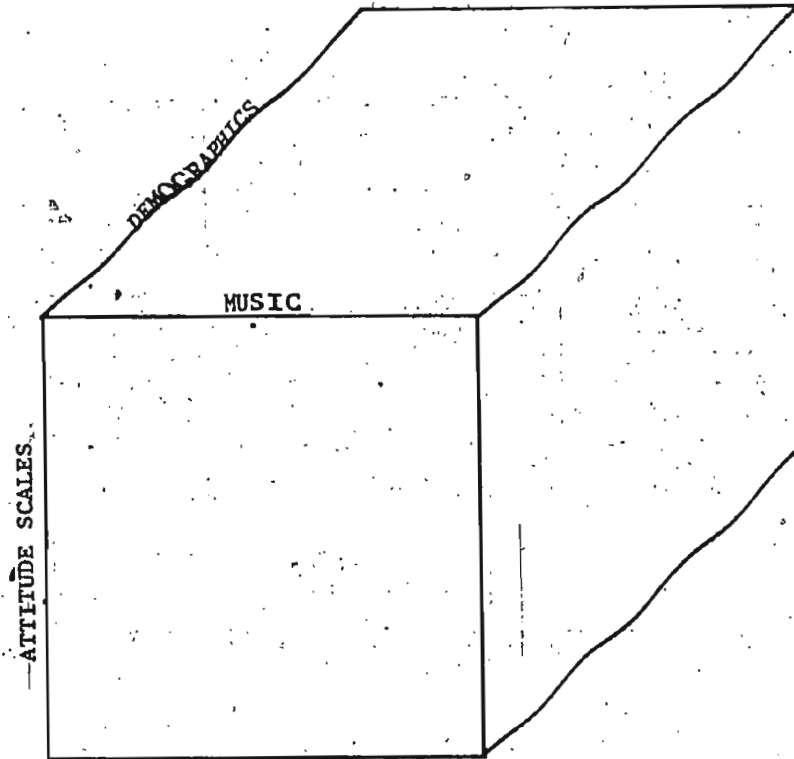


Figure 3. Three Dimensional Comparison of Variables

Table 1: Music Used in Each Version of Slide-Tape

VERSION	MUSIC USED	TYPE OF MUSIC	DESCRIPTION
I	"Eyes of a Child" by The Moody Blues	soft music	quiet, slow
II	"Hopelessly Human" by Kansas	hard rock	loud, fast
III	None	None	None

The second independent variable was the demographic characteristics or attributes of the audience. They were, so to speak, already manipulated and the subjects came to this study with these variables ready-made.

#### Dependent Variable

The dependent variables were the viewers' reactions to the slide-tape production as measured by their responses to the rating scales.

#### Controlled Variables

An attempt was made to control the following variables:

1. The same visuals were shown in the same sequence to all groups.
2. The length of the production was kept constant.
3. All versions were shown in the same, appropriately darkened room.
4. All versions were shown using the same hardware.

This insured that each group heard the soundtrack at very similar volumes and intensity of the projector was kept constant.

In addition, the following procedural variables were kept constant:



1. All groups were told that the study was a formative evaluation of the production and that they could cooperate by completing the questionnaire and rating scales immediately after viewing the production.
2. They were encouraged to be totally honest in their responses to the rating scales.
3. Each group was given the same brief explanation of the theme of the production.

#### The Instrument

The instrument (see Appendix B) was designed in three separate parts.

1. a set of twenty 7-point semantic differential scales.
2. a personal information questionnaire.
3. general questions about the program.

#### The Semantic Differential

The semantic differential, developed by Osgood, Suci, and Tannenbaum (1957), is a combination of association and scaling procedures. It was originally designed to attempt to measure the amount of meaning that a person attributed to various concepts. It has since been used extensively in many social and clinical contexts (Snider, 1969), and has proven to be a reliable method of collecting data related to meaning.

When using a semantic differential a person is usually asked to rate a concept or object (in this study, a slide-tape presentation) on a series of bipolar, seven-interval scales, the poles being defined by adjectival opposites. A series of such scales is assumed to be

representative of a set of factors which can be used to define a multi-dimensional semantic space within which the meaning of a concept may be specified. In the factor analysis work conducted by Osgood and his colleagues, three basic factors or dimensions of meaning repeatedly exhibited themselves. The first is clearly identifiable as a general "evaluative" factor and is characterized by such scales as good-bad, fair-unfair, valuable-worthless, and the like. The other dimensions are identified as a "potency" factor (strong-weak, large-small, etc.) and an "activity" factor (fast-slow, active-passive, etc.).

More recently, Baggaley, Ferguson and Brooks (1980) found that four principal factors were extracted from data collected from experiments related to television and audience perception. They termed the factors: (a) Integrity (b) Mastery, (c) Empathy, and (d) Poise. They concluded that these factors were related to a performer's "Professional and Personal" characteristics as perceived by the audience.

The twenty semantic differential scales selected for this study reflected both Osgood's and Baggaley's factors. (see Appendix B)

#### Personal Information

This section was designed to collect personal information which might be a contributing factor to an individual's perception of a slide-tape presentation.

Age and sex were selected as two of the most likely factors. Other questions sought to determine each individual's interest in photography, music, and media production. It was felt that knowledge of viewers' interests in these areas could affect their perceptions of the production, and the extent to which music played a part in it.

Rating of the Production

Subjects were asked to rate the production on the scale

Poor      1      2      3      4      5      Excellent

They were to use several criteria including:

1. Quality of the photographs
2. Appropriateness of the photographs to the theme of the production
3. Quality of the narration
4. Length of the program
5. Overall technical quality
6. Appropriateness of music to theme (Versions I and II).

It was felt that responses to this section might further contribute to analysis of the effects of music on the production elements of the slide-tape presentation.

Subjects were also given an opportunity to voice their opinions on the slide-tape presentation. It was felt that these comments, while quite subjective, might be of some interest to the producer.

Selection of the Slide-Tape Presentation

For the purpose of this study, a slide-tape presentation entitled, "Seeing: Through the Eyes of a Child", was selected. This production - designed, written, photographed, and produced by this writer - was considered an appropriate choice since it was originally designed around a specific piece of music, "Eyes of a Child", by the Moody Blues.

"Seeing" was chosen as the title of the production because it is the producer's belief that in order to become a photographer one must learn to "see" the world. In this presentation, "seeing" refers to a

person's unique way of looking at, or perceiving, the world. As a person becomes more adept at seeing his surroundings he will become more sensitive about that which he perceives.

The subtitle, "Through the Eyes of a Child", was chosen because children are naturally curious about their environment and spend much time exploring and investigating their surroundings. It is in this spirit of natural curiosity that a photographer must learn to "see" photographic subjects.

This production is intended to be an audiovisual experience which will motivate people to look more closely at the world. The narration is pleasant and contains little technical language and viewers should have little difficulty comprehending the intended message.

Examples of several different kinds of photographs are included in the production: scenics, flora, insects, wildlife, people, close-ups, and abstracts, such as those using slow shutter speeds and shallow depth-of-field. Each is intended to show how one photographer sees his world and expresses these perceptions through the medium of photography.

These themes are reflected in the piece of music that was chosen. Thus, this producer considers the music to be an integral element of the production.

"Seeing: Through the Eyes of a Child" was designed such that it could be divided into five segments (see Figure 4).

Part I consists of a series of slides with musical accompaniment which introduces the production.

Part II consists of slides and a narration with no musical accompaniment.

	I	II	III	IV	V
Part	MUSIC	NARRATION	MUSIC	NARRATION	MUSIC
Time	1:38	2:39	0:57	1:09	0:26

Figure 4: Format of Slide-Tape Production

Part III consists of a series of slides with music and no narration.

Part IV consists of a narration, but no music to accompany the visuals.

Part V is a closing sequence of slides with music.

Designing the slide-tape presentation in this manner allowed this researcher to vary the types of music easily as well as insuring that the musical variable was given sufficient time and attention so as to be perceived as an important production element.

#### The Population

As stated previously, "Seeing: Through the Eyes of a Child" is intended to show audiences that through the medium of photography one can learn to "see" the world in much the same way that a child sees the world, and that in order to become a photographer one must learn to see the world in this way. The language of the narration is not technical and no previous knowledge of photography is required in order for a viewer to comprehend that message.

Thus it was determined that subjects for this study may be selected from the general population of university students. Several

professors were approached and they subsequently consented to let their students partake in the study.

Appendix C contains a list of tables summarizing the demographic data and distribution of subjects according to group.

### Procedure

The data was collected over a three day period. Three versions of the slide-tape presentations were shown in the same, appropriately darkened room using the same equipment.

Each group was told that they were participating in a formative evaluation of the slide-tape presentation and were asked to answer the questionnaire as honestly as they could immediately after viewing. Each group was given a brief explanation of the theme of the production.

After the questionnaires were collected each group was given an opportunity to comment on the production or ask more specific questions related to the study.

### Analysis of the Data

#### Analysis of Semantic Differential

The data collected from the three sections of the questionnaire were subjected to several methods of analysis.

Responses to the twenty, 7-point semantic differential scales were coded from 1 to 7, with 1 being the most positive pole and 7 being the extreme opposite. In cases where no response was recorded, a zero was indicated.

The coded data was then factor analyzed using the PA I Non-iterative, Varimax Rotation (Nie, Bent & Hall, 1970).

Following the factor analysis, a Student-Newman-Keules analysis of variance and chi square tests were carried out on each of the twenty 7-point scales to determine whether or not the observed differences between the responses of different subject groups on the scale were statistically significant.

#### Analysis of Personal Data and Program Rating

The data from the personal information and program rating sections of the questionnaire were coded and input into a microcomputer which permitted descriptive and inferential analysis of variations between the responses of individual audience members.

Using this program allowed the researcher to analyze data and cross-reference the results from each question with all other questions. It also allowed the existing data to be restructured in order to investigate further the demographic make-up of an audience and identify the ways each individual responded to the slide-tape presentation.

It was decided to investigate several scales of the semantic differential test more closely, to analyze the audiences' perceptions of the production and to determine to what extent music affected these perceptions.

## Chapter IV

### RESULTS

As discussed in the previous chapter, the data from this study were collected on three occasions, one for each condition.

Responses to the twenty 7-point semantic differential scales were coded and factor analyzed, and any significant differences were cross-referenced with the demographics of the audiences.

For the purpose of subsequent discussion the groups shall be referred to as Original - Group I, Rock - Group II and Mute - Group III.

#### Analysis of Mean Responses to Semantic Differential Scales

The mean response for each scale by group was obtained. These were then plotted on a graph (See Figure 5). The scales were arranged such that all read from extreme positive (1) to extreme negative (7).

As can be observed from Figure 5, mean responses on most scales tended to be very positive for all three groups. However, on a few scales, particularly fast-slow, active-passive, and complex-simple, there appeared to be a noticeable difference between groups. In each case the Mute Group tended to respond more negatively.

The means of each scale according to group (see Table 2) were then submitted to a Student-Neuman-Keules analysis of variance to determine whether observed differences in the means were statistically significant. The results showed that only two scales showed a between-group statistical difference greater than 0.5 level. Table 3 shows the



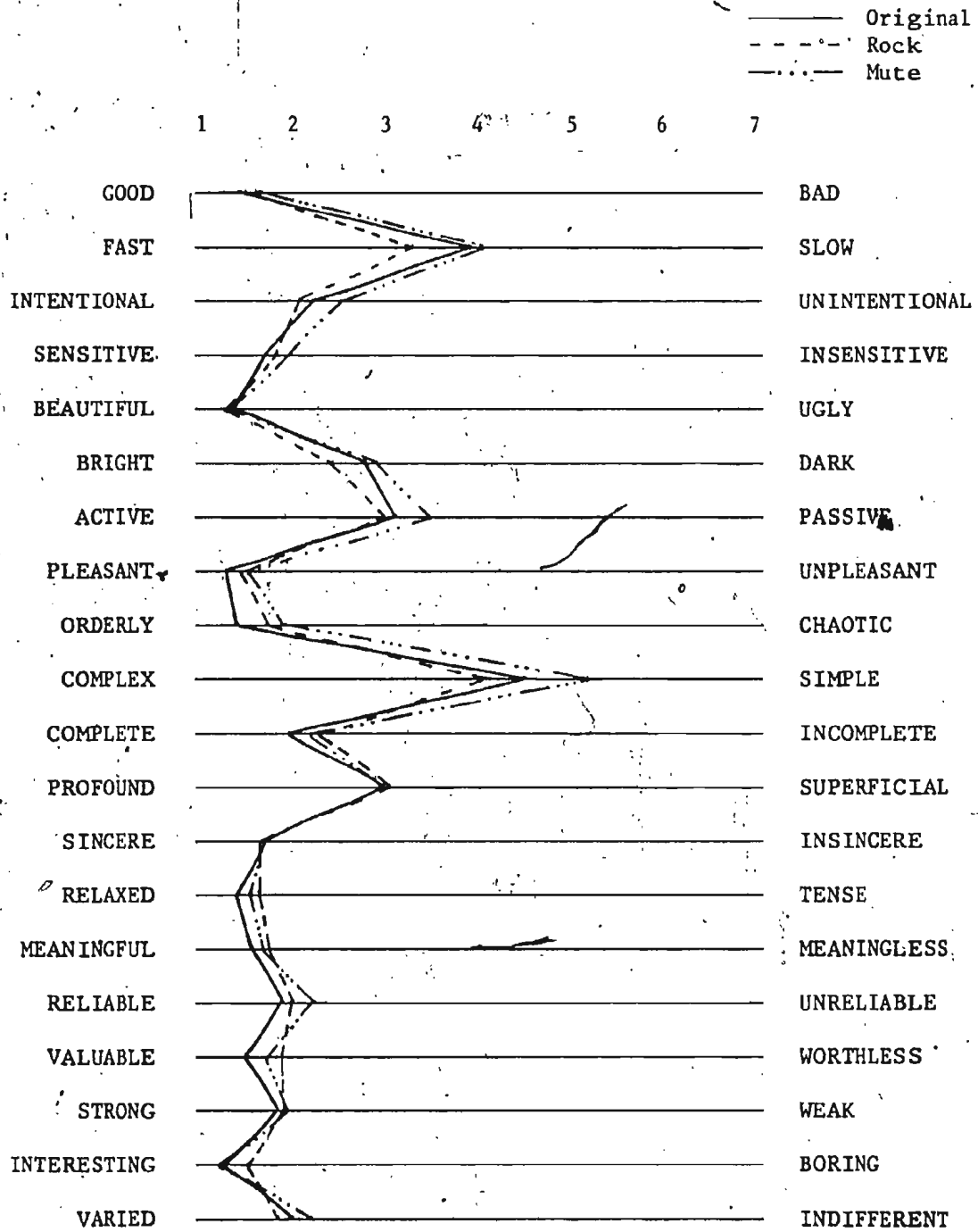


Figure 5: Mean Responses to Semantic Differential Scales

Table 2: Mean Responses to Twenty 7-Point Semantic Differential Scales by Group

SCALE	MEAN RESPONSES		
	ORIGINAL	ROCK	MUTE
1. GOOD	1.46	1.48	1.55
2. FAST	3.81	3.43	4.02
3. INTENTIONAL	2.30	2.22	2.53
4. SENSITIVE	1.73	1.78	2.00
5. BEAUTIFUL	1.46	1.33	1.44
6. BRIGHT	2.84	2.52	2.91
7. ACTIVE	2.89	2.72	3.58
8. PLEASANT	1.30	1.43	1.47
9. ORDERLY	1.43	1.67	1.86
10. COMPLEX	4.57	4.17	5.23
11. COMPLETE	2.00	2.28	2.16
12. PROFOUND	3.00	3.07	3.00
13. SINCERE	1.70	1.65	1.70
14. RELAXED	1.46	1.67	1.58
15. MEANINGFUL	1.54	1.72	1.63
16. RELIABLE	1.92	2.02	2.26
17. VALUABLE	1.51	1.91	1.72
18. STRONG	1.84	1.91	1.93
19. INTERESTING	1.35	1.50	1.30
20. VARIED	2.03	1.87	2.28

results of this test for these two scales. The complete results of this test are given in Appendix D.

Table 3: Results of Student-Neuman-Keules  
(Extracted from Appendix D)

VARIABLE	BIPOLAR ADJECTIVE	D.F.	SUM OF SQUARES	MEAN SQUARES	F-RATIO	F. PROBLEMS
7	active-passive	2	18.1333	0.0666	3.854	0.0238
10	complex-simple	2	25.2707	12.6354	3.537	0.0321

On the active-passive scale it was found that the Original and Rock versions differed from the Mute group, while not showing a significant difference between themselves. On the complex-simple scale there were significant differences between all groups.

Osgood, Suci, and Tannenbaum (1957) included the active-passive and complex-simple scales in a factor they termed "Activity".

Table 4 gives the results of the unrotated factor analysis for the three groups. It was felt that the unrotated results provided a less distorted analysis than the rotated results of the factor analysis. Each scale included in the factors has met the criterion of 0.55 or greater in the factor loadings.

In all three conditions factor analysis showed there was a heavy loading of Factor I with scales that can be termed "Evaluative". However, it can be observed in Table 4 that the Original version has a more heavily loaded first factor than the Rock version, which in turn has a greater first factor than the Mute version. This would seem to indicate that the audience responded more systematically toward the

Table 4: Attitude Scales: Unrotated Factor Loadings

FACTOR	ORIGINAL	ROCK	MUTE	
I	BEAUTIFUL	0.873	MEANINGFUL 0.881	VALUABLE 0.804
	GOOD	0.827	STRONG 0.791	PLEASANT 0.788
	INTERESTING	0.788	RELIABLE 0.774	GOOD 0.722
	VALUABLE	0.782	GOOD 0.746	SENSITIVE 0.715
	PLEASANT	0.774	PLEASANT 0.744	SINCERE 0.697
	PROFOUND	0.735	VALUABLE 0.719	COMPLETE 0.687
	MEANINGFUL	0.721	SINCERE 0.707	STRONG 0.629
	STRONG	0.663	VARIED 0.705	BEAUTIFUL 0.644
	COMPLETE	0.659	COMPLETE 0.683	INTERESTING 0.601
	RELAXED	0.650	INTERESTING 0.679	
	VARIED	0.598	SENSITIVE 0.574	
	SENSITIVE	0.567		
	SINCERE	0.563		
II	INTENTIONAL	0.638	FAST 0.744	MEANINGFUL 0.574
	ACTIVE	0.569	PROFOUND 0.703	FAST 0.551
	VARIED	0.564		
III	SINCERE	0.598	BEAUTIFUL 0.552	INTENTIONAL 0.623
IV	COMPLEX	0.564	BRIGHT 0.664	-----
V	---		BEAUTIFUL 0.593	PROFOUND 0.624

original version and less systematically toward the Mute version.

Also, in all three conditions, Factor II indicated an "Activity" factor while the other factors showed no substantial loadings at all.

Thus, it appears that the results of this study are similar to the study by Tannenbaum (1956), reported previously. Music appears to have affected the audiences' responses according to activity scales, while not affecting their evaluative judgment of the slide-tape presentation.

Further inspection of the factor analysis results indicated repeatedly high loadings on three semantic differential scales. Table 5 shows unrotated factor loadings for these scales.

At least two thirds of the scales had loadings greater than 0.6 in each condition. That is, at least two thirds of the scales are used systematically at the same criterion level in each version.

Table 5: Unrotated Factor Loadings for Three Scales.  
(Extracted from Table 4)

SCALE	ORIGINAL	ROCK	MUTE
Beautiful	0.873	0.372	0.614
Meaningful	0.771	0.881	0.466
Valuable	0.782	0.720	0.805

#### Results of Demographic Analysis

The audiences' responses were then cross tabulated with the demographic characteristics which may have affected their perceptions of the production. All data collected from the Personal Information

and Rating of Program sections of the questionnaire were coded and input into the micro-computer's cross tabulation program.

As has been reported previously in this chapter, only two scales showed a significant difference in the mean response between groups; active-passive and complex-simple. The ratings on these and the three scales indicated in Table 5 were cross-tabulated with responses to all remaining questions on the questionnaire.

#### Results of Cross-Tabulation

The results of cross-tabulation provided some data that, while useful to the producer in terms of make-up of the audiences, could not be used in the analysis because the responses tended to be predominately positive and comparison of the two groups did not yield statistically significant results (see Table 6).

Table 6: Questions and Responses which were Predominately Affirmative

Question	Yes	No
Do you own a camera:	104	14
Do you enjoy listening to music?	115	3
Was the show professional?	114	2

In addition, responses on the rating scales for all groups tended to be extremely positive. This indicated that music had no significant effect on an already positive audience reaction to the production, further substantiating a conclusion drawn earlier regarding mean responses on the evaluative scales of the semantic differential (see Table 4).

### Cross Tabulation with Scale Complex-Simple

Since there was a significant difference between the mean responses on the scale complex-simple between the groups, it was predicted that further investigation into the demographic characteristics might point out which type of person caused the differences. The responses of subjects on this scale were cross-tabulated with all questions. This analysis indicated:

1. Table 7 shows each group's responses for the scale complex (1) - simple (7). It can be observed from Table 7 that those audience members who viewed the slide-tape presentation without music, tended to find it less complex than those who saw it with musical accompaniment (chi-square  $\chi^2 = 12.25$ ;  $< p 0.01$ ). Thus, music can be said to affect an audience's perception of how complex or how simple a slide-tape presentation is.

Table 7: Number of Responses on Scale Complex-Simple by Group. (n indicates frequency of responses to each point of the scale)

	1	2	3	4	5	6	7
ORIGINAL n	2	3	5	7	3	10	6
ROCK n	8	5	7	5	3	9	9
MUTE n	0	2	5	7	7	10	12

2. The data also showed that factors such as age, sex, whether or not the subjects played a musical instrument, or the type of music they enjoyed did not affect their perceptions of how complex the production was.

3. While not statistically significant, it is interesting to note that those who took fewer photographs (0-3 rolls in the past 6 months) tended to rate the production as more complex than moderate photographers (4-6 rolls in the past 6 months).

The results shown in Table 7 were derived from data relating to those who responded to this scale without considering which version of the production they saw. The data were then rearranged in order to analyze responses on this scale according to group. This rearrangement grouped all those who responded 1, 2 or 3 as "complex", and those who responded 5, 6, or 7 as "simple". Those who responded 4 were considered "neutral" for this analysis.

This analysis showed the following:

1. It can be observed from Table 8 that those who viewed the Original and Rock versions of the production were much more decisive in their responses and rated it as more complex than those who viewed the Mute version. Those who viewed the Mute version rated it as more simple or neutral. Once again, these results indicate that music is a factor in determining if an audience perceives a slide-tape presentation to be complex or simple.

Table 8: Frequency of Responses to Complex-Simple by Group

GROUP	ORIGINAL				ROCK				MUTE			
	C	N	S	$\chi^2$	C	N	S	$\chi^2$	C	N	S	$\chi^2$
Frequency of Responses	23	9	3	19.531*	32	9	5	18.270*	18	12	13	0.516

\*p < 0.01

C - Complex

N - Neutral

S - Simple



Further investigation of the cross-tabulation results indicated that the above conclusions were true for all groups regardless of the demographic characteristics and personal interests of individuals. (see Appendix E).

#### Cross-Tabulation with Scale Active-Passive

The active-passive scale was the only other one in which there was a significant difference in the mean responses for each group. It was predicted that further investigation into the demographic characteristics of the audiences might provide evidence as to the types of person perceiving the production as relatively active. The responses on this scale were cross-tabulated with all other questions.

It can be observed from Table 9 that those who viewed the Original and Rock versions reported that they perceived the production as more active than those who viewed the Mute version.

Table 9: Responses on the Scale Active-Passive by Group.  
(n is frequency of subjects responding)

ACTIVE	1	2	3	4	5	6	7
ORIGINAL n 4	4	11	8	9	1	2	0
ROCK n 4	4	18	5	9	2	3	0
MUTE n 8	8	4	6	12	7	4	2

2. Further analysis showed that in general, most subjects perceived the production as active regardless of demographics.

It was decided to arrange the data to determine the group or groups to which those who perceived the production as more active

belonged. All subjects who originally responded 1, 2, or 3 on the scale were called "Active", and those who responded 5, 6 or 7 were called "Passive". Those who responded 4 were called neutral. These subjects were also divided into their respective groups for this analysis.

It can be observed from Table 10 that a greater proportion of those who viewed the Original and Rock versions of the slide-tape presentation perceived it as being more active than those who viewed the Mute version. Thus, music can be said to affect an audience's perception of a slide-tape production in terms of its activity. (see Appendix F).

Table 10: Results of Rearranging Frequency of Responses to the Scale Active to Passive

GROUP	ORIGINAL				ROCK				MUTE			
	A	N	P	$\chi^2$	A	N	P	$\chi^2$	A	N	P	$\chi^2$
Frequency of Responses	23	9	3	18.885*	32	9	5	18.270*	18	12	13	0.516

\*p < 0.01

A - Active

N - Neutral

P - Passive

#### Cross-Tabulation with Scale Meaningful-Meaningless

Factor analysis showed meaningful-meaningless to be one of the most systematically used scales in each group. The responses to this scale were cross-tabulated with all other questions. The results showed that subjects generally felt that the slide-tape presentation was very

meaningful.

Table 11 shows subjects' responses to the scale meaningful-meaningless by group. Because of low numbers of responses on the negative end of the scale, they have not been included in this table.

Table 11: Frequency of Responses on Scale Meaningful-Meaningless by Group

GROUP	ORIGINAL			ROCK			MUTE		
	1	2	$\chi^2$	1	2	$\chi^2$	1	2	$\chi^2$
Frequency of Responses	.24	8	7.031*	23	15	1.290	26	13	3.692

\*  $p < 0.01$

1 - Extremely Meaningful  
2 - Quite Meaningful

As can be observed from Table 11, the majority of responses for each group is at the positive end of the scale. The difference between those who responded "extremely meaningful" and "quite meaningful" in the Original version is significant. There is no significant difference between these in either of the other groups.

Further examination of the results revealed that among those who had previously produced a slide-tape presentation, there was a significant difference in the perceptions of meaning in the Original version, but not in the other two versions. On the other hand, those who had not produced a slide-tape presentation previously perceived the Mute version as being significantly more meaningful. (see Table 12)

This evidence indicated that music was a factor in determining the audiences' perceptions of this slide-tape presentation in terms

Table 12: Cross Tabulation of question - "Have you ever Produced Slide-Tape Shows?" With Responses on the Scale Meaningful-Meaningless.

Produced Slide-Tape	ORIGINAL			ROCK			MUTE		
	1	2	$\chi^2$	1	2	$\chi^2$	1	2	$\chi^2$
YES	15	5	4.05*	8	7	0	2	3	0
NO	9	5	0.267	15	14	0	24	11	4.114*

\*  $p < 0.05$

1 - Extremely Meaningful

2 - Quite Meaningful

of the amount of meaning they considered it to contain. This author concludes subjectively that the presence of lyrics which reflected the theme of the production was a contributing factor. This conclusion is important for the producer who is attempting to select "appropriate" music to accompany a production.

This evidence therefore suggests that those who have been involved in production of slide-tape presentations responded to the presence of lyrics and found the production significantly more meaningful. Those without experience of this kind did not seem to be affected by the absence of music or lyrics. The Rock group seemed to be ambivalent in their reactions probably caused by the dissonant music. These findings indicate this author's original prediction that the presence of appropriate lyrics would make this production more meaningful.

#### Cross-Tabulation with Scale Beautiful-Ugly

Generally, most subjects rated the slide-tape presentation as beautiful, and the factor analysis showed that it was one of the most systematically used scales. Analysis of the data and chi-square tests

showed no significant differences between groups. Further analysis of the demographic characteristics showed no other significant results (see Appendix G).

The music used in this particular experiment did not seem to affect audiences' perceptions of beauty. It would appear that the visual element alone was used in judging the beauty of this slide-tape presentation.

#### Cross-Tabulation with Scale Valuable-Worthless

Factor analysis showed valuable-worthless to be the most systematically used scale in each group. The responses to this scale were cross-tabulated with all other questions. The results showed that subjects in all three groups perceived this production as being very valuable regardless of demographics. Thus music did not appear to add anything to an already positive audience reaction to this production in terms of value.

#### Qualitative Subjective Data: Report on "Additional Comments"

The comments given in the "Additional Comments" section of the questionnaire could not be coded, but they were examined and recorded. This section may give some insight to the reader though it should be emphasized that no statistical significance can be attributed to the comments.

Original Version

Of 36 subjects, 17 offered comments at the end of the questionnaire. Of the 17, six commented on the photography, describing it as "excellent", "beautiful" and so on. Six others commented on the production as a whole. These comments tended to be extremely positive. Five subjects made comments about the music. Four of these reported that they had negative feelings about the music and made comments such as "music too abrupt", "music too loud", and "music was distracting". Only one person reported that the music was "excellent". However, when one examined subjects responses to "appropriateness of music" on the Rating of Program section of the questionnaire, it was observed that the vast majority of the group rated this very highly. As a result, though four of the thirty-six subjects made negative comments about the music, it can be assumed that the majority of subjects felt that the music was appropriate.

Rock Version

Of 46 subjects, 22 offered additional comments. Of the 22, six made extremely positive comments about the quality of the photographs. Nine made equally positive comments about the production as a whole. Seven commented on the music and all seven comments were negative. These people felt "quieter" or "slower" music would be more appropriate.

Once again, it should be pointed out examination of this group's responses to "Appropriateness of Music" section on the questionnaire were positive, though not as positive as those who viewed the Original Version.

Mute Version

Of 43 subjects in this group, 23 offered additional comments. Five commented on the photography and 11 commented on the production as a whole. These comments tended to be quite positive. Seven subjects made reference to music, even though none was included in this version of the production.

The following comments were recorded:

"Without music one tended to concentrate on the details in the photography."

"Quite interesting. First few slides without music seemed empty, yet made you wonder what is yet to come, or the purpose."

"Music would enhance the mode of the production and make it flow more smoothly and go faster."

"Music would make it much better."

"Sound (music) would be a tremendous help, particularly during the periods when there were pictures, but nothing else. Silence did not help."

"Without music you can appreciate photography more."

"The creaking during the quiet spots made for some tension. Also the absence of a music track made the first words rather jolting."

"Absence of music questionable."

These comments provide some evidence that the lack of music was noticed by viewers of this slide-tape production, and that those viewers felt that music should have been included.

### Summary of Results

This study has provided the following results:

1. Factor analysis showed that there were two main factor loadings which resulted from responses to a twenty, 7-point semantic differential. The first factor in all three groups proved to be heavily loaded with scales that can be termed "evaluative", and the second factor contains scales that can be termed "activity", using Osgood's (1957) terminology.
2. A study of mean responses to the 20 scales indicated that most were very positive for each version of the slide-tape presentation. An analysis of variance indicated that there were significant differences between conditions for two of the scales only; complex-simple and active-passive. This suggested that music affected audiences' perceptions of this particular slide-tape presentation on the "activity" factor while not affecting the "evaluative" judgement. This successfully replicates the findings of Tannenbaum (1956) in a study of the effects of music on audiences' perceptions of a play. (see Chapter I)
3. Further observation of the results of factor-analysis indicated that while most evaluative scales were used systematically by all three groups, three proved to be most systematically used: meaningful-meaningless, valuable-worthless, and beautiful-ugly.
4. It was found that music had a significant effect on audiences' perceptions of the "complexity" or "activity" of the slide-tape presentation, but that there were no significant differences between the different types of music.



5. It was intimated that the presence of lyrics added to how meaningful an audience found the production. It was also found that the presence of lyrics significantly affected producers of slide-tape presentations, while absence of music (Version III) failed to affect non-producers.

## Chapter 5

### CONCLUSION

#### Implications for the Producer

Past research has been unable to prove conclusively whether or not music is an important element of a slide-tape presentation. This has led to much controversy and confusion as to the role it should play in such a production.

This study has shown that the presence of music does affect audiences' perceptions of factors such as complexity and activity, but the particular types of music used in the study did not seem to matter. It was also suggested that the presence of lyrics had some effect on the perceived meaningfulness of the production. Finally, it was pointed out that the visual element appeared to have been the most important for judging the production in terms of beauty and value.

The personal interests of audience members were shown to have a significant effect only for those who previously produced a slide-tape presentation. These individuals reacted most positively to the original version, while non-producers had a very positive reaction to the Mute version.

The methodology used in this study can be used as it stands or modified somewhat to continue research in this area. With continued advances in microcomputer technology and the development of more user-friendly software, producers can become increasingly more involved in the research process.

These advances, combined with the creative intuition of the producer, will inevitably lead to slide-tape productions which will be more effective communicators of ideas and messages.

#### Recommendations for Further Research

The importance of producers becoming involved in research has been pointed out by Holosko, Gould and Baggaley (1983).

As many of the conventional academic investigations of media impact prove, few researchers have a more practical sense of the right questions to ask than does the producer. (p. 61)

This author as a slide-tape producer and researcher recommends further research be carried out to determine further the effects of music on slide-tape presentations.

It would be interesting if a study were carried out which attempted to measure whether music helped give meaning where there was none intended. A series of unrelated slides can be shown to groups with several different sound tracks, each containing different types of music. The present study suggested that lyrics tended to make the production more meaningful. This can be considered in the recommended study.

It would also be valuable to determine if music helps shape attitudes toward a concept. Here a researcher might attempt to measure attitudes toward a concept before and after viewing a slide-tape presentation. By using different types of music one should determine, more fully than was possible in the present study, if music is a significant factor in attitude change.

The present study can be taken a step further by using modern

program evaluation technology to determine at which points in a production the audience responded positively or negatively. This approach would pinpoint the effects of music at precise moments in the production.

While the results of this study do not signify differences between groups' evaluative judgements of the slide-tape production, this may be a result of too few subjects. This research, if replicated, may benefit from having more subjects in each group.

#### Conclusion

This author has had the advantage of being both producer and researcher. When conceiving the idea for "Seeing: Through the Eyes of a Child", music was considered to be an important element. It was to set the mood and tone of the production. The piece of music, "Eyes of a Child", was selected because it met these objectives perfectly. The final production, in the opinion of this producer, met the overall aims and objectives, and music played an important role.

When the idea for this study was being developed, this writer felt intuitively that music would prove to be a very important element. When searching for a piece of "dissonant" music, this researcher chose music which was felt to be inconsistent with the intended mood. It was expected that audiences would react negatively toward this version. It was also expected that the version without music would be perceived more negatively by audiences. These expectations were not fulfilled to the extent that music could be said to conclusively affect audiences' perceptions of the productions. The visual element, the photography, was apparently the most important element of this slide-tape production.

While the results of this study have suggested that music plays a partial role, this writer intuitively feels that further research will reveal that it is an important element of a slide-tape production.

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## Appendix A

Lyrics to Song Used in Original Version of Slide-Tape PresentationEyes of a Child<sup>1</sup>

Listen, hear the sound, the child awakes  
 Wander all around, the child awakes  
 Now, in his life, he never must be lost  
 No thoughts must deceive him  
 In life he must trust.

With the eyes of a child  
 You must come out and see  
 That your world's spinning 'round  
 And through life you will be  
 A small part of a whole  
 Of a love that exists  
 Through the eyes of a child  
 You will see.

Near, from far away, new life awakes  
 Time, it has not day, new life awakes  
 And here is your dream  
 And how does it feel?  
 No words will go with you  
 And now what is real?

With the eyes of a child  
 You must come out and see  
 And through life you will be  
 A small part of a whole  
 Of a love that exists.  
 Through the eyes of a child  
 You will see.

Moody Blues

<sup>1</sup>This song was copywritten in 1967 by The Moody Blues. A letter requesting permission to use this song was sent to London Records of Canada (1967) Ltd. A reply stating that this company no longer existed was received. A further attempt to obtain permission was sent to Threshold Records, London England but no reply was received.

Appendix B

The Instrument

Seeing: Through the Eyes of a Child

Instructions:

The purpose of this study is to measure the meaning of a slide-tape presentation to people by having them judge it on a series of descriptive scales. In taking this test please make your judgements on the basis of what the slide-tape presentation means to you. Rate the production on all scales. If you feel that the slide-tape show is very closely related to an extreme of the scale, you should place your check-mark as follows:

fair X : \_ : \_ : \_ : \_ : \_ : \_ | unfair  
or  
fair \_ : \_ : \_ : \_ : \_ : \_ : X | unfair

If you feel that the slide-tape show is quite closely related (but not extremely) you should place your check mark as follows:

fair \_ : X : \_ : \_ : \_ : \_ : \_ | unfair  
or  
fair \_ : \_ : \_ : \_ : \_ : X : \_ | unfair

If you feel that the slide-tape show is only slightly related to one side as opposed to the other, you should place your check-mark as follows:

fair \_\_\_\_ : \_\_\_\_ : X : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : unfair

or

fair \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : X : \_\_\_\_ : \_\_\_\_ : unfair

The direction toward which you mark will depend upon which end of the scale best represents your judgement.

If you consider the slide-tape show to be neutral, equal on both sides of the scale, or irrelevant to the scale you should place check-mark in the middle space.

fair \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : X : \_\_\_\_ : \_\_\_\_ : unfair

Important:

1. Please place your check-marks in the middle of the spaces, not on the boundaries.

This

fair \_\_\_\_ : X : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : unfair

Not This

fair \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : X : \_\_\_\_ : \_\_\_\_ : unfair

2. Make one mark for every scale.
3. Do not omit any.
4. Put only one mark on each scale.
5. Work independently and quickly. Your first impressions are the most important.

- 1. good \_\_\_\_\_ bad
- 2. slow \_\_\_\_\_ fast
- 3. unintentional \_\_\_\_\_ intentional
- 4. sensitive \_\_\_\_\_ insensitivie
- 5. beautiful \_\_\_\_\_ ugly
- 6. dark \_\_\_\_\_ bright
- 7. active \_\_\_\_\_ passive
- 8. pleasant \_\_\_\_\_ unpleasant
- 9. chaotic \_\_\_\_\_ orderly
- 10. simple \_\_\_\_\_ complex
- 11. complete \_\_\_\_\_ incomplete
- 12. superficial \_\_\_\_\_ profound
- 13. insincere \_\_\_\_\_ sincere
- 14. relaxed \_\_\_\_\_ tense
- 15. meaningless \_\_\_\_\_ meaningful
- 16. unreliable \_\_\_\_\_ reliable
- 17. valuable \_\_\_\_\_ worthless
- 18. weak \_\_\_\_\_ strong
- 19. interesting \_\_\_\_\_ boring
- 20. repetitive \_\_\_\_\_ varied

---

Personal Data

21. Sex: Male  Female

22. Age:      18 - 22       23 - 27   
                  28 - 32       33 - 37   
                  38 or over

23. Do you own a camera: Yes       No

24. If yes, how many rolls of film do you estimate you have  
 exposed in the past six months?

- 0       1 - 3       4 - 6       7 - 9   
    10 or more

25. Which term most accurately describes your interest in media  
 production?

Very interested       Interested       Not Interested

26. Have you produced slide-tape shows?

Yes       No

27. Do you enjoy listening to music?

Yes       No

28. Do you play a musical instrument?

Yes       No       Which one? \_\_\_\_\_

29. What type of music do you enjoy? (Check one or more)

Classical       Folk

Rock       Jazz

Others (name them) \_\_\_\_\_

30. Do you feel that the slide-tape show was

Professional  Unprofessional

31. Please rate the following variables on the scale

	Poor	1	2	3	4	5	Excellent	(circle one on each line)		
(a) Quality of photographs .....		1	2	3	4	5				
(b) Appropriateness of photos to theme .....		1	2	3	4	5				
(c) Quality of narration .....		1	2	3	4	5				
(d) Length of program .....		1	2	3	4	5				
(e) Overall technical quality .....		1	2	3	4	5				

Additional Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Thank you kindly for completing this questionnaire.

## Appendix C

Distribution of Subjects According to Group

## Question

1

SEX	ORIGINAL	ROCK	MUTE
MALE	19	31	14
FEMALE	17	15	32

2

AGE	ORIGINAL	ROCK	MUTE	TOTAL
18 - 20	0	1	0	1
23 - 27	7	8	14	19
28 - 32	17	16	12	45
33 - 37	8	13	9	30
38 +	4	8	8	20
TOTAL	36	46	43	125

3

OWN CAMERA?	ORIGINAL	ROCK	MUTE	TOTAL
YES	32	40	39	111
NO	4	6	4	14
TOTAL	36	46	43	125



4	FILM IN 6 MONTHS	ORIGINAL	ROCK	MUTE	TOTAL
	0	3	10	2	15
	1 - 3	6	19	19	44
	4 - 6	16	8	13	37
	7 - 9	5	4	1	10
	10+	3	3	3	9
	TOTAL	33	44	38	115

5	MEDIA PRODUCTION	ORIGINAL	ROCK	MUTE	TOTAL
	VERY INTERESTED	18	11	13	42
	INTERESTED	16	32	27	75
	NOT INTERESTED	2	3	3	8
	TOTAL	36	46	43	125

6	PRODUCED SLIDE-TAPE	ORIGINAL	ROCK	MUTE	TOTAL
	YES	20	16	5	41
	NO	16	30	38	84
	TOTAL	36	46	43	125

7	ENJOY LISTENING TO MUSIC	ORIGINAL	ROCK	MUTE	TOTAL
	YES	34	46	41	121
	NO	2	0	2	4
	TOTAL	36	46	43	125

8	PLAY MUSICAL INSTRUMENT	ORIGINAL	ROCK	MUTE	TOTAL
	YES	7	13	16	36
	NO	29	33	27	89
	TOTAL	36	46	43	125

9	ENJOY CLASSICAL	ORIGINAL	ROCK	MUTE	TOTAL
	YES	18	21	14	53
	NO	18	25	27	70
	TOTAL	36	46	41	123

10	ENJOY FOLK	ORIGINAL	ROCK	MUTE	TOTAL
	YES	23	30	24	77
	NO	13	16	17	46
	TOTAL	36	46	41	123

11	ENJOY ROCK	ORIGINAL	ROCK	MUTE	TOTAL
	YES	19	25	20	64
	NO	17	21	21	59
	TOTAL	36	46	41	123

12	ENJOY JAZZ	ORIGINAL	ROCK	MUTE	TOTAL
	YES	5	6	11	22
	NO	31	40	30	101
	TOTAL	36	46	41	123

## Appendix D

Results of Student-Neuman-Keules Analysis  
of Variance for each Variable

Variable	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prod.
1. Good	2	0.2278	0.1139	0.208	0.81
2. Fast	2	7.9164	3.9582	2.83.	0.06
3. Intentional	2	2.3814	1.1907	0.512	0.60
4. Sensitive	2	2.3922	1.1961	1.043	0.36
5. Beautiful	2	0.4546	0.2273	0.341	0.71
6. Bright	2	3.7401	1.8700	0.864	0.42
7. Active	2	18.1333	9.0666	3.854	0.02
8. Pleasant	2	0.6254	0.3127	0.585	0.55
9. Orderly	2	3.6475	1.8238	1.833	0.16
10. Complex	2	25.2707	12.6354	3.537	0.03
11. Complete	2	1.6389	0.8195	0.575	0.56
12. Profound	2	0.1788	0.0894	0.050	0.95
13. Sincere	2	0.0673	0.0337	0.057	0.95
14. Relaxed	2	0.9434	0.4717	0.476	0.62
15. Meaningful	2	0.6446	0.3223	0.365	0.69
16. Reliable	2	2.4361	1.2180	1.119	0.33
17. Valuable	2	3.2789	1.6395	2.067	0.13
18. Strong	2	0.1888	0.0944	0.110	0.90
19. Interesting	2	0.9423	0.4711	0.794	0.45
20. Varied	2	3.7695	1.8847	1.228	0.30

## Appendix E

Frequency of Responses to Variable 10,Complex-Simple According to Groups

C - Complex, N - Neutral, S - Simple

QUESTION	ORIGINAL			ROCK			MUTE			
	C	N	S	C	N	S	C	N	S	
AGE										
2	18 - 27	4	2	1	7	1	1	7	1	6
	28 - 32	10	5	2	12	4	0	3	6	3
	33+	9	2	0	13	4	4	8	5	4
FILM in 6 Mo.										
4	0 - 3 rolls	6	2	1	18	8	3	8	7	6
	4 - 6 rolls	9	5	1	6	0	2	6	3	4
	7 rolls	6	2	0	8	1	0	2	1	1
Interest in Media Production										
5	Very Interested	10	6	1	8	3	0	4	5	4
	Interested	12	2	2	5	5	11	11	7	9
	Not Interested	1	1	0	2	1	0	3	0	0
Produced Slide/Tape										
6	YES	13	5	1	11	4	1	1	3	1
	NO	10	4	2	21	5	4	17	9	12
Play <del>Musical</del> Instrument										
8	YES	1	3	2	2	9	2	6	5	5
	NO	22	6	1	23	7	3	12	7	8
Enjoy 'Classical										
9	YES	11	4	3	15	4	2	6	4	4
	NO	12	5	0	17	5	3	11	8	8
Enjoy Folk										
10	YES	14	7	1	22	4	4	10	8	6
	NO	9	2	2	10	5	1	7	4	6

QUESTION		ORIGINAL			ROCK			MUTE		
		C	N	S	C	N	S	C	N	S
Enjoy Jazz										
11	YES	4	1	0	4	1	1	7	1	3
	NO	19	8	3	28	8	4	10	11	9
Enjoy Rock										
12	YES	11	5	3	20	4	1	7	6	7
	NO	12	4	0	12	5	4	10	6	5

## Appendix F

Frequency of Responses to Variable 7,  
Active-Passive, According to Group

A - Active, N - Neutral, P - Passive

QUESTION	ORIGINAL			ROCK			MUTE			
	A	N	P	A	N	P	A	N	P	
AGE										
2	18 - 27	4	2	1	7	1	1	7	1	6
	28 - 32	10	5	2	12	4	0	3	6	3
	33+	9	2	0	13	4	4	8	5	4
FILM in 6 Mo.										
	0 rolls	1	1	1	8	2	0	2	0	0
4	1 - 3 rolls	5	1	0	10	6	3	6	7	6
	4 - 6 rolls	9	5	1	6	0	2	6	3	4
	7 - 9 rolls	4	1	0	4	0	0	0	0	1
	10+ rolls	2	1	0	2	1	0	2	1	0
Interest in Media Production										
5	Very Interested	10	6	1	8	3	0	4	5	4
	Interested	12	2	2	22	5	5	11	7	9
	Not Interested	1	1	0	2	1	0	3	0	0
Produced Slide/Tape										
6	YES	13	5	1	11	4	1	1	3	1
	NO	10	4	2	21	5	4	17	9	12
Play Musical Instrument										
8	YES	1	3	2	9	2	2	6	5	5
	NO	22	6	1	23	7	3	12	7	8
Enjoy Classical										
9	YES	11	4	3	15	4	2	6	4	4
	NO	12	5	0	17	5	3	11	8	8

QUESTION	ORIGINAL			ROCK			MUTE			
	A	N	P	A	N	P	A	N	P	
	Enjoy Folk									
10	YES	14	7	1	22	4	4	10	8	6
	NO	9	2	2	10	5	1	7	4	6
	Enjoy Rock									
11	YES	11	5	3	20	4	1	7	6	7
	NO	12	4	0	12	5	4	10	6	5
	Enjoy Jazz									
12	YES	4	1	0	4	1	1	7	1	3
	NO	19	8	3	28	8	4	10	11	9

## Appendix G

Frequency of Responses to the Positive End  
of Scale Beautiful - Ugly According to Group

+++ - Extremely Beautiful  
++ - Quite Beautiful

QUESTION	ORIGINAL		ROCK		MUTE		
	+++	++	+++	++	+++	++	
AGE							
2	18 - 27	4	3	7	2	11	1
	28 - 32	12	4	13	2	11	1
	33+	8	2	14	5	11	3
FILM in 6 Mo.							
	0	3	0	9	1	2	0
4	1 - 3	4	2	12	4	17	1
	4 - 6	3	5	5	3	8	2
	7+	6	2	6	1	4	0
Interest in Media Production							
5	Very Interested	10	5	9	1	9	2
	Interested	12	4	23	7	22	2
	Not Interested	2	0	2	1	2	1
Produced Slide/Tape							
6	YES	13	5	11	3	4	1
	NO	11	4	23	6	29	4
Play Musical Instrument							
8	YES	2	3	7	5	11	3
	NO	22	6	27	4	22	2
Enjoy Classical							
9	YES	13	4	16	3	12	1
	NO	11	5	18	6	20	4



QUESTION		ORIGINAL		ROCK		MUTE	
		+++	++	+++	++	+++	++
Enjoy Folk							
10	YES	15	6	23	5	18	3
	NO	9	3	11	4	14	2
Enjoy Rock							
11	YES	10	5	17	7	17	1
	NO	14	4	17	2	15	4
Enjoy Jazz							
12	YES	4	1	5	1	9	1
	NO	20	8	29	8	23	4

## Appendix H

Frequency of Responses to the Positive End  
of the Scale Valuable to Worthless According to Group

+++ - Extremely Valuable  
++ - Quite Valuable

QUESTION	ORIGINAL		ROCK		MUTE		
	+++	++	+++	++	+++	++	
AGE							
2	18 - 27	3	4	2	5	3	0
	28 - 32	10	7	6	8	6	4
	33+	8	2	10	7	10	5
FILM in 6 Mo.							
4	0	7	0	8	1	1	1
	1 - 3 rolls	4	2	3	10	8	10
	4 - 6 rolls	4	10	3	4	5	3
	7+ rolls	8	0	3	4	2	2
Interest in Media Production							
5	Very Interested	11	5	7	4	7	3
	Interested	9	7	10	15	10	14
	Not Interested	1	1	1	1	2	1
Produced Slide/Tape							
6	YES	13	6	7	6	1	3
	NO	8	7	11	14	18	15
Play Musical Instrument							
8	YES	2	3	2	7	8	5
	NO	19	10	16	13	11	13
Enjoy Classical							
9	YES	12	6	8	10	7	6
	NO	9	7	10	10	11	12

QUESTION	ORIGINAL		ROCK		MUTE		
	+++	++	+++	++	+++	++	
Enjoy Folk							
10	YES	15	6	12	12	11	11
	NO	6	7	6	8	7	7
Enjoy Rock							
11	YES	11	8	6	14	7	9
	NO	10	5	12	6	11	9
Enjoy Jazz							
12	YES	3	2	2	3	5	5
	NO	18	11	16	17	13	13

## Appendix I

Frequency of Responses to Positive End  
of Scale Meaningful - Meaningless According to Group

+++ - Extremely Valuable  
++ - Quite Valuable

QUESTION	ORIGINAL		ROCK		MUTE		
	+++	++	+++	++	+++	++	
AGE							
2	18 - 27	4	2	4	3	7	4
	28 - 32	12	4	10	4	7	5
	33+	8	2	9	8	12	4
FILM in 6 Mo.							
4	0	3	0	8	2	1	0
	1 - 3 rolls	5	0	5	9	11	7
	4 - 6 rolls	8	5	3	3	9	2
	7+ rolls	8	0	5	1	3	1
Interest in Media Production							
5	Very Interested	13	3	10	0	8	2
	Interested	9	5	13	13	17	10
	Not Interested	2	0	0	2	1	1
Produced Slide/Tape							
6	YES	15	4	8	5	2	3
	NO	9	4	15	10	24	10
Play Musical Instrument							
8	YES	3	1	2	7	10	6
	NO	21	7	21	8	16	7
Enjoy Classical							
9	YES	13	4	10	7	8	6
	NO	11	4	13	8	17	7

QUESTION	ORIGINAL		ROCK		MUTE		
	+++	++	+++	++	+++	++	
Enjoy Folk							
10	YES	17	3	18	6	13	8
	NO	7	5	5	9	12	5
Enjoy Rock							
11	YES	10	3	11	9	10	8
	NO	14	5	12	6	15	5
Enjoy Jazz							
12	YES	4	0	2	2	7	3
	NO	20	8	21	13	18	10



