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Date December 3, 1971

ROCK MUSIC: ITS POSSIBLE EFFECT ON AN ADOLESCENT RUNAWAY

by

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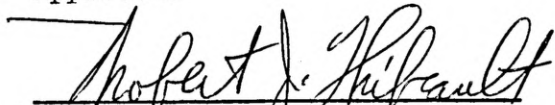
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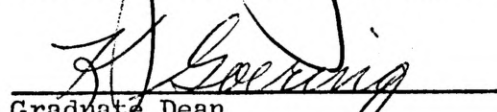
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Abstract

In an insidious fashion the conditioned reflex woven from the repeated beat and message of rock music could be responsible for an increasing number of runaways in recent years. A look at the popular music from 1963-1970 is made through a survey of recent literature. It was found that music took on a deadly seriousness and that electronic media, chiefly radio, has a great power over its captive audience, the adolescent. The music considered, which is probably the most disseminated and open expression of drugs, sexuality and alienation of proper mores is 'their music'. The message and the messengers were examined as well as the position of the music industry and the United States Copyright Laws. It is indicated that laws could be passed to protect children from those who could exploit them. A study at Arizona State University strongly indicates that the information content of the music is unmistakably understood by the young. A survey of conditioning, brainwashing and hypnosis is then made in terms of their broad interrelationships. They are, in fact, aspects of the same laws. Adolescent characteristics of conformity, uncertainty and loneliness make them particularly vulnerable to suggestion. Pavlov's conditioning of dogs, Hitler's propagandizing of the people of Germany and Russia's brainwashing of soldiers during the Korean war were examined and employed toward the problem of the study. Similarities between the hypnotizing characteristics and the driving aggressive beat of rock music are compared to the tribal and witches dances where music often effected destructive and uncontrollable behavior. Historical accounts of how music can effect moods both positive and adverse are presented. An experiment on regulating brainwave patterns conducted at the University of California at Irvine reveals that the young are more susceptible to hypnosis because they have slower EEG frequencies. This and an experiment where the Navy is using rock music in a controlled environment to create moods to get at underlying reasons for drug abuse suggests that rock music could be a highly influential media. The effects of the message, the repetition and the beat of rock music and the susceptibility of the adolescent to suggestive techniques makes it urgent that this study be presented to the academic community where it is hoped that educators and researchers will apply concern.

Chapter I

Introduction

"I am tempted to begin a revolution against the murderers of my beautiful friends", said Robert Kavanaugh in his new book The Grim Generation (20: 100). The friends he speaks of are the unhappy young students he counsels in his daily work. It is fairly clear who he feels are their murderers--the parents who nurtured them in a permissive atmosphere; who gave them more than they needed and overprotected and oversupervised them.

Like Kavanaugh, the investigator of this study is tempted to begin a revolution, but instead will channel the necessary energy in research and study. The 'beautiful friends' of the study will be the increasing number of runaway children. The 'murderers' might well be a society that closes its eyes to the warnings of the wise men and lets history repeat itself by disregarding the results of previous research.

Socrates told us that music and arts change the world. Would it not be well, then, to take a thoughtful look at the present state of music and arts? The Prophets in the Old Testament warned: "Rehearse not again a wicked and harsh word, and thou shalt not fare the worse (11: 729)." Contemplate the repetition possible with today's mass media! Is the 'play' worth putting 'on stage'?

The questions of the study are made to the academic community. The privilege to have become a part of educational research could

make it a cooperative effort--an appeal to the statisticians, students of law, psychotherapists, psychologists, and others to use their expertise in an area that the investigator feels needs to be studied. Clossen points to the fact that "slowly our society is recognizing the reality that schools and educators are where many of the answers are to be found in preventing further increase in delinquent behavior (8: 290)."

In a study of the area of mental conditioning, it is often necessary to cross over the line and invade highly technical fields where one person could never even approach expertise. The risk to get into other territories has been made, however, to get closer to the truth. Does one really have to understand everything about his work to make it meaningful? There is an ancient adage which could be used to reply to this question: In the land of the blind, the one-eyed man is king. The investigator is not intimidated by the immensity of the problem.

Statement of the Problem

The problem of this study is to investigate rock music from 1963-1970 in the light of conditioning and suggestion theories and its possible effects on adolescent runaways.

Need for the Study

The question asked daily in the news media, in troubled family rooms, in schools is 'what is to be done about increasing delinquency, increasing drug use, increasing number of runaways?' An endless list of statistics tell of early deaths, suicides, need for more rehabilitation facilities and hospital wards to care for children. Do these endless figures deaden sensibilities to the point where there is no awareness of the human child suffering?

Clossen reports that in San Diego, known as an 'all American city', 56% of the total juvenile offenders in 1969 were recorded as local runaways, incorrigibles or curfew violators (8: 292). The Probation Officer of Gallatin County has told the investigator of the alarming increase of runaways recorded in his files in the past two years. John C. Brogen, Director of the Armed Forces Office of Information in an Associated Press release to George Cornell has linked drugs to the rock music culture, citing evidence from song lyrics, the youth underground and rock festival scenes. His Special Assistant for Executive Liaison, Kirk H. Logie, confirmed this in a letter to the investigator (6: 1). The American Bandstand reports that seventeen out of twenty young people interviewed prefer the Doors over all other musical groups (12: 386). What can be learned from these statistics? The Chinese word for crisis is made up of two characters--one depicts 'danger'; the other 'opportunity'.

The investigator feels that there exists a crisis situation and wants to find the 'whys' of the recent upsurge of runaways.

General Questions to be Answered

1. What is to be learned about rock music from recent literature?
 - a. What do the lyrics say?
 - b. Is there a message repeated through key words?
 - c. Is the median the message?
 - d. Does the music industry exploit adolescents?
2. What do scholars say about conditioning, suggestion and hypnosis?
 - a. Are adolescents vulnerable to suggestion?
 - b. What is the effect of repetition of sound?
 - c. What is the effect of musical beat?
 - d. Is there evidence that music can effect moods and behavior?

General Procedures

Chapter II consists of a look at rock music through a survey of recent literature. A group of representative lyrics have been collected through literature and listening. The message of the music and the position of the music industry are reviewed. Passages from

the United States Copyright Laws are cited.

Chapter III consists of a survey of conditioning studies in terms of their broad interrelationships. Some adverse and positive effects of music on moods is presented. As part of this survey information has been received from Joe Hart, at the University of California at Irvine about an experiment he is conducting on regulating brainwave patterns (5: 71). His work sheds some light on the possible effect of music on behavior. Some work done by the Navy using rock music to elicit moods is studied to shed further light on the possible effect of music on behavior (17: 42).

Limitations

The limitations are necessarily of the nature mentioned earlier, that it is often necessary to enter the fields of psychology, sociology and counseling in which the investigator is a neophyte; and still other fields of law and music in which the investigator is a layman. But it is believed that in an era of departmentalized knowledge, some risks need be made to stimulate cooperative thinking and, hopefully, cooperative action.

No attempt is made to describe adolescence to the reader (see Definition of Terms). In this study it will be assumed that the reader has a fundamental understanding of developmental psychology.

Definition of Terms

It is intended that the method used to define the terms will help the reader gain insight into the meaning they hold for the investigator. The quotations used are not definitions, as such, but helps to understanding.

Adolescence. The Most Reverend Fulton J. Sheen, in his latest book Children and Parents (32: 54,55) refers to adolescence as the lonely time of life, an internal void where the 'basic question 'Who am I?' is asked. He calls it a 'coma' which can come at any age. No attempt is made to do an exhaustive study on adolescence in this paper. The generally accepted characteristics of loneliness, searching and confusion of the normal adolescent are used.

Runaway. The young person apprehended or sought after by law in the period between 1963-1970; no likeness to Huckleberry Finn; part of the 'Underground Revolution' described by Feigelson which "encompasses all black leaders, left over Beats, Diggers, Swami followers..., college dropouts, campus rebels, high school runaways, any one who smokes pot or drops acid, old 'now' artists and new theater revolutionaries (14: 8)."

Rock Music. A particular group of popular songs from 1963-1970 which are discussed, for the most part, as a unity of lyrics, sound and message. Lines are crossed in some songs, advertently or inadvertently. "Popular music, ...in general for American youth, has

become a serious medium, one reflecting their problems, their questions about life, and their culture (14: 206)."

Conditioning, suggestion, hypnosis and brainwashing. These words are discussed, except where specified otherwise, as having a broad interrelationship. "Hypnosis, word-conditioning, and emotional conditioning are thoroughly interwoven...they are all aspects of the same laws (30: 26)."

Summary

The investigator presents for consideration the possible effects of rock music on adolescent runaways. This is done through a survey of recent literature on rock music, a survey of literature on some conditioning studies and findings of how music can create moods. Some questions are raised concerning the lyrics, message and messengers of rock music and the susceptibility of the mind of the adolescent to suggestive techniques. The relationship of the two concepts are then examined. It is hoped that the study will appeal to the interest and cooperation of the academic community and will shed some light on what the investigator feels is a subject that urgently needed examination. If there is even a remote connection between rock music and runaway behavior, it would suggest that laws should be passed to protect the freedom of the unwary from the enslavement of those who would use laws of conditioning to exploit.

If it takes frustration and conflict to bring about awareness, then the investigator has freely chosen the risk. Meerloo records a saying in The Rape of the Mind:

"Our doubts are traitors

and make us lose the good we oft might win

by fearing to attempt (25: 242)."

Chapter II

Introduction

To survey the literature of rock music from the period 1963-1970, the use of language is insufficient. A metalanguage would be convenient, but the investigator has not found one. As a help, the reader is asked to turn his radio on, indiscriminately. Bob Dylan has said that this is where one connects to what is happening. The words are not complete without the sound. The words and sound are not complete without the performer in sight--so, at best, this chapter conveys a partial description of what is a unity of lyrics, sound and message. It is hoped that the lyrics and performers chosen are representative and meaningful to the problem of the study. A research conducted at the Arizona State University at Tempe is reviewed. The chapter is then concluded with some findings on participation, exploitation and law.

Lyrics, Sound, Message and Performers

Bob Dylan started it all, bringing words like 'free', 'change' and 'progressive' into the lyrics of songs. To these, the Rolling Stones add 'street', 'girl' and 'satisfaction'. 'Run', 'park', 'wild', 'plastic' and 'fire' came from varied sources with overtones of death, frustration, aggression, sexuality, ecstasy 'now' and undertones of surrealism and mysticism.

Subtley, the Beattles introduced the 'good child's' hostility

to grownups. Their She's Leaving Home tells of the girl going off, writing a note to her parents, who moan their incomprehension. Then in Strawberry Fields, they attempt to evoke a climate of mystery, hallucination and dream. The Golden Road by the Grateful Dead (Warner Bros.) sings: "See that girl, barefoot...whistlin' and a-singin'/ She's a carryin' on/ Laughin' in her eyes, dancing in her feet/ she's a...(sound)/ and she can live on the street". In The White Rabbit (RCA Victor), the Jefferson' Airplanes describe why kids take drugs to get away from rules, away from logic and proportion, from their families, especially their mothers. The Iron Butterfly warn a girl to stay away from people 'made of plastic' in Stamped Ideas (Heavy) and Steppinwolf sings of those Born to be Wild (Dunhill).

"It was heady stuff for fourteen-year old virgins and others besides. And the publicity played it up...They (The Rolling Stones) were never photographed to look pretty; they seemed under orders not to smile and their music was full of disdain for women, morals and parents (29: 423)."

The death-sex theme of Jim Morrison of the Doors comes through the lines of Break on Through: "Come on baby, gonna take a little ride/ Goin' down by the ocean side/ Gonna get real close/ Get real tight/ Baby gonna drown tonight/ Goin' down, down, down (Nipper Music Co., Inc., All Rights Reserved)." His songs insist that love

is sex and sex is death and this somehow brings salvation. It is no wonder that Kavanaugh can say:

Modern folk rock music speaks frequently of death. Pre-occupation with dying is a widespread characteristic of the alienated and hurting student. Daily I hear students discuss a possible suicide. Usually the discussion is theoretical, but suicide is the second most common cause of student deaths after traffic accidents (20: 92).

Light My Fire got Morrison the reputation as a messenger of the Devil. In The End the lyrics say "Father? Yes, Son? I want to kill you. Mother, I want to... (scream)." "Cancel my subscription to the resurrection" he sings in When the Music's Over. Then, "We want the world and we want it now (Strange Days, Nipper Music Co. Inc.)." As the radio will evidence to, seventeen out of twenty interviewees on American Band Stand prefer the Doors to any other group (12: 150)!

"In person, singer Jim Morrison was cold, insolent, evil, slightly mad and seemed to be in some sort of drugged or hypnotic trance (29: 151)." Lillian Roxon says that he wrote the chaotic lyrics for his group and performed in black vinyl pants making some of his contemporaries look like angels by comparison--but not all.

Recent Study on Listening

Although they admit precise measurement is very difficult to get, two professors of health education from Arizona State University

Dezelsky and Toohey (10: 40) did a recent study where they quized 250 undergraduates at Arizona State as to what the abstraction in a sample of eleven current song lyrics meant to them. The songs were representative of the music listened to by young people. They hoped to determine if the recording artist really wanted his material to be interpreted in a predetermined manner. They felt that it is no more possible for one to listen to a melody like Let's Do It In the Road by the Beattles and imply a sexual meaning than it is for a subject to view a particular Rorschaak Test ink blot and authoritatively state that the ink blot has a sexual message to deliver.

They concluded that since adolescents are spending as much time in the pursuit of listening to music as they do with their formal education, it was time teachers listened to modern music in order to better communicate with them. Their one hypothesis is that in the absence of any formal education in the area of sex and social responsibility, the music could function to interpret sexuality for the youthful listener. The other is that music might function as a catalyst to intensify interest or curiosity and would probably exert it's influence in this manner. Their question: Could music influence the listener's personality?

The sample of songs was divided into three categories--three about drug use, four on sexuality and four on social protest. One example of their method follows:

If You Feel

RCA Victor

Jefferson Airplane

"If you feel like love, make it

If you're flying,

Make love flying,

Make love flying (10: 41)."

Note: (composite of students' interpretations) Enjoying sexual pleasure while high on some kind of narcotic. The feeling of doing what you want to while high.

The comments made by the students strongly indicate that the message in the lyrics is interpreted beyond the imagination of the adult listener.

Participation, Exploitation and the U. S. Copyright Law

Eisen holds that the central motif of rock music is participation: "A kind of visceral anarchism, an anti-authoritarianism has been the result... No music has been able to inspire a greater degree of participation than has rock, except, perhaps, tribal music with which rock shares many analogies (12: xiii)."

Tom Wolf, a writer on current music, told of a Beatles concert at Cow Palace outside San Francisco on September 2, 1965, "They have brought this whole mass of human beings to the point where they are one, out of their skulls, one psyche, and they have utter control over them, but they don't know what in the hell to do with it...(7: 282)."

Peter, Paul and Mary speculated, "We could mobilize the youth of America today in a way that nobody else could (3: 32)."

What does this all say to the music industry? "The record buyer is drawn into an illusion that he is making history... So long as people feel involved in the movements within the charts, they will not begin to question their necessity (21: 28)." The Hit Parade of yesterday and the Top 40 of today reduce the songs to one level-- songs of unfamiliar kinds become important. All get attention whether they deserve it or not. Jean-Paul Sartre, when he visited the United States in 1946 described buyers of hit records as being formed by a process of 'extero-conditioning', united to something external-- the decision of the music industry (21: 25). Sartre perceived a psychology of urgency in that 'the purchases have to be made this week'. There is still a great pressure on performers to standardization. The Beatles and the Rolling Stones were among the few to successfully innovate on the charts. "The entertainment industry and its satellites exist not to further the revolution, but to make money, and they exist largely through cultural debasement and the crassest form of exploitation (12: xiii)."

The Citizens for Conservative Action and the Young Republicans made a plea for a return to conservatism in California after the song Eve of Destruction by P. F. Sloan came out in 1965. They filed a complaint with the Federal Communications Commission arguing that

this and similar songs of protest violated the equal time provision and contacted popular rock aggregates in an attempt to ban or refute the message of the controversial song. The only action they got was to have Decca Records jump on the political band wagon with a song titled Dawn of Correction by the Spokesman (9: 807-23).

The mass exposure of Eve of Destruction provided an excellent opportunity to gain some insight as to the message being heard by the listeners. Denisoff reported that a questionnaire was administered to a random sample of 180 students at a Junior College in the San Francisco Bay area. Seventy-three percent assimilated part or all of the message indicating rock as a propaganda vehicle.

After reading How to Secure a Copyright the investigator believes that in the strict copyright laws in this country the freedom and protection of some is being sacrificed for the freedom and license of others. In Section 1 of the Copyright Act, there exists "the right to print, reprint, sell, arrange, translate all for the duration of twenty-eight years. After twenty-eight years a second term of the same duration...available to the author or his widow, or children, executor, or next of kin." In the section on Performance, it states that "performance, in itself, does not constitute publication" and that "immoral and obscene matters cannot be copyrighted (33: 11, 12, 39)." Obviously many copyrights need to be challenged. It points to the fact that convincing research needs to be done to stimulate

reform in this area. The distinguished musician, Pablo Casals (12: 4), says that rock is poison put to sound. Our government has many laws which protect citizens from poison in food. Why not protect citizens from poison in sound, especially since the young indulge in it so much?

Some authors advocate a return to 'propaganda analysts' as existed before World War I. David Reisman suggests that there be developed the equivalent to the Rorschach Test to figure out the meaning of music. Laing suggests a systematic study of pop discs and mentions that work in this direction has already been carried out at the Centre of Mass Communication Studies in Paris, France (21: 194, 196).

Summary

In this chapter the investigator has endeavored to point out that during the period from 1963-1970 popular music began to take on a deadly seriousness. The 'key' words in the message, the lyrics, the sound and the performance and the participation of the listeners all constitute the celebrated Marshall McLuhan aphorism: The medium is the message. A study done in Arizona State University at Tempe added some scarce research information. It was pointed out that electronic media, chiefly radio, had great power over its captive audience, the adolescent. The role of the entertainment industry

was brought out and finally, a look at the United States Copyright laws and some views on censorship concluded the survey.

Chapter III

Introduction

"Orpheus has entered into an alliance with Pavlov--the power of sound with the conditioned reflex (18: 66)." In this chapter a survey of studies on conditioning, brainwashing and hypnosis is made with comments interspersed about adolescent susceptibility to suggestion. Some adverse and positive effects of music on the creation of moods are reflected on as well as the possible significance of beat and repetition. An experiment conducted at the University of California at Irvine regarding the regulating of brainwave lengths is described. A thought provoking study describing how the Navy uses rock music to help drug addicts concludes the chapter.

Conditioning, Brainwashing and Hypnosis

In Pavlov's famous experiments with dogs, it is illustrated that conditioned reflexes do not involve volitional thinking. The trained subject becomes a pure automation to the non-genuine stimuli once the conditioning is woven into a reflex (30: 2). Meerloo states that there is an urge to be conditioned. Young children naturally submit to the communal pattern and the family pattern must be related to man's dependency on parents and fellow men. Individuals with doubts and inner conflicts are more easily conditioned (25: 53).

People are conditioned to ask themselves 'what do others

think?' and tend to react the way they think they are expected to. Adolescence is a time when conformity is at its peak.

Conditioning is not necessarily permanent. If the stimuli are decreased, responses will gradually disappear. In fact, the principle of deliberate brainwashing takes place in this way. Old patterns are broken down through disuse, then the subject is blasted with new patterns--loud and repetitious. Strong emotion is very contagious. Hitler shouted in a frenzy words like 'hatred', 'force', 'crush' and 'smash' (18: 61). His tactic was to pry the people loose from tradition and moralities then impose a new order on them. The masses he spoke to were bewildered, frustrated and unsuspecting. Adolescents are generally unwary, making them highly susceptible to propaganda.

When Pavlov worked with his dogs, he found that when prolonged physical or psychic stress was administered, their brains went on a strike. They either lost consciousness altogether or developed symptoms similar to hysteria. The significant thing was that on the way to the point of final breakdown, the dogs were the most suggestible. Fear, rage or anxiety heightened the suggestibility as well as fatigue, or sickness and they were much more subject to suggestion at night.

These principles were applied to humans by the Russians during the Korean War. They kept their prisoners in psychological stress, in a state of suspense, uncertainty and apprehension, questioned and punished them for the most trivial breaches of rules and humiliated

them whenever possible. They were also isolated from companions. Then they would repeat the whole process until the soldiers were in a state approaching collapse. At this point propaganda was blasted at them full force.

Adolescents often experience isolation, suspense, uncertainty and apprehension and are they not often humiliated and upbraided for rule-breaking? Could not much misery be eliminated if teachers and parents understood the principles of brainwashing? Does not rock music present a contradiction of ideologies?

"The readiest victims of brainwashing or religious conversion may be the simple, healthy extrovert (31: 81)." Sargent goes on-- "it is a popular fallacy that the average person is more likely to resist modern brainwashing techniques than the abnormal."

A normal, intelligent adolescent is highly susceptible to hypnotic persuasion. London and Cooper have found that younger subjects are characteristically more susceptible to hypnosis than adults (23: 113). Increased feelings of yearning for some unknown happiness makes the young especially vulnerable to propaganda. Salter found that in normally intelligent children, the reflexes are easily conditioned. Meerloo says that with the advent of a new sense of selfhood, youth begins to oppose the adult authorities who previously directed his life. Fear and loneliness accompany growth and emancipation (25: 247). He speaks of television: "(it) hampers a process

(of quiet inner conversation) and prepares the mind more easily for collectivization and cliché thinking (25: 211)." "In all mass media we have to be aware of the hypnotizing, seductive action of any all-penetrating form of communication (25: 209)." Meerloo feels that the child that is exposed to radio, television and film is unwittingly conditioned to millions of sounds, pictures and movements in which he takes no part. Huxley points out that music is intrinsically attractive. Melodies ingrain themselves in the mind and a tune will haunt the memory for a lifetime. The words repeat themselves every time the melody is remembered.

"It is no exaggeration to say that every human being is hypnotized to some extent, either by ideas he has uncritically accepted from others, or ideas he has repeated to himself or convinced himself are true (24: 49)."

Hypnopedia is a form of suggestion which could easily influence adolescents who are known to use earphones on their electronic hi-fi and radio at night. In World War II this 'sleep learning' method was used to teach soldiers the Morse Code and again to teach spies lengthy information which they wouldn't have time to memorize. Studies reported by Huxley have found that sleep learning takes place most effectively in the 'kind of waking' state next to sleep (18: 109). There is a significant difference between light sleep and deep sleep. No alpha waves are recorded by EEG in deep sleep--only in light

sleep. Alpha waves are present in waking and hypnotic states, however (4: 310).

It is very easy to put oneself in rapport with sleeping persons, especially children. The 'cortex may be too inactive to think straight, but it is alert enough to respond to suggestions and pass them on to the automatic nervous system (18: 112)." Huxley goes on to say that

whatever can be done with and to a person in a hypnotic trance can be done with and to a person in a light sleep. Verbal suggestions can be passed through the somnolant cortex to the midbrain stem and automatic nervous system. If these conditions are well conceived and frequently repeated, the bodily functions of the sleeper can be improved or interfered with, new patterns of feeling can be installed and old ones modified, posthypnotic commands can be given, slogans, formulas and trigger words deeply ingrained in the memory.

Adverse and Positive Effects of Music on Moods

Music, through lyrics, sound and message can evoke moods varying from calmness or contentment to states of elation or hysteria. Almost every nation has a national anthem to inspire patriotism, universities have an Alma Mater song to elicit loyalty and pride, athletic teams have fight songs to generate spirit and churches use music to instill feelings of praise and penitance.

Although strong emotion does not necessarily display an overt response there is some measure of mood stimulation through music resulting in change in behavior and even change in physiological

systems. Sargent feels

it should be more widely known that electrical recordings of the human brain show that it is particularly sensitive to rhythmic stimulation by percussion and bright light, among other things, and certain rates of rhythm can build up recordable abnormalities of brain function and explosive states of tension sufficient even to produce convulsive fits in predisposed subjects... Furthermore it is easier to disorganize the normal function of the brain by attacking it simultaneously with several strong rhythms played in different tempos (31: 105).

Sargent tells of the case of people who have been worked up into a state of suggestibility by Voodoo drumming in Haiti. They feel they are possessed by a certain deity, then, although apparently unconscious, they carry out all the detailed behavior expected of the particular god. A Voodoo priest increases excitability and suggestibility by altering the loudness and rhythm of the drums.

When Hitler announced his plans to conquer the world, he used the clashing, disturbing sounds of martial music on the radio as background to his hysterical voice. It was not necessary for the world to understand the German language to fear the threat of a terrible war.

In his book The Devils of Loudin, Huxley says that "no man, however highly civilized, can listen for very long to African drumming or Indian chanting, or Welsh hymn singing, and retain intact his critical and self-conscious personality (19: 369)."

Juliette Alvin (1: 76) in her carefully researched book on

music therapy cites the frenzy of the tribal or witches' dances, and of bacchic orgies, was produced by music made of endless repetitive and conflicting rhythms at a pace faster than the beat of the heart, often at accelerating speed. She quotes Jacques Chailley's opinion (40,000 Years of Music) that when such rhythmical music reaches the primitive instincts of man and unbridles them, its effect may be destructive and uncontrollable behavior. "(Music) can reflect the feeling of the moment or change it by its presence. It can also increase the actual mood and bring it to a climax, or dispel it (1: 68)."

On the positive side music has its curative effects. Sound and music were used by primitive and medieval man for healing. "Most of the medicine songs we have seen are rapid (over 100 beats per minute) rhythmical and repetitive (1: 33)." The dance of the Tarentella in the ancient Greek colony of Apulia produced an hypnotic state and provoked hysterical behavior, ending in a catharsis for a nervous illness, which could only be alleviated by this means. Violins, pipes, zithers, harps, timbrils and drums were played very fast and repeated endlessly. European medical circles investigated this phenomenon and recorded the data very carefully. Bernard de Clairvaux of the eleventh century wanted his monks to chant sweetly to alleviate sadness and calm the spirit. Farinelli, an Italian of the eighteenth century cured Philip V of Spain of severe melancholia by playing the same

four soothing songs every night for ten years--repeated over 3600 times!

Music has been used extensively in psychotherapy today either to excite depressed patients or to calm agitated ones. An interesting report by Robins (28: 144) tells of work with the seriously disordered child. Behavioral changes were observed in the children resulting from music experiences. The music was used as an effective form of non-verbal communication helping them to move toward one another and as an aid in better control over the children. He feels the control is a direct result of the inner feelings children have about music in a school setting. It is one academic area which the child can feel he is learning for the sake of pleasure and pride. "Music reactions are intimately bound with psychopathology. These reactions consist of a preoccupation and unusual absorption in music, a rote memory for melodies and a preference for singing over speech (28: 150)."

Meyer (26: 6) in his study of meaning and emotion in music reminds us that philosophers from Plato to modern times affirm belief in the ability of music to evoke emotional response in listeners. "Since motor behavior plays a considerable role in both designative emotional behavior and in musical experience, a similarity between the motor behavior of designative gestures and that of musical gestures will enforce the feeling of similarity between the two types

of experience (26: 268)."

Recent Study on Regulating Brainwave Lengths

An enlightening experiment was conducted recently by Joe Hart at the University of California at Irvine (5: 71) culminating nearly a decade of work. A polygraph, an instrument that records and measures brainwaves, is attached to a subject's head. It was found that with the use of a strobe light, brainwave patterns could be regulated. He referred to this as a 'feedback loop'. He can make a person more susceptible to hypnosis by changing the frequency of his brainwaves to slower. Some evidence was found that long periods of intense concentration are associated with fast waves; while deep emotions on hearing music are related to slow waves. He asserts that ESP, like hypnosis seems to be correlated with slow brain waves.

Research by Lindsley (22: 102) shows that young people have slower EEG frequencies than adults. Hart speculates that such slow wave EEG activity may reflect processes within the nervous system of the young person which also directly affect hypnotic susceptibility (15: 8).

In his speech to the seventh annual meeting of the Society for Psychophysiological Research in San Diego (16: 17) Hart pointed to another exciting direction of speculation that useful alterations in mood, or in cognitive, perceptual and motor performances might follow autocontrol training of alpha waves. Reports about the

relationship of alpha waves and meditative states do suggest that mood variations might well be induced by training. Investigations have been conducted with Zen Buddhist monks and Indian Yogis and show that adepts achieve nearly steady alpha once they enter into meditation (2: 454).

Hart and colleagues Engstrom and London were asked to report their experiments to the seventy-eighth annual convention of the APA in 1970 (13: 1-2).

Rock Music Considered a Highly Influential Media

To point out that rock music is considered a highly influential media, the investigator will describe a pilot project being tested by the San Diego Eleventh Naval District. It is known as Credo (Chaplains Relevance to the Emergency Drug Order). A group of 21 Navy enlisted men and marines, most of them teen-age drug users gather to listen to rock music that is heavy with laments of youth's despair for a series of 72-hour weekends. With them are seven Navy Chaplains and twelve young 'straight' officers who want to help and also learn to relate to the attitude of the drug users.

For a three-hour period all are saturated with rock music and asked to examine their inner gut-level feelings. The purpose is to establish an emphatic feeling. They cannot find workable solutions to the feeling that society has let them down and they, therefore,

reject it. Lieut. Comdr. Don B. Barris, a Chaplain and psychiatrist set up the program. It is separate from other programs of medical therapy, counseling, career development and drug abuse education, which Harris feels do not attack the problem of 'why' young people turn to drugs (17: 42).

This experiment is conducted in a controlled environment and expected to produce strong feelings. Consider the consequences in an uncontrolled environment--adolescents listening to radio and hi-fi, especially at night.

Summary

This chapter points out that adolescent characteristics of conformity, uncertainty, isolation make them particularly vulnerable to conditioning and suggestion. Pavlov's conditioning of dogs, Hitler's propagandizing the people of Germany during World War II and Russia's brainwashing of soldiers during the Korean War were evidenced as being similar. It was mentioned that mass media had hypnotizing and seductive characteristics and that the use of electronic equipment by children, especially at night, could be having dangerous repercussions. Evidence from history that music has always created moods, both positive and adverse was surveyed with emphasis on the effects of beat and repetition. Description of music as therapy was used to strengthen the position that music is a

powerful media. An experiment on regulating brain wave lengths pointed out that slower brainwaves were associated with deep emotions on hearing music and that children tend to have slower EEG frequencies. A recent experiment describing how the Navy uses rock music to help drug addicts points to the highly influential nature of rock music in a controlled environment.

Chapter IV

Summary and Conclusions

The investigator has presented a survey of the literature on rock music from 1963-1970. The lyrics, message and messengers were studied in light of the susceptibility of the mind of the adolescent to suggestive techniques. These techniques were revealed through a survey of literature on conditioning studies which establishes that hypnosis, word conditioning and emotional conditioning are thorough-interwoven, in fact, aspects of the same laws. Findings from history of how music can create moods are presented along with two studies, one of which reports research regarding regulating brainwave lengths and another attesting to the considerable influence of rock music.

The investigator feels the problem of the study urgently needs examination and an appeal is being made to the academic community to listen. It is suggested that there is a connection between conditioning laws and the driving aggressive beat of rock music that American youth is being bombarded with and that its message could account for an epidemic surge of young runaways. It is suggested that laws could be passed to protect children from those who would exploit them. "Never before have so few been in a position to make fools, maniacs or criminals of so many (19: 367)." Those who study the effects go so far as to recommend censorship and propaganda

analysis.

It is difficult to establish cause and effect. There are many variables in a study of this nature. Listeners differ in maturity, education, personality, temperament, environment, hereditary factors of talent and musical ear, but psychology has always had to reckon with individual differences just as biological science has always had to study variation and types.

The music considered, which is probably the most disseminated and open expression of drugs, sexuality and alienation of proper mores, is 'their' music. Eisen finds it profoundly subversive, direct and gutsy and speaking to the senses, "...rock now must be seen as an art form like any other that arises from and talks to the people in direct, charged and organic ways (12: xii)." All children listen to the music of their time. The studies reported in this paper say they are getting the message--the information content is 'coming in, loud and clear'.

Jim Morrison is dead now, as are several of his infamous peers. The messengers are dying--will the message die with them? The 'charts' are new, but must we continue to listen? This investigator feels that in an insidious way the conditioned reflex has been woven from the message of the rock sound. During adolescence conformity is at its peak. Young people tend to react the way they think they are expected to. Their music has been leading them along

like the Pied Piper led the children of Hamelin. What insidious lures will future mass media furnish?

Hitler used the Pavlovian conditioning theory to brainwash his people. The Russians applied the same principle during the Korean War with their prisoners--breaking old patterns down and replacing them with loud, repetitious substitutes. Isolation, stress, suspense, apprehension, humiliation were inflicted in various ways, then the whole process repeated with propaganda following full force. Huxley has warned

In their propaganda, today's dictators rely for the most part on repetition, suppression and rationalization--the repetition of catchwords which they wish to be accepted as true, the suppression of facts which they wish to be ignored, the arousal and rationalization of passions which may be used in the interests of party or state (19: 46).

The normal, intelligent young person is highly susceptible to persuasion. His characteristics of conformity, uncertainty and isolation make him particularly vulnerable. Then when he is persuaded it only takes the learning principle of repetition to develop habits which permit doing things automatically and spontaneously.

Since the time of primitive man, who attributed the origin of music to the gods, man's moods have been effected by music. "Because moods and sentiments attain their most precise articulation through vocal inflection, it is possible for music to imitate sound of emotional behavior with some precision (26: 268)."

Throughout history, it has been evidenced that music can have

both curative and harmful effects. "Even in its most simple forms, music is evocative of sensation, moods and emotions...(it) penetrates into the most secret recesses of the soul, an effect against which man is more or less defenseless (1: 68)."

Marshall McLuhan reminds us that print media has been superseded by electronic media which makes different demands on our powers of comprehension. It is hoped that the present study will alert educators, in particular, to the power of sound.

Recommendations

The findings of Hart have been included in the study because his work points out that young people are more susceptible to hypnosis and suggestion due to their slower EEG's and also for the exciting speculation that brainwave lengths can be changed. If a person can be made more susceptible to hypnosis by changing the frequency of his brainwave to slower, it might be possible in the future to vary mood by training.

The experiment at San Diego Eleventh Naval District was included to show how influential rock music is considered even in a controlled environment.

The investigator feels it would be fruitful to follow up both of these experiments. It is suggested that a Semantic Differential Test, as developed by Osgood et al. (27: 1-342), may be given to children with a history of running away and compare the results with a control group to see if there are variations in the meaning derived from the

message of rock music. This test is indirect in the same sense that an intelligence test does not directly measure the capacity, but nevertheless provides a useful type of information. It acknowledges that meanings vary in some unknown number of dimensions and it is relatively free of response biases. It is a unique method of testing habit strength and seems to this investigator to be an appropriate and reliable test for anyone wishing to further research the problem of this study.

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