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What is Rock Music Doing to the Minds of our Youth? A First Experimental Look at the Effects of Rock Music Lyrics and Music Videos

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Abstract

This article reports the results of three preliminary studies of the cognitive effects of rock music lyrics and music videos. Study 1 indicates that comprehension of rock music lyrics develops with age and that lyrics are often misunderstood, particularly by young children who lack relevant world knowledge and are at a concrete stage of cognitive development. Study 2 shows that music videos provide less stimulation to imagination and are enjoyed less than the songs alone. Study 3, using different methods, confirms the negative effect of music videos on the imagination. The results of this study also demonstrate that a rock song, without any visuals, evokes and elicits more feelings than when it is part of a music video.

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Starting in 1983, rock music became a source of controversy in the culture. First, MTV (the first music video television channel) and music videos in general were endlessly debated in the media (e.g., Cocks, 1983; Zorn, 1984). About a year later, rock music lyrics came to the fore when the Parents Music Resource Center (PMRC) charged, in a congressional hearing, that rock music lyrics were a dangerous influence in the areas of sexual morality, violence, drugs, and satanism (Cocks, 1985; Dougherty, 1985; Zucchini, 1985). The national Parent Teacher Association (PTA) concurred (Cox, 1985). Most recently, Tipper Gore, one of the founders of the PMRC, has written a book elaborating on these views (Gore, 1987).

But what evidence exists about the actual psychological effects of these important facets of popular culture? Indeed, it could be argued that rock music is the most salient phenomenon in the cultural environment of preadolescents and adolescents. This article presents the results of three small-scale, preliminary studies, one on rock music lyrics and two on music videos. The studies were done by undergraduate students enrolled in a Communications Studies course given by the first author at a university in California. The origin of the studies as student projects is a source of both strengths and weaknesses.

On the positive side, the students had the special insight of insiders: They were studying their own peer culture, and this fact is reflected in the conceptualization of questionnaires and interviews and in how they chose their rock music stimuli. Another advantage was the easier rapport the researchers could have with the respondents because of being members of the same youth subculture. In addition, these student researchers have explored the impact of a particular moment in the chronological continuum of popular culture, one that will not come again. Most important, their studies are among the very first experimental studies of the effects of rock music.

On the negative side, the results, not originally intended for publication, cannot be presented in as much detail or with the inferential statistics normally expected in empirical research. However, because almost no experimental research on the effects of rock music exists, it is worthwhile to present the results of these three experiments, in order to provoke thought, stimulate more definitive research, and to chronicle a particular moment in popular culture.

COMPREHENSION OF ROCK MUSIC LYRICS: STUDY 1

If rock lyrics are to have the effects charged by the PMRC, they must first be comprehended by their audience. Rock stars such as Gene Simmons, lead singer of the group Kiss (Cox, 1985), have countered that rock lyrics are deliberately subordinated to the music, to the point of incomprehensibility. But how much exactly is understood of the lyrics?

There have been a number of studies of the comprehension of rock music lyrics (Robinson & Hirsch, 1969; Denisoff & Levine, 1971; Gantz, 1977; Edwards & Singletary, 1984; Rosenbaum & Prinsky, 1987). Desmond (1986) reviewing the liter-

ature, concludes that "Taken as a whole, these studies reveal that approximately one-third of any sample of adolescents are able to articulate the meaning of available popular song lyrics" (p. 5).

However, as Desmond (1986) points out, survey studies may underestimate *comprehension* of lyrics because they are based on *memory* for lyrics under conditions where the song title is often the subject's only contemporaneous cue. In none of these studies were a full set of lyrics presented to the subjects in the course of the study. Our study, in contrast, was the first to present the lyrics to subjects to interpret in the course of the experiment. This experimental methodology allowed us to assess comprehension of lyrics independently of the memory factor.

While studies have generally shown low understanding of (or at least poor memory for) rock lyrics, *particular* groups of adolescents, such as the fans of specific bands or types of music, could show higher comprehension (Rosenthal, personal communication, January 9, 1987). This is a point to which we will return in the discussion. However, the goal of the present study was to find out to what extent *unselected* groups of young people (for example, whole classrooms) understand the lyrics of generally popular rock songs.

More specifically, how does comprehension of lyrics vary over the age range of the rock audience. This is an important question because rock music attracts an audience from elementary school children up through adults. It was hypothesized that the more vulnerable members of the younger audience might be selectively protected from the effects of sexual or other controversial lyrics by their lack of comprehension. A developmental study was therefore necessary to address this issue. However, at the time of this study, no developmental research on music lyrics had been done.

Method

The study examined the comprehension of rock music lyrics in four different age groups. As an experimental treatment, two highly popular songs of the moment (1986), "Born in the USA" by Bruce Springsteen (1984) and "Like a Virgin" (1985) by Madonna were played for audiences in fourth, eighth, and twelfth grade (from an upper-middle-class area), plus a sample of college students (enrolled in a Los Angeles university communications class on media effects). The sample comprised ten children in each of the three younger groups and twenty-five college students.

Following the playing of each of the songs, a questionnaire was administered to the subjects. The questionnaire covered (a) liking of the artist and the song, (b) comprehension of specific words, (c) comprehension of overall meaning, and (d) the importance of the lyrics to the enjoyment of a song. In studying comprehension of rock music lyrics, the researchers felt it important to compare the effects of key words or phrases (the title and refrain of a song) versus the effects of the detailed lyrics (verses). A copy of the questionnaire used for "Born in the USA" is presented in Table 1.

In order to understand the results from "Born in the USA," it is necessary to be familiar with the details of the lyrics. These are presented in Table 2.

TABLE 1

PART I				
1. Do you like Bruce Springsteen?	1	2	3	4
2. Do you like "Born In The USA"	1	2	3	4
3. Are the words in the song "Born In The USA" part of the reason you like the song?	1	2	3	4
4. What is "Born In The USA" about?				
PART II				
1. Can you fill in the rest of the first line of this song? "Born down in _____ The first kick I took was when I hit the ground." (hint: they rhyme)				
2. Read these words that are from the second part of the song: "Got in a little hometown jam so they put a rifle to my hand Sent me off to a foreign land to go and kill the yellow man." a. What is a "hometown jam"? b. Who is the "yellow man" he talks about?				
3. What is the general feeling Bruce Springsteen has about living in the USA?				

1 = *Very much*; 2 = *Somewhat*; 3 = *Not too much*; 4 = *Not at all*.

Lyrics "Born in the USA" are reprinted with permission from Bruce Springsteen Music, New York. (1984); (ASCAP).

Results and Discussion

The results confirmed the researchers' success in choosing popular rock songs. about 85 percent of the overall sample liked the artists and songs, although Madonna was more popular with younger students and Springsteen with older ones.

Contrary to what one might expect from the concerns of the PMRC and PTA (but similar to the results of the survey studies cited earlier), comprehension of the lyrics of "Born in the USA" was surprisingly low. Almost 60 percent of the overall sample could not answer all the questions pertaining to song content, even after hearing the song in its entirety and seeing excerpts in the questionnaire.

Here are some examples of misunderstandings and the progressive development of understanding with age. One question was "What is a hometown jam?" (first line in second verse). A hometown jam can be broadly interpreted as some kind of dilemma the singer found himself in while in the place where he grew up. Only 20 percent of the fourth graders but 60 percent of the eighth graders were able to understand this meaning. The 12th graders and college students did even better, with an average of over 95 percent comprehension.

The percentage of the students who accurately interpreted "yellow man" (last phrase in the second verse) as a North Vietnamese soldier was even lower than the rate of comprehension in the previous question. Only 10 percent of the fourth grade

TABLE 2

 “BORN IN THE USA”

Born down in a dead man's town
 The first kick I took was when I hit the ground
 You end up like a dog that's been beat too much
 Till you spend half your life just covering up

BORN IN THE USA
 I was BORN IN THE USA
 I was BORN IN THE USA
 BORN IN THE USA

Got in a little hometown jam so they put a rifle in my hand
 Sent me off to a foreign land to go and kill the yellow man

BORN IN THE USA
 I was BORN IN THE USA
 I was BORN IN THE USA
 I was BORN IN THE USA
 BORN IN THE USA

Come back home to the refinery
 Hiring man says “Son if it was up to me”
 Went down to see my V.A. man
 He said “son don't you understand now”

Had a brother at Khe Sahn fighting off the Viet Cong
 They're still there he's all gone
 He had a woman he loved in Saigon
 I got a picture of him in her arms now

Down in the shadow of the penitentiary
 Out by the gas fires of the refinery
 I'm ten years burning down the road
 Nowhere to run ain't got nowhere to go

BORN IN THE USA
 I was BORN IN THE USA
 BORN IN THE USA
 I'm a long gone Daddy in the USA
 BORN IN THE USA
 BORN IN THE USA
 BORN IN THE USA
 I'm a cool rocking Daddy in the USA

Lyrics “Born in the USA” are reprinted with permission from Bruce Springsteen Music, New York. (1984); (ASCAP).

sample, 30 percent of the eighth grade sample, and 50 percent of the 12th grade sample knew what Springsteen meant by "yellow man." 85 percent of our college sample understood the meaning of "yellow man" in the song.

The misunderstandings were of a different sort at the different age levels. As one might expect from knowledge of cognitive development, the misinterpretations of the younger students could be quite concrete in nature. For example, one fourth grader responded to the question about the "yellow man" with "a man who fell in yellow paint and it splashed on him." Another wrote "he has a yellow mask." A totally different (and much more dangerous) sort of miscomprehension was demonstrated by the college student who wrote "A yellow man is any kind of Communist!"

Perhaps most interesting are the responses to the question which moved beyond specifics and asked about the song's general meaning: "What is the general feeling Bruce Springsteen has about living in the USA?" Contrary to what one might think from the title and refrain, his general feelings consist of despair, disillusionment, and resentment. Not one of the fourth grade sample understood this. For the older groups, the percentage showing some understanding increased only to 30 percent for the eighth graders, and 40 percent for the 12 graders. Even with college students studying communications, barely 50 percent showed understanding! The primary reason these percentages are so low is that subjects made the mistake of taking the title and catch phrase of the refrain, "Born in the USA," at face value without paying attention to the rest of the words. This may be a common phenomenon with rock music (Prinsky & Rosenbaum, 1987), leading to drastic misinterpretation when, as in "Born in the USA," the title/catch phrase gives a misleading impression.

The results for "Like a Virgin" (1985) were very similar. There was low comprehension of certain terms used in the lyrics, for example, the word "wilderness," with understanding increasing with age (from 20% among fourth graders to 95% among college students). Again, the younger children were more literal and concrete in their interpretations, the college students more metaphorical and abstract. Whereas, fourth graders interpreted "wilderness" as "hills and trees," college students correctly saw "wilderness" as "rough times" and "emotional loneliness."

In terms of overall interpretation, the numbers correctly interpreting Madonna's general feeling were significantly higher for "Like a Virgin" than they had been for Springsteen and "Born in the USA." Most likely this is because the catch phrase, "Like a Virgin," accurately summarizes the rest of the song and serves as a kind of encapsulation of Madonna's feelings. Nevertheless only 10 percent of fourth graders correctly interpreted Madonna's general feeling. One likely reason is because they did not know what a virgin was and could not learn from the song alone. In line with this conclusion, the percentage of correct interpretations rose to 50 percent in eighth grade, 60 percent in twelfth grade, and 80 percent among college students.

This result makes the point that the potential of lyrics to have destructive effects in the area of sexuality is limited by the child's own knowledge, which, in turn, limits his or her interpretation of the song. Lyrics cannot teach new information

because, being poetry, they are too elliptical. Knowledge and experience must be used by the listener to flesh out the interpretation. If, for example, a child's only knowledge of "virgin" is the Virgin Mary, the song, "Like a Virgin," will have religious, not sexual connotations for that child (Teuber, personal communication, November 21, 1986). Where knowledge and experience are limited, the interpretation of lyrics will be also. However, this is *not* the case for lyrics accompanied by a video, and it is to this subject that we next turn.

MUSIC VIDEOS: EFFECTS ON THE IMAGINATION

In 1981, the cable channel MTV entered two million homes (Sherman & Dominick, 1986). Five years and thirty million homes later (Hedegard, 1985), its success and permanence as a part of our culture seemed certain. This union of the television and music industries has sparked tremendous change in both. Video music is now a television staple, following the establishment of three new cable video channels and a host of network and local video programs. A Nielsen survey (Musical influence, 1983) found that young people's music buying decisions were more influenced by MTV than radio stations, supporting the common conviction, here stated by *People*, that "MTV brought music back to life." (Jarvis, 1985). The advertising industry has also felt and adopted the attracting power of video music (Spillman, 1985). In sum, the way the young talk, dress, and dance has been influenced by rock videos (Seidman, 1985).

In the light of these many evident and visible effects on the cultural scene, it seemed important to investigate the more subtle psychological effects on viewers themselves, especially young viewers (under 25 years of age) who comprise 63 percent of MTV's audience (Cocks, 1983).

Because of its newness as a form of communication, most of what has been published concerning music videos is in the form of speculation and general observations. Commendations range from its "stimulating, fresh, fun" nature (Jarvis, 1985) and rejuvenation of the music industry (Cocks, 1983) to its depersonalization of music (Zorn, 1984), addictive nature, and abundance of sexism and violence (Seidman, 1985). Content analyses carried out a few years ago supported the accusations of sexism and violence (Radecki, 1984; Sherman and Dominick, 1986) and one even found rock video to be saturated with nihilistic themes and images (Davis, 1986). The only behavioral studies in existence found that violent music videos desensitize young people to violence immediately after viewing (Rehman & Reilly, 1985).

In 1984 Zorn wrote an editorial in *Newsweek* on music videos called "Memories Aren't Made of This." In it he decried the negative influence of the videos on the listener's imagination. Whereas songs used to elicit associations and memories from the listener's own imagination and experience, Zorn says that MTV viewers "play back" a video in their mind when they hear the song on the radio. We had recently completed a study in which we showed that a radio story stimulates the imagination more than a television story with the same soundtrack (Greenfield, Farrar, &

Beagles-Roos, 1986; Greenfield & Beagles-Roos, in press). Would the same effect hold for music? To find out, we set about to do an experimental study comparing the audio version of popular rock songs with the video version, to see if the song alone, without the video, would be more stimulating to the imagination.

Study 2: Method

The researchers felt it important to test a wide range of different types of song, as well as different types of video, in order for the experimental treatment to best represent the quantity and diversity of material now produced. In this way, the goal was to achieve a measure of ecological validity. The researchers selected one video that told the same story as the song ("Russians," 1985, by Sting), a concert video illustrated with film clips ("When the Going Gets Tough, the Tough Get Going" by Billy Ocean [Brathwaite, Eastmond, Lange, & Ocean, 1985]), a video that used video imagery and techniques without telling the story of the song ("Take Me Home" by Phil Collins, 1985), and a video that was animated and innovative ("How to Be a Millionaire" by ABC [White & Frye, 1985]). These songs also fit the criteria of being fairly easy to comprehend and comprising a wide variety of topics to interest all the subjects.

The subjects were 26 fifth and sixth graders from a middle-middle to upper-middle class background; most of the students were eleven or twelve years old. There were two experimental treatments: as a group, half the class, arbitrarily selected, listened to the four songs on audio tape in the classroom; the other half listened to and viewed the music video in another room. Each subject was given a sheet of general questions and a sheet of questions to answer after each song. During this time the researchers watched and noted verbal comments and reactions to each particular song. Following the experimental phase, the class was brought back together for a group discussion. The discussion questions, as well as the questions used in the individual questionnaires, appear in Table 3.

From the point of view of imagination, the key questions were "If you were going to make a video about the song, what would it be like?" and, especially, "If you were to add another verse, what would it be about?" Our concept of imagination was that it is a mental representation or construction that is not present in the immediately preceding stimulus. An imaginative response was therefore operationally defined as one containing additional information not previously given during the media presentation of the song. An all-or-none rating system was used: a particular response was coded either as imaginative or not.

Study 2: Results

While video subjects responded more often, their verses for two out of the four songs were less imaginative than the verses of those who had not seen the video. In no instance did the video version elicit more imaginative verses.

The video also seemed to draw mental activity away from the verbal lyrics and towards visual stimuli. When asked to add another verse, many in the video group

TABLE 3

Descriptive information:

1. Sex.
2. Age
3. Grade
4. How often do you listen to the radio per week?
(given choices)
5. How often do you watch music videos per week?
(given choices)
6. Which do you enjoy more, radio or music videos?
7. Why?

Questions for songs:

1. What kind of song is this? Sad, Happy, Angry, Silly
Serious, Other
2. Why do you think that?
3. What do you think the writer of the song was writing about?
4. If you were to add another verse of the song what would it be about?
5. If you were going to make a video about the song what would it be like?

Questions for oral discussion:

1. Do you think that music videos make you more imaginative or less imaginative?
2. Do music videos make you think about things you had never thought about before?
3. Do radio songs make you think about things you had never thought about before?
4. Which one gives you the most new ideas?
5. If you had never seen the video, would you have still picked the same meanings of the song?

added scenes to the video instead of verses to the song. For example, after seeing the video of "Take me home," which shows shots of many famous cities, one subject, asked to create another verse, responded with "going to another place to see more amusements."

Seeing the video reduced the ability to imagine other possible videos. We found that the ability to think of an imaginative video is greater after the audio than the video versions for all four songs. Note too that any differences in favor of the audio version are probably underestimates of the true effect: although we tried to use new videos, a good number of subjects in the audio group had seen the videos previous to our experiment.

Reinforcing the written responses, the children commented many times that the videos confused them on what they felt the song meant and forced them into thinking the way the videos did. Indeed, many in the video group said something to the effect that "I can't answer this because they already showed you how the video is supposed to be, so how could I make it any different?"

The class discussion after the test provided both additional and confirming information. Paradoxically, 85 percent of the class liked a video better if it told them the story of the song; yet the data show this type of video to be most limiting to the imagination. At the same time, many subjects complained that the video takes away

from their own personal interpretation of the song. Eighty-one percent of the class felt that videos make them less imaginative (although they were not informed of either the subject or hypothesis of our research). All subjects felt that seeing a video version of a song before hearing it on the radio inhibited their imaginative thinking about the song. It was interesting that there was so much self-awareness of the negative effect of videos on imagination.

During the experimental phase the researchers noticed that the videos held the attention of the students. Subjects never stopped watching the screen until the final credit of the song was shown. The audio group, by contrast, got quite bored. Nevertheless, 56 percent of the subjects reported liking to hear songs on the radio more than in videos. Many said that it was because they could do other things while listening to the songs. This reason reconciles the seeming contradiction between boredom and preference, because there were no other activities available in our experimental situation.

In summary, fifth and sixth graders prefer to listen to the audio version of a song and agree with our experimental results that the video version limits their imagination. They enjoy radio more because it allows other simultaneous activities; while their attention is captured by the music video more than by the song alone.

Study 3: Method

A related experiment on the subject of music videos, done with college students in Los Angeles, found a very similar pattern of results. Again, one experimental treatment consisted of music videos, while a contrasting treatment consisted of a matched group of songs. A group of 12 students watched four videos and answered a set of questions after each video. A second group of 11 students simply heard the same four songs and answered a similar (although smaller) set of questions. Selection of the two groups was random. Questions included "What did you think the song was about?" and a 10-point scale of liking. The researchers also gave each subject a list of seven emotions (*happy, sad, excited, angry, scared, peaceful, threatened*) and asked them to rate, on a scale of one to ten, the degree to which the song evoked or emitted each emotion.

The four songs selected were the top sellers of that week, as reported by a national record store. They were "King for a Day" by the Thompson Twins, "Kyrie" by Mr. Mister, "How Will I Know" by Whitney Houston, and "When the Going Gets Tough, the Tough Get Going" by Billy Ocean. So as not to influence the subjects by a difference in sound quality, both the videos and the songs were heard over the TV (the latter with the sound turned off).

Study 3: Results and Discussion

Among those who watched the videos, there was again an overall preference for the song alone, without the video. Paradoxically, students still felt that the video added to rather than detracted from the song.

When asked what each song was about, the subjects' descriptions of the videos were somewhat similar and often specific, whereas subjects' descriptions of the

songs were, overall, more dissimilar and vague. For example, for the music video group, the most frequent single interpretation of "When the Going Gets Tough, the Tough Get Going," was "when the going gets tough, the tough get going." On the other hand, for the group who heard the song alone, there was no modal response: every subject who replied gave a different interpretation, and not one simply quoted the title of the song.

In line with what has been found in previous cross-media story research (Greenfield, Farrar, & Beagles-Roos, 1986; Greenfield & Beagles-Roos, in press) and Study 2, these results indicate that the song with out visuals may be more stimulating to the imagination. With just the music and words, listeners can conjure up their own mental pictures and develop their own interpretations. Perhaps this engagement with an active interpretation process explains why, for three of the four songs, the song alone was rated as more *meaningful* than the video. (In the fourth case, there was no difference between the song and the video.)

For every song, the audio alone was associated with stronger emotions than was the video. One interesting facet of these results is that, despite the variety among the songs, all four were rated more *peaceful* without the video. This may tie in with the popular idea of music as soothing. Moving images provide action stimuli which perhaps detract from a sense of peace or restfulness. To give a further sense of the findings, the song "King for a Day" was rated higher on *happy* and *excited* than was the corresponding video, while the song "Kyrle" was rated as more *sad* than its video.

CONCLUSION

For elementary school age children our results indicate that the furor over the influence of rock lyrics in the area of sexuality may be unnecessary. Fourth graders, who, most likely did not know what a virgin was before they heard Madonna's song, "Like a Virgin," almost never had any idea of the song's general feeling after listening to it. Comprehension rose most sharply in eighth grade and then again in college the period during which sexual maturing takes place and an increase in sexual knowledge would be expected. In other words, our results show that comprehension of lyrics follows rather than leads general development. Lyrics can only be an influence on sexuality, for example, if they are interpreted in a sexual way; this was not the case for young children listening to "Like a Virgin." Such interpretation depends on knowledge that children so young simply do not have. The results indicate that, for children in fourth grade or younger, it may be more difficult for rock lyrics to have an impact on sexual ideas and values than has been thought by the PMRC and the national PTA.

Motivation, as well as knowledge, facilitates comprehension. Thus, Rosenthal (1985a) found that, among a group of young people waiting in line to attend a punk rock concert by the group *Dead Kennedys*, there was a significant positive correlation between memory for lyrics and involvement with punk music (measured by concert attendance and number of records owned).

Although about a third of Rosenthal's sample did not respond to a request to

interpret specific lyrics (perhaps because of the concert situation), about two-thirds of those who did answer gave essentially correct answers (Rosenthal, 1985a). This rate for correct memory among punk rockers seems higher than that found by studies using unselected samples. Most important, however, was the finding that over 90 percent of the respondents answering this particular question claimed to agree with the rebellious sentiments expressed in Dead Kennedys' songs, clearly higher than the population at large (Rosenthal, 1985a). Thus, higher than average lyric comprehension is associated with higher than average agreement with the attitudes presented in the lyrics, a pervasive finding social psychology.

While direction of influence cannot be assessed, it seems likely that it goes both ways. That is, young people with particular views are attracted to a particular kind of music such as punk (e.g., Tanner, 1981). At the same time, it may be these particular people who pay attention to, comprehend, and are vulnerable to the influence of the lyrics (Rosenthal, 1985b).

Experience with a song and motivation to listen to it (as measured by popularity of the song and album ownership) can also be a factor in memory for lyrics. The PMRC (and the national PTA) take the position that parents should get involved in record album purchases, because the music affects young people's attitudes (Gore, 1987). Consonant with this position, Rosenthal (1985a) found significant relationship between owning a particular album and memory for the lyrics of songs from that album. The most popular songs also received the highest memory scores. Hence, owning an album and hearing a song frequently set the stage for comprehension, the first requisite for influence.

Prinsky and Rosenbaum (1987) also identified motivation, experience, and knowledge as factors in the interpretation of lyrics. They found that preadolescents and adolescents often missed sexual themes in lyrics. Adult organizations such as the PMRC interpret rock lyrics in terms of sex, violence, drugs, and satanism more frequently than do young people themselves (Prinsky & Rosenbaum, 1987). The authors found that preadolescents and adolescents, in contrast to these adult groups, interpret their favorite songs in terms of themes of "love, friendship, growing up, life's struggles, having fun, cars, religion, and other topics that relate to teenage life" (Prinsky & Rosenbaum, 1987, p. 393).

In response to their concerns about rock lyrics, the PMRC and the PTA hoped for a voluntary system of rating records for sexual, violent, and other disturbing content. However, a visit to two large chain record stores in Los Angeles in 1987, revealed but one or two records that carry the label, "Explicit language-parental advisory."

In any case, the finding that interpretation of songs often means misinterpretation, especially by younger children, makes it difficult to justify a rating system on records. The assumption behind such a system is that the raters know how the young audience will interpret the lyrics and that there is but a single possible interpretation. Clearly neither assumption is correct. Indeed, Rosenbaum and Prinsky (1987) found that 37 percent of the time, preteens and teenagers did not know what their favorite songs were about. A negative side to record ratings, therefore, is

that they would, in many cases, call attention to themes of which their young listeners were not even aware. Requiring printed lyrics on the outside of every album, another measure advocated by the PMRC, could have the same effect. Our conclusions on these matters square with those of Prinsky and Rosenbaum (1987).

In relation to the second point, song lyrics are poetry, and poetry is often deliberately elliptical and ambiguous, leading to multiple interpretations. As an example, Dee Snider, a member of the rock group, Twisted Sister, told the PMRC-inspired congressional hearings that "Under the Blade" (Snider, 1981), a Twisted Sister song accused of being about sado-masochism was in fact about fear of surgery (Cocks, 1985). In fact, Snider wrote the song when a fellow band member was about to undergo surgery. On one level "Puff the Magic Dragon" (Yarrow & Lipton, 1973) is an innocent children's song; on another it is about marijuana. John Denver's song, "Rocky Mountain High" (1972, 1974) was banned by some radio stations because it was thought to be about marijuana. John Denver says it is about the joy of experiencing nature (Goodchild, 1986). Is there really any objective basis for deciding who is "right"?

Music videos compared with an audio song are like the television medium as a whole in comparison to radio: They detract from imaginative response (Greenfield & Beagles-Roos, in press; Greenfield, Farrar, & Beagles-Roos, 1986), but they are a compelling medium which successfully rivets the attention of the young audience. These results concerning the negative effect of music videos on imaginative activity seems to be yet another example of Salomon's (1983) finding that television is considered an "easy" medium, one that requires relatively little mental effort.

A new finding, with interesting social significance, is that, relative to a song, a music video reduces the emotional response of a young audience to rock music itself. If confirmed by further research, this effect may ultimately lead to a lessened popularity of music videos among preadolescents and adolescents. At present, the ability of a rock song to communicate feelings or mood is the major reason among this age group for liking a favorite song (Rosenbaum & Prinsky, 1987). Yet the present research indicates that this gratification is consistently lessened when the song is embedded in a music video.

There is also a connection between the cognitive response to rock lyrics and to music videos. In line with our previous research comparing television and radio (Beagles-Roos & Gat, 1983; Greenfield & Beagles-Roos, in press), the results of Study 2 suggest that music videos also function, as some rock singers have complained, to detract attention away from the lyrics. The earlier findings (Beagles-Roos & Gat, 1983; Greenfield & Beagles-Roos, in press) would suggest that, when the video is irrelevant to the lyrics (as is often the case with music videos), lyric comprehension would decrease further, plummeting to below the meager level elicited by the song alone.

In conclusion, it is hoped that the findings and conceptualization of issues presented in this article will not only stimulate more definitive research, but will also help those who work with and study young people to better understand youth's response to rock music, the most important medium in their cultural environment.

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