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Is Eminem Evil? The Effects of Music and Trait Aggression on State Hostility

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SENIOR PROJECT - APPROVAL

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PROJECT TITLE: Is Eminem Evil? The Effects of Music and Trait Aggression on State Hostility

I have reviewed this completed senior honors thesis with this student and certify that it is a project commensurate with honors level undergraduate research in this field.

Signed: John C. Malone, Faculty Mentor
Date: May 7, 2003

Comments (Optional):

Good!
Is Eminem Evil?
The Effects of Music and Trait Aggression on State Hostility

*Undergraduate Honors Thesis*
*2002-2003*

Omar Bradley McCarty

University Honors Program
University of Tennessee
Is Eminem Evil?

The Effects of Music and Trait Aggression on State Hostility

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Abstract

This research addresses the on-going debate over the alleged dangerous effects of listening to music by rap artists such as Eminem. An experiment was conducted to examine the effects of listening to a song containing implied violence on the state hostility of the listener. Two versions of the same song (nearly identical lyrics, different artists) were used, and the interaction with trait aggression was examined. While results found neither a significant aggression by song version interaction nor a main effect for aggression, a significant main effect for song version was seen. The Eminem version was associated with significantly smaller increases in state hostility. However, the two versions were not found to be significantly different on ratings of violence and offensiveness. These findings suggest that lyrical content is not the only factor in state hostility increase.
Is Eminem Evil?

The Effects of Music and Trait Aggression on State Hostility

In recent years, the emergence of new rap superstars, such as the controversial Eminem (a.k.a. Marshall Mathers), has rekindled the debate over what effects music has on the listener, especially when the listener is a child or adolescent (Eby, 2003; McCrillis, 2003). Eminem has received scrutiny from parents, activists, and critics alike—including Lynne Cheney, the wife of current Vice President Dick Cheney (McCrillis, 2003)—acquiring nicknames ranging from “the Pied Piper of disaffected youth” (Ali, 2002, p. 58) to the “sworn enemy of ‘concerned parents’ everywhere” (D’Entremont, 2001, p. 19), not to mention “rock & roll’s biggest pain in the a**” (Sheffield, 2002, p. 61) and, as Eminem himself admits, “Mr. Potty-Mouth King” (Bozza, 2002, p.75).

Critics claim that Eminem’s lyrics, which “pulsate with vulgarity, adolescent sexuality, hatred, misogyny, and violence” (Eby, 2003, Rap Lyrics and Charlton Heston section) and get “more violent and misogynistic with every album” (Sheffield, 2002, p. 61), shape children’s thinking about the world around them: “It influences them precognitatively [sic], insinuating itself into their spirits, so to speak, in such a way that their young selves are formed, without their conscious knowledge or consent, into its way of being and outlook” (Eby 2003, Rap Lyrics and Charlton Heston section). Eby (2003) goes on to argue that there is a direct link between the behavior of children and adolescents and the music to which they listen:

One would be quite foolish to claim that there is no direct connection between young people’s immersion in rock and rap music—drenched as those musics are in adolescent sex, violence, and misogyny—and the rise in actual teenage sex, with its attendant
pregnancies and sexually transmitted diseases, and the increase in teenage violence, shootings, and other pathologies. This is not just simple correlation; there is surely a causal factor, too. (Rap Lyrics and Charlton Heston section)

Eminem’s critics are not limited to only words, however. During the 43rd annual Grammy Awards ceremony, for which Eminem received four nominations, including Album of Year for the *Marshall Mathers LP*, 200 demonstrators gathered to protest his recognition by the National Academy of Recording Arts and Sciences (NARAS). Among those in attendance were the Gay and Lesbian Alliance Against Defamation (GLAAD), the National Organization of Women (NOW), and the Family Violence Prevention Fund (D’Entremont, 2001). D’Entremont (2001) includes this quote in his account of the scene:

‘Eminem’s lyrics do more than glorify violence against lesbians, gay men, transgendered people and women,’ GLAAD’s Joan Garry told the press. ‘They also give permission for young people to abuse and harass people who are “different”, numbing them to the damaging impact of homophobia and misogyny.’ (p. 20)

Indeed, this opinion has become so popular and pervasive that the Federal Communications Commission (FCC) recently fined KKMG, a top 40 radio station in Colorado Springs, CO, $7,000 for playing the edited version of Eminem’s “The Real Slim Shady” (Schiffman & Teitelman, 2001). From these actions and accusations arise certain obvious questions regarding the legitimacy of their concerns. Is all this criticism really deserved? What evidence do critics have to back their claims, or are they simply based on “common sense” predictions and suspicions? Can listening to “violent” music ultimately cause people to exhibit problem and/or antisocial behaviors?
The field of psychology cannot answer these questions without first investigating which psychological variables and dimensions are affected by such music and, then, how those dimensions relate to specific behaviors. In a study investigating dimensions related to the criticism and subsequent censorship of targeted music, McLeod, Eveland, & Nathanson (1997) and Eveland and McLeod (1999) examined the relationships between the third-person effect and ratings of antisocial rap lyrics. McLeod et al. (1997) found that participants were more likely to indicate that antisocial rap lyrics would have a greater effect on others than on themselves (perceptual component) and, as such, should be censored (behavioral component). Eveland and McLeod (1999) found similar results supporting the perceptual component of the third-person effect.

In related studies, Fried (1996, 1999) examined the effects of labeling one particular set of violent song lyrics as “rap,” “folk,” or “country” on reactions to those lyrics. The lyrics, identical in all conditions of both studies, originally came from a 1960s folk song by the Kingston Trio entitled “Bad Man’s Blunder.” In the 1996 study, when the lyrics were labeled as “rap,” participants rated them as more offensive, violent, and dangerous to society than when labeled “country” or “folk.” As a result, “rap” lyrics received greater calls for censorship and government action. In the 1999 study, Fried found similar results when the lyrics were labeled “rap” as opposed to “country.” The “rap” lyrics were again found to be more offensive, violent, dangerous, and in greater of need censorship and banning.

Several other studies have focused on music preferences and listening trends and their relationships to problem behaviors and related constructs such as suicidality, especially in adolescence (Arnett, 1991, 1992; Hansen & Hansen, 1991; Lacourse, Claes, & Villeneuve, 2001; Scheel & Westefeld, 1999; Took & Weiss, 1994). Arnett (1991, 1992) found relationships
between heavy metal and punk music preferences and incidence of reckless and high-risk behavior in adolescents. Took and Weiss (1994) noticed similar relationships among rap and heavy metal, adolescent turmoil, and antisocial behavior. Hansen and Hansen (1991) also observed that fans of heavy metal and punk reported higher estimates of antisocial and high-risk behaviors among the general population than did nonfans. Others have discovered connections between music preference and adolescent suicidal risk (Lacourse et al., 2001; Scheel & Westefeld, 1999).

To assess whether these and other relationships are in any way causal, a slew of studies have examined the content and effects of viewing music videos on such dimensions as antisocial behavior, aggression, and hostility (Benjamin, 1999; Hansen & Hansen, 1990; Huesmann, Moise, & Podolski, 1997; Johnson, Jackson, & Gatto, 1995; Jones, 1997; Wann & Wilson, 1996, 1999). A few of particular interest are the Hansen and Hansen (1990) study and the Wann and Wilson (1996, 1999) and Benjamin (1999) studies. In their investigation of rock music videos and antisocial behavior, Hansen and Hansen (1990) found that, after viewing rock music videos containing antisocial content, viewers were more accepting of antisocial behavior (a confederate making an obscene gesture toward the experimenter) than participants who had viewed neutral videos. Wann and Wilson (1996) examined the effect of locus of control on whether or not participants' self-reported (state) aggression scores would increase after viewing clips of aggressive or nonaggressive music videos. Though their initial results showed neither a significant main effect for aggressiveness of music video nor a music video by locus of control interaction, reanalysis of the data by Benjamin (1999) and Wann and Wilson (1999) themselves showed a significant main effect for locus of control. Regardless of whether they watched an aggressive music video or a nonaggressive video, external locus of control participants showed
greater decrease in aggression than participants with an internal locus of control. This finding suggests that watching music videos of any kind might actually cause people with an external locus of control to decrease in aggression. Though this finding contradicted the original research hypothesis—that participants with an external locus of control would report higher scores on aggression after exposure to aggressive music videos—both studies suggested further research in the area, with Benjamin (1999) giving particular mention of state hostility and trait aggression.

These findings, and particularly Benjamin's (1999) suggestions, led to the research questions posed in this study. Can exposure to music produce changes in state hostility? Does trait aggression have any bearing on or relationship to state hostility changes? Are Eminem’s lyrics the only perpetrator, if indeed his songs have “the potential… to increase violent crimes” (Fried, 1996, p. 2135), or does something else factor into the equation?

To view the question from a slightly different angle than previous research, this study focuses only on a single, auditory exposure to one song containing implied violence and aggression, “'97 Bonnie & Clyde.” The effects, then, are expected to be minimal at best. Thus, the first research hypothesis:

H1: A single exposure to one song will not produce significant changes in state hostility.

As state hostility and trait aggression have been found to be related constructs (Anderson, Deuser, & DeNeve, 1995; Buss & Durkee, 1957; Buss & Perry, 1992), it is predicted that higher scores in aggression will be related to greater increases in state hostility:
H2: Participants scoring high in trait aggression will report greater increases in state hostility than those scoring low in trait aggression.

To determine whether factors outside the lyrics themselves contribute to state hostility change, reactions to two versions of the same song, "'97 Bonnie & Clyde", will be compared. Fried's (1996, 1999) studies have indicated that participants rate lyrics more offensive when labeled as rap (as opposed to some other genre). Consequently, it is predicted that, as a rap song, the Eminem version of "'97 Bonnie & Clyde" will elicit higher ratings of violence and offensiveness than the Tori Amos (alternative rock) version. This, in turn, will be related to greater increases in state hostility:

H3: Participants in the Eminem Group will report (a) higher ratings of perceived violence and (b) offensiveness and (c) greater increases in state hostility than participants in the Tori Amos Group.

Method

Participants

Eighty-seven undergraduates participated in the study for extra credit in upper-level psychology courses. No identification of gender or ethnicity was obtained or utilized for the purposes of this study. Participants were randomly assigned to one of two groups corresponding to the version of the song played: the Eminem (E) Group ($n = 36$) or the Tori Amos (TA) Group ($n = 51$). The experiment was conducted with participants in large groups of 16 or more.
Materials

The State Hostility Scale (Anderson et al., 1995), the primary instrument in the study, was used to measure participants' self-reported state hostility (SH) before and after listening to one of the two versions of the song "'97 Bonnie & Clyde". One version was recorded by rap artist Eminem; the second, a remake of the original Eminem version, was recorded by alternative rock artist Tori Amos. Besides artist and style, the songs differ only very slightly with regard to lyrics. (The brief opening and closing monologues and the second half of each chorus from the Eminem version were omitted from the Tori Amos version. Nevertheless, the three verses—the parts of the song containing implied violence—remained entirely intact.) The song is a dialogue between a man and his young daughter. It becomes obvious from the lyrics that the man has murdered his ex-wife, as well her new husband and stepson, and is now (i.e., at the time of the song) dumping the (human) bodies into some body of water, presumably an ocean.

The Buss-Perry Aggression Questionnaire (Buss & Perry, 1992), a measure of trait aggression, was utilized for two purposes. First, along with pretest measures from the SH Scale, aggression scores were used to assure no significant initial differences in the two groups with regard to the variables studied. Second, the aggression scores were used to divide both groups into High and Low Aggression subgroups by means of a median-split. This was done in order to address the question regarding effects of aggression on responses to the song. As the experiment was described to participants as a study on music and mood, the Affect Grid (Russell, Weiss, & Mendelsohn, 1989) was included primarily as a blinding instrument. A song-rating questionnaire was incorporated to determine whether participants would rate the two versions significantly different with respect to perceived violence (V) and offensiveness (O). The questionnaire asked participants to rate the song to which they had listened with regard to
violence on a scale from 1 to 9 (1 = minimum violence, 9 = maximum violence). A rating of offensiveness was assessed on a similar 1-to-9 scale. Additionally, the questionnaire was incorporated to determine the relative contribution of six listed factors (lyrics, musical accompaniment, genre/style, artist reputation, artist gender, and artist tone of voice) to each of the two ratings (V and O) by means of ranking each factor (1 to 6) immediately below each rating.

**Procedure**

Participants in both groups received a packet containing all of the instruments utilized in the study divided in half by lyrics sheets appropriate to the version of the song being played. The lyrics sheets identified the name of the song and the recording artist. Before the lyrics sheets in each packet were a copy of the Buss-Perry Aggression Questionnaire (Buss & Perry, 1992), the State Hostility Scale (Anderson et al., 1995), and the Affect Grid (Russell et al., 1989). Following the lyrics sheets were second copies of both the Affect Grid (Russell et al., 1989) and the State Hostility Scale (Anderson et al., 1995), as well as the song-rating questionnaire described earlier. Upon receiving the packet, participants were asked to complete only the first half, which ended in a page containing the word “STOP” in large, bold print, and then to wait for further instructions before proceeding. After the first half of the packet was completed, the version of the song corresponding to the participant’s group was played, and participants were asked to follow along with the lyrics sheets provided. Once the song had finished playing, participants were asked to complete the remainder of the packet.
Results

No significant pretest differences were found between the two groups with regard to aggression or state hostility. However, both the E Group, $t(35) = 3.13, p < .01$, and the TA Group, $t(50) = 8.45, p << .001$, showed significant increases in state hostility after listening to the song. For the purposes of comparison between the two groups, SH difference scores were calculated by subtracting pretest SH scores from posttest scores, thereby denoting increases in SH as positive differences. Upon comparison, the TA Group showed a significantly larger increase in SH than the E Group, $t(85) = -3.85, p < .001$ (see Table 1 and Figure 1), thereby rejecting the first research hypothesis.

Table 1

<table>
<thead>
<tr>
<th>Song Version</th>
<th>Pretest</th>
<th>Posttest</th>
<th>Difference (Post - Pre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eminem</td>
<td>60.92 (18.98)</td>
<td>71.72 (19.06)</td>
<td>10.81 (20.74)</td>
</tr>
<tr>
<td>Tori Amos</td>
<td>55.51 (16.62)</td>
<td>85.31 (23.44)</td>
<td>29.80 (25.19)</td>
</tr>
</tbody>
</table>
To examine the main effects and interactions of song version (Eminem vs. Tori Amos) and aggression (low vs. high), high and low aggression subgroups were formed by median-split of the aggression scores. For the E Group, aggression scores ranged from 44 to 141 with a median of 86 ($M = 84.56$, $SD = 22.30$). For the TA Group, scores ranged from 39 to 134 with a median of 79 ($M = 79.88$, $SD = 22.12$). SH difference scores were then analyzed using a 2 x 2 (Song Version x Aggression) analysis of variance (ANOVA). Results indicated neither a significant main effect for aggression, $F(1, 83) = 0.49$, $p > .05$, nor a significant song version by aggression interaction, $F(1, 83) = 0.33$, $p > .05$. However, a main effect for song version was observed, $F(1, 83) = 13.65$, $p < .05$ (see Table 2). This finding did not support the second research hypothesis.
Table 2

Mean (SD) Change in State Hostility as a Function of Song Version and Trait Aggression

<table>
<thead>
<tr>
<th>Song Version</th>
<th>Eminem</th>
<th>Tori Amos</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>14.22 (20.74)</td>
<td>30.68 (23.37)</td>
<td>23.79 (23.53)</td>
</tr>
<tr>
<td></td>
<td>n = 18</td>
<td>n = 25</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>7.39 (20.76)</td>
<td>28.96 (27.26)</td>
<td>20.14 (26.79)</td>
</tr>
<tr>
<td></td>
<td>n = 18</td>
<td>n = 26</td>
<td></td>
</tr>
</tbody>
</table>

F(1, 83) = 13.65, p < .05  
F(1, 83) = .33, p >> .05

In order to further investigate whether aggression and state hostility were statistically related, regression analyses were conducted, showing that, for both groups, aggression was significantly correlated with both pretest ($r_E = .58$, $p < .001$; $r_{TA} = .56$, $p << .001$) and posttest state hostility ($r_E = .37$, $p < .05$; $r_{TA} = .31$, $p < .05$). However, no significant correlations were found between aggression and state hostility difference ($r_E = .19$, $p > .10$; $r_{TA} = .08$, $p >> .10$).

To address the third research hypothesis, violence and offensiveness data from the song-rating questionnaire was analyzed to see whether ratings of the Eminem version ($M_v = 7.58$, $M_o = 5.89$) differed significantly from those of the Tori Amos version ($M_v = 7.57$, $M_o = 6.59$). However, no significant difference was found in either violence, $t(85) = .05$, $p >> .05$, or offensiveness, $t(85) = -1.32$, $p > .05$. These findings failed to support the third research hypothesis. Moreover, the two dimensions were found to be positively correlated in both groups,
Due to confusion on the part of some participants over the exact procedure for ranking the factors contributing to ratings of violence and offensiveness, the contribution ranking data were not analyzed.

**Discussion**

In light of the current literature, the rejection of all three research hypotheses seems a bit surprising. It appears to contradict "common sense" and traditional wisdom as well. One explanation for the rejection of the third hypothesis, that the E version would receive higher ratings of violence and offensiveness than the TA version, could stem from examination of the participants of this and the related studies (Fried, 1996, 1999). In her studies, Fried (1996, 1999) drew participants from the adult population of various public locations, not from college students (as is true for this study). One hypothesis is that middle-aged and older adults are more likely to find rap music violent and offensive than are younger adults. This might also explain the findings that neither version was rated significantly more violent or offensive than the other. The nonsignificant findings could be due in part to the relationship between V and O ($r_E = .59, p < .001$, $r_{TA} = .58, p << .001$) as well.

Upon further examination, however, while the data showed no significant differences in violence and offensiveness between the two versions, a trend in the offensiveness data was noticed, with the TA being rated slightly more offensive than the E version. As violence accounted for only 35% of the variance in offensiveness scores for the E Group ($r_E = .59$) and only 33% in the TA Group ($r_{TA} = .58$), further examination of factors contributing to offensiveness—beliefs in a just world, perhaps—and its relationship to SH increases could prove useful. One avenue of approach might include the items mentioned earlier (lyrics, musical
accompaniment, genre/style, artist reputation, artist gender, and artist tone of voice) and their contribution to ratings of offensiveness. It is possible, for example, that Eminem's style is seen as humorous and, as such, presents violence in a more acceptable manner than the typically more serious, impassioned, and morose Tori Amos. Perhaps even music preferences of the listener, overall mood of the song, or annoyance level of the song (to the listener) play a role. These could all be significant contributors to SH increase.

Regardless, both versions of the song, listened to only once, did produce increases in SH. This finding, along with the findings from the violence and offensiveness data, supports the notion that the lyrics of a song do contribute appreciably to changes in affect, specifically state hostility. But as the TA version yielded significantly greater increases in SH than the E version, despite the fact that the lyrics of the two versions were nearly identical, it seems that lyrical content, while most likely important, is not the only factor in SH increase. Further research examining which elements of a song contribute to increases in state hostility, and to what extent, is needed. Perhaps deconstructing a song into its basic elements (vocals, percussion, etc.) and analyzing the effects of each individual element on SH would prove useful.

The nonsignificant findings regarding trait aggression also seem surprising, especially since aggression and pretest SH were found to be correlated ($r_E = .58$, $p < .001$; $r_{TA} = .56$, $p << .001$). Redefining high and low aggression subgroups by means of extreme groups (e.g., High = top 25%, Low = bottom 25%) rather than by median-split might be more suitable. Even so, additional research examining the relationships between trait aggression and state hostility should be conducted, perhaps including other dimensions such as emotional reactivity or locus of control.
Though much additional research is needed to understand the relationships between music listening and state hostility, the data nevertheless do seem to provide some support to calls for censorship of songs such as the one used in this study, inasmuch as listening increases SH. But what relationship(s) does SH increase have with reckless, high-risk, or antisocial behaviors? Does music have "the potential...to increase violent crimes in the schools and city streets" (Fried, 1996, p. 2135)? What is the duration of the effects of music listening (i.e., how long does SH remain elevated, and how long does it take to return to baseline)? Are there any cumulative effects? Will listening to SH-increasing music over the course of a week, month, year, or lifetime have differential effects? These questions can only be reliably answered by further research.

Answers to these questions seem of great import in today's society, where it seems that children and adolescents are perpetually surrounded by and, perhaps as a result, choosing to listen to music. This is due largely in part to the ready availability of music, made possible by recent technological advances such as CDs, .mp3s, and satellite radio. Also, the constant presentation of music by such popular media sources as MTV and VH1 inundates young people with messages of social acceptability and popularity, especially with regard to music. Indeed, music is ubiquitous in today's society—commercials, restaurants, and sporting events, to name just a few, all incorporate music. In light of these phenomena, we, as a culture, have choices to make. We can choose to ignore these trends, assuming that music has no effect on our youth. We can claim, instead, that the effects are immense and potentially detrimental and, as a result, should be avoided at all costs through strict censorship and perhaps even banning of certain "dangerous" types of music. Or, through scientific research, we can study the relationships and
effects and make our decisions and policies based on the evidence. Those are our choices. May we choose wisely.
References


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