

Check That Body! The Effects of Sexually Objectifying Music Videos on College Men's Sexual Beliefs

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The present study examined the effects of sexual objectification of female artists in music videos on male undergraduates' sexual beliefs. Findings showed that participants who viewed music videos of highly objectified female artists reported more adversarial sexual beliefs, more acceptance of interpersonal violence, and, at a level of marginal significance, more negative attitudes about sexual harassment than participants assigned to low-sexual objectifying music videos by the same female artists. Path models indicated that adversarial sexual beliefs mediated the relationship between condition, and (1) acceptance of interpersonal violence and (2) negative attitudes regarding sexual harassment.

Critics maintain that the dominant discourse in music videos reproduces distorted ideologies of women's sexuality (Arnett, 2002; Oware, 2009). Content analyses consistently observed that music videos place a great deal of emphasis on women's sexual appeal and reinforce the stereotype of women as sex objects, existing primarily for the pleasure of male spectators (Aubrey & Frisby, 2011; Seidman, 1992; Sommers-Flanagan, Sommers-Flanagan, & Davis, 1993; Vincent, 1989; Vincent, Davis, & Boruszkowski, 1987). As Jhally (2007) argued, music videos are often constructed around the "pornographic imagination," in which women are seen as sex symbols that simply must have sex and will submit to any fantasy that a man may have. Cultural and industry expectations motivate female artists to participate readily in their own sexual objectification. A recent content analysis showed that female artists were even more likely to objectify themselves than male artists were to objectify female characters in their music videos (Aubrey & Frisby, 2011).

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Although content analytic studies have concluded that women were portrayed as sex objects in music videos, the bulk of the literature on music videos focused on the effects of exposure to broadly defined sexual themes in music videos, and not sexual objectification *per se*, (for exceptions, see Hansen, 1989; Hansen & Hansen, 1988; Hansen & Krygowski, 1994) on sexually permissive attitudes (see Arnett, 2002, for review). Although the link between sexually objectifying media exposure and attitudes about sexual aggression were established in the context of other media, most notably pornography (e.g., Malamuth & Check, 1985), the authors sought to test whether sexually objectification *in music videos* could cause a similar short-term negative impact on men's sexual beliefs and attitudes about sexual aggression.

Music videos are an important stimulus to consider for several reasons, both social and theoretical. From a social perspective, music videos are available on demand to audiences. Although they are not the central programming strategy of MTV currently, music videos are accessible through MTV.com, its sister network, MTV2, as well as other platforms (e.g., VH1, BET, iTunes, YouTube). Additionally, an examination of music videos is particularly important because of their popularity among adolescents and young adults, who are likely to refine their schemata regarding gender and sexuality (Ward, Hansbrough, & Walker, 2005). By the age of 15, the amount of time an adolescent listens to music exceeds the amount of time they spend watching TV or spending time with any other medium (Roberts & Foehr, 2004), and for 13% of 11- to 14-year-olds, music videos represent their most preferred television genre. From a theoretical perspective, music videos are useful to consider because they often are constructed around common, simple social events and themes represented in memory in the form of schemata (Hansen, 1989). Music videos also are arousal-producing stimuli, which heighten their ability to activate the stored schemata (Zillmann & Mundorf, 1987). Thus, music videos could be expected to be especially potent schematic primes for concepts related to gender and sexuality.

The present study posits that young-adult men's exposure to female music video artists engaging in sexual objectification of their bodies will temporarily prime the perception that women use their bodies and sexuality to unfairly manipulate men (henceforth referred to as adversarial sexual beliefs). Based on research suggesting that perceiving women as responsible for their treatment is positively linked to men's acceptance of sexual aggression (Allen, Emmers, Gebhardt, & Giery, 1995), the study's goal was to examine whether music videos would prime sexual aggression-related attitudes, such as acceptance of interpersonal violence in sexual relationships, agreement with rape myth beliefs, and disagreement that sexual harassment is a legitimate concern for women.

Content Analyses of Sexuality and Sexual Objectification in Music Videos

Content-analytic work documented that sexual exploitation, objectification, and degradation of women were commonplace in music videos (Conrad, Dixon, &

Zhang, 2009; Gow, 1996; Sommers-Flanagan et al., 1993). For example, research has shown that female characters were consistently portrayed in more sexually submissive positions when compared to male characters (Conrad et al., 2009; Sommers-Flanagan et al., 1993). Similarly, women were portrayed as sex objects by the use of revealing or provocative clothing, typically displaying excessive skin exposure (King, Laake, & Bernard, 2006; Seidman, 1992; Smith, 2005).

A recent content analysis of rap/hip hop music videos documented the presence of misogyny, defined as sexualizing women and the dominance of men over women (Conrad et al., 2009). Operationally, this theme was observed when there were numerous highly sexualized women dancing provocatively, often wearing revealing clothing, and acting submissively to the male artists and other male characters in the music videos. Further, the results suggested that whereas male characters were associated with a variety of themes, female characters were more singularly placed in positions of objectification. Another recent content analysis examined different types of sexual objectification in the music videos of three musical genres (hip hop, pop, and country) (Aubrey & Frisby, 2011). This study found that 91.6% of the sample of music videos of female artists contained at least one of the following indicators of sexual objectification: close-up shots of individual body parts, self-touching of sexual body parts, ample skin exposure, or sexualized dancing. Thus, it is not the case that sexual objectification is exclusively done to female characters by male artists; rather, a majority of female artists engage in sexual objectification of their own bodies.

This study's conceptualization of sexual objectification relied on these music video content analyses (especially Aubrey & Frisby, 2011), as well as on research on objectification theory (Fredrickson & Roberts, 1997), a thriving research literature in feminist psychology. According to objectification theory, sexual objectification can be conceptually defined as treating a person as a body, "valued predominately for its use to (or consumption) by others" (p. 174). Based on this definition, sexual objectification was operationalized both in the visual presentation of female artists' bodies (skin exposure and close-ups of female artists' body parts) and their behavioral portrayals (using sexualizing dance or gestures in the explicit presence of the male gaze).

Media Priming Effects

To understand how short-term exposure to sexually objectifying music videos might be linked to semantically related constructs of adversarial sexual beliefs and aggression-related attitudes among college men, the study drew from the media priming framework (Roskos-Ewoldsen & Roskos-Ewoldsen, 2009). The premise of priming is that when people hear, see, or read media stimuli, ideas sharing similar meanings are activated for a short time afterward and are used to process subsequent stimuli (Higgins, Bargh, & Lombardi, 1985). Priming is based on network models of memory, which assume that memory is a collection of semantic networks, with each

network consisting of nodes that represent thoughts, feelings, and action tendencies, all linked through associative pathways.

The activation of nodes in the network model is based on environmental input (e.g., media stimuli) or the spread of activation from related nodes (Roskos-Ewoldsen & Roskos-Ewoldsen, 2009). The ability of the media to prime, or activate, a certain concept in memory is based on the media's ability to exceed the activation threshold for the concept. That is, some concepts will need very little provocation to become accessible; others will require a more intense (typically measured in frequency or duration) media stimulus to exceed the activation threshold.

Priming may be understood also as a mechanism used to test schematic processing. Schemata are cognitive structures that represent knowledge about a concept, including its attributes and the relations between those attributes (Fiske & Taylor, 1991). Schemata can concern broad concepts (e.g., gender), events or behaviors (e.g., instances of sexual harassment), or groups of people (e.g., women). This reasoning formed the basis of the assumption that sexual objectification in music videos activates a schema of women as sex objects, which subsequently affects young-adult men's sexual beliefs and attitudes about sexual aggression.

Priming effects typically are measured in three ways (Roskos-Ewoldsen & Roskos-Ewoldsen, 2009). After stimulus to a prime, researchers often measure (1) people's judgments of ambiguous events, (2) the behaviors they display, or (3) their reaction times in word recognition tasks to document direct priming effects. However, the present study deviates from the research that measures direct priming effects and takes inspiration from models of stereotype priming with regard to gender (e.g., Hansen & Hansen, 1988; Hansen & Krygowski, 1994; Intons-Peterson, Roskos-Ewoldsen, Thomas, Shirley, & Blut, 1989). In these studies, the main theoretical explanation for the priming effect is that the media *indirectly* activate stereotypes, or stored schema about social groups (i.e., women), which, in turn, directly influence judgments of others and social issues (Roskos-Ewoldsen & Roskos-Ewoldsen, 2009). The stimuli in stereotype priming studies are designed so that there is no explicit reference to the dependent outcomes measured, but the mere presence of an attitude object implicitly primes stored stereotypes, often without individuals' conscious reflection (Fazio, Sanbonmatsu, Powell, & Kardes, 1986).

Applied to the present study, exposure to music videos where female artists engage in the sexual objectification of their bodies may prime a schema of women as sexual objects. This activated schema probably contains related attributes, such as the idea that sexual objects invite the male gaze and thus male attention. That the female artists invite sexual attention might alleviate responsibility for men in contexts in which the attention crosses over to sexual aggression (Allen et al., 1995). Importantly, the stimuli in the present study do not exhibit any sexual aggression, or for that matter, any explicit sexual acts between male and female characters. Thus, any effect on the aggression-related attitudinal measures must be the result of the schema activated by the music videos.

From a priming perspective, the present study also draws from a well-established literature on the effects of pornography on men's sexual behaviors and attitudes.

In the behavioral realm, exposure to the portrayal of women as sexual objects in pornography results in men engaging in more sexually motivated behaviors toward women compared to those assigned to a control group (McKenzie-Mohr & Zanna, 1990; Rudman & Borgida, 1995). Additionally, studies show that exposure to violent pornography temporarily increases support for the rape myth among undergraduate men (Malamuth & Check, 1985), especially if the participants perceive the rape victims as exhibiting arousal during the rape (Malamuth & Check, 1980). In particular, this study's expectation is similar to the findings of Wyer, Bodenhausen, and Gorman (1985), which suggested that exposure to women portrayed as sex objects in sexually explicit media (i.e., pornography) primed in men a belief that the victims were responsible for the sexual aggression; such attributed responsibility diminished their belief in the credibility of rape victims. A similar connection to attitudes about interpersonal violence in sexual relationships, acceptance of rape myth, and a disbelief in the legitimacy of sexual harassment is anticipated.

Effects of Sexuality in Music Videos

Researchers examined the effects of music video exposure on college-age and teen-age audiences, but most of this research examined exposure to sexual content in the music videos instead of sexual objectification in music videos. Experimental evidence suggests that undergraduate students and teenagers exposed to music videos featuring sexual content are more likely to endorse casual and stereotypical attitudes about sex (Calvin, Carroll, & Schmidt, 1993; Greeson & Williams, 1986) and more likely to agree with the opinion that sexual relationships are adversarial (Kalof, 1999) than those assigned to a control group. In Ward et al.'s (2005) study, African American high school students who watched sexually stereotyped music videos demonstrated significantly more support for stereotypical beliefs about gender and sexual roles than those in the control group who watched videos with no such stereotypes. Similarly, Kistler and Lee (2010) discovered that male college undergraduates who viewed highly sexual hip-hop music videos expressed greater objectification of women, sexual permissiveness, and stereotypical gender attitudes than male participants who viewed less sexual hip-hop videos.

The work by Hansen and colleagues specifically tested the effects of exposure to sexual objectification in music videos on participants' subsequent interpretation of sexually ambiguous interactions (Hansen, 1989; Hansen & Hansen, 1988) or evaluations of sexually ambiguous media (Hansen & Krygowski, 1994). For example, Hansen (1989) showed that when participants were primed with sexually stereotypic music videos, a female confederate who reciprocated a male confederate's sexual advances was liked more than a female confederate who deflected them. Just the opposite pattern emerged when the participants were primed with a stereotype-neutral music video. Hansen argued that without the benefit of stereotypic priming videos, the male confederate's sexual advances was perceived as sexual harassment, but

the stereotypic video primed a more favorable impression of a female confederate who acquiesced to the advances.

At least two experimental studies established a link between music videos' ability to make sexual stereotypes accessible and more apathetic attitudes toward sexual violence. Kistler and Lee (2010) found that men were more accepting of rape myths if they viewed sexual music videos rather than non-sexual videos. Further, in another experimental study, young women who watched hip-hop music videos were more likely to be accepting of teen violence than they were before watching the video (Johnson, Jackson, & Gatto, 1995). In both cases, the authors argued that the acceptance of violence is a result of seeing women in objectified positions, which makes the participants feel that the violence was justified.

The Present Study

The goal of the present study was to isolate sexual objectification displayed by female artists in music videos to examine how these portrayals affect college men's sexual beliefs and aggression-related attitudes. The focus was on college men's reactions for three main reasons. First, recent evidence suggests that the effects of sexual music videos on gender- and sexuality-related attitudes primarily occur among men (Kistler & Lee, 2010). Second, men often initiate and perpetrate the types of sexual aggression investigated here (e.g., Storch, Bagner, Geffken, & Baumeister, 2004). Third, examining male college undergraduates at a large, Midwestern university, in particular, is useful because these men are in an environment with a strong party culture, fraternity system, and college athletic program, all of which predict aggression-supportive attitudes (Flack et al., 2007; Murnen & Kohlman, 2007). Thus, college men are likely to exhibit quite a bit of variance in their *a priori* attitudes about sexual aggression; the present study allows one to understand the short-term influence of situational stimuli (e.g., music videos) on these aggression-related attitudes. Thus, the findings on this population would have implications for campus health professionals seeking to prevent sexual violence on college campuses (American College Health Association, 2008).

The first hypothesis predicted that exposure to female music video artists would activate adversarial sexual beliefs. That is, it was expected that viewing female artists objectifying their bodies would activate men's belief that women use their sexuality to their advantage over men.

- H₁. Men exposed to music videos high in sexual objectification will report more adversarial sexual beliefs than men exposed to music videos low in sexual objectification.

The next set of hypotheses (H₂–H₄) examined whether exposure to sexually objectifying music videos primes aggression-related attitudes among men.

- H₂. Men exposed to music videos high in sexual objectification will report more acceptance of interpersonal violence than men exposed to music videos low in sexual objectification.
- H₃. Men exposed to music videos high in sexual objectification will report more acceptance of rape myths than men exposed to music videos low in sexual objectification.
- H₄. Men exposed to music videos high in sexual objectification will report more disagreement with the idea that sexual harassment is a legitimate concern of women than men exposed to music videos that are low in sexual objectification.

Based on the media priming framework, the last hypothesis tested the idea that the activation of adversarial sexual beliefs will be related to other more specific attitudes related to women deserving harm that might come to them (whether it be interpersonal violence, rape, or harassment). That is, if the music videos activate a global schema of women being sexually manipulative, then related components of that schema also might be activated, such as victim-blaming and general skepticism of sexually coercive experiences. To support the speculation, research shows that adversarial sexual beliefs were consistently linked to acceptance of interpersonal violence and rape myth acceptance (see Lonsway & Fitzgerald, 1994, for review).

- H₅. Men's agreement with adversarial sexual beliefs will mediate the relationship between exposure to sexually objectifying music videos and their attitudes about (a) interpersonal violence, (b) rape myths, and (c) sexual harassment.

Method

Participants

In total, 85 undergraduate men from a large, public Midwestern university participated in the study. Their ages ranged from 18 to 28, with a mean of 20.28 ($SD = 1.57$). Their racial breakdown was 88.2% ($n = 75$) Caucasian, 3.5% ($n = 3$) African American, 3.5% ($n = 3$) Asian American, 3.5% ($n = 3$) Latino/Hispanic, and 1.2% ($n = 1$) identified as other. Their enrollment year breakdown was, 18.8% ($n = 16$) freshmen, 35.3% ($n = 30$) sophomore, 27.1% ($n = 23$) junior, and 18.8% ($n = 16$) senior.

Design and Procedure

The design was a between-subjects post-test-only experiment with two conditions: exposure to music videos of female artists that are high in sexual objectification

($n = 44$) and low in sexual objectification ($n = 41$). Participants were recruited from introductory communication classes and invited to participate in a study on the "production quality of music videos." Participants were randomly assigned to one of the two conditions.

Each research session was run by a female research assistant. Participants reported to a research laboratory, where they were stationed individually at a computer. They were told that the study was designed to assess the production values of popular music videos. Participants self-administered the music videos via iTunes, and completed a paper-and-pencil questionnaire with eight items per video assessing production values, e.g., "How well does the lighting enhance the movement of the artist during the video?" (0 = *not at all*; 6 = *very well*).

Participants were told that they would participate in a separate online survey in which they filled out a "College Student Concerns Questionnaire" that ostensibly was administered by another faculty member. According to the cover story, this questionnaire covered one of three topics relevant to college students: (1) opinions about racial and ethnic minorities; (2) opinions about gender roles; or, (3) opinions about sexual orientation. In actuality, all questionnaires covered the second topic, including the measures assessing adversarial sexual beliefs, acceptance of interpersonal violence, acceptance of the rape myth, and attitudes toward sexual harassment (see measures).

Stimulus Materials

Based on prior research on the visual aspects of sexual objectification (Aubrey & Frisby, 2011), the following criteria considered to be sexually objectifying were used: the artist had to (a) have a high degree of body exposure; (b) feature multiple close-up shots of sexual body parts; and (c) dance, move, and gesture in a suggestive manner in the explicit presence of a male audience. To control for possible differences between genres and to highlight a genre where there are a plethora of female artists, only videos from the mainstream pop music genre were selected. Another selection criterion for the stimuli was that the music videos could not contain a portrayal of actual sexual interactions between characters, and the videos could not contain any portrayal of sexual aggression.

Using these criteria, dozens of music videos that were on the Hot 100 Billboard charts for 2007 and 2008 were screened. Seven music videos that best fit the study's selection criteria were selected and submitted for pre-testing. Nineteen undergraduate students, separate from the participants in the main study, participated in the pre-test. On average, these participants were 21.0 years old ($SD = 1.86$), consisting of 11 (58.9%) women, and 8 (41.1%) men.¹

During a class period, a female graduate student showed the 7 music videos to the 19 pre-test participants. Students rated each on three criteria: (1) sexual objectification (participants were given Fredrickson and Robert's (1997) definition), (2) the physical attractiveness of the artist, and (3) their liking of the video. So as

not to conflate sexual objectification with liking and attractiveness, the study’s goal was to select music videos that were rated high on sexual objectification but that did not differ between music videos on physical attractiveness and liking. The videos were rated on an 11-point scale for sexual objectification (0 = *not at all sexually objectifying*, 5 = *somewhat sexually objectifying*, 10 = *extremely sexually objectifying*) and a 4-point scale for attractiveness and liking (1 = *not at all*, 4 = *a lot*). Table 1 shows the rankings, means, and standard deviations of the seven pre-tested music videos.

The three music videos that were rated highest on sexual objectification (Beyoncé’s “Upgrade U,” Fergie’s “Fergalicious,” and Hilary Duff’s “Stranger”) were selected as the stimuli for the experimental condition. Not only were they the highest on sexual objectification, but also did not differ from each other on attractiveness of the artists, $F(2, 17) = .67, p = .52$, or liking of the artist, $F(2, 17) = 2.01, p = .17$. For the control condition, music videos by the same artists that were identified as low on the aforementioned criteria were chosen. In each case, the artists were fully clothed and did not engage in sexually suggestive dance, and the music video was released within a year of the experiment video. Also, although the primary focus was the visual objectification of women’s bodies, it was also necessary that the lyrical content of the music videos be reasonably matched between conditions. Based on these criteria, the videos selected for the control group, or the low sexual objectification condition, were (1) Beyoncé’s “Listen”; (2) Fergie’s “Glamorous”; and (3) Hilary Duff’s “Wake Up.” In both conditions, the running time of the music videos was approximately 15 minutes. Participants viewed the music videos in random order.

Table 1
Ranking, Means, and Standard Deviations of Pre-Test Variables

Music Video	Sexual Objectification Rating	Physical Attractiveness Rating	Liking Rating
1. Beyoncé, “Upgrade U”	8.68 (1.63)	2.84 (1.01)	2.53 (1.12)
2. Fergie, “Fergalicious”	7.79 (1.87)	2.89 (.88)	2.95 (.91)
3. Hilary Duff, “Stranger”	7.42 (2.36)	3.11 (.94)	3.15 (.90)
4. Nellie Furtado, “Maneater”	7.15 (2.27)	3.00 (.92)	2.58 (1.02)
5. Gwen Stefani, “Hollaback Girl”	6.21 (1.32)	3.00 (.82)	2.50 (.86)
6. Christina Milian, “When You Look at Me”	5.84 (1.89)	3.47 (.96)	3.32 (.75)
7. Kelly Clarkson, “Walk Away”	3.21 (1.69)	2.32 (1.11)	2.68 (1.06)

Note: Sexual objectification was based on a 0 (*not at all*) to 10 (*extremely*) rating. Physical attractiveness and liking were based on a 1 (*not at all*) to 4 (*very much*) rating.

Measures

After exposure to the music videos, the participants completed the following scales as part of the "College Student Concerns Questionnaire." Participants completed this survey online via SurveyMonkey.

Adversarial Sexual Beliefs.

The Adversarial Sexual Beliefs subscale of the Cultural Myths Questionnaire (Burt, 1980) was used to capture participants' belief that women are sexually manipulative (e.g., "Most women are sly and manipulating when they are out to attract a man."). Participants reported to what extent they agreed with each of four statements (1 = *strongly disagree*; 7 = *strongly agree*), $\alpha = .76$.

Acceptance of Interpersonal Violence.

Five items from the Acceptance of Interpersonal Violence subscale and from the Cultural Myths Questionnaire (Burt, 1980) were included to measure participants' acceptance of using violence against women in sexual relationships (e.g., "Being roughed up is sexually stimulating to many women"). Participants reported the extent to which they agreed with each of the statements (1 = *strongly agree*; 7 = *strongly disagree*), $\alpha = .72$.

Rape Myth Acceptance.

Nine items were included from the Rape Myth Questionnaire (Burt, 1980) to capture participants' acceptance of rape myths (e.g., "A woman who goes to the home of a man on their first date implies that she is willing to have sex"). Participants reported the extent they agreed with each statement (1 = *strongly disagree*; 7 = *strongly agree*), $\alpha = .76$.

Sexual Harassment Attitudes.

Eight items were selected from the Tolerance for Sexual Harassment Inventory (TSHI) (Lott, Reilly, & Howard, 1982) that measures the attitude that sexual harassment is not a legitimate concern (e.g., "People who receive annoying sexual attention often times provoke it"). Participants reported to what extent they agreed with each of the statements (1 = *strongly disagree*; 7 = *strongly agree*), $\alpha = .76$. Thus, a higher score on this scale reflects less concern for sexual harassment as a legitimate concern.

Liking of the Music Videos.

It was deemed important to control for participants' liking of the music videos. As part of the production values survey, participants rated each video on a 7-point scale (0 = *not at all*, 3 = *somewhat*, 6 = *very well*) for enjoyment, entertainment,

and ability to hold one's attention. An average of these three items provided a global measure of liking ($\alpha = .81$).

Demographic Variables.

At the end of the SurveyMonkey survey, participants reported their basic demographic information, including mother's education (1 = *less than high school*; 6 = *graduate degree completed*), father's education (1 = *less than high school*; 6 = *graduate degree completed*), their family's household income (1 = *less than \$10,000*; 6 = *more than \$150,000*), and age (reported in years). Participants also responded to a yes/no question, inquiring whether they were currently in a "committed, romantic relationship." These variables were entered as possible covariates in order to control for the possible social and relational origins of adversarial sexual beliefs and attitudes about sexual aggression (see Lonsway & Fitzgerald, 1994).

Results

Preliminary Analyses

Stimulus Testing.

Once selected, possible differences on participants' subjective assessments of the music videos, either between conditions or within condition were investigated. Repeated-measures ANOVAs with video entered as the within-subjects factor and condition entered as the between-subjects factor were run. There was no within-subjects effect of music video on enjoyment, $F(2, 76) = 1.69, p = .19$, nor was there a between-subjects effect on enjoyment, $F(1, 77) = .19, p = .67$. For entertainment, the between-subjects effect was not statistically significant, $F(1, 76) = .67, p = .42$; however, the within-subjects factor was, $F(2, 75) = 5.26, p = .007$. The Hilary Duff videos were seen as less entertaining ($M = 3.27, SD = 1.41$) than the Beyoncé ($M = 3.82, SD = 1.31$) and Fergie ($M = 3.74, SD = 1.51$) videos.² For the videos' ability to hold participants' attention, the between-subjects effect was not statistically significant, $F(1, 77) = .48, p = .49$, nor was the within-subjects effect, $F(2, 76) = 2.37, p = .10$.

Manipulation Check.

As a manipulation check, at the end of the questionnaire assessing the dependent outcomes, participants rated on a 7-point scale (0 = *not at all*, 6 = *extremely*) how much, as a whole, the videos they viewed focused on women's bodies. As expected, those who were assigned to the high objectification condition rated the videos higher on this scale ($M = 4.41, SD = 1.45$) than those assigned to the low objectification condition ($M = 1.21, SD = 1.14$), $t(74) = 11.07, p < .001$.

Table 2
Inter-Correlations among Dependent Variables

	1.	2.	3.	4.
1. Adversarial Sexual Beliefs	1.0			
2. Acceptance of Interpersonal Violence	.48***	1.0		
3. Rape Myth Acceptance	.55***	.54***	1.0	
4. Sexual Harassment Attitudes	.42***	.51***	.51***	1.0

Note: *** $p < .001$.

Correlations Among Dependent Variables.

If the dependent variables are semantically related, as proposed in this study, then the dependent variables should be inter-correlated. As shown in Table 2, the dependent variables were moderately inter-correlated, ranging from $r = .42$ to $r = .55$.

Hypothesis Testing

First, the multivariate main effect of condition on all four dependent variables was examined, and found to be marginally significant, Wilks $\lambda = .91$, $F(4, 74) = 2.16$, $p = .08$, $\eta^2 = .10$. Also entered were four demographic variables (mother's education, father's education, income, and age), the relational status, and participants' subjective assessments of liking the music videos as covariates. Of the six covariates, it was found that only mother's education, Wilks $\lambda = .87$, $F(4, 74) = 2.89$, $p = .03$, $\eta^2 = .12$, and age, Wilks $\lambda = .77$, $F(4, 77) = 5.85$, $p < .001$, $\eta^2 = .25$, exhibited multivariate effects. Thus, these two variables were controlled in subsequent analyses.³

ANCOVAs were conducted to test the hypotheses. H_1 examined the main effect of condition on participants' adversarial sexual beliefs. An ANCOVA was run with condition entered as the factor, adversarial sexual beliefs as the dependent variable, and age and mother's education, entered as covariates. The model yielded a statistically significant main effect of condition, $F(1, 81) = 4.78$, $p = .03$, $\eta^2 = .06$. As predicted, participants in the high sexual objectification condition reported more agreement with adversarial sexual beliefs ($M = 3.54$, $SD = 1.04$) than participants in the low sexual objectification condition ($M = 3.10$, $SD = .95$).

To test H_2 , an ANCOVA examining acceptance of interpersonal violence as the dependent variable also yielded a statistically significant main effect, $F(1, 81) = 4.26$, $p = .04$, $\eta^2 = .05$. As predicted, participants in the high sexual objectification condition ($M = 2.49$, $SD = .91$) reported significantly more acceptance of interpersonal violence than participants in the low sexual objectification condition ($M = 2.13$, $SD = .85$).

H₃ tested the main effect of the condition on the acceptance of the rape myth. The ANCOVA did not yield a main effect of condition, $F(1, 81) = .54, p = .46$, observed power = .11. Thus, the results do not support H₃.

For H₄, the ANCOVA for attitudes toward sexual harassment yielded a marginally significant main effect on condition, $F(1, 81) = 3.59, p = .06, \eta^2 = .04$. The results revealed that participants in the high sexual objectification condition reported less concern for sexual harassment as a legitimate concern ($M = 4.17, SD = .76$) than participants in the low sexual objectification condition ($M = 3.80, SD = .74$). This was only tentative support for the hypothesis.

Finally, H₅ examined adversarial sexual beliefs as a mediator in the relationship between condition and the aggression-related attitudes. Because the results of H₃ did not exhibit a main effect on rape myth acceptance, the focus of the mediational analyses was on acceptance of interpersonal violence and attitudes toward sexual harassment. Specifically, regression-based path analyses (with exposure to high sexual objectification dummy-coded as 1) was run to examine whether adversarial sexual beliefs mediated the relationship between exposure to sexually objectifying music videos on acceptance of interpersonal violence and attitudes toward sexual harassment. To test for mediation, procedures outlined by Baron and Kenny (1986) and the bootstrapping technique suggested by Preacher and Hayes (2004) were used to test the significance of the indirect effect. According to Baron and Kenny (1986), mediation is demonstrated when (a) the independent variable (condition) is significantly related to the dependent variables (acceptance of interpersonal violence, disbelief in the legitimacy of sexual harassment), (b) the independent variable is significantly related to the mediator variable (adversarial sexual beliefs), (c) the mediator is significantly related to the dependent variables, and (d) the effect of the independent variable on the dependent variable decreases significantly when the mediator variable is controlled. Then, to test the indirect effect, further analyses using 5,000 bootstrap resamples were conducted to generate 95% confidence intervals (Preacher & Hayes, 2004).

For each regression model, age and mother's education were entered in the first step of the model, condition in the second step, and for the full model's investigating acceptance of interpersonal violence and negative attitudes toward sexual harassment, adversarial sexual beliefs was entered in the third step. The results are reported in Table 3.

First, to test the mediating role of adversarial sexual belief in the relation between condition and acceptance of interpersonal violence, the regression model confirmed that the effect of condition on acceptance of interpersonal violence was statistically significant, ($\beta = .24, t = 2.19, p = .03$). Further, exposure to sexually objectifying music videos significantly predicted adversarial sexual beliefs ($\beta = .21, t = 2.06, p = .04$), and adversarial sexual beliefs positively predicted acceptance of interpersonal violence ($\beta = .44, t = 4.67, p < .001$). When adversarial sexual beliefs were controlled, the effect of condition on acceptance of interpersonal violence was reduced to non-significance ($\beta = .11, t = 1.14, p = .25$). According to the Baron and Kenny procedure (1986), this result suggests full mediation. Evidence for

Table 3
Adversarial Sexual Beliefs Mediating Condition and Acceptance of
Interpersonal Violence, Sexual Harassment Attitude

	Adversarial Sexual Beliefs	Acceptance of Interpersonal Violence	Sexual Harassment Attitudes
Step 1			
Age	.03	-.26*	-.44***
Mother's education	-.13	-.21*	.01
Adjusted R ²	.02	.09**	.18***
Step 2			
Condition	.24*	.21*	.18 ⁺
Adjusted R ²	.07 ⁺	.12**	.20***
Δ Adjusted R ²	.05*	.03*	.02 ⁺
Step 3			
Condition		.11	.08
Adversarial sexual beliefs		.44***	.43***
Adjusted R ²		.30***	.37***
Δ Adjusted R ²		.18***	.17***

Notes: ⁺ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$. Condition was dummy coded, 1 = *high sexually objectifying music videos*; 0 = *low sexually objectifying music videos*.

the significance of the mediation was found using the bootstrapping procedures; the standardized estimate for the indirect effect was .18 (SE = .09; 95% CI = .01–.36). Thus, when adversarial sexual beliefs were considered, the relationship between condition and acceptance of interpersonal violence was no longer statistically significant.

The next test was whether adversarial sexual beliefs mediated the relationship between exposure to sexually objectifying music videos and disbelief in the legitimacy of sexual harassment. The regression results confirmed that condition predicted disbelief in the legitimacy of sexual harassment, again at a level of marginal significance ($\beta = .18$, $t = 1.89$, $p = .06$). Regressions also confirmed that exposure to the high sexual objectification videos positively predicted adversarial sexual beliefs ($\beta = .21$, $t = 2.06$, $p = .04$) and that adversarial sexual beliefs positively predicted disbelief in the legitimacy of sexual harassment ($\beta = .43$, $t = 4.78$, $p < .001$). When adversarial sexual beliefs were controlled, the effect of condition on the disbelief in the legitimacy of sexual harassment was substantially reduced ($\beta = .08$, $t =$

.83, $p = .41$). Evidence for the significance of the mediation was found using the bootstrapping procedure; the standardized estimate for the indirect effect was .18 (SE = .09; 95% CI = .01–.30). Thus, this evidence supports a case for adversarial sexual beliefs fully mediating the influence of sexually objectifying music video exposure on participants' attitudes toward sexual harassment.

Discussion

In response to the concern that music videos foster a distorted portrait of the sexual norms, the present study investigated the effects of sexual objectification of female artists on male undergraduates' adversarial sexual beliefs and aggression-related attitudes (Arnett, 2002). As expected, the results showed that exposure to sexually objectifying music videos primed male college students' adversarial sexual beliefs, acceptance of interpersonal violence, and, at a level of marginal significance, disbelief in the legitimacy of sexual harassment.

These findings were interpreted as consistent with the media priming effects framework (Roskos-Ewoldsen & Roskos-Ewoldsen, 2009). That is, the sexually objectifying music videos appeared to prime schemata related to deeply entrenched cultural beliefs about women's sexuality, which, for at least a short time afterward, make semantically related thoughts and beliefs more immediately accessible. The study's justification for the priming argument is that the music video stimuli were selected specifically so there was no explicit reference to sexual behaviors or sexual aggression; thus, the findings are likely a result of the implicitly primed stereotype of women as sexual objects, which subsequently directly influenced their evaluation of women and of sexual aggression. Priming seems a more probable interpretation of the findings than modeling or persuasion because portrayals of sexual aggression were absent from the stimuli. Thus, it is not possible that the participants simply reacted to a vicariously reinforced depiction of sexual violence.

Because the music videos primed in men the belief that women use their sexuality to their advantage, the related schema, possibly linked in their cognitive networks, might be that women have little basis to complain if men reciprocate the interest, and it goes too far (in terms of violence or sexual harassment). This is consistent with research on the effects of violent pornography suggesting that viewers tend to perceive female victims in sexually violent depictions to be responsible or partially responsible for their treatment (Allen et al., 1995; Wyer et al., 1985). Applied to the current context, in music videos, female music artists have at least some, although certainly not complete, agency in how they represent themselves in their own music videos (Fitts, 2008). Due to industry and cultural expectations, a dominant way that female artists present themselves is through objectification of their own bodies (Aubrey & Frisby, 2011). Thus, seeing popular female artists sexually objectify their bodies in their own music videos might be an effective priming agent in this realm because the female artists are seen as making a choice to objectify themselves and thus are responsible for any sexual advances they experience. Future research

will need to directly measure the intervening schemata of responsibility to see if they are being primed as speculated here. Open-ended thought listing is one future methodological avenue that would tap which thoughts were directly primed during viewing.

However, contrary to prediction, there was not an effect of condition on male participants' acceptance of rape myths. Although recent research found that highly sexual hip-hop videos increased participants' rape myth acceptance (Kistler & Lee, 2010), it is important to keep in mind the differences between the stimuli used in each study. The music videos in Kistler and Lee's study portrayed men as powerful, sexually assertive, with a fair degree of sexual prowess; in the present study, the music videos did not contain any portrayals related to male sexuality that might have primed rape myth acceptance. Similarly, the studies linking pornography to the acceptance of the rape myth contained explicit depictions of non-consensual sex that could have provided the priming agent for rape myth acceptance (e.g., Malamuth & Check, 1985). In the present study, the stimuli lacked the cues related to male aggression that might prime the acceptance of false beliefs about rape.

Additionally, follow-up research on the measures used in the present study show that both the measures of adversarial sexual beliefs and acceptance of interpersonal violence are highly correlated with a generalized hostility toward women (Lonsway & Fitzgerald, 1995). Thus, one way to interpret these findings is that the music videos of female artists sexualizing themselves prime constructs that are related to hostile feelings toward women. It is possible, then, that exposure to sexual objectification in music videos does not exceed the activation threshold for rape myth acceptance, whereas it does exceed the activation threshold for concepts related to hostile feelings toward women. Consistent with this explanation, Malamuth and Check (1985) concluded that aggressive sexual media may increase men's rape myth acceptance when it depicts positive consequences of the rape, such as sexual arousal or romance. In the absence of such positive reinforcement cues, rape myth acceptance might not be activated.

Following the reasoning that music videos prime a global schema about adversarial sexual relations, which, in turn, activate more specific components of the same general schema, the present study also tested whether adversarial sexual beliefs mediate the main relationship between exposure to sexually objectifying music videos and (1) acceptance of interpersonal violence and (2) disbelief in the legitimacy of sexual harassment. The results supported full mediation in both cases, which suggests that adversarial sexual beliefs are stored in schema that also include attributes related to sexual aggression. Still, it is important to point out that the adversarial sexual beliefs and the aggression-related attitudes were measured cross-sectionally; thus, it is not possible to rule out the possibility that the causal directions between the mediator and the outcome variables are actually reversed.

It is important to note that the effect sizes for the main effects of conditions observed here were relatively small. Thus, it is likely that other factors, including participants' personality, real-world experiences, and political ideology, certainly

have more of an influence on college men's adversarial sexual beliefs and sexual aggression-related attitudes than short-term exposure to music videos. However, if music videos can be considered as just one medium in the typical college student's media diet, which might include pornography, sexualized and violent video games, and lad magazines (i.e. *Maxim*), the media landscape of a typical male college student is likely to be rife with sexual stereotypes and myths related to women's sexuality. Thus, the relevant question to consider is not whether such schemata are activated but *how often* they are.

The present study had limitations. In addition to the limitations already articulated, the study utilizes a convenience sample of college students, so the ability to generalize to other populations is limited. Further, the focus is only on male undergraduate students; future research would benefit from including women as a comparison group. Because research suggests that the effects on sexual stereotypes was not present for women (Kistler & Lee, 2010), inclusion of self-perceptions might provide a fuller portrait of how gender is implicated in the effects of music videos. Further, there were limitations related to the study's selected stimuli. First, to be consistent with the experimental sample, the authors acknowledge that an all-male pre-test participation as ideal. Although the pre-test participants' ratings of the videos did not differ by gender, an all-male sample would produce more rigorous ratings. Second, the study's manipulation check revealed that the stimuli showed a shortcoming because there was a difference in the entertainment value of the selected videos. This is an issue that future studies should try to control.

The representations of female artists in music videos deserve further research attention. They likely affect myriad attitudes and self-perceptions, including conceptions and understandings of masculinity and femininity, women's rights, and self-esteem. Examining the stories that music videos reveal about female sexuality contributes to a fuller understanding of the communication of gender in contemporary media.

Notes

¹No differences by gender were found for the pre-test variables. For the three selected music videos, objectification ratings did not differ for the Beyoncé video (Male $M = 9.13$, Female $M = 8.36$, $t(17) = 1.00$, $p = .33$); Fergie video (Male $M = 8.05$, Female $M = 6.81$, $t(17) = 1.33$, $p = .20$); or the Hilary Duff video (Male $M = 7.93$, Female $M = 7.35$, $t(17) = .66$, $p = .52$). The attractiveness ratings also did not differ: Beyoncé video (Male $M = 2.75$, Female $M = 2.90$, $t(17) = .33$, $p = .75$); Fergie video (Male $M = 3.00$, Female $M = 3.18$, $t(17) = .41$, $p = .69$); or the Hilary Duff video (Male $M = 2.50$, Female $M = 3.01$, $t(17) = 1.71$, $p = .11$). Finally, the liking ratings did not significantly differ by gender: Beyoncé video (Male $M = 2.00$, Female $M = 2.70$, $t(17) = 1.78$, $p = .10$); Fergie video (Male $M = 2.88$, Female $M = 3.36$, $t(17) = 1.71$, $p = .11$); or the Hilary Duff video (Male $M = 2.50$, Female $M = 3.01$, $t(17) = 1.71$, $p = .11$).

²Although not ideal that there was a within-subjects effect on entertainment, the dependent measures were assessed at the end of exposure to all three videos. Thus, there was no way to formally control for participants' assessment of entertainment between videos. This will be an issue that will need to be resolved in follow-up work.

³The effects of age and mother's education is similar to recent research showing that being in college longer and coming from a family with a working mother negatively predicted the belief in rape myths (Haywood & Swank, 2008). Thus, it was deemed important to control for these variables.

References

- Allen, M., Emmers, T. M., Gebhardt, L. J., & Giery, M. (1995). Exposure to pornography and acceptance of rape myths: A research summary using meta-analysis. *Journal of Communication, 45*(1), 5–26.
- American College Health Association (2008). *Shifting the paradigm: Primary prevention of sexual violence*. Available: http://www.acha.org/sexualviolence/docs/ACHA_PSV_toolkit.pdf
- Arnett, J. (2002). The sounds of sex: Sex in teens' music and music videos. In J. D. Brown, J. R. Steele, & K. Walsh-Childers (Eds.). *Sexual teens, sexual media: Investigating media's influence on adolescent sexuality* (pp. 253–264). Mahwah, NJ: Lawrence Erlbaum.
- Aubrey, J. S., & Frisby, C. (2011). Sexual objectification in music videos: A content analysis comparing gender and genre. *Mass Communication & Society, 14*, 475–501.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173–1182.
- Burt, M. (1980). Cultural myths and supports for rape. *Journal of Personality and Social Psychology, 38*(2), 217–230.
- Calvin, M. S., Carroll, J. L., & Schmidt, J. (1993). Viewing music-videotapes before taking a test of premarital sexual attitudes. *Psychological Reports, 72*(2), 475–481.
- Conrad, K., Dixon, T., & Zhang, Y. (2009). Controversial rap themes, gender portrayals and skin tone distortion: A content analysis of rap music videos. *Journal of Broadcasting & Electronic Media, 53*(1), 134–156.
- Fazio, R. H., Sanbonmatsu, D. M., Powell, M. C., & Kardes, F. R. (1986). On automatic activation of attitudes. *Journal of Personality and Social Psychology, 50*(2), 229–238.
- Fiske, S. T., & Taylor, S. E. (1991). *Social cognition* (2nd ed.) (pp. 96–116). New York: McGraw-Hill.
- Fitts, M. (2008). "Drop it like it's hot": Culture industry laborers and their perspectives on rap music video production. *Meridians: Feminism, Race, Transnationalism, 8*(1), 211–235.
- Flack, W. F., Daubman, K. A., Caron, M. L., Asadorian, J. A., D'Aureli, N. R., Gigliotti, S. N., ... Stine, E. R. (2007). Risk factors and consequences of unwanted sex among university students: Hooking up, alcohol, and stress response. *Journal of Interpersonal Violence, 22*(2), 139–157.
- Fredrickson, B. L., & Roberts, T-A. (1997). Objectification theory: Toward an understanding of women's lived experiences and mental health risks. *Psychology of Women Quarterly, 21*, 173–206.
- Gow, J. (1996). Reconsidering gender roles on MTV: Depictions in the most popular music videos of the early 1990s. *Communication Reports, 9*(2), 151–161.
- Greeson, L. E., & Williams, R. A. (1986). Social implications of music videos for youth: An analysis of the content and effects of MTV. *Youth and Society, 18*(2), 177–189.
- Hansen, C. H. (1989). Priming sex-role stereotypic event schemas with rock music videos: Effects on impression favorability, trait inferences, and recall of a subsequent male-female interaction. *Basic and Applied Social Psychology, 10*(4), 371–391.
- Hansen, C. H., & Hansen, R. D. (1988). How rock music videos can change what is seen when boy meets girl: Priming stereotypic appraisal of social interactions. *Sex Roles, 19*(5–6), 287–316.
- Hansen, C. H., & Krygowski, W. (1994). Arousal-augmented priming effects: Rock music videos and sex object schemas. *Communication Research, 21*(1), 24–47.

- Haywood, H., & Swank, E. (2008). Rape myths among Appalachian college students. *Violence & Victims, 23*(3), 373–389.
- Higgins, E. T., Bargh, J. A., & Lombardi, W. (1985). Nature of priming effects on categorization. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 11*(1), 59–69.
- Intons-Peterson, M. J., Roskos-Ewoldsen, B., Thomas, L., Shirley, M., & Blut, D. (1989). Will educational materials reduce negative effects of exposure to sexual violence? *Journal of Social and Clinical Psychology, 8*(3), 256–275.
- Jhally, S. (Writer/Editor/Narrator). (2007). *Dreamworlds 3: Desire, sex, and power in music video* [motion picture]. (Available from Media Education Foundation, 60 Masonic St., Northampton, MA 01060).
- Johnson, J., Jackson, A., & Gatto, L. (1995). Violent attitudes and deferred academic aspirations: Deleterious effects of exposure to rap music. *Basic and Applied Social Psychology, 16*(1/2), 27–41.
- Kalof, L. (1999). The effects of gender and music video imagery on sexual attitudes. *The Journal of Social Psychology, 139*(3), 378–385.
- King, K., Laake, R. A., & Bernard, A. (2006). Do the depictions of sexual attire and sexual behavior in music videos differ based on video network and character gender? *American Journal of Health Education, 37*(3), 146–153.
- Kistler, M. E., & Lee, M. J. (2010). Does exposure to sexual hip-hop music videos influence the sexual attitudes of college students? *Mass Communication and Society, 13*(1), 67–86.
- Lonsway, K. A., & Fitzgerald, L. F. (1994). Rape myths: In review. *Psychology of Women Quarterly, 18*(2), 133–164.
- Lonsway, K. A., & Fitzgerald, L. F. (1995). Attitudinal antecedents of rape myth acceptance: A theoretical and empirical re-examination. *Journal of Personality and Social Psychology, 68*(4), 704–711.
- Lott, B., Reilly, M. E., & Howard, D. R. (1982). Sexual assault and harassment: A campus community case study. *Signs: Journal of Women in Culture and Society, 8*(2), 296–319.
- Malamuth, N. M., & Check, J. V. P. (1980). Sexual arousal to rape and consenting depictions: The importance of the woman's arousal. *Journal of Abnormal Psychology, 89*(6), 763–766.
- Malamuth, N. M., & Check, J. V. P. (1985). The effects of aggressive pornography on beliefs in rape myths: Individual differences. *Journal of Research in Personality, 19*(3), 299–320.
- McKenzie-Mohr, D., & Zanna, M. P. (1990). Treating women as sexual objects: Look to the (gender schematic) male who has viewed pornography. *Personality and Social Psychology Bulletin, 16*(2), 296–308.
- Murnen, S. K., & Kohlman, M. H. (2007). Athletic participation, fraternity membership, and sexual aggression among college men: A meta-analytic review. *Sex Roles, 57*(1–2), 145–157.
- Owens, M. (2009). A “man’s woman”? Contradictory messages in the songs of female rappers, 1992–2000. *Journal of Black Studies, 39*(5), 786–802.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers, 36*(4), 717–731.
- Roberts, D. F., & Foehr, U. G. (2004). *Kids & media in America*. Cambridge, UK: Cambridge University Press.
- Roskos-Ewoldsen, D., & Roskos-Ewoldsen, B. (2009). Current research in media priming (pp. 177–192). In R. L. Nabi & M. B. Oliver (eds.), *The Sage handbook of media processes and effects*. Sage: Thousand Oaks, CA.
- Rudman, L., & Borgida, E. (1995). The afterglow of construct accessibility: The behavioral consequences of priming men to view women as sexual objects. *Journal of Experimental Social Psychology, 31*(6), 493–517.
- Seidman, S. A. (1992). An investigation of sex-role stereotyping in music videos. *Journal of Broadcasting & Electronic Media, 36*(2), 209–216.
- Smith, S. L. (2005). From Dr. Dre to dismissed: Assessing violence, sex, and substance use on MTV. *Critical Studies in Media Communication, 22*(1), 89–98.

- Sommers-Flanagan, R., Sommers-Flanagan, J., & Davis, B. (1993). What's happening on music television? A gender role content analysis. *Sex Roles, 28*(11/12), 745–753.
- Storch, E. A., Bagner, D. M., Geffken, G. R., & Baumeister, A. L. (2004). Association between overt and relational aggression and psychosocial adjustment in undergraduate college students. *Violence and Victims, 19*(6), 689–700.
- Vincent, R. C. (1989). Clio's consciousness raised? Portrayal of women in rock videos, reexamined. *Journalism Quarterly, 66*(1), 155–160.
- Vincent, R. C., Davis, D. K., & Boruszkowski, L. A. (1987). Sexism on MTV: The portrayal of women in rock videos. *Journalism Quarterly, 64*(4), 750–755.
- Ward, L. M., Hansbrough, E., & Walker, E. (2005). Contributions of music video exposure to black adolescents' gender and sexual schemas. *Journal of Adolescent Research, 20*(2), 143–166.
- Wyer, R. S., Bodenhausen, G. V., & Gorman, T. F. (1985). Cognitive mediators of reactions to rape. *Journal of Personality and Social Psychology, 48*(2), 324–338.
- Zillmann, D., & Mundorf, N. (1987). Image effects in appreciation of video rock. *Communication Research, 14*(3), 316–334.