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The Influence of Sexual Music Videos on Adolescents' Misogynistic Beliefs: The Role of Video Content, Gender, and Affective Engagement

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Abstract

Research on how sexual music videos affect beliefs related to sexual aggression is rare and has not differentiated between the effects of music videos by male and female artists. Moreover, little is known about the affective processes that underlie the effects of sexual music videos. Using data from a nationally representative three-wave panel survey among 1,204 Dutch adolescents, structural equation modeling showed that viewing sexual music videos by male artists increased the acceptance of female token resistance (i.e., the notion that women say "no" to sex when they actually mean "yes") among adolescent girls, but not adolescent boys. Furthermore, viewing sexual music videos by male artists influenced girls' acceptance of token resistance indirectly via affective engagement. The findings suggest that effects of sexual music videos on stereotypical sexual beliefs depend on the specific type of music video and viewers' gender, and can be partly explained by viewers' affective engagement.

Keywords

media, teenagers, youth, sex differences

Music videos have often been criticized for their large amount of stereotypical sexual content, and their potential to shape viewers' beliefs about sexual behavior (e.g.,

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Greenberg & Hofschire, 2000; Zhang, Miller, & Harrison, 2008). In fact, over two thirds of the music videos on music television channels seem to feature sexual portrayals and erotic content (Hansen & Hansen, 2000; Wright, 2009). This content is often gender-stereotypical: Women are typically portrayed in submissive roles and men as dominant and (sexually) aggressive (Andsager & Roe, 2003; Sommers-Flanagan, Sommers-Flanagan, & Davis, 1993). Watching music videos with sexual or erotic content, which we will call "sexual music videos," has been found to be associated with beliefs about women as sex objects (Kistler & Lee, 2009), acceptance of rape myths (Aubrey, Hopper, & Mbure, 2011; Kistler & Lee, 2009), as well as sexual permissiveness and stereotypical gender attitudes (Kistler & Lee, 2009; Zhang et al., 2008).

Adolescents may be particularly susceptible to an influence of sexual music videos when forming sexual beliefs (Hansen & Hansen, 2000; Ward, 2002; Ward & Friedman, 2006; Wright, 2009). Adolescence is by definition a period in which sexual beliefs are still developing (Gruber & Grube, 2000), and adolescents often turn to the mass media for information about sexuality (Brown & Bobkowski, 2011; Wright, 2009). Adolescents are the most frequent users of music videos, viewing them on average 10 hours a week (Borzekowski, Robinson, & Killen, 2000; Robinson, Chen, & Killen, 1998; Ward & Friedman, 2006; Wingood et al., 2003), and between 30 minutes and 3 hours per day (Roberts & Christenson, 2012; Ward, Hansbrough, & Walker, 2005). Moreover, music is a highly involving, pleasurable medium for adolescents (Roberts & Christenson, 2012). Such engagement with music, in combination with the high levels of pleasure and arousal that music videos elicit (Hansen & Hansen, 1990, 2000), makes an influence of the messages included in music videos on adolescents likely. Finally, music videos are now increasingly available, and potentially more pervasive than ever due to Web sites such as YouTube and multiple viewing platforms, including mobile phones, portable digital video/ music players, and computers (Wallis, 2011).

Despite our increasing knowledge about the effects of sexual music videos on stereotypical sexual beliefs among adolescents, at least two issues have been insufficiently addressed in the literature. A first issue concerns the scarcity of research on the effects of sexual music videos on misogynistic beliefs related to sexual aggression among adolescents, a few notable exceptions notwithstanding (Aubrey et al., 2011; Johnson, Adams, Ashburn, & Reed, 1995; Kaestle, Halpern, & Brown, 2007). This lack of research is striking given the frequent concerns about the misogynistic content (i.e., the dislike of, and negativity toward, women) of sexual music videos (Aubrey et al., 2011; Kistler & Lee, 2009; Zhang et al., 2008). Specifically, externally valid longitudinal research on the effects of sexual music videos on misogynistic beliefs among adolescents is still lacking (Roberts & Christenson, 2012). Moreover, current research on the effects of sexual music videos on stereotypical beliefs among adolescents does not take into account that sexual music videos may differ in the type and degree of misogynistic content, for example, depending on the artists' gender. The first aim of the present study was therefore to investigate possible differential longitudinal effects of sexual music videos by male and female artists on misogynistic beliefs among adolescents.

A second issue concerns the lack of research on the processes that underlie the effects of sexual music videos. Research on how music videos influence viewers' beliefs is scarce and has mainly focused on cognitive involvement (Ward, 2002; Ward & Rivadeneyra, 1999) or priming effects (Hansen, 1989; Hansen & Hansen, 1988; Hansen & Krygowski, 1994; Ward et al., 2005). However, when explaining the effects of media entertainment, affective responses are generally considered essential (Vorderer, Klimmt, & Ritterfeld, 2004). This is especially relevant for sexual music videos, which have been shown to elicit high levels of pleasure and arousal (Hansen & Hansen, 1990, 2000). Given previous research on the role of pleasure and arousal in explaining effects of sexual media content (e.g., Wright, 2011; Wright, Malamuth, & Donnerstein, 2012), it is conceivable that affective engagement plays a role in explaining the effects of sexual music videos on misogynistic beliefs. The second aim of our study was therefore to investigate viewers' affective engagement as a possible underlying mechanism of the effect of watching sexual music videos on misogynistic beliefs.

Misogyny and Acceptance of Female Token Resistance

Two important features of misogyny in popular sexual music videos are the sexualization of women and the dominance of men over women (Conrad, Dixon, & Zhang, 2009). For instance, Sommers-Flanagan et al. (1993) observed that in many music videos, women were the object of aggressive sexual advances by dominant men. Accordingly, various scholars (Aubrey et al., 2011; Johnson et al., 1995; Kaestle et al., 2007; Kistler & Lee, 2009) have suggested that viewing sexually objectified women and sexually dominant men in sexual music videos may be related to sexually aggressive beliefs. Moreover, as sexual music videos often show women as sexual objects willing to please men (Ward et al., 2005), they may teach girls that their sexual desires do not matter and need not be expressed. Boys, in turn, may learn from such videos that in the end girls are always willing to have sex, even if they say no at first.

One under-studied concept that may be related to portrayals of misogyny in sexual music videos is the stereotypical belief of female token resistance, that is, the belief that women say "no" to having sex but instead mean "yes" (Krahé, Scheinberger-Olwig, & Kolpin, 2000). The belief of female token resistance refers to perceptions of whether women, or girls, are capable of clearly and genuinely expressing their sexual needs and desires, and whether their refusal to have sex should be taken seriously (Krahé et al., 2000). For women, this belief stems from a traditional female script that averts any explicit communication of sexual desires on their part. Instead, women are expected to passively await the sexual advances of men. As Brown, Steele, and Walsh-Childers (2002) have pointed out, token resistance is an integral part of the sexual norms that girls learn:

> [I]f [girls] express their sexual desires they will be "bad girls." If they choose to be "good girls" instead, they will sense that it isn't as much fun and may find themselves vulnerable to aggressive boys who don't believe that "no" means "no." (Brown et al., 2002, p. 3)

For men, and boys, the acceptance of female token resistance is based on the idea that women's refusal of sexual advances can be seen as "token resistance," which should be overcome by men's persistent efforts (Krahé et al., 2000). Sexual music videos may be particularly influential with regard to these beliefs, given the sharp demarcation of gender roles in music video content (Brown et al., 2002).

Sexual Content in Music Videos by Male and Female Artists

Content analyses have demonstrated that music videos differ in their amount of sexual content (Wright, 2009). The highest amount of sexual content has been found for music videos within the genres hip-hop, rap, soul, and rhythm and blues (Aubrey & Frisby, 2011; Hansen & Hansen, 2000; Turner, 2011; Wright, 2009). Rap music videos are especially characterized by misogynous images (Barongan & Nagayama Hall, 1995; Cobb & Boettcher, 2007; Johnson et al., 1995). In such videos, women are typically portrayed as being mere bodies that form the background scenery to the male rappers (Bryant, 2008). Moreover, rap music and rap music videos contain several forms of misogyny, such as derogatory naming and shaming of women, sexual objectification of women, distrust of women, legitimation of violence against women, and glorification of prostitution and pimping (Weitzer & Kubrin, 2009). Female submissiveness is also prevalent in sexual music videos and is typically emphasized by images of male power over the female characters (Andsager & Roe, 2003). In addition, sexual music videos often portray women as sexual objects (Emerson, 2002) who willingly seem to serve the male artist (Andsager & Roe, 2003).

As misogyny and female submissiveness are frequently featured in sexual music videos, notably within hip-hop and rap, scholars have pointed out potential effects of such videos on adolescents' sexual beliefs. Specifically, researchers have emphasized that rap and hip-hop music videos may affect adolescents' beliefs about the use of violence against women (Johnson et al., 1995; Kistler & Lee, 2009), and the acceptance of negative images of women (Bryant, 2008). Interestingly, however, existing research on the use and effects of sexual music videos has rarely distinguished whether the videos feature male or female artists. This is striking because criticism of misogyny and female submissiveness within the rap genre has mostly been directed at music videos by male artists (Gan, Zillmann, & Mitrook, 1997). These concerns are usually less strongly expressed for videos by female artists. Indeed, as Roberts (1991) has pointed out with respect to misogyny in music videos, some female artists may use their music videos to challenge negativity toward women. Similarly, with respect to female submissiveness, Andsager and Roe (2003) have suggested that some women in sexual music videos have been depicted as being in charge of a situation. Some scholars have also considered female artists' portrayal of themselves as sexual beings an attempt to achieve control of their sexuality (Emerson, 2002), and to make assertions of female strength and autonomy (Roberts, 1991).

However, a considerable number of music videos of female artists still portray misogyny and female submissiveness. For example, Frisby and Aubrey (2012) recently

found that 71.7% of the music videos by female artists contained sexual objectification of the artists themselves or of other female characters. Moreover, a content analysis of music videos by Aubrey and Frisby (2011) showed that sexual objectification of women occurred in music videos by both male and female artists, albeit in somewhat different ways. For instance, female artists engaged more often in baring their sexual bodies and used dance and dress to appear sexually alluring. Male artists were more likely to gaze at female characters with sexual desire and to portray women as merely decorative objects. Frisby and Aubrey have argued that the female artists who sexually objectify themselves might be interpreted by some audiences as empowering because they are making the choice to embrace their own sexuality. At the same time, female artists who are acting sexually in their music videos may also undermine their agency, by conveying the message that the way to obtain success for women is by sexually objectifying themselves (Frisby & Aubrey, 2012).

In sum, although both male artists' and female artists' sexual music videos feature misogyny and female submissiveness, female artists seem to be somewhat less uniform and more ambiguous in their portrayals of these themes compared with male artists. This may result in differential effects of sexual music videos by male and female artists on misogynistic beliefs, such as acceptance of female token resistance. As a result, we hypothesized as follows:

Hypothesis 1a (H1a): Watching sexual music videos both by male and female artists will positively predict acceptance of female token resistance; however, this effect will be stronger for videos by male artists than for videos by female artists.

In addition, given the easy accessibility of music videos on the Internet, it is plausible that adolescents selectively expose themselves to videos that match their beliefs and attitudes while avoiding videos that do not match their beliefs and attitudes. According to the selective exposure perspective (for reviews, see Oliver, 2002; Zillmann & Bryant, 1985), it can be expected that adolescents who already hold misogynistic views may be more likely to watch sexual rap and hip-hop music videos than adolescents who do not hold such views. As outlined above, sexual music videos by male artists seem somewhat more uniform in their presentation of misogyny and female submissiveness than sexual music videos by female artists. Therefore, we expected the following:

Hypothesis 1b (H1b): Acceptance of female token resistance positively predicts watching sexual music videos both by male and female artists; however, this effect will be more distinct for videos by male artists than for videos by female artists.

Hypotheses 1a and 1b focus on unconditional direct effects of media content. However, it is increasingly acknowledged that the emergence and strength of media effects may depend on dispositional susceptibility variables, such as gender (Valkenburg & Peter, 2013a). Previous research has indeed shown that the relation between sexual music videos and stereotypical sexual attitudes differ by gender, albeit

inconsistently. For instance, effects of rap music videos on perceptions of teen dating violence have only been found for girls (Johnson et al., 1995). In contrast, effects of hip-hop music videos on the objectification of women, traditional gender attitudes, and acceptance of rape myths have only emerged among boys (e.g., Kistler & Lee, 2009). In another study, the relationship between sexism and rap music was also most profound for boys (Cobb & Boettcher, 2007). Finally, whereas one study found that the relationship between music video exposure and sexually permissive attitudes was stronger for girls (Strouse, Buerkel-Rothfuss, & Long, 1995), another study has shown that this relationship occurred among both boys and girls (Ter Bogt, Engels, Bogers, & Kloosterman, 2010). Given these results of previous research, it seems important to test whether the predictions stated in Hypotheses 1a and 1b are moderated by gender. As the literature is currently unclear as to whether the relation between watching sexual music videos and sexual stereotypes is stronger for boys or girls, we posed the following two research questions:

Research Question 1a (RQ 1a): Does the effect of watching sexual music videos by male and female artists on acceptance of female token resistance differ between girls and boys?

Research Question 1b (RQ 1b): Does the effect of accepting female token resistance on the frequency of watching sexual music videos by male and female artists differ between girls and boys?

Explaining Effects of Music Videos on Sexual Beliefs: Affective Engagement

Theories that explain the effects of sexual media content on beliefs, such as priming theory, social cognitive theory, and cultivation theory (Ward, 2003) have generally focused on cognitive processes as underlying mechanisms. Although these theories have greatly increased our knowledge about the effects of sexual media content, little is known about whether and to which extent affective processes may explain effects of sexual media content on beliefs. Such knowledge is particularly important when it comes to sexual music videos because these videos may have a strong potential for eliciting affective processes, notably as far as arousal and pleasure are concerned (Hansen & Hansen, 1990, 2000). In terms of arousal, Rubin et al. (1986) found that music videos were rated as more exciting and arousing than music audios. Similarly, in terms of pleasure, Hansen and Hansen (1990, 2000) showed that music videos elicit a pleasurable emotional response, which is intensified by the high levels of arousal people experience while watching music videos. In fact, the experience of pleasure is one of the main reasons for adolescents to listen to music (Roberts & Christenson, 2012), and the same reasons probably hold for watching music videos.

In line with research on the conceptualization of affect (Russell, 1980; Watson, Wiese, Vaidya, & Tellegen, 1999), the high levels of arousal and pleasure that are experienced while viewing music videos can be seen as markers of strong affective engagement. Several existing theories suggest that affective engagement may explain

the effects of sexual music videos on sexual beliefs. More generally, contemporary media processing theories, such as Lang's (2009) limited capacity model for mediated message processing, progressively acknowledge that pleasure and arousal during media exposure may enhance media effects because they increase the level of resources allocated to a stimulus. More specifically, Wright's (2011) recent script acquisition, activation, application model (3AM) emphasizes that pleasure and arousal play, next to various cognitive processes, an important role as mechanisms that underlie the effects of sexual media on sexual beliefs and behavior. According to the 3AM, arousal increases attention toward the sexual content, which in turn increases the influence of such content (Wright, 2011; Wright et al., 2012). Specifically, arousal reduces working memory capacity and results in encoding specificity, which increases the likelihood that sexual scripts from the media are accessed and activated during viewing and in subsequent sexually arousing situations (Wright et al., 2012).

Based on the 3AM, it is thus plausible to conceptualize affective engagement as a possible underlying mechanism of the effects of sexual music videos on acceptance of female token resistance. Given their pleasurable and arousing content (Hansen & Hansen, 1990, 2000), sexual music videos are very likely to elicit affective engagement. Affective engagement, in turn, enhances the processing of the sexual music video content by increasing viewers' attention to the content. If this content features, as outlined above, misogyny and female submissiveness, the viewers are likely to learn these views and accept female token resistance.

Previous research on constructs similar to affective engagement initially supports that affective engagement may explain the effect of sexual music videos on beliefs of female token resistance. For instance, subjective sexual arousal has been found to mediate the effect of sexually explicit Internet material on sexual preoccupancy among adolescents (Peter & Valkenburg, 2008). Similarly, experiencing sexually explicit Internet material as pleasurable has been shown to mediate the relationship between such material and notions of women as sex objects (Peter & Valkenburg, 2009). However, the role of affective engagement in mainstream sexual content, such as music videos, is still unknown. What we do know is that viewers' cognitive involvement with mainstream sexual content on television has proven a consistent and robust predictor of sexual attitudes and expectations (e.g., Ward & Rivadeneyra, 1999). Based on the 3AM and the findings from related research, we hypothesized that the effect of sexual music videos on beliefs of female token resistance would, at least partly, be explained by a mediation effect of affective engagement:

Hypothesis 2a (H2a): Watching sexual music videos positively predicts affective engagement.
Hypothesis 2b (H2b): Viewers' affective engagement positively predicts acceptance of token resistance.
Hypothesis 2c (H2c): When viewers' affective engagement is included as a predictor of acceptance of token resistance, the association between watching sexual music videos and acceptance of token resistance is reduced.

Method

Sample and Procedure

The hypotheses were tested using a longitudinal correlational design, based on data from a three-wave survey among adolescents (N = 1,205). The three-wave panel design made it possible to measure music video viewing, viewers' affective engagement, and the belief of token resistance in all three waves. This design enabled us not only to test the reciprocal effect pattern hypothesized in H1a and H1b but also to analyze the longitudinal mediation effect by affective engagement rigorously (Cole & Maxwell, 2003). As affective engagement seems to be a characteristic response to sexual music videos (Hansen & Hansen, 1990, 2000; Hansen & Krygowski, 1994), the positive association between sexual music videos and affective engagement can be expected to be stable over time. Similarly, the positive association between affective engagement in response to sexual music videos and sexual beliefs related to the stereotypical content of the music videos is expected to be stable over time.

The survey was conducted among a nationally representative sample of Dutch adolescents (aged 12-17 years; 50% male). The survey was fielded between May 2008 and May 2009, with 6-month intervals between waves, and was administered by Veldkamp, a Dutch survey institute. Respondents were randomly selected from a pool of respondents, which was originally sampled randomly among the Dutch population and continuously updated, reducing problems of self-selection biases. At the time of the survey, 98% of Dutch adolescents had home Internet access (CBS, 2008). Therefore, it is unlikely that lack of Internet access affected the representativeness of the sample.

Institutional approval and (parental) informed consent of all respondents were obtained before the start of the study. The study consisted of an online questionnaire, which is a suitable way to investigate sexual topics (Mustanski, 2001). The respondents were made aware of the sexual topics in the questionnaire, and were told that participation was completely anonymous and that they could quit the study at any time. Completing the entire questionnaire took about 15 to 20 minutes. After each wave, the respondents received a voucher worth €5 for participation.

In the first wave, 2,092 adolescents from the respondent pool were randomly contacted after the parents had given their consent. The response rate was 84% (N = 1,765), calculated according to the guidelines of the American Association for Public Opinion Research (The American Association for Public Opinion Research, 2008). Of the 1,765 adolescents who completed the first questionnaire, 1,445 participated in Wave 2, and 1,205 participated in Wave 3. The attrition rates thus ranged from 16% to 18%. Independent-sample t tests indicated that those who completed all three questionnaires did not systematically deviate from those respondents who dropped out in the course of the study on the main variables at Wave 1: male artists' music video viewing, $t(1763) = 0.85$, $p = .39$; female artists' music video viewing, $t(1763) = 1.08$, $p = .28$; viewers' affective engagement, $t(1763) = 0.65$, $p = .52$; acceptance of token resistance $t(1763) = 1.62$, $p = .11$. The generalizability of the findings was therefore not affected by panel attrition. A close inspection of the variables relevant to our

Table 1. Means, Standard Deviations and Zero-Order Correlations Between the Variables.

	1	2	3	4	5	6	7	8	9	10
1. M MV (w1)										
2. M MV (w3)	.44									
3. F MV (w1)	.63	.32								
4. F MV (w3)	.30	.64	.48							
5. AE (w2)	.32	.23	.25	.25						
6. TR (w1)	.06	.04	.03	.03	.07					
7. TR (w3)	.07	.10	.02	.07	.07	.39				
8. Gender	–.02	.00	.31	.29	.04	–.13	–.14			
9. Age (w1)	.07	.03	–.01	–.05	.06	.04	–.01	.02		
10. Sex. Exp. (w1)	.07	.14	.06	.08	.06	.06	.04	.07	.39	
Mean	2.04	1.95	2.38	2.47	2.78	2.33	2.15	1.50	14.48	.18
(SD)	(1.45)	(1.40)	(1.53)	(1.63)	(.82)	(.91)	(.90)	(.50)	(1.67)	(.39)

Note. M MV = viewing of male artists' music videos; F MV = viewing of female artists' music videos; AE = viewers' affective engagement; TR = acceptance of token resistance; w1 = wave 1; w2 = wave 2; w3 = wave 3; Sex. Exp. = sexual experience.
All correlations of .06 and above (or - .06 and below) were significant at least at $p < .05$.

analyses revealed, based on the Mahalonobis d^2 statistic, one respondent with unusual scores in the prediction of acceptance of female token resistance by male music videos, and one respondent with unusual scores in the prediction of acceptance of female token resistance by female music videos. Because we analyzed the effects of male and female music videos separately, we excluded the respondent who presented the outlier in the particular analysis, resulting in a sample of 1,204 adolescents for both the analysis of male artists' music videos and the analysis of female artists' music videos.

Measures

Music video viewing. Lists of male (i.e., Jay-Z, Snoop Dogg, 50 Cent) and female (i.e., Beyoncé, Rihanna, the Pussycat Dolls) popular artists were used to measure exposure to sexual music videos by male and female artists. Such listing of popular or frequently shown media content has been used as an exposure measure in previous research (e.g., Buijzen & Valkenburg, 2000; Buijzen, Rozendaal, Moorman, & Tanis, 2008; Buijzen & Valkenburg, 2003; Ward & Rivadeneyra, 1999). Respondents were asked to indicate how often in the last 6 months they had watched music videos on the Internet or on television by the artists listed. The response categories were 1 (*never*), 2 (*less than once a month*), 3 (*1-3 times a month*), 4 (*once a week*), 5 (*several times a week*), 6 (*every day*), and 7 (*several times a day*). For both the measure of viewing male artists' sexual music videos and female artists' sexual music videos, the items formed a uni-dimensional scale in all three waves, with a minimum explained variance of 84% and a minimum Cronbach's alpha of .90. For information about the means and standard deviations of the measures (Waves 1 and 3), see Table 1.

The lists of artists were chosen according to three criteria: First, the artists' music had to belong to music genres known for the highest amount of sexual content in music videos (i.e., rap, hip-hop, and rhythm and blues, Hansen & Hansen, 2000; Turner, 2011; Wright, 2009), and the artists had to be known for at least some sexual content or sexual allusions in their music videos. Second, the artists had to be popular among Dutch adolescents at the beginning of the study. Third, the artists needed to be sufficiently established in order to remain popular over the course of the study. We therefore chose those artists who had been at the top of the Dutch music charts in the previous year and those who could be assumed to not be "one-hit wonders." The music videos by the chosen male artists were often characterized by themes of misogyny and female submissiveness. For instance, one of the most popular songs of 2008 was "P.I.M.P." by rapper 50 Cent. In the music video, women are scarcely dressed and seem to be there purely as background decoration and to please the men in the music video. In the music videos of the chosen female artists, such themes of misogyny and female submissiveness were less extreme. For instance, in the music video for "Single Ladies," the female artist Beyoncé is portrayed in a sexy way, but men are not present in the video and her dancing and singing are not necessarily submissive.

Acceptance of female token resistance. Acceptance of female token resistance was measured with four items based on the token resistance subscale from Muehlenhard and Felts's (1998) Sexual Beliefs Scale (cf. Peter & Valkenburg, 2011). Sample items are "Girls often say 'No,' only because they don't want men to think they are easy" and "When girls say 'No' they often mean 'Yes.'" Because in pre-tests the item "Girls generally want to be talked into having sex" did not cluster well with the remaining three items, we replaced this item with the item "Girls only say 'No' so as not to look promiscuous" from the extended version of the Sexual Beliefs Scale. Respondents had to think about the context of a sexual situation when answering the items. Response categories ranged from 1 (*fully disagree*) to 5 (*fully agree*). In all three waves, the items formed a uni-dimensional scale, with a minimum explained variance of 77% and a minimum Cronbach's alpha of .90. For means and standard deviations (Waves 1 and 3), see Table 1.

Viewers' affective engagement. Participants were asked how they experience watching music videos by answering the following statements: "I think watching music videos is exciting," "I think watching music videos is arousing," and "I think watching music videos is pleasurable." We used a general measure of affective engagement because asking the aforementioned items for each artist separately may capture the viewing preference for a specific artist, rather than the characteristic response to music videos we intended to measure. Moreover, investigating affective engagement in response to each particular artist or song would have been tedious for respondents, and could create artificial correlation through response sets. Finally, a general measure of a response state to explain effects of specific sexual media content has been used successfully in previous research (i.e., involvement in television viewing, Ward & Rivadeneyra, 1999). Response categories ranged from 1 (*does not apply at all*) to 5 (*applies completely*). In all three waves, the items formed a uni-dimensional scale, with a minimum

explained variance of 66% and a minimum Cronbach's alpha of .73, for which the means and standard deviations (Wave 2) can be found in Table 1.

Control variables. Age and sexual experience were included as control variables, as previous research has shown that these are important variables to take into account when studying the effects of sexual media content (e.g., Ward, 2002; Zhang et al., 2008). The measurement of age was straightforward. To measure sexual experience, adolescents were asked to indicate whether they had already had sexual intercourse with somebody by answering "no" (coded 0) or "yes" (coded 1). In Wave 1, 85% of the sample had never had sexual intercourse, while in Waves 2 and 3, this percentage was 74% and 73%, respectively. These figures are somewhat below the incidence of sexual intercourse among adolescents who are younger than 18 years of age, in both the Netherlands and in other Western countries, such as the United States (Schalet, 2010). Means and standard deviations of the control variables (Wave 1) can be found in Table 1.

Data Analysis

The hypotheses were tested with structural equation modeling, using AMOS 7.0. The latent construct of watching male artists' sexual music videos was created out of the three survey items used to measure music video viewing by male artists. The three items used to measure music video viewing by female artists formed the latent construct of watching female artists' sexual music videos. Similarly, the three items measuring arousal, excitement, and pleasure were the manifest indicators for the latent construct of viewers' affective engagement. The four survey items measuring acceptance of female token resistance were used to create the latent construct of acceptance of female token resistance. The moderator variable gender was coded "0" for boys, and "1" for girls.

Shapiro-Wilk tests revealed that none of the variables of the model were normally distributed. To account for this violation of the normality assumption, we used the bootstrap method (Efron & Tibshirani, 1993). In this method, a computer generates a series of data sets that would be obtained if the study were repeated many times. Each bootstrap sample results from sampling, with replacement, from the original sample. In all the bootstrap samples, the value of interest is computed. This nonparametric approach estimates values of interest without making assumptions about the sampling distribution of the statistic, and therefore produces more accurate results if normality assumptions are violated. We estimated 90% bias-corrected confidence intervals (90% BCI) on the basis of 1,000 bootstrapping samples (N = 1,204 each). When the 90% BCI does not include 0, the effect can be assumed to differ significantly from 0, and is therefore considered a statistically significant effect.

Results

Correlations of the variables used in the analyses are shown in Table 1. Hypothesis 1a predicted that watching sexual music videos both by male and female artists would

positively predict acceptance of female token resistance, but that this effect would be stronger for videos by male artists. In order to investigate the relationship between viewing sexual music videos and acceptance of female token resistance, we analyzed a structural equation model that included levels of acceptance of female token resistance at Wave 1, along with the simultaneous influence of music video viewing at Wave 3, to eliminate potentially confounding influences (Cole & Maxwell, 2003).

The fit of the model for sexual music videos by male artists was good, $\chi^2(97, N = 1204) = 235.07$, $p < .001$, comparative fit index (CFI) = .99, root mean square error of approximation (RMSEA) = .03 (90% confidence interval [CI] = [.03, .04]). Watching male artists' sexual music videos (in Wave 1) was positively related to the acceptance of female token resistance (in Wave 3), $\beta = .05$, $B = .03$, $SE = .02$, $p = .04$ (one-tailed; 90% BCI = [−.003, .06]). Addressing RQ 1a, we tested whether this relation depended on gender by conducting multiple-group analyses (Rigdon, Schumacker, & Wothke, 1998), controlling for age and sexual experience. These analyses suggested that adolescents' gender moderated the effect of viewing male artists' sexual music videos (in Wave 1) on acceptance of female token resistance (in Wave 3), $\Delta\chi(1, N = 1204) = 6.48$, $p = .01$. Looking at the effect of viewing male artists' sexual music videos for boys and girls separately, we found that this prediction was significant for girls, $\beta = .12$, $B = .08$, $SE = .03$, $p = .006$ (one-tailed; 90% BCI = [.03, .12]), but not for boys, $\beta = -.03$, $B = -.02$, $SE = .02$, $p = .23$ (one-tailed; 90% BCI = [−.06, .03]). Figure 1 shows the prediction of acceptance of female token resistance (in Wave 3) by viewing male artists' sexual music videos (in Wave 1) for girls.

A similar model was tested for watching female artists' sexual music videos. This model also showed good model fit, $\chi^2(97, N = 1204) = 274.37$, $p < .001$, CFI = .99, RMSEA = .039 (90% CI = [.03, .04]). The effect of sexual music videos by female artists (Wave 1) on acceptance of female token resistance (Wave 3) was not significant, $\beta = .05$, $B = .03$, $SE = .02$, $p = .07$ (one-tailed; 90% BCI = [−.007, .06]). Moreover, this relationship was not moderated by gender, $\Delta\chi(1, N = 1204) = 3.79$, $p = .052$. H1a was thus supported for the prediction that videos by male artists would positively predict acceptance of female token resistance, and that this effect would be stronger than the effect of videos by female artists. However, in response to RQ 1a, this effect only held for girls, but not for boys. H1a was not supported for the prediction that videos by female artists would positively predict acceptance of female token resistance.

Hypothesis 1b posited that acceptance of female token resistance would positively predict the frequency of watching sexual music videos by both male and female artists, but that this effect would be more distinct for watching sexual music videos by male artists. Acceptance of female token resistance (Wave 1) neither influenced viewing of male artists' sexual music videos (Wave 3), $\beta = .01$, $B = .01$, $SE = .04$, $p = .37$ (one-tailed; 90% BCI = [−.05, .10]), nor viewing of female artists' sexual music videos (Wave 3), $\beta = .01$, $B = .01$, $SE = .05$, $p = .37$ (one-tailed; 90% BCI = [−.07, .11]). H1b was not supported. As for RQ 1b, gender did not moderate the relationship between acceptance of female token resistance (Wave 1) and viewing of male artists' sexual music videos (Wave 3), $\Delta\chi(1, N = 1204) = .33$, $p = .57$, nor did it moderate the

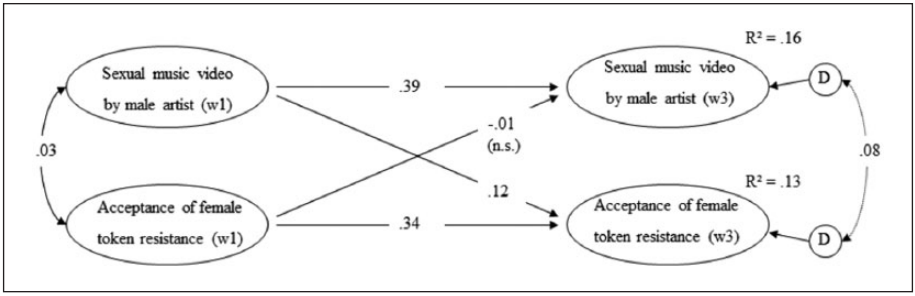

Figure 1. Exposure to sexual music videos by male artists is positively related to acceptance of female token resistance among adolescent girls. Coefficients represent standardized estimates, significant at least at $p < .05$, unless indicated otherwise.
Note. The dashed line indicates covariance between disturbance terms (D). Observed variables, error variances, measurement models, and control variables are not displayed for clarity reasons. W1 = Wave 1; W3 = Wave 3.

relationship between acceptance of female token resistance (Wave 1) and viewing of female artists' sexual music videos (Wave 3), $\Delta\chi(1, N = 1204) = .03$, $p = .86$.

Mediation Analysis: Viewers' Affective Engagement

Hypotheses 2a to 2c jointly posited that the effect of watching sexual music videos on acceptance of female token resistance would be mediated by viewers' affective engagement. As outlined above, only sexual music videos by male artists had a significant effect on acceptance of female token resistance and this effect occurred only among girls. Therefore, we analyzed only the mediation effect for music videos by male artists among girls. The structure of the model follows recommendations by Cole and Maxwell (2003) about how to model mediation processes with longitudinal data.

The fit of the model was good, $\chi^2(399, N = 603) = 767.21$, $p < .001$, CFI = .97, RMSEA = .039 (90% CI = [.03, .04]). As predicted by H2a, watching male artists' sexual music videos (in Wave 1) was positively related to affective engagement (i.e., the mediating variable, Wave 2), $\beta = .11$, $B = .07$, $SE = .03$, $p = .005$ (one-tailed; 90% BCI = [.02, .13]). Furthermore, in line with H2b, affective engagement (in Wave 2) was positively related to acceptance of female token resistance (in Wave 3), $\beta = .10$, $B = .09$, $SE = .03$, $p = .004$ (1 tailed; 90% BCI = [.02, .15]; see Figure 2). The indirect effect of watching male artists' sexual music videos on token resistance via affective engagement (i.e., the product of the two effects that constitute the mediation effect) was also significant, $B = .006$, $SE = .003$, $p = .03$ (one-tailed; 90% BCI = [.001, .02]).

For the mediation effect of affective engagement as stated in H2c to occur, the association between watching male artists' sexual music videos and acceptance of female token resistance, as shown in Figure 1, would have to be reduced when affective engagement is taken into account as a mediator of the link between the two

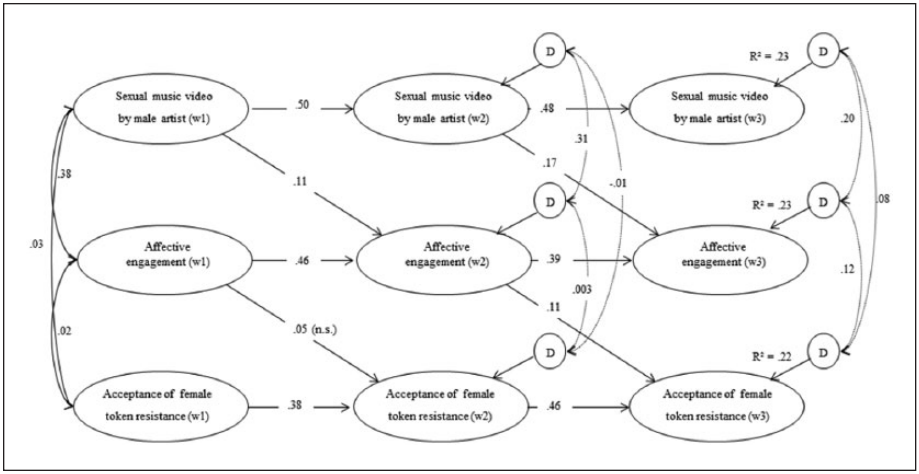

Figure 2. Indirect effect of exposure to male artists' sexual music videos on acceptance of female token resistance, through affective engagement, for adolescent girls.
Note. Coefficients represent standardized estimates, significant at least at $p < .05$, unless indicated otherwise. The dashed line indicates covariance between disturbance terms (D). Observed variables, error variances, measurement models, and control variables are not displayed for clarity reasons. W1 = Wave 1; W2 = Wave 2; W3 = Wave 3.

variables. To investigate the mediation effect, we tested the model in Figure 2 with the nested-model logic under two conditions: when the (added) direct path from watching male artists' sexual music videos (in Wave 1) to acceptance of female token resistance (in Wave 3) was allowed to vary and when it was constrained to zero. If the model with the constrained path does not change the model's overall fit, affective engagement mediates the influence of watching male artists' sexual music videos on acceptance of female token resistance.

The results showed that when affective engagement (Wave 2) was included in the model, the association between watching male artists' sexual music videos and acceptance of female token resistance was slightly reduced, but remained significant, $\beta = .11$, $B = .06$, $SE = .02$, $p = .005$ (one-tailed; 90% BCI = [.02, .10]). The model with the constrained path also significantly changed the model's fit, $\Delta\chi(1, N = 603) = 6.21$, $p = .01$. Thus, the results showed that affective engagement did not fully mediate the effect of watching male artists' sexual music videos on acceptance of female token resistance.

As affective engagement is expected to be a characteristic response to music videos in general, we expected the mediation effect to occur independent of personal characteristics, such as age or sexual experience. In line with this expectation, multiple-group analyses of the mediation effect for age (controlling for sexual experience) and sexual experience (controlling for age) did not result in significant moderation effects (analyses not shown).

Discussion

The present study showed that watching sexual music videos may increase misogynistic beliefs among adolescents over time and that affective engagement may initially explain this effect. Specifically, we found that adolescent girls who frequently watched male artists' sexual music videos showed a greater acceptance of female token resistance 1 year later. This effect did not emerge among adolescent boys. Frequent exposure to female artists' sexual music videos was not significantly related to the acceptance of female token resistance, nor were there differences between boys and girls for this relationship.

Previous research has shown that music videos can affect aggressive thoughts, emotions, and behavior toward women (e.g., Aubrey et al., 2011; Johnson et al., 1995; Kaestle et al., 2007; Kistler & Lee, 2009). Extending this literature, our results suggest that watching sexual music videos with misogynous content can also increase the acceptance of female token resistance, at least among adolescent girls. In addition, our results contribute to the broader field of research on sexual media influences. Interestingly, a previous study has found that Internet pornography increased acceptance of female token resistance only among adults, but not among adolescents (Peter & Valkenburg, 2011). Apparently, the specific sexual content that adolescents consume affects their stereotypical sexual beliefs differently and may be subject to gender differences.

Our findings are in line with research that has focused on the idea that some adolescents may be more vulnerable to media effects than others, based on the specific media content that is watched and the dispositional susceptibility variables, such as gender (Valkenburg & Peter, 2013a). It has been argued that sexual content on television affects boys and girls in different ways because what adolescents take from such content depends on what is salient for their gender (Aubrey, Harrison, Kramer, & Yellin, 2003). Acceptance of female token refers to how women, or girls, should behave when it comes to sex (Krahé, 1998; Krahé et al., 2000). Content in music videos that is related to how girls should behave sexually may be more salient for girls, which may explain why sexual music videos are related to the acceptance of female token resistance for girls and not for boys.

The non-significance of the effect of watching sexual music videos by female artists on the acceptance of female token resistance may be explained by different interpretations of the sexual behavior of female artists. Several scholars (e.g., Andsager & Roe, 2003; Emerson, 2002; Frisby & Aubrey, 2012; Roberts, 1991) have pointed out that the depiction of women's sexual behavior in female artists' music videos can be interpreted as both sexually objectifying *and* empowering. In sexual music videos by male artists, women are more consistently objectified. As a result, the association between watching sexual music videos and sexually aggressive views about women, such as acceptance of female token resistance, may be less consistent for female artists' sexual music videos compared with male artists' sexual music videos.

However, it is important to note that the effect of watching female music videos on acceptance of female token resistance only marginally failed to reach statistical

significance. In fact, previous research has found that sexual objectification of female artists in their music videos increased adversarial sexual beliefs and acceptance of interpersonal violence (Aubrey et al., 2011). Likewise, exposure to sexual music videos by female Black artists has been shown to increase negative evaluations of Black women (Gan et al., 1997). Therefore, we caution researchers against the premature interpretation of our results that female artists' sexual videos may generally be irrelevant to the acceptance of female token resistance. We need to better understand which specific content features of female artists' sexual music videos may affect such beliefs, and which do not before any valid conclusions can be drawn.

Similar to earlier research (Peter & Valkenburg, 2011), we did not find a selective exposure effect of acceptance of female token resistance on exposure to sexual music videos. One explanation may be that female token resistance is a relatively specific sexual belief and that it may therefore be difficult for viewers to select media content that directly reflects this belief (Peter & Valkenburg, 2011). The lack of a selective exposure effect also reinforces the notion that, even in times of nearly unlimited selectivity, sexual music videos may still exert a socializing influence. That said, it is paramount that the relations and dynamics of selective exposure to sexual content and sexual socialization be studied more closely. Adolescents increasingly control which music videos they see and have easy access to the music videos of their favorite artists online (Nielsen, 2011; Roberts & Christenson, 2012), which likely changes how selective exposure to sexual content and adolescents' sexual socialization are related and evolve over time.

Viewers' Affective Engagement Underlying Effects of Sexual Music Videos

In line with previous research (e.g., Hansen & Hansen, 1990, 2000), we found that sexual music video viewing was associated with stronger affective engagement. Affective engagement, in turn, was related to a stronger acceptance of female token resistance. However, although male music videos influenced girls' acceptance of female token resistance indirectly through affective engagement, affective engagement did not fully explain the effect. It is thus unlikely that affective engagement constitutes the only underlying mechanism of the effect of music videos on acceptance of female token resistance. It is theoretically reasonable to assume that other variables mediate the effect of male artists' sexual music videos on acceptance of token resistance as well. For instance, perceived realism and utility (Peter & Valkenburg, 2010a) as well as involvement (Peter & Valkenburg, 2010b) are important variables when explaining effects of sexually explicit content, and they may also play an important role in explaining effects of sexual music videos.

More generally, our findings merge with research that has shown the important role of affect and engagement in our understanding of media effects (e.g., Busselle, & Bilandzic, 2009; Green & Brock, 2000; Vorderer et al., 2004). Specifically, our findings are in line with Wright's (2011) 3AM model. Although the 3AM is predominantly concerned with the processes that underlie the effects of sexual media on sexual

behavioral scripts, our findings suggest that similar processes may also occur when sexual media influence the acquisition or activation of sexual beliefs. In line with the 3AM, our results point to the possibility that pleasure and arousal (i.e., affective engagement) in response to sexual music videos increased attention to the content of the music videos, which in turn increased the acquisition or activation of beliefs of female token resistance. Within the context of the 3AM, our results thus suggest that research on the effects of sexual music videos on beliefs may be meaningfully extended by including affective processes, such as the combination of arousal and pleasure, as underlying mechanisms.

Limitations and Suggestions for Future Research

An important limitation of the current study is that the effects of sexual music video viewing on acceptance of female token resistance were small. Small effects of media content are common in media-effects research (Valkenburg & Peter, 2013a, 2013b) and not necessarily trivial as they may accumulate over time with repeated exposure (e.g., Neuman & Guggenheim, 2011; Shrum, Lee, Burroughs, & Rindfleisch, 2011). Moreover, research on the effects of pornography on outcomes related to sexual aggression has shown that the size of effects increases when personality characteristics, such as hostile masculinity and impersonal sex orientation, are taken into account (Kingston, Malamuth, Fedoroff, & Marshall, 2009; Malamuth, Addison, & Koss, 2000).

Still, there are several explanations for our small effect sizes that deserve attention. First, our small effect sizes may be a result of the time lag of 12 months between measurements of the predictor and outcome variable. This time lag may be too long to find strong effects for music videos by specific artists. Second, participants watched music videos by the male and female artists only a few times a month. As a result, the variance in our independent variable was not sufficiently large for finding strong effects. These low viewing frequencies may have been caused by the limited sample of artists used in the measurement of music video viewing (we could include only those artists in the study who were popular at the time of the survey and for which the music videos contained sexual allusions and themes of misogyny). Third, and relatedly, we did not take into account adolescents' overall sexual media diets. In addition to watching sexual music videos, adolescents may expose themselves to sexually explicit Internet material that reinforces the misogynistic messages of sexual music videos, for instance by showing women as sexually willing (Brosius, Weaver, & Staab, 1993). At the same time, prime-time television dramas often show that engaging in sexual activities can have negative emotional and social consequences, especially for female characters (Aubrey, 2004). Other sexual content on television may thus reinforce notions that girls should control and restrict sexual interactions (Aubrey, 2004; Hust, Brown, & L'Engle, 2008), which may in turn challenge misogynistic messages of sexual music videos and subsequent beliefs of female token resistance. Adolescents' sexual media diet, and its differential sexual messages, may thus account for part of the small effect sizes. Finally, the adolescents in our sample had on average less sexual experience than their counterparts in other countries, such as the United States (e.g., Brown et al.,

2002). Moreover, sex education is mandatory in Dutch schools and Dutch adolescents are often also taught about the relational aspects of sex. Given that our measure of token resistance focused on girls' behavior when it comes to having sex and moreover dealt inherently with something (i.e., sexual aggression) that may conflict with adolescents' sex education, it may be difficult to find strong effects on token resistance.

Another limitation of the present study is that it does not distinguish between the effects of lyrics and images on sexual beliefs. However, scholars have consistently pointed out that the genres rap and hip-hop, to which the music videos by male artists in our study belong, contain misogyny in both the lyrics and the images in the music videos (e.g., Barongan & Nagayama Hall, 1995; Bryant, 2008; Cobb & Boettcher, 2007; Zhang et al., 2008). As a result, it seems generally unlikely that the lyrics of the songs elicited different effects on acceptance of female token resistance than the images of the music videos. In addition, several studies have documented that adolescents often do not fully understand the lyrics of songs (for overviews, see, for example, Roberts & Christenson, 2012; Strasburger, Wilson, & Jordan, 2009, p. 350), which applies even more to our sample of adolescents, who were not native English speakers. This implies that misogynous images, rather than misogynous lyrics, may have caused the effect found.

A final limitation of our study is related to the self-report measure of viewers' affective engagement. Using a longitudinal survey design allowed for measuring effects of music videos over time and increased the external validity of our findings. However, this also meant we had to rely on self-report measures of viewers' affective engagement. While similar self-report measures (i.e., subjective sexual arousal in response to sexually explicit internet material, Peter & Valkenburg, 2008) have shown satisfactory convergent and discriminant validity, future experimental research should measure the affective engagement that is elicited during music video viewing.

In conclusion, the present study has initially shown that watching male artists' sexual music videos increased acceptance of female token resistance among adolescent girls, which can be partly explained by their affective engagement when watching these music videos. These findings are important in the light of the potential consequences of the acceptance of female token resistance on adolescents' sexual behavior. It has been shown that women's risk of experiencing sexual harassment or date rape is significantly increased as a function of acceptance of female token resistance (Krahé, 1998; Krahé et al., 2000). Future research needs to focus more strongly on this issue in order to shed more light on the relation between sexual music videos, female token resistance, and girls' risk of experiencing sexual aggression.

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