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Media Exposure and Viewers' Attitudes Toward Homosexuality: Evidence for Mainstreaming or Resonance?

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Media Exposure and Viewers' Attitudes Toward Homosexuality: Evidence for Mainstreaming or Resonance?

Jerel P. Calzo and L. Monique Ward

This study explored connections between media use and college students' attitudes of acceptance towards homosexuality (AATH). Data were collected from 1,761 undergraduates (62.7% female, $M_{Age} = 19$ years). Results varied by the gender, ethnicity, and religiosity of the participants. Overall, greater media consumption among men and those who are highly religious was associated with greater AATH, whereas the reverse was true among women and those who are less religious. Although the associations were modest, the results support evidence of a mainstreaming effect, whereby increased media exposure may draw groups with disparate attitudes towards a more similar viewpoint on homosexuality.

Attitudes towards homosexuality have been shown to vary along different demographic dimensions such as gender or political orientation (e.g., Herek, 2002; Strand, 1998), but little is known about how these attitudes form. As with other sexual topics, attitudes towards homosexuality are not inborn, but are socialized. Multiple agents contribute to this socialization process, including parents, peers, and religious institutions (e.g., Ballard & Morris, 1998). Prominent among them are likely to be the media, which youth frequently cite as a top source of sexual information (e.g., Brown, Halpern, & L'Engle, 2005; Ward, 2003). Indeed, it is argued that media portrayals may be especially influential in this domain because the controversial nature of the topic may silence discussion from some parents and peers, and because first-hand experience may be limited (Gross, 1991). Media portrayals may be a primary source of information for the 40% of American adults who claim not to know a gay person personally (Pew Research Center, 2003).

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Based on cultivation theory (Gerbner, Gross, Morgan, Signorielli, & Shanahan, 2002), it is reasonable to assume that exposure to media representations of homosexuality may help cultivate viewers' own attitudes about homosexuality. What might viewers learn about homosexuality from the media? Does frequent media exposure make them more accepting, or less so? Although studies show that media sources play a prominent role as sex educators (for review, see Ward, 2003), few have assessed media contributions to viewers' attitudes toward homosexuality. This gap is addressed by examining whether multiple forms of media use correlate with viewers' attitudes toward homosexuality, and by examining which factors moderate these connections, focusing on the roles of social position (i.e., race and gender) and viewers' religious involvement. Finally, the overall patterns of associations are investigated, examining whether they are consistent with either the mainstreaming or resonance mechanisms of cultivation theory.

Media Representations of Homosexuality

Although early analyses of television's sexual content reported minimal to zero references to homosexuality across the episodes coded (e.g., Greenberg & Busselle, 1996), more recent analyses indicate that these trends are slowly changing. In an analysis of prime-time network programming for fall of 2001, Raley and Lucas (2006) report that gay male and lesbian characters were represented in 7.5% of the dramas and comedies on the schedule. A recent study of programming from 2001–2002 and 2002–2003 found that sexual content associated with sexual minorities occurred in 15% of programs overall (Fisher, Hill, Grube, & Gruber, 2007). Most of these portrayals were in movies or in sitcoms.

Qualitative analyses of the nature of this content note that although recent portrayals rarely show gay and lesbian characters as mentally ill (Hart, 2000), most representations continue to perpetuate stereotypes about homosexuality. If represented at all, gays and lesbians tend to be promiscuous, infected with HIV, or have unsatisfying sexual and romantic relationships (Hart, 2000; Herman, 2005). Even successful sitcoms that present gay and lesbian characters as the leads, such as *Ellen* and *Will & Grace*, may reinforce stereotypes by portraying these characters as lacking stable relationships, as being preoccupied with their sexuality (or not sexual at all), and by perpetuating the perception of gay and lesbian people as laughable, one-dimensional figures (Cooper, 2003; Fouts & Inch, 2005; Herman, 2005).

Such characterizations may not be limited to electronic media. Limited research on homosexual content in popular print media also suggests a similar marginalization and perpetuation of stereotypes. For example, in a content analysis of articles and advice columns from the women's magazines *New Woman* and *Essence*, Gadsen (2002) found that over the span of 10 years, only 6% of *New Woman* and 5% of *Essence* magazine issues addressed homosexuality explicitly, generally focusing on male homosexual activity, the nefarious nature of husbands and male

lovers who have sexual liaisons with other men, and the physical and emotional health risks these men pose to women. Absent are positive portrayals of sexual minority romantic and sexual relationships as well as a discussion of sexual minority civil rights.

However, not all findings suggest that media portrayals of homosexuality are universally negative. For example, in a qualitative analysis of the lesbian teenager, Bianca, on the daytime soap opera *All My Children*, Harrington (2003) argues that the presentation of a stable lesbian character who accepts her sexual identity, has successful romantic relationships, and continues to develop other aspects of her identity (not just the sexual) may improve viewers' attitudes toward homosexuality. In addition, Hart (2004) argued that the increase in the representation of politically conscious gay characters and themes may also increase attitudes of acceptance. In the review of the successful make-over show, *Queer Eye for the Straight Guy*, Hart argued that one reason for the show's success in attracting and maintaining a diverse audience may be the fact that the makeover team continuously pokes fun at the gay stereotypes they represent. Their use of humor may expose the absurdity of gay stereotypes, revealing that gay men are not a threat to straight men or women, and that rigid adherence to traditional gender roles may actually be detrimental to the well being of the makeover targets. Thus, although stereotypical and negative portrayals of homosexuality have dominated the media, recent trends indicate a possible increase in the diversity and the positive nature of portrayals of sexual minorities.

Effects of Media Use on Attitudes Towards Homosexuality

Given that mainstream media are beginning to include homosexual characters, and that both stereotypical and more multi-dimensional portrayals co-exist, the question then becomes: Does exposure to this content shape viewers' attitudes toward homosexuality? Existing data are minimal. In one study, Riggle and colleagues (1996) measured the attitudes of 82 students prior to and after watching a documentary about Harvey Milk, a prominent gay politician who was murdered in a hate crime. The researchers found that watching the film was generally associated with reporting less prejudiced attitudes in the post-test. Mazur and Emmers-Sommers (2002) found similar results in their study, in which watching a film about a nontraditional family with homosexual characters resulted in greater acceptance of homosexuality. In addition, German adolescents exposed over the course of a week to talk show segments featuring discussions of homosexuality later expressed more accepting attitudes toward homosexuals than did adolescents in the control group (Rössler & Brosius, 2001). Similarly, Bonds-Raacke, Cady, Schlegel, Harris, and Firebaugh (2007) demonstrated that participants primed to think about and evaluate a positive portrayal of a gay character later expressed more positive attitudes towards gay men than participants primed to think about and evaluate a negative portrayal. Finally, Shiappa and colleagues (2006) found that the more frequently

undergraduates viewed *Will & Grace*, the lower their levels of prejudice toward gay men.

Although these findings suggest that *directed* exposure to homosexual characters appears to affect viewers' attitudes, to date no studies have documented whether everyday media exposure is associated with attitudes toward homosexuality. Drawing from cultivation theory, it is expected that frequent, regular media consumption would lead viewers to cultivate beliefs about homosexuality that coincide with those portrayed in the media. If negative stereotypes dominate in the media consumed, regular exposure could make people less accepting, leading them to accept those unfavorable portrayals (Gross, 1991). However, as media content concerning homosexuality becomes more positive and diverse, it is possible that such shifts may be associated with greater attitudes of acceptance towards homosexuality. Accordingly, given the diversity of portrayals in today's media environment, the focus turns to the contributions of media genre and media consumer in order to better understand which kinds of attitudes may be cultivated.

Contributions of Media Content: A Focus on Media Genre

Although Gerbner and colleagues (2002) argue for cultivation effects based on overall viewing amounts, there are both conceptual and empirical reasons to consider genre-specific effects. First, analyses indicate that content and portrayals may vary across genres, and may therefore convey somewhat different messages. In comedies, for example, portrayals of homosexuality tend to be one-dimensional, and homosexual characters and homophobia are often exploited for comic effect (Cooper, 2003; Fouts & Inch, 2005). In dramas, soap operas, and films however, more in-depth storytelling permits deeper characterizations. This does not free these genres from stereotypes however, as most commercial films are no more welcoming to gay characters than television (Gross, 1991). Second, empirical evidence concerning links between media exposure and viewers' general sexual attitudes report *stronger* cultivation effects for specific genres than for overall TV viewing (e.g., Bilandzic & Rössler, 2004; Potter & Chang, 1990). Based on these conceptual and empirical expectations, the first hypothesis is offered:

H₁: Uniform associations with global exposure to media are not expected. Rather, it is expected that associations between media use and viewers' attitudes toward homosexuality will vary across genres.

Based on the literature review, it appears that media representations of homosexuality are diverse, and that such representations may vary according to genre. It is expected that frequent exposure to more stereotypical genres, such as music videos, comedies, and men's magazines, will be associated with holding less accepting attitudes toward homosexuality, and that frequent exposure to soap operas will be

associated with holding more accepting attitudes. For other genres (e.g., movies, talk shows), analyses are more exploratory.

Contributions of Viewer Variables: A Focus on Gender, Ethnicity, and Religiosity

Although the authors acknowledge that media exposure is likely to shape viewer attitudes in general, they also assume that these associations will not be universal. It is a virtual media truism that media content affects some of the viewers some of the time (Dorr, 1986). Aspects of the viewer, such as social position (e.g., gender and ethnicity) and pre-existing attitudes (e.g., religious beliefs), are likely to guide consumers' reactions to and engagement with the media, their openness to alternative messages, and their degree of homophobia. Thus, the effects of media exposure on consumers' attitudes towards homosexuality are likely to depend on multiple characteristics of the consumer. The focus here is on gender, ethnicity, and existing religious beliefs.

As social constructions, beliefs about sexuality are highly influenced by these forces (Dubé, Savin-Williams, & Diamond, 2001). In terms of gender, past studies suggest that young men, on average, tend to receive messages about homosexuality that are more negative in tone than the messages that young women receive (e.g., Herek, 2002). It is possible, then, that men and women come to engage the media from different stances regarding attitudes of acceptance. Ethnicity is also likely to play a role in determining media effects on attitudes towards homosexuality. Recent findings document significant cultural differences in the values and attitudes expressed towards homosexuality. Here, research has found that Asian, Latino, and Black participants tend to harbor more negative attitudes towards homosexuality than White participants (Barkely & Mosher, 1995; Calzo & Ward, in press; Lewis, 2003; Matteson, 1997), although group differences in socioeconomic status and religiosity also play a role (Herek & Gonzalez-Rivera, 2006). Indeed, research suggests that religious involvement is a robust predictor of attitudes towards homosexuality. Some studies find that having any religious affiliation is associated with greater intolerance (e.g., Wilkinson, 2004), whereas other studies show some variability among religious groups (Burdette, Ellison, & Hill, 2005). Overall, given the stance of many religions toward homosexuality, it is likely that viewers who are highly religious will approach homosexuality and related media content from differing positions than viewers who are much less involved with religion.

As suggested by these data, individuals are likely to approach media from different perspectives, with some already more accepting and some less accepting of homosexuality. How, then, might these social positions influence the pattern of associations between media use and attitudes toward homosexuality? The mechanisms of mainstreaming and resonance from cultivation theory were used to guide the explorations (Shrum & Bischak, 2001). Under the principle of mainstreaming,

media exposure brings people with discrepant perspectives closer together, toward a central mainstream (Gerbner et al., 2002). Thus, *mainstreaming* effects on viewers' attitudes toward homosexuality would be demonstrated if the divergent attitudes of different social groups become more similar by heavy media exposure. By contrast, with the mechanism of *resonance*, viewers are more accepting of and influenced by content that matches their existing beliefs. Therefore, it is anticipated that media exposure will affect viewers' attitudes toward homosexuality differently based on their gender, ethnicity, and religious involvement. Since these patterns of influence may reflect either mainstreaming or resonance, both possibilities are explored in the second and third hypotheses.

H₂: Patterns of associations between media use and attitudes toward homosexuality will vary according to social position (i.e., ethnicity and gender).

It is expected that women and White participants will hold more positive attitudes toward homosexuality than men and ethnic minorities. It is also expected that ethnicity and gender will produce different patterns of associations between media use and these attitudes, but the authors leave open the questions as to whether effects will be more consistent with mainstreaming or resonance.

H₃: Religious involvement will influence the pattern of associations between media use and attitudes toward homosexuality.

It is predicted that levels of religiosity (i.e., high versus low) will influence both viewers' attitudes towards homosexuality as well as the associations between media use and these attitudes. However, questions as to whether these patterns are more consistent with mainstreaming or resonance are left open.

Method

Participants

Participants included 1,761 undergraduates (62.7% female) aged 17 to 27 ($M = 19.0$ years) attending a large university in the Midwestern United States. Approximately 71.7% of the participants self-identified as White/Caucasian, 16.9% as Asian/Asian-American, 7% as Black/African-American, 4.3% as Latino/a, and 1.1% as Multiracial. The average level of education for the fathers and mothers of the participants was 17.1 and 16.1 years of schooling, respectively. In addition, 96.9% of the sample self-identified as exclusively or predominantly heterosexual, 0.4% as bisexual, and 2.7% as predominantly or exclusively homosexual. Participants in the last two groups were collapsed to form a Gay/Bisexual categorization variable.

Procedure

All students enrolled in each of three large Introductory Psychology classes were invited to complete a survey as an extra credit option; 79% of the enrolled students opted to participate. Survey packets containing the instruments were distributed in class, and participants completed the measures on their own and returned them to class the following week. Data for 74% of participants were collected during the winter and fall semesters of 2000; data for 26% of the sample were collected during March of 2002. Written consent was obtained from all participants.

Measures

Media Exposure. To examine participants' general media use, their regular exposure to television, magazines, and movies was assessed. Television viewing was assessed via six questions that asked participants to indicate the number of hours they watch TV (any channel) on an average weekday morning, afternoon, evening, and late night, on Saturday, and on Sunday. These data were summed to create a measure of weekly TV viewing hours, which was converted to monthly hours to be more consistent with the other measures. To assess levels of magazine reading, a list of 36 popular monthly magazines was provided and participants were asked to indicate the number of issues (0–12) read in a typical year. These responses were summed to produce a total magazine exposure score. Participants also indicated the number of movies they watched in theatres, on cable TV, or rentals in a typical month. A sum score across the three movie types was calculated.

About 13 assessments focused on genre-specific media use. To examine genre-specific TV exposure, the investigation considered participants' viewing of the following programming types that are popular among young adults, and are likely to contain messages about sexuality: prime-time comedies, prime-time dramas, soap operas, music videos, and daytime talk shows. To assess viewing of prime-time comedies and dramas, participants were provided with a list of 35 top-rated prime-time network programs containing 13 dramas and 22 comedies (20 and 15 for 2002), and were asked to indicate the frequency with which they had viewed each program during the previous semester. Responses were indicated on a 5-point scale anchored by *never/not this season* at 0, and *every week* at 4. Responses were converted to approximate hours per month based on the length of the program (i.e., 30 versus 60 minutes) and the frequency with which it was viewed. Monthly sums of viewing prime-time comedies and prime-time dramas were calculated from these data.

To assess students' viewing of soap operas and daytime talk shows, a list was provided of current network programming in each genre. This included 11 soap operas and 10 daytime talk shows (e.g., *Jerry Springer*). Using a 5-point scale

anchored by *never/not this season* at 0, and *almost every day* at 4, participants rated how often during an average month they had watched each program during the previous term. These individual scores were later converted to hours (i.e., *almost every day* equaled 20 monthly hours), and were summed across the programs within each genre. As only 30% of the sample viewed soap operas, this final score was rescaled to reduce skewness. Frequency of viewing music videos was assessed via five questions that examined the number of hours students watch music videos during the week (morning, afternoon, and evening), on Saturday, and on Sunday. Monthly totals were calculated from these data.

Finally, to assess participants' exposure to specific magazine genres, a factor analysis of the list of 24 magazines provided was conducted, creating 5 subscales: Teen magazine (e.g., *Seventeen*; 4 items), Women's magazines (e.g., *Cosmopolitan*; 8 items), Men's magazines (e.g., *Maxim*; 5 items), popular culture magazines (e.g., *Rolling Stone*; 3 items), and health magazines (e.g., *Self*; 3 items). The data were summed across each subscale to produce 5 subtype scores.

To approximate students' *prior* media use, a list of 35 prime-time programs and 9 soap operas that were popular 4 years prior to data collection was provided. Students were asked to indicate how frequently they had typically watched each program, and their responses were scored in the manner noted above. One item assessed their prior music video viewing, and asked participants to use a 5-point scale (from *never* to *very frequently*) to indicate how frequently they viewed that genre 4 years ago. These items, while not extensive, do add a temporal component that may help clarify issues of causality.

Attitudes Toward Homosexuality. Using a 6-point scale anchored by *strongly disagree* at 1, and *strongly agree* at 6, participants indicated their level of agreement with each of six statements: (1) "Homosexuality is a question of sexual orientation, not morality," (2) "Same-sex marriages are morally offensive" (reverse-coded), (3) "Homosexuality is perverse and unnatural" (reverse-coded), (4) "Homosexual behavior is an acceptable form of sexual preference," (5) "Homosexuality is not sinful," and (6) "The love between two same-sex partners is not different than the love between a man and a woman." After reverse-scoring the appropriate items, a mean score was taken, such that higher scores indicate more accepting attitudes toward homosexuality (AATH; $\alpha = .93$).

Results

Preliminary Analyses

To test the hypotheses, descriptive statistics were first calculated to assess the media diet of the participants, and correlation analyses were run to identify

demographic correlates of AATH. Descriptive statistics for each of the media use variables are provided in Table 1. As seen in the table, music videos, women's magazines, and men's magazines were consumed most frequently. Overall, the participants had diverse media diets, suggesting multiple avenues of potential influence.

Zero-order correlations were next conducted between the AATH variable and the following seven demographic variables: gender, age, ethnicity (Asian, Latino, Black), self-identifying as homosexual or bisexual, religiosity, parental education, and year of data collection. Results indicated that higher levels of parental education were associated with more accepting attitudes toward homosexuality ($r(1755) = .16, p < .001$), and that greater religiosity ($r(1758) = -.41, p < .001$), Asian and Black ethnic background ($r(1759) = -.12$ and $r(1759) = -.12$, respectively, $p < .001$), year of data collection ($r(1759) = -.05, p < .05$), and gender ($r(1759) = -.21, p < .001$) were associated with less accepting attitudes. Surprisingly, self-identification as a sexual minority did *not* emerge as a significant correlate. Based on these results, gender, ethnicity, religiosity, parental education, and year of data collection were used as controls when appropriate.

Table 1
Mean Levels of Media Use

Type	Variable	Mean	Range	SD
Global media use	Total TV viewing (hrs/month)	22.52	0–187	19.51
	Total magazine reading (issues/year)	28.2	0–169	25.22
Genre-specific media use/mo.	Total movies (number/month)	9.14	0–71	8.02
	Prime-time situation comedies	5.16	0–29	4.01
	Prime-time dramas	6.96	0–44	6.42
	Music videos	22.04	0–220	33.22
	Daytime talk shows	5.48	0–88	10.47
	Soap operas (rescored)	.62	0–3	1.08
	PAST Prime-time comedies & dramas	19.30	0–77	11.40
	PAST Music videos	1.82	0–4	1.17
	PAST Soap operas	5.70	0–170	13.30
Magazine genres	Teen	4.26	0–48	7.38
	Women's	11.19	0–96	15.74
	Men's	7.09	0–52	9.46
	Popular culture	2.95	0–31	4.62
	Health	2.38	0–36	5.08

Associations Between Media Genres and Attitudes Toward Homosexuality

Hypothesis 1 postulated that there would be no uniform associations between *global* assessments of media exposure and AATH. Rather, it was predicted that there would be multiple, significant associations between media *genres* and AATH. This hypothesis was evaluated by first conducting partial correlations between AATH and overall total TV viewing hours, movie viewing, and number of magazines read. Controlling for demographic correlates, it was found that viewing more movies was associated with greater report of AATH ($r(1755) = .05, p < .05$). Television viewing and magazine reading, however, were not significantly associated with AATH, thus supporting the hypothesis that effects would lack uniformity.

To examine genre effects, partial correlation analyses were then conducted between the 13 media genre variables and AATH, controlling for the demographic correlates named above. Results displayed in Table 2 reveal that past music video and prime-time television viewing, and current reading of popular culture magazines were each associated with greater AATH. Current teen magazine reading, however,

Table 2
Partial Correlations Between Media Use by
Genre and AATH (Controlling for Sex, Race,
Religiosity, SES, and Wave)

	AATH
TV Genres	
Prime-time situation comedies	.02
Prime-time dramas	.00
Music videos	-.01
Daytime talk shows	.01
Soap operas	.00
PAST Prime-time comedies & dramas	.08***
PAST Music videos	.06*
PAST Soap operas	.02
Magazine Genres	
Teen	-.06*
Women's	.02
Men's	-.03
Health	-.03
Popular culture	.08**

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

was associated with less acceptance of homosexuality. The results partially support the first hypothesis. Rather than global media exposure producing a consistent effect on AATH, it seems that only certain genres of media are associated with attitudes of acceptance in both positive and negative ways. Surprisingly, music videos—typically viewed as a source of sexual stereotypes—were associated with more positive attitudes, and soap operas did not appear to have any significant association with attitudes.

Social Position, Media Use, and Attitudes Toward Homosexuality

In the second hypothesis, it was assumed that there would be gender and ethnic group differences in attitudes toward homosexuality, and that media use would contribute differently to viewers' attitudes based on their social position. To examine gender and ethnic group differences in AATH, a 2 (gender) \times 4 (ethnic group) Univariate ANOVA was first conducted, with AATH as the dependent variable and controlling for relevant demographic correlates. As expected, significant gender differences in AATH emerged, with women ($M = 4.55$) expressing more accepting attitudes towards homosexuality than men ($M = 4.00$; $t(1757) = 9.07, p < .001$). Also, results indicated that these attitudes varied significantly by ethnic group. Here, Whites ($M = 4.48$) appear to be most accepting towards homosexuality, and Blacks the least ($M = 3.78$). To test these subgroup differences directly, post hoc Bonferroni analyses were conducted. Findings indicated that White students reported significantly *more* accepting attitudes toward homosexuality than did Asian ($M = 4.01, p < .001$) and Black students ($p < .001$); and that Black students expressed significantly *less* accepting attitudes toward homosexuality than did Latino students ($M = 4.34, p < .01$). Finally, analyses indicated a significant sex by ethnic group interaction ($F = 16.37, p < .01$), in which White, Asian, and Latino women reported significantly higher AATH scores than men within the same respective ethnic groups; this was not the case for Black men ($M = 3.90$) and Black women ($M = 3.73$), who did not differ.

As stated in the hypotheses, the authors were unsure whether the effects of media exposure on the AATH of men and women, and members of different ethnic groups, would exhibit mainstreaming or resonance patterns. If the data fit a mainstreaming pattern, then media exposure was expected to be associated with lower AATH values among women and Whites, and greater AATH values among men and ethnic minorities. If the data fit a resonance pattern, then those who are typically more accepting of homosexuality (i.e., Whites and women), would be more accepting with increased media use, and those who are typically less accepting of homosexuality (i.e., ethnic minorities and men) will be less accepting with increased media use. To explore potential patterns, the associations between media use and participants' AATH separately by gender and for each ethnic group was examined. Several series of partial correlations were conducted between AATH and the 16 media variables,

controlling for religiosity and parental education. Because of the small number of Latino participants, the authors were not confident in their results for this subgroup and do not report them. Results for the women are listed in Table 3 and results for the men are listed in Table 4.

As displayed in Tables 3 and 4, the pattern of correlations is somewhat consistent with a mainstreaming effect. Looking first at the results among the women, several associations emerged between media use and their attitudes towards homosexuality. For women overall, more frequent viewing of prime-time programs 4 years ago and more frequent reading of popular culture magazines was each associated with

Table 3
Significant Partial Correlations Between Women's Media Use and AATH
(Controlling for Religiosity, Parental Education, and Year)

	All Women (<i>n</i> = 1096)	White Women (<i>n</i> = 759)	Asian Women (<i>n</i> = 172)	Black Women (<i>n</i> = 79)
General Media Exposure				
Total TV viewing				
Total movie viewing				
Total magazine reading				
TV Viewing by Genres				
Prime-time situation comedies				-.22*
Prime-time dramas				
Music videos	-.07*			
Daytime talk shows				
Soap operas				
PAST Prime-time sitcoms & dramas	.07*	.11**		
PAST Music videos				
PAST Soap operas				
Magazine Genres				
Teen	-.09**	-.11**		
Women's				
Men's				
Health				
Popular culture	.08*			

Note. * $p \leq .05$; ** $p \leq .01$; *** $p \leq .005$.

Table 4
Significant Partial Correlations Between Men's Media Use and AATH
(Controlling for Religiosity, Parental Education, and Year)

	All Men (<i>n</i> = 647)	White Men (<i>n</i> = 450)	Asian Men (<i>n</i> = 105)	Black Men (<i>n</i> = 27)
General Media Exposure				
Total TV viewing				
Total movie viewing	.08*		.20*	
Total magazine reading				
TV Viewing by Genres				
Prime-time situation comedies			.28**	
Prime-time dramas				.48**
Music videos				
Daytime talk shows	.09*			
Soap operas	.10*			
PAST Prime-time sitcoms & dramas	.09*		.25*	
PAST Music videos				
PAST Soap operas			.20*	
Magazine Genres				
Teen				
Women's				
Men's				
Health				
Popular culture	.10*	.12*		

Note. * $p \leq .05$; ** $p \leq .01$; *** $p \leq .005$.

expressing greater acceptance of homosexuality. Conversely, current teen magazine reading and music video viewing was each associated with *less* accepting attitudes toward homosexuality. These results were driven by findings among White women, who made up the majority of the sample. However, when tested separately, more frequent viewing of sitcoms among Black women was associated with less accepting attitudes toward homosexuality.

Possible evidence of a mainstreaming effect is more pronounced when examining the results among the men. Several significant associations between media use and

men's attitudes toward homosexuality were found, and all of these were *positive* associations. More frequent consumption of movies, daytime talk shows, soap operas, popular culture magazines, and prime-time programming (four years ago) was each associated with more accepting attitudes towards homosexuality. Whereas a few of these results emerged among White men and Black men when tested separately, the patterns were perhaps most consistent among Asian men. For men overall, more frequent media use was associated with holding *more* accepting attitudes toward homosexuality.

Religiosity, Media Use, and Attitudes Toward Homosexuality

To address the final hypothesis concerning the possible moderating role of religious involvement, a median split of the religiosity scores was conducted to produce two groups. Participants with scores of 0–6 were classified as “Low Religiosity” ($n = 886$), and participants with scores of 7–12 were classified as “High Religiosity” ($n = 873$). Based on analyses of covariance, controlling for gender, ethnicity, parental education, and year of data collection, those in the low religiosity group reported higher mean levels of AATH ($M = 4.74$, $SD = 1.05$) than those in the high religiosity group ($M = 3.95$, $SD = 1.33$; $F(1, 1745) = 198.70$, $p < .001$). These results support previous research indicating that individuals with high religiosity tend to hold more negative views of homosexuality (e.g., Wilkinson, 2004).

A series of partial correlations was conducted between AATH and the media variables, controlling for demographic correlates. As displayed in Table 5, the pattern of correlations presents strong evidence of a mainstreaming effect of media use on AATH. Indeed, *all* of the significant associations between media use and AATH were *negative* among participants with low religiosity. Magazine reading and current television and music video viewing were associated with less acceptance of homosexuality among those who are less religious. By stark contrast, *all* of the significant associations between media use and AATH were *positive* among participants with high religiosity. Among these participants, current and past TV viewing, movie and music video viewing, and reading of women's and popular culture magazines were associated with greater AATH scores.

Discussion

Research testing media effects on attitudes towards homosexuality has been limited, and the effects documented have been diverse and specific. The study's goal was to examine a large sample of data on media diet and attitudes towards homosexuality to better understand these dynamics. It was hypothesized that media use would correlate with attitudes towards homosexuality, but that the nature of the associations would differ as a function of the media genres consumed, the social

Table 5
Significant Partial Correlations Between Media Use and AATH for Those of Low Versus High Religiosity (Controlling for Race, Sex, Parental Education, and Year)

	Low Religiosity (<i>N</i> = 866–875)	High Religiosity (<i>N</i> = 850–861)
General Media Exposure		
Total TV viewing	−.07*	.07*
Total movie viewing		.12***
Total magazine reading	−.10**	
TV Viewing by Genres		
Prime-time situation comedies	−.07*	.09**
Prime-time dramas	−.08*	.07*
Music videos	−.11***	.07*
Daytime talk shows	−.08*	.08*
Past TV Viewing		
PAST prime-time sitcoms & dramas		.12***
PAST music videos		.12***
PAST soap operas		
Magazine Genres		
Teen	−.09**	
Women's		.09*
Men's	−.11***	
Health	−.11***	
Popular culture		.10**

Note. * $p \leq .05$; ** $p \leq .01$; *** $p \leq .005$.

position of the consumer, and relevant pre-existing attitudes. Results largely support the hypotheses, and highlight the mainstreaming nature of media content.

Variations by Genre, Gender, and Ethnicity

The analyses suggest that consumption of certain media genres—not overall global media use—are associated with attitudes toward homosexuality, and that these associations are not universally related with greater acceptance of homosexuality. Surprisingly, it was not current but past prime-time TV viewing and music

video viewing that were associated with greater attitudes of acceptance. Results were mixed for magazine reading, with popular culture magazines associated with greater attitudes of acceptance, but teen magazines associated with less accepting attitudes. These findings highlight the importance of considering media genre, and may speak to potential differences in the content of particular print media and television programming. For example, teen magazines have been noted to be more conservative in their sexual content (e.g., Kim & Ward, 2004), and popular culture magazines may be more progressive. The existence of many genre effects and few global effects highlights constraints within traditional cultivation theory, suggesting the need for more genre-driven effects analyses.

The presence of gender and ethnic differences in the results also suggests that characteristics of the consumer affect whether and how media use is influential. Initial analyses of gender and ethnic group differences in students' attitudes were largely consistent with previous research, finding that women were more accepting of homosexuality than men, and that Black participants were least accepting. However, although women, in general, reported greater levels of acceptance, several of the significant associations between different forms of media use (e.g., teen magazines) and their attitudes towards homosexuality were surprisingly *negative*. Results also varied somewhat by ethnicity. White women who watched more prime time programming in the past were likely to report more accepting attitudes towards homosexuality, but those who read more teen magazines reported less acceptance. In addition, Black women who watched more sitcoms reported less accepting attitudes.

These race- and gender-specific associations drive home the point that media effects likely depend on one's initial starting position, a point that is made more clear when the men's and women's results were compared. In general, various forms of media use were associated with greater acceptance of homosexuality among the men. Men who more frequently viewed soap operas, daytime talk shows, and prime-time TV in high school, and men who read more popular culture magazines were more accepting of homosexuality. There were few ethnic group differences in these trends. Gender ideology and culture dictate homophobia for men, who in general, are less accepting than women of homosexuality (e.g., Mahalik, Talmadge, Locke, & Scott, 2005). In this study, however, media exposure seems to be associated with men's moving away from gender role rigidity, as reflected in its associations with more accepting attitudes toward homosexuality.

As with all cross-sectional survey data, causality cannot be confirmed, and experimental manipulations are needed to determine specificity and directionality of the effects. However, because there was no link between sexual minority orientation and participants' attitudes toward homosexuality, it may be possible to rule out the interpretation that those who are more likely to identify as sexual minorities just watch more TV and read more magazines. Overall, the pattern of results suggests the possibility of a mainstreaming effect, whereby frequent viewers of all types are pulled closer to some central viewpoint. Indeed, although men and women show significant global differences in AATH in the data, exposure with the media

appeared to close this gap, such that women develop less accepting attitudes and men develop more accepting attitudes.

Variations by Religious Involvement

The potential mainstreaming effect of media use was further investigated by examining how patterns of associations differ based on level of religious involvement. As expected, individuals who self-identified as highly religious exhibited more negative attitudes towards homosexuality than did those who were less religious. However, media use seemed to draw these two groups closer together. Among those *low in religiosity*, heavy television, music video, and magazine consumption was each associated with *less* acceptance of homosexuality. By contrast, among those *high in religiosity*, frequent television, movie, and magazine consumption was each associated with *greater* acceptance of homosexuality. The study's results suggest that media use may produce effects that challenge the influence of pre-existing attitudes.

Limitations and Future Directions

Although the correlations found in this exploratory study were statistically significant, the associations were modest and require replication. These effect sizes, however, are comparable to other well-cited associations between media use and viewers' belief systems. For example, Holmstrom's (2004) meta-analysis of 34 studies testing links between media use and body dissatisfaction reported an overall, unweighted effect size of $r = .10$ and a weighted effect size of $r = .08$. Similarly, in their meta-analysis of studies linking media use and viewers' sex stereotyping, Herrett-Skjellum and Allen (1996) reported an effect size of $.10$ across the 17 non-experimental studies. As with these findings, the study does not seek to argue that the media are the *sole* source of peoples' beliefs, but that the media, in conjunction with other sources, are a contributing factor.

Given the speed with which media content changes, follow-up research is required to confirm if these results are contemporary, and if the trends persist with current programming. Attention is needed to other media sources that may inform attitudes towards homosexuality, such as Internet websites, newer cable programs and channels (e.g., LOGO), and homosexual-themed films. Also, content analyses of visual and print media are needed to better understand the diverse genre-related findings in this study. The mainstreaming patterns must be corroborated by longitudinal research that assesses the growth of media use and attitudes over time and by studies that control for other significant exposure to homosexuality (e.g., parental messages; personal contact with sexual minorities). Future research may also investigate viewers' processing of media content on homosexuality (e.g., concentration, perceived realism, selective exposure) to arrive at a better understanding of the mechanisms at work.

It is also important to note that the sample consisted of undergraduates at a large Midwestern university, whose demographic profiles and media consumption habits may not be representative of the population at large. Future researchers may want to address whether the mainstreaming trends found here replicate in viewers of varying ages, education levels, and geographic contexts. Future research may also benefit from over-sampling minority participants to determine reliability of these findings.

In spite of these limitations, the results do provide preliminary insights for this understudied topic. Little research has examined how attitudes toward homosexuality may develop through socialization processes. This study looked specifically at media contributions, with the diversity of results highlighting both the promise and the power of media use in shaping viewer perspectives. For those who wish to increase acceptance of homosexuality, the findings suggest that the media may be one source of intervention. However, the findings also call into question the ease with which the media can foster positive attitudes towards homosexuality. The pattern of results suggests that some media genres may be better suited than others as sources of intervention for changing attitudes, and that these relations may differ depending on viewer characteristics.

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