

Body Objectification, MTV, and Psychological Outcomes Among Female Adolescents¹

SHELLY GRABE²

University of California, Santa Cruz

JANET SHIBLEY HYDE

University of Wisconsin-Madison

In response to the American Psychological Association's Task Force on the Sexualization of Girls, the present study explored the role of sexually objectifying media—in this case, music television—in a host of psychological consequences among a community sample of adolescents girls (M age = 13 years). Objectification theory posits that the consequences of sexual objectification involve the process of self-objectification. As such, we hypothesized that music television consumption would first and foremost be associated with self-objectification, which would, in turn, predict a number of body-related consequences. The findings support a model in which self-objectification mediates a direct relation between music television viewing and body esteem, dieting, depressive symptoms, anxiety, and confidence in math ability.

In 2007, the American Psychological Association (APA) commissioned a task force to examine the links between the media and girls' sexualization, resulting in a published report that summarizes the current status of research investigating this relation. The current study was conducted in direct response to the task force's recommendations for conducting research aimed at understanding the role of the media in the sexualization of girls.

Building on an emerging body of literature investigating body objectification, members of the task force defined *sexual objectification* to be instances in which a person is made into a thing for others' sexual use, rather than being seen as a person with the capacity for independent action and decision making (APA, 2007; Bartky, 1990; Fredrickson & Roberts, 1997). As the authors of the task force argued, sexual objectification may be especially problematic when it happens to youth. Importantly, research has suggested that girls begin to internalize messages from the media regarding their bodies as young as the age of 7 years (Dohnt & Tiggemann, 2006). As such, it is imperative that we understand the processes by which media exposure that is rife with sexual objectification influences the psychological well-being of girls

¹This research was supported by a grant from the Graduate School of the University of Wisconsin to the second author, and by NIMH Grant F32 MH071971 to the first author.

²Correspondence concerning this article should be addressed to Shelly Grabe, Department of Psychology, University of California, Santa Cruz, CA 95064. E-mail: sgrabe@ucsc.edu

and their experiences with their bodies. Therefore, the current study focuses on these processes among early adolescents.

A growing body of evidence has demonstrated that sexually objectifying media are linked to a variety of harmful body-related consequences among women. In a recent meta-analytic study, Grabe, Ward, and Hyde (2008) reviewed 77 studies from both the experimental and correlational literatures demonstrating that media use is directly linked to women's body dissatisfaction, internalization of the thin ideal, and disordered eating attitudes and beliefs. Furthermore, recent longitudinal designs have begun to demonstrate that exposure to sexually objectifying media prospectively contributes to the development of body-image problems among girls and women. For example, increased television viewing among grade school girls has been associated with higher disordered eating 1 year later (Harrison & Hefner, 2006). Girls as young as age 7 who viewed more appearance-focused television at Time 1 reported lower levels of appearance satisfaction 1 year later (Dohnt & Tiggemann, 2006); and both magazine and television exposure among teenage girls predicted higher levels of internalization, core beliefs about appearance value, and drive for thinness 1 year later (Tiggemann, 2006). Thus, both the meta-analytic and longitudinal findings in this area of research have begun to shed light on how the sexualization of women in the media adversely affects girls' and women's psychological well-being.

Theoretical Perspectives

Important in the investigation of the link between media consumption and psychological consequences for girls and women is understanding how the media have an impact on women's well-being. In other words, what is the mechanism by which the media influence an array of subsequent psychological outcomes? Communications researchers employ cultivation theory to argue that individuals use the consistent messages portrayed in the media, regardless of how narrow, to construct an image of reality (Gerbner, Gross, & Morgan, 2002). Therefore, according to the theory, following chronic exposure, individuals will come to adopt a perspective that is consistent with the models seen in the media.

Similarly, according to social learning theory (Bandura, 1994), viewers will come to adopt specific behaviors that they have learned are appropriate or behaviors that will provide a sense of value and reward. Objectification theory has argued that within a culture that is infused with sexualized representations of women, girls learn to treat and experience themselves as sexual objects (Fredrickson & Roberts, 1997; McKinley & Hyde, 1996). Thus, according to objectification theory, women exposed to high levels of

sexually objectifying media will not only begin to internalize the perspective of women as objects, but also begin to view themselves as objects to be valued based on appearance; in other words, to self-objectify. Therefore, according to both social learning theory and objectification theory, if girls observe that sexualized behavior and appearance are highly valued, they are likely to internalize this perspective and engage in higher levels of objectification of their own bodies.

Empirical Support

Although research investigating the direct link between consumption of sexually objectifying media and women's view of themselves as objects whose value is based on appearance has been scant, two empirical investigations have demonstrated that sexually objectifying media are positively related to higher levels of self-objectification among women. Based on a survey study among college-age women, Morry and Staska (2001) reported that exposure to sexually objectifying magazines was positively associated with self-objectification. The authors further demonstrated that the relation between media consumption and self-objectification was mediated by internalization of societal ideals. In other words, internalization of the culturally ideal body explained how media consumption relates to higher levels of self-objectification.

In a second study, using a two-wave longitudinal design among undergraduate women, Aubrey (2006) demonstrated that initial levels of exposure to sexually objectifying television in the first wave of the study predicted an increase in levels of self-objectification 1 year later. These prospective findings provide initial evidence that exposure to sexually objectifying media precedes women's levels of self-objectification, rather than the counterargument that women with low body esteem self-select body-focused media. In sum, there is emerging evidence that suggests the media play an influential role in socializing women to internalize an observer's perspective of themselves, which, in turn, puts them at risk for experiencing elevated levels of self-objectification.

More importantly, self-objectification has been related to a host of negative psychological outcomes among girls and women. Chief among those are poor body esteem and eating-disordered symptoms (Fredrickson, Roberts, Noll, Quinn, & Twenge, 1998; McKinley, 1999; McKinley & Hyde, 1996; Muehlenkamp & Saris-Baglama, 2002; Noll & Fredrickson, 1998; Slater & Tiggemann, 2002; Tiggemann & Slater, 2001). Research has also demonstrated that self-surveillance is related to depression and anxiety in college (Miner-Rubino, Twenge, & Fredrickson, 2002; Muehlenkamp &

Saris-Baglana, 2002) and adolescent samples (Grabe, Hyde, & Lindberg, 2007). Moreover, experimental investigations have demonstrated that self-objectification negatively affects cognitive performance on standardized math tests, as well as tasks that assess logical reasoning and spatial orientation (Fredrickson et al., 1998; Gapinski, Brownell, & LaFrance, 2003). Thus, a range of negative psychological consequences can be expected as a result of self-objectification. The aim of the current study is to examine self-objectification as the mechanism by which the media influence an array of psychological outcomes.

Music Television

Perhaps the genre in which sexually objectified women are most prevalent is music television. Music videos, in particular, have been criticized for objectifying and exploiting women as hypersexualized objects of male desire (Emerson, 2002). In a review of findings from the past two decades of research on music video, Andsager and Roe (2003) reported that music videos sexually objectify women by frequently displaying them in provocative or alluring clothing; use sexual suggestiveness or innuendo, such as pelvic thrusts, long lip-licking, or stroking in nearly 90% of videos; and frequently portray women as prostitutes, nightclub performers, and servants. Indeed, numerous content analyses have found that women's role in music videos—that of the sexually objectified body—reflects a social constraint that limits women's autonomy and agency (Gow, 1996; Sommers-Flanagan, Sommers-Flanagan, & Davis, 1993). Furthermore, it has been shown that among the most popular music videos, men outnumber women 5:1 in lead roles, while women are shown in an extraordinarily narrow range of roles, with the majority appearing as dancers or posers who are highly subject to male gaze (Gow, 1996). In other words, being relegated almost solely to scantily clad dancers or props positioned in highly suggestive manners situates women, by definition, as objects.

This genre of media contributes to the cultural milieu in which girls' psychological well-being develops. There is accumulating evidence linking music video consumption to traditional gender-role attitudes, a stronger acceptance of women as sexual objects (Ward, 2002; Ward, Hansbrough, & Walker, 2005), and more accepting attitudes regarding the treatment of women as objects via sexual harassment (Strouse, Goodwin, & Roscoe, 1994). This is especially concerning, given that 25% of 14- to 18-year-olds report watching more than 4 hr of television daily (Eisenmann, Bartee, & Wang, 1999). Therefore, we hypothesize that girls with increased exposure to music videos may internalize the portrayed ideal and experience a range of

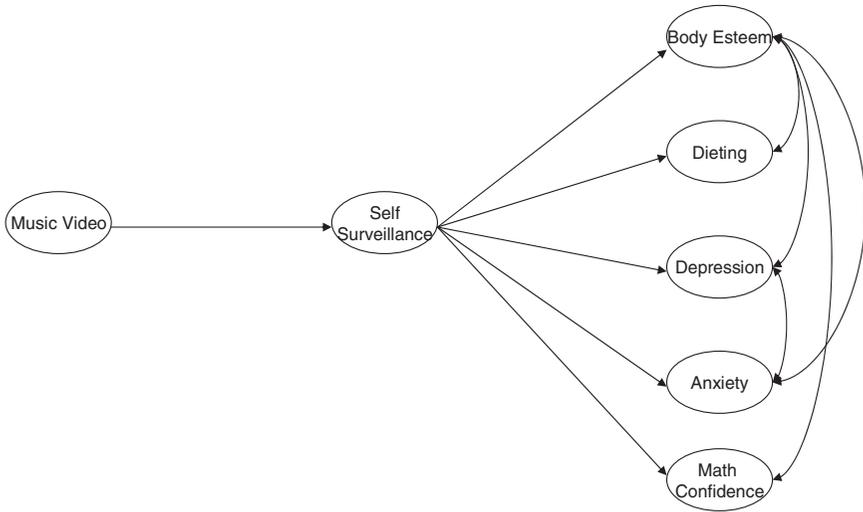


Figure 1. Conceptual model of the effect of music television use on body esteem, dieting, depression, anxiety, and confidence in math ability with self-surveillance as a mediator.

psychological consequences as a result. Thus, we expect that music video consumption will be positively associated with self-objectification, which will, in turn, be related to a range of proposed psychological consequences (see Figure 1 for a diagram of this conceptual model).

The Current Study

The aim in the present study is to respond to the task force (APA, 2007) recommendations by addressing the gaps in the literature in three important ways: (a) by examining the relation of sexual objectification to psychological well-being among youth; (b) by examining the mechanism (i.e., self-objectification) by which sexually objectifying media influence psychological well-being; and (c) by examining a diverse array of psychological outcomes. Because research specifically examining the sexualization of youth is urgently needed, we responded to the task force's pertinent recommendation to examine these processes in a sample of adolescent girls.

Although prior research in this area is compelling, it has focused almost exclusively on adult women (i.e., college age and older). Given how young girls begin to internalize messages from the media, it is imperative that these processes be examined among youth. Furthermore, while we expect to observe a direct effect of music television consumption on several markers of

girls' psychological well-being, we argue that this direct effect is mediated or explained by levels of self-objectification. Specifically, we expect that music video consumption will be positively associated with self-objectification, which will, in turn, be related to a host of negative psychological consequences that result when girls observe women's bodies being presented in a narrow range of roles that undermine their confidence by valuing them as nothing more than sex objects. Thus, we tested a model investigating the link between music television consumption and body esteem, dieting, depressive symptoms, anxiety, and confidence in math ability among a sample of 13-year-old girls (see Figure 1 for a diagram of this conceptual model).

Method

Participants

The present study included 195 female adolescents who were part of the ongoing, longitudinal Wisconsin Study of Families and Work (originally called the Wisconsin Maternity Leave and Health Project; Hyde, Klein, Essex, & Clark, 1995). Initial recruitment of pregnant women and their partners occurred over a period of approximately 15 months in 1990–1991; the participants in the current study are daughters of these women.

The data for the present study were collected when the girls had just completed the seventh grade. The mean age of the adolescents was 13.2 years. The ethnic breakdown was 89.4% White ($N = 174$), 3.4% American Indian/Alaskan Native ($N = 7$), 2.8% Asian American ($N = 6$), 2.2% Black ($N = 4$), 1.7% Hispanic ($N = 3$), and 0.6% "Other" ($N = 1$).

Procedure

Signed parental consent and adolescent assent were obtained for all participants. Participants completed questionnaires on a laptop computer during an in-home visit, which lasted approximately 1 hr. Computer administration of sensitive measures has been demonstrated to yield more extensive and accurate reporting by adolescents than traditionally administered questionnaires (e.g., Turner, Ku, Rogers, Lindberg, Pleck, & Sonenstein, 1998).

Measures

Music television use. To assess music television consumption, respondents were asked to report how often they watched MTV, BET, and music

videos in general on the following scale: *never, once a week, 2 to 5 times a week, or every day*. Responses for the three questions were averaged to index an overall music video score.

Self-surveillance. Self-surveillance was measured with the surveillance subscale of the Objectified Body Consciousness Scale for Youth (OBC-Y; Lindberg, Hyde, & McKinley, 2006), which includes four items (e.g., "During the day, I think about how I look many times"). Respondents were asked to indicate how much they agreed with the statements on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The surveillance subscale of the OBC-Y has demonstrated strong test–retest reliability (.81), as well as validity (Lindberg et al., 2006). In the current study, the internal consistency (α) was .87.

Body esteem. Body esteem was measured with the body image subscale of the Self-Image Questionnaire for Young Adolescents (SIQYA; Brooks-Gunn, Rock, & Warren, 1989; Petersen, Schulenberg, Abramowitz, Offer, & Jarcho, 1984), a nine-item scale that measures global body esteem with items such as "Most of the time I am happy with the way I look." Each item is rated on a 6-point scale ranging from 1 (*does not describe me at all*) to 6 (*describes me very well*). The scale is appropriate for adolescents between 10 and 18 years of age and has good psychometric properties (Brooks-Gunn et al., 1989). Psychometric analyses indicated that Item 4 ("I am uncomfortable with the way my body is developing") resulted in a reduction of alpha. Therefore, Item 4 was dropped, leaving an eight-item scale ($\alpha = .79$).

Current dieting status. Dieting status was assessed with a single item asking "Are you currently on a diet?" Response options were *Yes* or *No*.

Depressive symptoms. Symptoms of depression were assessed using the self-report Children's Depression Inventory (CDI; Kovacs, 1981, 1985), which has been used successfully with children as young as 3rd grade. The inventory consists of 27 items tapping cognitive ("I thought about bad things happening to me"), affective ("I was sad"), and behavioral ("I got into fights with people") symptoms of child depression. In the current study, three items pertaining to school were omitted because data collection occurred in the summer.

Each item consists of three statements representing increasing severity (e.g., "I was sad once in a while; I was sad many times; I was sad all of the time"), and children are instructed to choose the item that best describes how they felt in the past 2 weeks. The CDI has repeatedly demonstrated excellent internal consistency, test–retest reliability, and predictive and construct validity (e.g., Blumberg & Izard, 1986; Cole, Martin, Peeke, Seroczynski, & Fier, 1999). Coefficient alpha for the 24 items was .84.

Anxiety. Anxiety was measured using a short version of the Trait Anxiety Scale from the State–Trait Anxiety Inventory for Children (STAIC;

Spielberger, Edwards, Lushene, Montuori, & Platzek, 1973), asking the child to focus on the last week. The scale consists of 11 descriptors (e.g., *upset*), each rated on a 3-point scale (e.g., *very upset*, *upset*, *not upset*). Approximately half of the items describe anxiety (e.g., *nervous*), and half indicate the absence of anxiety (e.g., *calm*), which are reverse-scored. Coefficient alpha for the current study was .77.

Math confidence. Three items developed by Eccles and colleagues (e.g., Frome & Eccles, 1998) were administered to assess self-concept of ability in math (“How good at math are you?”; “If you were to rank all the students in your math class from the worst to the best in math, where would you put yourself?”; “Compared to most of your other school subjects, how good are you at math?”). The items were rated on a 7-point scale ranging from 1 (*much worse*) to 7 (*much better*). Coefficient alpha for this scale was .85.

Results

Preliminary Analyses

Table 1 contains the descriptive data based on the composite variables (i.e., scale scores) that are included in the estimated model. The data indicate that girls in this sample viewed MTV an average of once a week; they reported notably higher levels of self-objectification ($M = 4.06$) than did college-age women ($M = 1.73$ for Aubrey, 2006; $M = -0.26$ for Morry & Staska, 2001); they experienced relatively low levels of anxiety ($M = 14.81$; range = 11–33); 40% of the sample reported no symptoms of depression,

Table 1

Means and Correlations for Study Variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Music video	1.99	0.85	—					
2. Self-surveillance	4.06	1.76	.22**	—				
3. Anxiety	14.81	2.88	.21**	.21**	—			
4. Depression	1.62	2.28	.07	.32***	.61***	—		
5. Body esteem	4.53	0.86	-.14†	-.35***	-.29**	-.50***	—	
6. Confidence in math ability	4.96	1.76	-.13†	-.09	-.17*	-.08	.25**	—
7. Dieting	0.12	0.33	.24**	.12†	.06	.08	-.32***	-.06

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

whereas 35% reported two or more symptoms; girls rated their confidence in math relatively high ($M = 4.96$; range = 1–7); and the majority of the sample (88%) was not currently dieting. As can be seen from the table, most of the study variables correlated in the expected direction. Constructs within the structural models were allowed to correlate based on the relationships reported in Table 1.

Structural Equation Modeling

Mediation analyses were tested in a series of structural equation models. All models were estimated using EQS maximum likelihood estimation procedures (Bentler, 1995) with variance–covariance matrices serving as input. Missing data were handled with the EQS 6.1 missing data analysis regression imputations. Multiple fit indexes were used as guides to evaluate the fit of the model: normed fit index (NFI), non-normed fit index (NNFI; Bentler & Bonett, 1980), comparative fit index (CFI), and root mean square error of approximation (RMSEA). Chi-square goodness-of-fit statistics and chi-square to degrees-of-freedom ratio are also reported. A satisfactory fit is indicated by a nonsignificant chi square or a chi square lower than double the degrees of freedom (significant chi squares are acceptable when the sample size is large; Carmines & McIver, 1981); NFI, NNFI, and CFI values greater than .95; and RMSEA values less than .06 (Hu & Bentler, 1999).

In the hypothesized model, we specified five latent variables (i.e., self-surveillance, body esteem, anxiety, depression, and confidence in math ability), each identified by three indicators. Because use of more than three indicators per latent variable tends to yield poor fitting measurement models (Chorpita, 2002), item parcels were created from the original items. Several procedures for collapsing items have been suggested (e.g., Kishton & Widaman, 1994). In the present study, item parcels (i.e., simple composite of raw items) were created for the scales to arrive at three final items per latent variable.

Results of Path Analyses

To test a comprehensive model, we constructed a path diagram that details the direct pathway between music television use and its proposed consequences. A pattern of correlations between the proposed consequences was modeled based on the preliminary analyses. A schematic representation of the conceptualized mediation model is shown in Figure 1.

It has been suggested in Monte Carlo research that Baron and Kenny's (1986) approach to mediation has low statistical power for small effect sizes, but greater power for large effect sizes in samples with more than 100 participants (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). MacKinnon et al. suggested that a product-of-coefficients test has the most power for detecting effects. Thus, given the wide acceptance of Baron and Kenny's method, both Baron and Kenny's criteria for mediating conditions and a product-of-coefficients test (MacKinnon, 2000; Sobel, 1990) were used in the present study. The four conditions that must be met to establish mediation are (a) the independent variable (i.e., music television use) must be significantly related to the outcomes of interest (i.e., psychological well-being indicators); (b) the independent variable must be significantly related to the mediator (i.e., self-surveillance); (c) the hypothesized mediator must directly predict the outcomes; and (d) the effects of music television use on the psychological well-being indicators must be substantially reduced or, if fully mediated, no longer significant after entering the hypothesized mediator (Baron & Kenny, 1986).

The four mediation conditions were tested using estimates from the structural equation models. To test the first condition, a direct effects model was run to examine the effect of music television use on the markers of psychological well-being. Next, a structural equation model was run to test the second and third conditions; namely, that music television exposure would directly predict self-surveillance and that self-surveillance would directly predict the psychological well-being indicators. Finally, to test the mediational hypotheses, we used a product-of-coefficients formula in which a calculated mediation effect is divided by a calculated standard error of the mediation effect for the indirect effect of music television use (via self-surveillance) on psychological well-being (MacKinnon, 2000; Sobel, 1990). Significant *t* values from these formulas indicate that the direct effect of the independent variable on the dependent variable is significantly reduced (as opposed to no longer being significant) when the hypothesized mediator is included in the full model.

To test for the first condition, a model was specified in which the direct effects of music television on the psychological well-being indicators were estimated. Results of this model (see Figure 2; see Table 2 for fit statistics) indicate that music television marginally predicted body esteem ($\beta = -.14$, $p < .10$) and significantly predicted current dieting status ($\beta = .24$, $p < .001$), anxiety ($\beta = .23$, $p < .01$), and math confidence ($\beta = -.15$, $p < .01$). The modification indexes suggest that a slight improvement in model fit would be gained by allowing two of the item parcels for depression to cross-load on the anxiety factor. Given the high correlation between depression and anxiety ($r = .61$), it is not surprising that the individual items would be correlated.

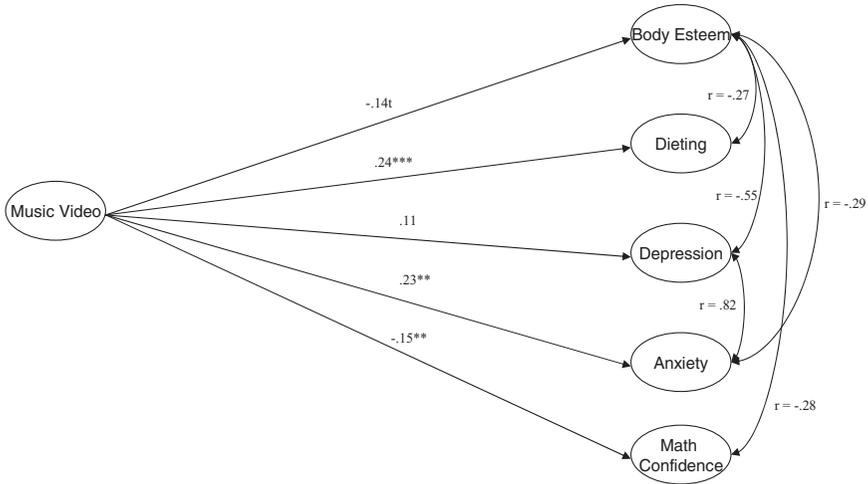


Figure 2. Direct model of the effects of music video on psychological outcomes. Values are standardized beta weights. $t < .10$. $**p < .01$. $***p < .001$.

Table 2

Goodness-of-Fit Statistics for Hypothesized Models

	χ^2	df	χ^2/df	NFI	NNFI	CFI	RMSEA
Direct effect model	118.05	65	1.82	.89	.92	.94	.07
Mediated model	198.99	106	1.88	.86	.91	.93	.07

Note. NFI = normed fit index; NNFI = non-normed fit index; CFI = comparative fit index; RMSEA = root mean square error of approximation.

Nevertheless, in the interest of parsimony and conceptual clarity, we chose to reflect the overlapping nature of depression and anxiety in the correlation between the factors and not to allow the item parcels to cross-load. This resulted in slightly lowered fit statistics, but we believe that clearer interpretations can be drawn from the findings.

To provide a direct test of Baron and Kenny’s (1986) second and third conditions, as previously outlined, a model was estimated in which music television use predicted self-surveillance, which, in turn, directly predicted the psychological well-being indicators: body esteem, dieting status, depression, anxiety, and math confidence (see Figure 3). Modification indexes were examined to see if direct paths between music television use and psychologi-

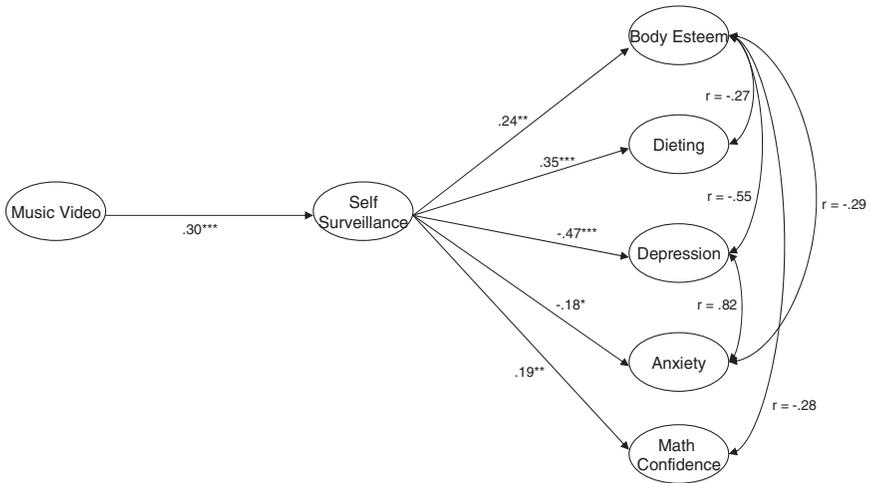


Figure 3. Mediation model. Values are standardized beta weights. $*p < .05$. $**p < .01$. $***p < .001$.

cal well-being should be retained. No direct paths were suggested. Results of the model test show that music television use significantly predicted self-surveillance ($\beta = .30$, $p < .001$). The results also reveal that, as expected, self-surveillance predicted body esteem, dieting, depression, anxiety, and math confidence (see Figure 3).

To test whether the effects of music television use were reduced or no longer significant after controlling for self-surveillance, we used the formula previously described to investigate the magnitude of the change in the direct relation between music television use with and without self-surveillance in the model. The findings indicate that self-surveillance significantly mediated the relation between music television use and body esteem, $t = -3.20$, $p < .001$; current dieting status, $t = 2.14$, $p < .03$; anxiety, $t = 2.31$, $p < .02$; and confidence in math ability, $t = 1.96$, $p < .05$. The findings also reveal that although music television use was not directly related to depression, a significant indirect relation between music television use and depression could be explained via the links to self-objectification, $t = 2.76$, $p < .01$. In other words, music video use was significantly related to self-objectification, which was, in turn, significantly related to depression.

Discussion

This study was in direct response to the call from the Task Force on the Sexualization of Girls (APA, 2007) for psychologists to conduct research

exploring the consequences of viewing objectified body images, particularly those that sexualize girls and women in music video, on the psychological well-being of girls. The APA report raised concerns about the impact of objectifying media, especially on young viewers. Addressing the concerns laid out in the report, this study investigated whether music television consumption is associated with several negative psychological outcomes and if that relation could be explained, in part, by girls' levels of self-objectification.

Although previous research in this area has suggested that exposure to sexualized images is associated with psychological consequences among adult women (e.g., Aubrey, 2006), several gaps remained. The present study adds to this literature by exploring how music television, which is argued to be among the most egregious of objectifying media, is related to adolescent girls' psychological well-being. Furthermore, we investigated the mechanism by which media portrayals are related to an array of subsequent psychological outcomes. Specifically, we hypothesized that greater consumption of music television would be positively related to self-objectification among adolescent girls, which would, in turn, negatively impact the esteem they derive from their bodies, dieting patterns, negative psychological well-being, and confidence in a traditional male domain, mathematics. Overall, the current data support these hypotheses.

Mechanisms

As expected, significant associations emerged between music video consumption and lowered body esteem, dieting, anxiety, and confidence in a male achievement domain. Furthermore, our findings suggest that the direct relation between media consumption and negative psychological outcomes could be explained, in part, by levels of self-objectification. One explanation of these processes is that girls' exposure to the televised sexual objectification of women cultivates a particular view of the self, a view that emphasizes the importance of physical appearance. As such, it is possible that, after viewing a media genre that is replete with images of hypersexualized and objectified female bodies, girls begin to view themselves as objects whose value is based on appearance.

We examined various outcomes. First, not surprisingly, we found that self-objectification related to women's experience of their bodies as reflected in low body esteem and prevalence of dieting. To the extent that the cultural ideal of women's bodies that is portrayed in these videos is nearly impossible to achieve, we would expect to see girls dissatisfied with their bodies and taking measures to control their body size. Second, prior research has demonstrated that holding the perspective of oneself as an object adversely

impacts psychological well-being (Miner-Rubino et al., 2002). We replicated this finding among adolescents by demonstrating that self-objectification was linked to both depression and anxiety. Finally, in support of the notion that the images portrayed in music television present women with a narrow range of roles, we demonstrated that music television and subsequent self-objectification are negatively associated with girls' confidence in the traditionally male achievement domain of mathematics. Undermined confidence—as well as the belief that physical appearance, rather than academic achievement, is of higher value for acceptance and self-worth—may influence girls' achievement levels and opportunities later in life.

In sum, the present study highlights that there are a host of negative consequences for girls when they are exposed to sexualized images. These findings support the research summarized in the APA (2007) report, but underscore that adolescence is a critical period for investigating the role of the media in socializing today's youth.

Limitations and Future Directions

Although this study offers a compelling first look at relations among adolescent girls, it does have limitations that future research should address. Although we argued that exposure to sexually objectifying media leads to self-objectification and, in turn, a host of negative psychological consequences, it is possible that causation goes in the opposite direction. In other words, it is possible that the experience of low body esteem, eating problems, or negative affect could influence the types of media selected by girls and women. However, recent prospective investigation (Aubrey, 2006) has suggested that it seems unlikely that this reverse order would be the case.

In addition, although hypersexualized images of Black women, in particular, pervade the music industry, our study sample did not allow for investigation into the role of race or ethnicity. In general, research examining women's body-related concerns among women of color has been sparse. However, given that Black and Latino youth report watching more television than do their White counterparts, the need to examine the impact of music television on women of color is imperative (for an exception, see Ward et al., 2005).

Finally, while past research has shown that body mass index (BMI) is related to variables included in the current study (e.g., body esteem, dieting), we did not have BMI data available. However, it is argued that cognitive aspects of self-objectification would lead women, regardless of body satisfaction and body size, to internalize an objectified perspective of the self. As such, even a woman who is thin and satisfied with her appearance can engage

in high levels of self-objectification and monitoring of her appearance. Nevertheless, it would be optimal to test these predictions empirically; as such, future research should include measures of BMI.

In summary, we argue that the current findings suggest that music television plays an important role in socializing adolescent girls and creates potentially harmful consequences. Thus, in light of the negative consequences of body objectification, a vital task for future research is to uncover ways to shift the culturally sanctioned view of the female body to promote the positive well-being of women.

Findings from the current study also have important social and clinical implications. There are a number of ways that girls can pursue healthy body esteem and psychological well-being. For example, one promising avenue is to encourage participation in activities (e.g., sports) that highlight the instrumentality of the body (e.g., Parsons & Betz, 2001). These and other practices may have the potential to refocus cultural norms and integrate into cultural worldviews healthier ways in which individuals can view their bodies.

Social intervention—such as programs that teach young girls the marketing strategies that strategically sexually objectify women's bodies (Stice, Mazotti, Weibel, & Agras, 2000)—may be effective in preventing girls from internalizing an observer's perspective of their own bodies. Perhaps more importantly, activism aimed at reducing the societal objectification of women's bodies may be beneficial in enhancing the psychological well-being of women. A recent example of activism is the work of former college football star Byron Hurts, summarized in the film "HIP-HOP: Beyond Beats and Rhymes," which questions the role of objectified female bodies in music video. His media literacy campaign is being disseminated in schools across the country with the aim to disrupt popular messages that women's bodies exist primarily as sex objects. Such work aimed at developing critical perspectives on how girls and women are sexualized is imperative for social change.

References

- American Psychological Association. (2007). *Report of the APA Task Force on the Sexualization of Girls*. Washington, DC: Author. Retrieved May 17, 2007, from www.apa.org/pi/wpo/sexualization.html
- Andsager, J., & Roe, K. (2003). "What's your definition of dirty, baby?" Sex in music video. *Sexuality and Culture*, 7, 79–97.
- Aubrey, J. S. (2006). Effects of sexually objectifying media on self-objectification and body surveillance in undergraduates: Results of a 2-year panel study. *Journal of Communication*, 56, 366–386.

- Bandura, A. (1994). Social cognitive theory of mass communication. In J. Bryant & D. Zillmann (Eds.), *Media effects: Advances in theory and research* (pp. 61–90). Hillsdale, NJ: Lawrence Erlbaum.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical consideration. *Journal of Personality and Social Psychology*, *51*, 1173–1182.
- Bartky, S. L. (1990). *Femininity and domination: Studies in the phenomenology of oppression*. New York: Routledge.
- Bentler, P. M. (1995). *EQS structural equations program manual*. Encino, CA: Multivariate Software.
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, *88*, 588–606.
- Blumberg, S., & Izard, C. (1986). Discriminating patterns of emotions in 10- and 11-year-old children's anxiety and depression. *Journal of Personality and Social Psychology*, *51*, 852–857.
- Brooks-Gunn, J., Rock, D., & Warren, M. (1989). Comparability of constructs across the adolescent years. *Developmental Psychology*, *25*, 51–60.
- Carmines, E., & McIver, J. (1981). Analyzing models with unobserved variables: Analysis of covariance structures. In G. Bohrnstedt & E. Borgatta (Eds.), *Social measurement* (pp. 65–115). Beverly Hills, CA: Sage.
- Chorpita, B. F. (2002). The tripartite model and dimension of anxiety and depression: An examination of the structure in a large school sample. *Journal of Abnormal Child Psychology*, *30*, 177–190.
- Cole, D., Martin, J., Peeke, L., Seroczynski, A., & Fier, J. (1999). Children's over- and underestimation of academic competence: A longitudinal study of gender differences, depression, and anxiety. *Child Development*, *70*, 459–473.
- Dohnt, H., & Tiggemann, M. (2006). The contribution of peer and media influences to the development of body satisfaction and self-esteem in young girls: A prospective study. *Developmental Psychology*, *42*, 929–936.
- Eisenmann, J. C., Bartee, T. R., & Wang, M. Q. (1999). Physical activity, TV viewing, and weight in U.S. youth: 1999 Youth Risk Behavior Survey. *Obesity Research*, *10*, 379–385.
- Emerson, R. A. (2002). "Where my girls at?": Negotiating Black womanhood in music videos. *Gender and Society*, *16*, 115–135.
- Fredrickson, B. L., & Roberts, T. (1997). Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly*, *21*, 173–206.
- Fredrickson, B. L., Roberts, T., Noll, S. M., Quinn, D. M., & Twenge, J. M. (1998). That swimsuit becomes you: Sex differences in self-objectification,

- restrained eating, and math performance. *Journal of Personality and Social Psychology*, 75, 269–284.
- Frome, P. M., & Eccles, J. S. (1998). Parents' influence on children's achievement-related perceptions. *Journal of Personality and Social Psychology*, 74, 435–452.
- Gapinski, K. D., Brownell, K. D., & LaFrance, M. (2003). Body objectification and “fat talk”: Effects on emotion, motivation, and cognitive performance. *Sex Roles*, 48, 377–388.
- Gerbner, G., Gross, L., & Morgan, M. (2002). Growing up with television: Cultivation processes. In J. Bryant & D. Zillmann (Eds.), *Media effects: Advances in theory and research* (pp. 43–67). Mahwah, NJ: Lawrence Erlbaum.
- Gow, J. (1996). Reconsidering gender roles on MTV: Depictions in the most popular music videos of the early 1990s. *Communication Reports*, 9, 151–161.
- Grabe, S., Hyde, J., & Lindberg, S. (2007). Body objectification and depression in adolescents: The role of gender, shame, and rumination. *Psychology of Women Quarterly*, 31, 164–175.
- Grabe, S., Ward, L. M., & Hyde, J. S. (2008). The role of the media in body image concerns among women: A meta-analysis of experimental and correlational studies. *Psychological Bulletin*, 134, 460–476.
- Harrison, K., & Hefner, V. (2006). Media exposure, current and future body ideals, and disordered eating among preadolescent girls: A longitudinal panel study. *Journal of Youth and Adolescence*, 35, 146–156.
- Hu, L. T., & Bentler, P. M. (1999). Cut-off criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1–55.
- Hyde, J., Klein, M., Essex, M., & Clark, R. (1995). Maternity leave and women's mental health. *Psychology of Women Quarterly*, 19, 257–285.
- Kishton, J. M., & Widaman, K. F. (1994). Unidimensional versus domain representative parceling of questionnaire items: An empirical example. *Educational and Psychological Measurement*, 54, 757–765.
- Kovacs, M. (1981). Rating scales to assess depression in school-aged children. *International Journal of Child and Adolescent Psychiatry*, 46, 305–315.
- Kovacs, M. (1985). The Children's Depression Inventory (CDI). *Psychopharmacology Bulletin*, 21, 995–998.
- Lindberg, S. M., Hyde, J. S., & McKinley, N. M. (2006). A measure of objectified body consciousness for pre-adolescent and adolescent youth. *Psychology of Women Quarterly*, 30, 65–76.
- MacKinnon, D. P. (2000). Contrasts in multiple mediator models. In J. S. Rose, L. Chassin, C. C. Presson, & S. J. Sherman (Eds.), *Multivariate*

- applications in substance use research* (pp. 141–160). Mahwah, NJ: Lawrence Erlbaum.
- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test the significance of the mediated effect. *Psychological Methods, 7*, 83–104.
- McKinley, N. M. (1999). Women and objectified body consciousness: Mothers' and daughters' body experience in cultural, developmental, and familial context. *Developmental Psychology, 35*, 760–769.
- McKinley, N. M., & Hyde, J. S. (1996). The Objectified Body Consciousness Scale: Development and validation. *Psychology of Women Quarterly, 20*, 181–215.
- Miner-Rubino, K., Twenge, J. M., & Fredrickson, B. L. (2002). Trait self-objectification in women: Affective and personality correlates. *Journal of Research in Personality, 36*, 147–172.
- Morry, M. M., & Staska, S.L. (2001). Magazine exposure: Internalization, self-objectification, eating attitudes, and body satisfaction in male and female university students. *Canadian Journal of Behavioural Science, 33*, 269–279.
- Muehlenkamp, J. J., & Saris-Baglama, R. N. (2002). Self-objectification and its psychological outcomes for college women. *Psychology of Women Quarterly, 26*, 371–379.
- Noll, S. M., & Fredrickson, B. L. (1998). A mediational model linking self-objectification, body shame, and disordered eating. *Psychology of Women Quarterly, 22*, 623–636.
- Parsons, E. M., & Betz, N. E. (2001). The relationship of participation in sports and physical activity to body objectification, instrumentality, and locus of control among young women. *Psychology of Women, 25*, 209–222.
- Petersen, A., Schulenberg, J., Abramowitz, R., Offer, D., & Jarcho, H. (1984). A Self-Image Questionnaire for Young Adolescents (SIQYA): Reliability and validity studies. *Journal of Youth and Adolescence, 13*, 93–111.
- Slater, A., & Tiggemann, M. (2002). A test of objectification theory in adolescent girls. *Sex Roles, 46*, 343–349.
- Sobel, M. E. (1990). Effect analysis and causation in linear structural equation models. *Psychometrika, 65*, 867–877.
- Sommers-Flanagan, R., Sommers-Flanagan, J., & Davis, B. (1993). What's happening on music television? A gender role content analysis. *Sex Roles, 28*, 745–753.
- Spielberger, C., Edwards, C., Lushene, R., Montuori, J., & Platzek, D. (1973). *STAIC: Preliminary manual*. Palo Alto, CA: Consulting Psychologists Press.

- Stice, E., Mazotti, L., Weibel, D., & Agras, W. S. (2000). Dissonance prevention program decreases thin-ideal internalization, body dissatisfaction, dieting, negative affect, and bulimic symptoms: A preliminary experiment. *International Journal of Eating Disorders, 27*, 206–217.
- Strouse, J. S., Goodwin, M. P., & Roscoe, B. (1994). Correlates of attitudes toward sexual harassment among early adolescents. *Sex Roles, 31*, 559–577.
- Tiggemann, M. (2006). The role of media exposure in adolescent girls' body dissatisfaction and drive for thinness: Prospective results. *Journal of Social and Clinical Psychology, 25*, 523–541.
- Tiggemann, M., & Slater, A. (2001). A test of objectification theory in former dancers and non-dancers. *Psychology of Women Quarterly, 25*, 57–64.
- Turner, C., Ku, L., Rogers, S., Lindberg, L., Pleck, J., & Sonenstein, F. (1998). Adolescent sexual behavior, drug use, and violence: Increased reporting with computer survey technology. *Science, 280*, 867–873.
- Ward, L. M. (2002). Does television exposure affect emerging adults' attitudes and assumptions about sexual relationships? Correlational and experimental confirmation. *Journal of Youth and Adolescence, 31*, 1–15.
- Ward, L. M., Hansbrough, E., & Walker, E. (2005). Contributions of music video exposure to Black adolescents' gender and sexual schemas. *Journal of Adolescent Research, 20*, 143–166.