



Reality television and the muscular male ideal[☆]



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ABSTRACT

Although researchers have examined the negative effects of viewing reality television (RTV) on women's body image, this research has not been extended to men. Exploring the extent to which RTV depicts men who embody the muscular ideal may enhance our understanding of the potential influence of this media genre. We explored the extent to which RTV depicted men who embodied the muscular ideal using a quantitative content analysis. Based on binomial tests, the primary male cast members of programs airing on networks popular among young adult men during the Fall 2009 broadcast season were more muscular, with lower levels of body fat, than average U.S. men. The chest-to-waist and shoulder-to-waist ratios of these cast members did not differ as a function of program type (i.e., reality drama, endurance, and romance). Young men who view RTV programs included in the present study would be exposed to an unrepresentative muscular ideal.

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Introduction

Both men and women experience body dissatisfaction (Gray & Ginsberg, 2007), with women endorsing higher levels of body dissatisfaction than men (e.g., Cash, Morrow, Hrabosky, & Perry, 2004). However, men and women differ in the type of body considered ideal. Whereas women generally strive to achieve the thin-ideal, men tend to prefer a body shape that is more muscular (Jacobi & Cash, 1994; Olivardia, Pope, Borowiecki, & Cohane, 2004; Pope, Phillips, & Olivardia, 2000). Presently, men most frequently endorse the mesomorphic body type (well-proportioned, average build, well-developed chest and arms, wide shoulders, narrow waist) as ideal (Labre, 2005; Mishkind, Rodin, Silberstein, & Striegel-Moore, 1986; Olivardia, 2007). In previous studies, most (90%) young adult men desired a more muscular build (Frederick et al., 2007; Jacobi & Cash, 1994), men were more satisfied with their bodies when their body shape closely matched the muscular ideal (Mishkind et al., 1986; Tantleff-Dunn & Thompson, 2000), and over one-third of young men frequently attempted to increase their muscle mass (McCaulay, Mintz, & Glenn, 1988). In fact, some men are willing to go to extreme lengths, even give-up five years of their lives in an effort to achieve the muscular ideal (Pope et al., 2000), and young

men may be particularly susceptible to body dissatisfaction (Peat, Peyerl, Ferraro, & Butler, 2011).

Potential Theoretical Models of Media Influence

Many theorists argue that societal factors exert a powerful influence on the development and maintenance of body dissatisfaction (Heinberg, 1996; Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). Sociocultural theorists view the mass media, as well as other sources of sociocultural pressure (e.g., familial influences), as powerful transmitters and reinforcers of sociocultural body ideals (Levine & Harrison, 2004; Tylka, 2011). Research on the etiology of men and women's body dissatisfaction revealed that media sources may have the potential to influence how men and women evaluate their bodies (e.g., Grabe, Ward, & Hyde, 2008; Tylka, 2011; Want, 2009). Sociocultural theorists emphasize that current societal standards for attractiveness inordinately stress the importance of muscularity and leanness for men (Gray & Ginsberg, 2007; Tylka, 2011). Additionally, these theorists assert that pressure to exemplify the muscular ideal portrayed in the media may influence some men to develop greater body dissatisfaction (Thompson et al., 1999). Men exposed to multiple genres of media that featured this muscular ideal, particularly those men who adopted societal ideals of attractiveness for themselves, experienced decreased muscle satisfaction, body dissatisfaction, and body esteem (Agliaia & Tantleff-Dunn, 2004; Barlett, Vowels, & Saucier, 2008; Hargreaves & Tiggemann, 2009; Hobza and Rochlen, 2009; Hobza, Walker, Yakushko, & Peugh, 2007; Mulgrew & Volcevski-Kostas, 2012). Gray and Ginsberg (2007) also contend that the media sends the false message that the ideal is attainable if one works hard and uses the proper techniques (e.g., dieting, supplements). As such, some men

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may internalize these standards (Tylka, 2011), even though these current societal standards are often out of reach for the average U.S. man (Thompson et al., 1999). Consequently, some men may falsely believe that the media-portrayed muscular ideal is realistic and easily achievable.

Cultivation theory may help explain the mechanism through which the media encourage muscularity concerns and behaviors among some U.S. men. Specifically, cultivation theorists posit that common conceptions of reality are cultivated by the overall pattern of television programming to which individuals are regularly exposed over time (Gerbner, 1969; Gerbner, Gross, Morgan, & Signorielli, 2002). In other words, they suggest that exposure to television subtly influences viewers' perceptions of reality. According to these theorists, individuals who spend more time watching television are more likely to perceive the "real world" in ways that reflect the common and recurrent messages of the television world (Gerbner & Gross, 1976).

Reality Television

One can use sociocultural and cultivation theories to speculate about the media's influence on men's body dissatisfaction. One specific media genre, reality television (RTV), may be particularly influential due to its purported portrayal of "real" people in "real-life" situations. Although RTV programming may be scripted and contrived in reality, some viewers consider these shows to reflect reality. Specifically, college students who more strongly endorsed the idea that RTV cast members were similar to people they know or meet, self-reported more enjoyment in RTV viewing and held beliefs that they learn valuable information from RTV (e.g., how people really are, how to deal with situations; Hall, 2009). In previous research, individuals who frequently viewed RTV featuring cosmetic surgery tended to see themselves as more knowledgeable about such procedures, endorsed beliefs that RTV programming is similar to cosmetic surgery in real life, reported interest in pursuing/held positive attitudes about cosmetic surgery, and endorsed symptoms of body dissatisfaction and disordered eating (Crockett, Pruzinsky, & Persing, 2007; Markey & Markey, 2010; Sperry, Thompson, Sarwer, & Cash, 2009). Similarly, experimentally exposing college students to a segment of RTV featuring cosmetic surgery increased the participants' interest in pursuing plastic surgery (Markey & Markey, 2010). In addition, women who internalized the thin-ideal also reported decreased self-esteem after viewing RTV (Mazzeo, Trace, Mitchell, & Gow, 2007). As such, viewing RTV may be a factor in body dissatisfaction and disordered eating behaviors among women (Mazzeo et al., 2007; Sperry et al., 2009).

If RTV largely portrays male cast members who embody the muscular ideal, this form of media may cultivate unrealistic beliefs of what the typical male body should look like. Content analyses to examine RTV and the types of male bodies portrayed are lacking; however, one may hypothesize that cultivation theory extends to body dissatisfaction and RTV in that heavy RTV viewers: (a) strongly believe that the bodies of men on television are typical of the average U.S. man and (b) that such a body type is easily attainable. If these hypotheses are correct, RTV may play a unique role in the development of body dissatisfaction among men.

It is possible that the same (over)portrayal of muscular male images found in other forms of media, television included (Gray & Ginsberg, 2007), extends to RTV. If RTV programming primarily features male cast members with the mesomorphic body type (implicitly suggesting that the mesomorphic body type is common and easily attainable for "real" men), body dissatisfaction researchers may be able to extend the criticism of the media with regard to the negative effect on men's body satisfaction to RTV. Although no research has tested these assertions, such speculations

are consistent with sociocultural and cultivation theories and existing research on RTV. In other words, sociocultural and cultivation theories, which have been used to understand the general effects of media content on body dissatisfaction, provide one way to understand how RTV could influence viewers' perceptions and behaviors (Mazzeo et al., 2007).

The Present Study

Before examining the effects of viewing RTV on young adult U.S. men, it would be helpful to understand the extent to which RTV features men embodying the muscular ideal. Therefore, to determine the extent to which various RTV programs featured muscular and lean men, we employed a quantitative content analysis to examine the contents, images of primary male cast members (PMCMs), of RTV appearing on channels frequently viewed by young adult men during a single broadcast season.

Based upon previous research documenting the media's portrayal of the muscular ideal (e.g., Labre, 2005), we expected to find a larger representation of the mesomorphic body type on RTV programming than is found among U.S. men on average (hypothesis 1). We also expected that the body types of PMCMs would differ as a function of focus of the RTV program (i.e., reality drama, endurance contest, or romance/dating). Specifically, by the nature of the programs, that endurance-based programs (where physical competitiveness is a key component) would depict more muscular men than RTV programs not involving physical competitiveness (i.e., reality dramas; hypothesis 2). In addition, physical appearance is valued in potential mates for both sexes (Buss, Shackelford, Kirkpatrick, & Larsen, 2001); therefore, we hypothesized that romance/dating programs would depict more muscular men than other types of RTV programs (e.g., reality dramas; hypothesis 3).

Method

Sample

Selection of reality television programming. Three types of RTV programming (i.e., reality dramas, endurance contests, and dating/romance; Kosovski, 2007) were examined in an effort to classify the male body types portrayed on RTV. We identified the most popular television channels (those with the highest percentage of viewership) among men ages 18–24 (a group that is heavily invested in achievement of the muscular ideal; e.g., Jacobi & Cash, 1994; McCaulay et al., 1988) using Nielsen Television Ratings (data from the 2007–2008 broadcast seasons). The top 15 channels popular among men ages 18–24 were initially identified by the researchers and included Adult Swim, ESPN, Comedy Central, Nick at Nite, TBS, FX, Discovery Channel, MTV, USA, TNT, Toon, Spike, History, VH1, and BET. Of these 15 channels, the following aired RTV programming and were therefore included in the present study: Discovery Channel, MTV, Spike, VH1, and BET. Because content analysis requires a pre-defined data set, we used an inclusion criteria that the program's first episode for the season aired during the Fall 2009 broadcast season (August–December 2009; Table 1). In other words, the programs eligible for inclusion were limited to those that premiered in a single defined broadcast season (on the aforementioned channels) in order to clearly identify what contents fell in the domain of the content analysis. To compare body types across different types of programming, we used Kosovski's (2007) definitions to identify programs that could be considered reality drama, endurance/contest, and dating/romance. Classification of selected programs into categories of reality drama, endurance/contest, and dating/romance was done with consensus.

Table 1
Reality television programming premiering in Fall 2009.

Channel	Reality television programs
Discovery	Dirty Jobs Ghost Lab Man vs. Wild
MTV	Jersey Shore Nitro Circus Real World/Road Rules Challenge: The Ruins Styl'd The City The Hills
Spike	The Ultimate Fighter: Heavyweights
VH1	Eddie Griffin: Going for Broke For the Love of Ray J 2 I Want to Work for Diddy 2 My Antonio Real Chance of Love: Back in the Saddle Sex Rehab with Dr. Drew The T.O. Show Tool Academy 2

Note. The reality television program, *Monica*, premiered on BET; however, there were no primary male cast members on the program. Therefore, the program *Monica* was not included in the content analysis.

We included in the analysis all shows that met these criteria and included PMCMs.

Identification of primary male cast members. After determining which RTV programs would be included in the present study (Table 1), the researchers recorded all episodes of each program using a Digital Video Recorder (DVR) and identified the PMCMs on each program. PMCMs were designated as those individuals (who self-identified as male) who appeared either at the start of the season as part of the cast and/or those individuals who were given substantial amounts of camera time (including participation in private interviews during the program). Those individuals initially designated as PMCMs were then cross-referenced with those individuals listed on the “Cast Bios” section of each RTV program website. A total of 85 PMCMs were identified through the aforementioned processes. These men had a mean age of 28.75 ($SD=6.35$) at the time the shows premiered. Of these men, information about ethnicity could not be found through web searches for 8 PMCMs (9.4%). Of the remaining PMCMs, 45 were Caucasian (52.9%), 17 were African American (20.0%), 11 were from a country outside the United States (12.9%), 1 was Hawaiian (1.2%), 1 was Hispanic American (1.2%), and 2 were biracial/multiracial (2.4%).

Obtaining images of primary male cast members. The data collection methods required the researchers to establish a set of criteria that each PMCM had to meet for inclusion in the present study. We used the following inclusion criteria in the *measurement* phase: measurements could only be taken when the cast members could be captured in an image where they were at no greater than a 45° angle with their arms hanging at less than 45° angles from their torso, following the methodology of Silverstein, Peterson, and Perdue (1986) and Petrie et al. (1996). To avoid measurement errors that may have occurred as a result of bulky clothing, images were only measured when the cast members were shirtless or in a tight-fitting, collarless t-shirt. Additionally, all measurements were completed as soon as possible after the PMCM's first appearance to avoid incidentally coding any changes in body shape that were a function of the type of program (e.g., gaining or losing weight). Fifteen of the PMCMs were not included in the *measurement* phase of the present study (resulting in an $N=70$) as they did not meet these inclusion criteria when using the best image we could capture from the show. For the *coding* phase, we included those PMCMs portrayed as shirtless or in a tight-fitting T-shirt (they did not have to adhere to the angle requirements previously outlined in the

measurement phase). Of the 85 PMCMs, 11 did not meet inclusion criteria when using the best available image of the PMCM, resulting in a sample of 74 for the coding phase.

Procedure

After recording each episode of the RTV programs included in the present study, the first author viewed each episode. She used a Digital Video Recorder to capture and burn to Digital Video Discs (DVDs), “clips” of each episode where a PMCM was portrayed shirtless or in a tight-fitting T-shirt. We used the Larcaman program, video editing software, to capture images of the male cast members to digital files. More specifically, the Larcaman program enabled us to preview the recorded clips from the DVD and then capture a single still image from the video frame displayed. After saving those images to digital files, we selected the best available picture for each cast member from the files and measured the PMCMs' shoulder-to-waist and chest-to-waist ratios using those images. The coders also used those images to complete the coding. This process helped ensure that the coding and measurement of the cast members were obtained from identical visual stimuli (rather than having coders watch segments, they coded still images).

Coding measures. Three independent coders used Labre's (2005) muscularity and body fat scales and the Bodybuilder Image Grid-Original (BIG-O; Hildebrandt, Langenbucher, & Schlundt, 2004) to code the images. Labre's muscularity scale includes pictures of men's torsos reflecting five categories: (1) not muscular, (2) somewhat muscular, (3) very muscular, (4) unnaturally muscular, and (5) can't tell. Labre's body fat scale includes pictures of men's torsos reflecting four categories: (1) low body fat, (2) medium body fat, (3) high body fat, or (4) can't tell – a category used for cases in which the coder could not determine a cast member's level of fat. Labre's scales were previously developed for use in a content analysis of men's fitness magazines (to code of images of men's bodies for muscularity and body fat).

The BIG-O is a grid comprised of 30 images, which had good reliability and convergent and discriminant validity when used to measure aspects of respondents' body image (Hildebrandt et al., 2004). The BIG-O is similar to figural drawing measures found in research on women's body image (Hildebrandt et al., 2004). As such, use of the BIG-O can help place the content analysis in the context of the body image dissatisfaction literature because it was developed for use among respondents rating their own desired and perceived body size. The BIG-O has two scales analogous to the measurement of longitude (6 body fat columns) and latitude (5 muscle mass rows). The top left figure represents the column with the least body fat and row with the least muscle mass. From left to right the figures increase in body fat, and from top to bottom the figures increase in muscle mass. The BIG-O does not provide a muscularity or body fat descriptor for each image. In other words, no set of images is designated as not muscular, somewhat muscular, very muscular, unnaturally muscular, low body fat, medium body fat, or high body fat. As such, we collectively determined which images presented on the BIG-O (based on rows for muscularity and columns for body fat) were most consistent with those levels of muscularity and body fat used in Labre's scales. It was ultimately determined that rows one and two of the BIG-O consisted of images that were not muscular; row three consisted of images that were somewhat muscular; row four consisted of images that were very muscular; and row five consisted of images that were unnaturally muscular. We further determined that columns one and two of the BIG-O consisted of images with low body fat; columns three and four consisted of images with medium body fat; and columns five and six consisted of images with high body fat.

Training coders and coding images. We had three individuals, blind to the study hypotheses (two females and one male; the

authors did not participate in this coding), act as coders. To establish adequate interrater reliability (a minimum reliability estimate of .90 was used during training), we provided training to the three coders before initiating the actual coding of data (i.e., the images for the 74 PMCMs) for the present study. During the training session, the first author explained Labre's muscularity and body fat scales and the images included in the BIG-O. She also provided instructions for coding images on the coding sheets. Subsequent to the introduction of the measurement instruments and coding sheets, the first author and the three coders coded an image (of a supporting male cast member from a RTV program who did not meet criteria for inclusion in the study because he was not a PMCM) together using Labre's muscularity and body fat scales and the BIG-O. Working independently, the three coders then coded ten additional images of supporting male cast members from RTV programming. Upon completion of the initial coding of training images, data from the coding sheets were entered into SPSS Statistical Package 18.0. A reliability estimate (using the macro provided by Hayes and Krippendorff, 2007) for Labre's muscularity/body fat scales and the BIG-O (combined) was obtained using Krippendorff's alpha. The initial alpha value obtained was .84, which did not satisfy the minimum interrater reliability estimate we established. Therefore, the first author and three coders coded an additional image together and discussed their designations as a group. After coding this additional image, the coders re-coded the ten training images of supporting male cast members. Training data from the second round of coding yielded a Krippendorff alpha value of .94. After we obtained a reliability value greater than .90 for the coding of the training images, the coders worked independently (on their own computers) to code the images of the PMCMs.

Measurement of primary male cast members. We obtained body measurements of the 70 PMCMs whose images met inclusion criteria for the measurement phase. Only images in which two coders (during the coding phase) agreed that the image met all inclusion criteria were included in the measurement phase. The first author assessed shoulder-to-waist and chest-to-waist ratios of the 70 PMCMs (who met inclusion criteria) using a millimeter ruler. These ratios were selected because the ideal male body has been described as V-shaped (with broad shoulders tapering to the waist) and because this approach is consistent with the bust-to-waist and hip-to-waist ratios used in studies on female sociocultural ideals of attractiveness (e.g., Silverstein et al., 1986) and past research on men's attractiveness (e.g., Weeden & Sabini, 2007). In addition, ratios solve the problem of images being different sizes that result from variations in the distance of the cast members from the camera (i.e., closer images will have larger measurements even if measuring the same cast member).

Results

Content Analysis of Reality Television Programming

A total of 74 images of PMCMs were analyzed in the present study; 31 (41.9%) were from RTV programs that premiered on MTV, 24 (32.4%) from VH1, 15 (20.3%) from Spike TV, and 4 (5.4%) from the Discovery Channel. The intra-class correlations (computed using guidelines and syntax from Hallgren, 2012) for the 74 images on the Labre (r single measures = .63, r average measures = .83) and BIG-O (r single measures = .64, r average measures = .84) scales fell in the good to excellent range for reliability among the three coders.

Muscularity of Primary Male Cast Members

To summarize the ratings of the three separate ratings from the independent coders, we used the modal rating for each rating made

per cast member. For example, if coders one and two rated an image as somewhat muscular and coder three rated the image as very muscular, the designation of somewhat muscular was used during data analysis. Using this procedure to summarize the ratings for analyses, we categorized 9 out of 74 (12.2%) PMCMs as not muscular, 55 (74.3%) as somewhat muscular, and 10 (13.5%) as very muscular on Labre's muscularity scale. We used the same procedure with the BIG-O and found that the ratings together resulted in categorizing 21 out of 74 (28.4%) PMCMs as not muscular, 50 (67.6%) as somewhat muscular, and 3 (4.1%) as very muscular. To evaluate the extent to which the ratings with the two separate scales corresponded, we correlated the modal ratings for muscularity on the Labre and BIG-O scales. We obtained a moderate relationship in which increased muscularity ratings using the Labre scale corresponded to ratings of greater muscularity using the BIG-O scale ($r = .41, p < .001$). An examination of the descriptive statistics from Labre's muscularity scale and the BIG-O reveals that the majority of PMCMs included in the analysis were somewhat muscular regardless of the scale used. Because the modal ratings for the two scales differed, we retained ratings for both scales in subsequent analyses.

Body Fat of Primary Male Cast Members

As previously described, the modal rating was computed for each PMCM (from the three independent coders) for ratings of body fat on the Labre and BIG-O scales. Using this procedure to summarize the coders' ratings, we categorized 24 out of 74 (32.4%) PMCMs as having low body fat, 43 (58.1%) as having medium body fat, and 7 (9.5%) as having high body fat on Labre's body fat scale. We categorized 35 out of 74 (47.3%) PMCMs as having low body fat, 35 (47.3%) as having medium body fat, and 4 (5.4%) as having high body fat on the BIG-O. The modal ratings across the two body fat scales were moderately to strongly correlated, $r = .70, p < .001$, such that as body fat ratings for images made with Labre's scale increased in size, so did the ratings for body fat made with the BIG-O. An examination of the descriptive statistics from Labre's body fat scale and the BIG-O revealed that the majority of PMCMs included in the analysis exhibited low to medium levels of body fat.

Muscularity and Body Fat as a Reflection of Average U.S. Men

Using binomial tests on the coded images, we evaluated whether or not the level of muscularity of PMCMs accurately reflected average U.S. men. Because the correlation of the modal ratings between the two scales was only moderate in size, we conducted the tests on the images coded using both the Labre and BIG-O muscularity scales. PMCMs originally designated as somewhat muscular or very muscular comprised the "overall muscular" group, and those PMCMs designated as not muscular retained their overall designation of "not muscular" (because available data for U.S. men is only sufficiently specific to determine how many men exercise sufficiently to be muscular). Only 35.6% of U.S. men ages 18–44 met the recommended guidelines (muscle strength training at least twice per week) for muscle strengthening in 2009 (National Center for Health Statistics, 2011); therefore, we used a test proportion of .36 in binomial tests for muscularity. The binomial tests on the Labre muscularity scale ratings revealed that the proportion of muscular cast members included in the analysis (the obtained proportion) [.88, $p < .001$] significantly differed from the proportion of muscular U.S. men (the test proportion). More specifically, 65 out of 74 PMCMs were "somewhat muscular" or "very muscular." Although 64% of U.S. men do not engage in rigorous exercise needed to build muscle, only 9 (12%) PMCMs were "not muscular." The binomial test with the BIG-O ratings revealed that the proportion of muscular PMCMs included in the analysis (the obtained proportion) [.72, $p < .001$] also significantly differed from the proportion

Table 2
Mean (and standard deviation) shoulder-to-waist and chest-to-waist ratios as a function of the type of reality television program.

Measurement	Drama	Endurance	Romance	F
Shoulder-to-waist ratio	1.428 (0.167)	1.561 (0.363)	1.534 (0.100)	1.232
Chest-to-waist ratio	1.084 (0.078)	1.117 (0.110)	1.172 (0.081)	1.721

Note. There are no significant differences within or between types of reality television programs.

of muscular U.S. men (the test proportion). More specifically, 53 out of 74 PMCMs were “somewhat” or “very muscular” and 21 of PMCMs were “not muscular.” The descriptive statistics from Labre’s muscularity scale and the BIG-O reflect that the majority of PMCMs included in the analysis were unrepresentatively muscular compared to the expected proportion based on the general U.S. population of men, of whom only 36% are sufficiently exercising to be muscular.

We used binomial tests on the images coded using the Labre and BIG-O body fat scales to determine how well the level of body fat exhibited by PMCMs accurately reflected level of body fat for average U.S. men. Those PMCMs originally designated as exhibiting low or medium levels of body fat comprised the “not overweight” group and those PMCMs designated as exhibiting high levels of body fat comprised the “overweight” group. Approximately 61% of the U.S. adult male population between the ages of 20 and 34 are overweight (National Center for Health Statistics, 2011); therefore, we used a test proportion of .61 in the binomial test. The proportion of overweight cast members included in the analysis (the obtained proportion) with the Labre body fat ratings [.1, $p < .001$] and the BIG-O ratings [.05, $p < .001$] significantly differed from the proportion of overweight U.S. men (the test proportion). Only 7 (10%) and 4 (5.4%) of the PMCMs were in the “high body fat” group with the Labre and BIG-O ratings, respectively. In other words, although the majority of men in the U.S. population are overweight, the majority of PMCMs included in the analysis were not.

Muscularity and Body Fat as a Function of the Type of Reality Television Program

To determine whether the level of muscularity and/or body fat in PMCMs differed as a function of the type of RTV program (as defined by Kosovski, 2007), we initially planned on performing a set of chi-square analyses for the data collected during the coding portion of the study. Because the cell size assumptions for chi-square were violated when looking at number of observations possible, the chi-square analysis could not be performed to test this hypothesis. As an alternative way to address the question of whether or not muscularity and/or body fat of PMCMs differed as a function of program type, we conducted two one-way analyses of variance on the data collected during the measurement phase of the study. Specifically, we compared the shoulder-to-waist (SWR) and chest-to-waist (CWR) ratios for male cast members across the different program types. Table 2 contains the mean CWR and SWR by type of program. The SWR [$F(2, 65) = 1.232, p = .298, ns$] and CWR [$F(2, 67) = 1.721, p = .187, ns$] of the PMCMs included in the analysis did not differ as a function of the type of RTV program.

Discussion

We sought to explore the extent to which RTV programming popular among young adult U.S. men depicted PMCMs who embody the muscular ideal. Using a quantitative content analysis, we examined the contents (images of PMCMs) of these RTV programs that premiered during the Fall 2009 broadcast season. Coders classified most of the PMCMs as either somewhat or very muscular (approximately 70–88%) and as exhibiting low or medium levels of body fat (approximately 91–95%). Therefore, viewers of the RTV programs

analyzed in the present study were overwhelmingly exposed to levels of muscularity and body fat that differ from average U.S. men. As previously noted, the exercise habits of average U.S. men are extremely unlikely to produce the chiseled abs, rock-hard pectorals, and muscular arms characteristic of the muscular ideal. As such, most U.S. men would not be expected to have the well-defined muscles that research has shown to be the muscular ideal (Thompson & Cafri, 2007).

At the societal level, RTV programming popular among young adult U.S. men may contribute to the perception that there is only one healthy and attractive male body type – the mesomorphic type. The finding that the majority of PMCMs were somewhat muscular with low to medium levels of body fat supported our hypothesis that the proportion of men with this body type would not match the general U.S. population. These results are consistent with several content analyses focused on muscular male images included in print media (e.g., Kolbe & Albanese, 1996; Labre, 2005), television (e.g., Lin, 1998), and motion pictures (e.g., Morrison & Halton, 2009). Because similar results have been obtained across various media genres, it is likely that men are saturated with muscular male images on a daily basis (e.g., while reading magazines and viewing television). With RTV purporting to cast “real” people in “real-life” situations, such programming may help contribute to the perception among male viewers that the muscular ideal is what men should look like.

Although the majority of PMCMs included in the present study embodied the muscular ideal, we failed to support our hypotheses that the extent to which PMCMs embody the mesomorphic body type would vary as a function of the type of RTV program. We thought it reasonable to expect that romance and/or endurance programs would portray more PMCMs who embodied the muscular ideal because of the importance placed on physical appearance in mate selection, as well as the importance of physical strength and endurance (e.g., muscularity and low body fat levels) in a large number of the endurance RTV challenges (e.g., such as those required on *Real World/Road Rules Challenge: The Ruins* and *The Ultimate Fighter: Heavyweights*). We particularly expected that endurance programs would include more muscular male cast members because one such program, *The Ultimate Fighter: Heavyweights*, featured men pursuing careers as professional mixed martial arts fighters (i.e., professional athletes). Although not interpretable, if the null findings do reflect a true lack of difference in body types portrayed across types of RTV shows (i.e., dating/romance programs, endurance, and reality dramas), young adult male viewers may have limited opportunities to view RTV PMCMs whose body types are consistent with that of average U.S. men.

One potential reason for the null findings for differences in SWRs and CWRs across program types is that networks intentionally cast men who have a similar body type, the V-shape, across programs. Networks may intentionally disproportionately cast men of the mesomorphic body type for RTV because they may expect that viewers will find the programming more appealing. Although this may in fact reflect the intentions of some networks, one study on advertisement effectiveness revealed that the use of normal-sized male models did not reduce perceived effectiveness of the advertisement (Diedrichs & Lee, 2010). It may be that RTV producers for programs popular among young adult men could increase their

use of male cast members with body shapes more typical of the average U.S. man without negatively affecting the programming. It is also possible, and expected, that programs on the networks most watched by young adult men are not representative of all RTV programming. Examining male cast members' body types on RTV programs that appeal to other audiences might reveal differences in body types for cast members as a function of the target audience.

Limitations

Several limitations to the present study warrant acknowledgment. First, despite procedures designed to increase its rigor, content analysis is a fairly subjective research method. One or more individuals operating within the same sociocultural context may view certain images as disseminating positive messages about muscularity while others may perceive the same material very differently.

Although we attempted to collect data regarding the PMCMs' age, ethnicity, and sexual orientation, information available on the web was not comprehensive. Therefore, an additional limitation of the present study is its limited ability to generalize across ethnicity and/or sexual orientation. The use of self-reported exercise behaviors as a comparison for evaluating the extent to which cast members differed from U.S. men also represents a limitation. The relationship between self-reported exercise and muscle build is unknown and we cannot determine how self-reported exercise would relate to the images used to code the PMCMs. Additionally, the present study was exploratory in nature. The purpose was to examine the extent RTV featured men who embodied the muscular ideal. The study did not address the question of how viewing RTV affects body image among men or vice versa. Other methods, such as experimental designs, would be more appropriate in this regard.

Finally, as described in the methods section, we used the Larcaman video editing software to capture still images from the recorded RTV content. The use of still images, although consistent with procedures utilized in previous content analyses, could be viewed as an additional limitation. It is possible that the images did not provide the clearest picture of each PMCM. Additionally, the effect of viewing images that are in motion may differ from the effect of viewing a single still image. Researchers using content analysis to examine television content should therefore consider using video clips of each cast member for coding data. This would allow the coders a clearer, more accurate representation of the cast member and more closely approximates the actual viewership experience.

Areas for Future Research

The present study used a quantitative content analysis to explore the extent to which RTV depicted men who embodied the muscular ideal. We did not examine viewers' perspectives of the RTV content; therefore, future research could explore viewers' perspectives regarding RTV programming and its contents. Use of a triangulation of research methods (i.e., the combination of a quantitative content analysis with qualitative in-depth interviews of young adult men) would allow researchers to explore the contents of these programs, as well as their relationship with young adult men's muscularity and body fat concerns. This approach would allow researchers to explore two interrelated aspects regarding RTV—content and audience—contributing to a fuller understanding of RTV and men's body image.

Because RTV relies on advertising dollars, future content analyses might focus on products advertised during RTV commercial breaks. This would allow researchers to determine if such advertisements emphasize products designed to help men attain

muscular ideal (e.g., exercise equipment, dietary regimens, nutrition supplements). Additionally, researchers could compare how the advertisements depicted during RTV are similar to/different from the advertisements portrayed during other television programming popular among U.S. men. Similarly, to determine which RTV programs may encourage men to engage in health-related (rather than appearance-related) behaviors, researchers may also examine whether or not exposure to RTV programming such as *The Biggest Loser* relate to positive changes in health behaviors among its viewers, given that some level of dissatisfaction could be related to an increase in health-related behaviors. Finally, research comparing the effects of viewing RTV to other types of television programming on body dissatisfaction would inform our understanding of whether the influence of RTV is less than, equal to, or more than that of other television programming. Specifically, it would be helpful to understand if men place more pressure on themselves to approximate RTV cast members than models and/or actors (or experience increased body dissatisfaction when they do not) since those cast members are supposed to be like the viewers themselves.

Conclusions

RTV programming included in the present study predominantly portrayed PMCMs who embodied the muscular ideal. Although promotion of the muscular ideal may encourage male viewers to adopt more health-related behaviors (e.g., exercise, healthy eating habits), the ideal may also contribute to body dissatisfaction and engagement in a number of unhealthy body investment strategies among some men (Thompson et al., 1999). Although RTV purports to cast "real" people in "real-life" situations, few "real" U.S. men can achieve the muscular ideal on RTV programming popular among young adult male viewers without use of unhealthy strategies, and most U.S. men do not look like the PMCMs in these RTV programs. Young adult men who restrict their RTV viewership to channels popular among their gender and age group are unlikely to view a representative range of body types. Those viewers who believe RTV reflects reality may be at particular risk for decreased body satisfaction.

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