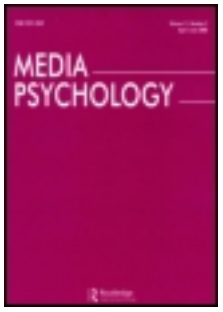

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Veronica Hefner[a], Kelly Woodward[a], Laura Figge[a], Jennifer L. Bevan[a], Nicole Santora[a] & Sabeen Baloch[a]
[a] Department of Communication Studies, Chapman University, Orange, California, USA
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The Influence of Television and Film Viewing on Midlife Women's Body Image, Disordered Eating, and Food Choice

VERONICA HEFNER, KELLY WOODWARD, LAURA FIGGE, JENNIFER L. BEVAN, NICOLE SANTORA, and SABEEN BALOCH
Department of Communication Studies, Chapman University, Orange, California, USA

A recent trend in screen media is the casting of older women who have bodies that are the shapes and sizes of younger women. These aging beauties can be found in shows such as Cougar Town *and* Desperate Housewives. *It was predicted that heavy viewers of these media would report stronger eating disorder symptomatology, greater body ideal discrepancies, and stricter food choices than light viewers. Participants were 166 midlife women (*M*: 44.57 years) who completed an online questionnaire that asked about body ideals, disordered eating, food choices, and exposure to aging beauty programming. Results demonstrate that media exposure was associated with stronger reports of disordered eating, greater discrepancies between actual body size and both women's ideal body size as well as perceptions of how others wanted them to look, and stricter food choices when around other people. Ideal self-discrepancies mediate the association between aging beauty media and disordered eating symptomatology. Our study builds on extant work related to media consumption, body concerns, and eating behaviors among a non–college-aged sample.*

In recent years, more and more midlife women on television and in films have been portrayed with bodies that are the shapes and sizes of much younger women (McHugh, 2006; Pannasch, 2008). For example, the television shows *Cougar Town* and *Desperate Housewives* both feature women in their 40s whose bodies are more representative of women in their 20s in terms of fitness and thinness. Reality television programs, such as *The Cougar*

Address correspondence to Veronica Hefner, Department of Communication Studies, Chapman University, 204 Doti Hall, One University Drive, Orange, CA 92866, USA. E-mail: vhefner@gmail.com

and *Real Housewives of Orange County*, also include women in their 40s and 50s who are thin and youthful looking. In films, midlife actresses are currently very popular. For example, 47-year-old Sandra Bullock, who is thin and fit, had two of the most successful movies in 2009, one of which earned her an Oscar (i.e., *The Blind Side*). Similarly, Jennifer Aniston, who is said to look younger than her 43 years, enjoyed success with recent films *Just Go With It* (2011) and *Horrible Bosses* (2011). Currently, older female actresses are as popular as they are slender and young looking in traditional screen media portrayals (Boston Women's Health Book Collective & Norsigian, 2011). For this study, we refer to these actresses as *aging beauties* and the programs and movies they populate as *aging media*.

The purpose of this study is to examine how midlife women may be affected by television and films that portray female actresses who appear like women much younger than them. These actresses and the content they help produce could be linked with body image concerns, eating disorder symptomatology, and food choices among midlife female viewers. We conducted a survey of midlife women to extend previous work in media and these body-related issues. Using the lens of self-discrepancy theory, we expected viewers of aging beauty media to report greater discrepancies between their actual body and both their ideal and ought body sizes. We also expected that those viewers would report engaging in behaviors (e.g., eating disorder symptomatology or stricter food choices) to achieve the portrayed standard of beauty, presumably in part to decrease the divergence between how they look and how they want to or feel they should look.

As the first study to investigate the association between viewing content featuring these older-but-younger-looking actresses and associated midlife women's body-related issues, this project is a necessary addition to the canon of gender, health, and media research. Furthermore, this line of research is important to readers from all countries because of the wide-reaching popularity of American television and films in other continents (Arango, 2008), and because body image concerns among midlife women are not unique to residents in the United States (Deeks & McCabe, 2001; Slevec & Tiggemann, 2010). All of the studies cited in this article employ samples from the United States, unless otherwise noted.

THE *DESPERATE HOUSEWIVES* EFFECT AND MIDLIFE WOMEN

One reason to pay attention to midlife women and their body-related concerns is because of the *Desperate Housewives* Effect, or the notion that women in their 30s, 40s, and 50s are feeling the pressure to look younger and thinner than what may be healthy for their age demographic because of television programs like *Desperate Housewives* (McHugh, 2006; Pannasch,

2008). These programs feature actresses who appear much younger than what might be considered normal by cultural standards. Kyra Sedgwick from the television program *The Closer* is a good example. Her cop character is feminine and sexy, as Sedgwick routinely wears skirts, fusses about her makeup, and looks much younger than her 46 years (Deggans, 2011). The popularity of thin, youthful, sexy midlife actresses on both television and in films is a phenomenon that may be unique to the female gender, both in terms of portrayals and the subsequent potential impact of these images on midlife female viewers. Although some researchers and authors have pointed to this *Desperate Housewives* Effect as the explanatory mechanism behind the growing trend of eating-related and body image concerns among midlife women (i.e., McHugh, 2006; Pannasch, 2008; Pryor, Gianini, & Shott, 2009), no published research has formally tested the hypothesis that these issues may be media related.

One way that these images might influence midlife women could involve the impact on their body image perceptions and eating disorder symptomatology. Although vast research has focused on eating disorders and body image concerns among younger and adolescent women (e.g., Kichler & Crowther, 2009; Seal, Bradford, & Meston, 2009), there is evidence that these body concerns are issues for older women, as well. For example, Lewis and Cachelin (2001) documented that midlife women, when compared to elderly women, exhibit more drive for thinness and issues with eating. More recently, McLean, Paxton, and Wertheim (2010) identified body mass index (BMI) as a significant predictor for disordered eating and body dissatisfaction among midlife women in Australia. Neither of these studies assessed the impact of media, which could be related to these body-related concerns. However, Slevec and Tiggemann (2011a) found that television exposure was positively correlated with disordered eating and body dissatisfaction among Australian women aged 35–55. Our study extends this research by looking specifically at the impact of television and films that feature midlife actresses that appear as younger, thinner, and sexier than what may be considered normal for this age group. Whereas some research has demonstrated no age differences for body satisfaction among women aged 18–65 (Frederick, Peplau, & Lever, 2006), no previous work has factored in the influence of media featuring these aging beauties, which could uncover meaningful effects.

Previous work associated with midlife women and body-related concerns generally defines this group as women aged 30–35 on the low end and 50–65 on the older end of the samples (Forman & Davis, 2005; Pryor et al., 2009; Rackley, Warren, & Bird, 1988; Slevec & Tiggemann, 2010, Australian sample[1]). For this study, we define midlife women as aged 30–65. We also tested for differences between older and younger midlife women to determine if these groups differed on any of the reports.

Our study also extends previous work by looking at how screen media depictions of aging beauties might influence midlife women's food choices.

Whereas previous work has demonstrated that television advertisements influence food choices and eating behaviors among children in England (Halford et al., 2004) and Australia (Ip, Mehta, & Coveney, 2007), little research has documented the association between television content and food choices among older women in the United States. For female undergraduates, past work indicates that dieters who view idealized body images demonstrate an inhibited food intake immediately following media exposure (Mills, Polivy, Herman, & Tiggemann, 2002, Canadian sample). Three reasons suggest the need for our project: (1) the argument that aging beauties are common in popular television and films (McHugh, 2006; Pannasch, 2008; Pryor et al., 2009); (2) the evidence that media can be linked to female's food choices, body image, and eating disorders (Kichler & Crowther, 2009; Seal et al., 2009); and (3) the lack of previous work that has investigated how media may impact midlife women. With the prevalence of these onscreen images seemingly becoming more frequent in movies and television, it is important to understand the relationship between these media and both body image and disordered eating. By investigating these relationships, our work may help bridge the gap in literature as well as educate researchers, practitioners, families, and entertainment producers about the potential harmful (or positive) links between these media images and body-related variables.

THEORETICAL FRAMEWORK: SELF-DISCREPANCY THEORY

Self-discrepancy theory (SDT) posits that people hold differing perceptions of self, and face cognitive dissonance and emotional turbulence when discrepancies between those perceptions arise (Higgins, 1987). In particular, individuals have perceptions of their ideal self, their ought self, and their actual self (Higgins, Roney, Crowe, & Hymes, 1994). Ideal self refers to the image of self that individuals want to have or aspire to be, including hopes and wishes; whereas the ought self refers to the image of self that they believe they should be, representing a sense of obligation (Higgins, Bond, Klein, & Strauman, 1986). Actual self is the perception of self that represents how an individual sees his or her current self. When discrepancies arise between these different perceptions, a self-discrepancy is said to have occurred. These discrepancies can lead to negative emotion and cognitive disturbance (Higgins, 1989). The theory also distinguishes between two standpoints of self: own and other (Higgins, 1987). Own refers to how a person perceives his or her self to be, whereas other is how the individual perceives others to believe his or her self to be (Higgins, 1987). Several dimensions of discrepancies can be measured and explored (e.g., actual or own versus ideal or other; actual or own versus ought or own, etc.). For our purposes, we defined an ideal discrepancy as the discrepancy between an individual's own perception of

self and her own ideal perception of self (i.e., actual or own versus ideal or own). We defined an ought discrepancy as the discrepancy between an individual's own perception of self and her other ought perception of self (i.e., actual or own versus ought or other). Our intention was to explore midlife women's own body ideals for self as well as what body types they perceived others near to them thought they should have.

When a person is consistently reminded of the discrepancy, they may engage in particular behaviors to try to overcome the discrepancy and relieve the emotional distress, such as develop eating disorders like anorexia and bulimia (Bessenoff, 2006; Strauman et al., 1991). In media today, there exist images of the thin female body that serve to create a cultural standard for what is ideal (Silverstein, Perdue, Peterson, & Kelly, 1986). For example, Harrison (2001) demonstrated that exposure to these ideal body media images can activate an ideal discrepancy among young people. Another study demonstrated that exposure to media images can lead to appearance-related self-discrepancies among young British men and women (Halliwell & Dittmar, 2006). The problem with developing these body ideals is that most of the research points to many problematic behavioral outcomes of holding a self-discrepancy about one's body. For example, at least one study demonstrates a positive correlation between self-discrepancies and symptoms of disordered eating, such as bulimia and anorexia (Strauman et al., 1991). Given this negative effect, it is important to extend previous work and test this association within a media context among a sample of midlife women.

MIDLIFE WOMEN AND BODY-RELATED CONCERNS: DISORDERED EATING AND SELF-DISCREPANCIES

Roughly 10 million women in the United States suffer from eating disorders (National Eating Disorders Association, 2011). Although there is no official statistical breakdown of that number by age group, experts who direct eating disorder treatment facilities across the United States estimate that the rapid increase in the number of midlife patients over the past 10 years could be as high as 500% (DeCarlo, 2005; Epstein, 2009). In addition, despite the fact that little research has looked at the relationships between media messages and midlife women's body-related concerns, there is plenty of evidence that midlife women do deal with body dissatisfaction and disordered eating (Midlarsky & Nitzburg, 2008; Slevec & Tiggemann, 2011b). For example, Slevec and Tiggemann (2011b) demonstrated that the factors that lead to body dissatisfaction and disordered eating among younger Australian women (i.e., BMI, sociocultural influences, internalization of the thin ideal) also are significant predictors of the same body issues among midlife women. Furthermore, the normal process of aging can make midlife women feel fat

and less attractive because they do not conform to the culturally-relevant body ideal (Paxton & Phythian, 1999, Australian sample). Our study extends this by investigating what role media exposure may play in association with these body-related concerns.

The factors that lead midlife women to engage in disordered eating or to report negative body images are similar to the factors of other groups. For example, Haines and Neumark-Sztainer (2006) reported that factors such as media use and body image dissatisfaction are shared by both obesity and anorexia as potential activators, depending on the individual. These body-related concerns are not two ends of the spectrum, but rather two sides of the same coin. Another group that shares the same predictors is younger females. Indeed, past research among younger women has demonstrated that media exposure can influence women to report body dissatisfaction and disordered eating (Lopez-Guimera, Levine, Sanchez-Carracedo, & Fauquet, 2010). We expect a similar relationship to exist for older women; that is, with increased exposure to images that praise the youthful standard of appearance, which could exacerbate these predictors, midlife women may experience an increased susceptibility to these concerns.

The purpose of this study is to test these potential associations. Therefore, we proposed the following hypotheses:

H1: Midlife women who frequently view aging beauty media report greater eating disorder symptomatology than do those who view less frequently.
H2: Midlife women who frequently view aging beauty media report greater self-discrepancies than do those who view less frequently.

FOOD CHOICE

Aside from eating disorders and negative body image, another way that exposure to idealized images might influence viewers concerns restricted eating, or food choices. These concepts are often interrelated (Harrison, 2001), but can sometimes operate as different processes (Krahe & Krause, 2010, German sample). Regardless, the general finding in the literature is that concern about appearance—often activated by media exposure (Mills et al., 2002)—is typically associated with a woman's decision about what foods to eat (Steptoe, Pollard, & Wardle, 1995, British sample). Stricter food choices refer to decisions individuals make to eat foods that are healthier, natural, low in fat and calories, and can help control weight (Steptoe et al., 1995). When compared to eating disorder and body image effects, there is not much existing work that has firmly demonstrated the link between media exposure and food choices. In addition, we are aware of no research that has looked at the media influence on midlife women's food choices. However, given that previous work demonstrates that media exposure can

activate appearance-related cognitions and affect women's eating decisions, we have proposed the following:

H3: Midlife women who frequently view aging beauty media report stricter food choices than do those who view less frequently.

THE CURRENT STUDY

We tested these hypotheses by surveying midlife women about their eating disorder symptomatology, self-discrepancies (actual-ideal and actual-ought), food choices (both in private and around others), and exposure to media featuring these aging beauties, or female actresses who appear younger than their actual ages. We expected that viewing this content would be associated with stronger eating disorder symptomatology, greater discrepancies between actual and ideal or ought body shapes and sizes, and stricter food choices.

We also predicted that the discrepancies would mediate the relationship between viewing aging media and these eating-related variables. We based these expectations on previous research that demonstrated a similar relationship between media exposure and eating-related variables; that is, Harrison (2001) found that these discrepancies mediate the association between exposure to thin-ideal media and eating disorder symptomatology among college women.

H4: Ideal and ought discrepancies mediate the relationship between exposure to aging media and reports of stronger eating disorder symptomatology and stricter food choices among midlife women.

We also included the reports of additional measures to statistically control for the possibility of other variables predicting the outcome variables. Specifically, we included each participant's height and actual body size because research in this field consistently includes height and weight as control variables (e.g., Eisenberg, Berge, Fulkerson, & Neumark-Sztainer, 2011; Harrison, 2001). It stands to reason that current body size will be associated with body-related questions. We also expected that age might make a difference, as younger women may identify more with the models seen on television but older women may report more body image disturbance by seeing those images. We included overall television viewing to ensure that any main effects we uncovered were the result of viewing aging beauty content and not indicative of a general tendency to consume large amounts of screen media. We also included perceived reality of television in order to control for the impact of believing that television represents an accurate depiction of reality. In order to test for the link between body issues and

viewing aging media, independent of the influence of current body size, height, age, overall television viewing, and perceived reality of television, we included those measures as control variables.

METHOD

Participants

A total of 189 women from the southwestern United States participated in our study. Of these, 23 did not report any demographic information and were subsequently dropped from further analyses. Of the remaining 166, the mean age was 44.57 years (range: 30–66, $SD = 10.06$). The majority of participants were Caucasian (82%). The rest were Latino (6%), Asian (5%), African American (1%), or other (6%). Participants' average height was 5 feet 5 inches ($SD = 3.46$ inches), and average reported weight was 154.54 ($SD = 35.44$) pounds. We calculated the body mass index (BMI) of each participant, and the scores ranged from 18.32 to 49.80 ($M = 25.73$, $SD = 5.74$).

Procedure

Roughly 20% of the participants were recruited in spring 2011 via flyers, which were posted in community centers, local gyms, hospitals, and coffee shops. About 50% of the sample was recruited via electronic flyers that were posted on the researchers' Facebook accounts. The flyers explained the nature of the study as follows: "You are being invited to participate in a research project entitled: 'Women's Beliefs About Their Bodies, Eating, Aging, and Leisure Activities.' You will be asked about the way you feel about your body. This questionnaire will also ask you about your beliefs and opinions about the aging process and the things you eat, as well as questions about what you do with your leisure time." The flyer indicated that only women aged 30–60 were eligible to participate. Interested participants were directed to the online survey link hosted by SurveyMonkey, and were entered into a drawing to receive a $20 Target gift card upon completion of the questionnaire. A final set of participants (30%) were recruited in spring 2013 via identical methods, except that this subsample received no incentive for participation. In addition to completing the same questionnaire, this subsample also answered a series of stimuli perception questions. The survey took roughly 25 minutes to complete. In order of appearance in the questionnaire, the included measures were: The Eating Attitude Test, Stunkard Figure Rating Scales (SFRS; Stunkard, Sorensen, & Schulsinger, 1983), relationship satisfaction, aging anxiety scale, food choice questionnaire, food choice around others questionnaire, satisfaction with life scale, television exposure, aging beauty television exposure, aging beauty movie exposure, stimuli

perception data, perceived television reality scale, depression scale, and demographics. Only the measures used for this particular study are fully explained in the following section.

Main Variables

Disordered eating. The Eating Attitude Test, developed in Canada, is used to measure symptoms, concerns, and characteristics of the eating disorder anorexia nervosa (Garner & Garfinkel, 1979). The 26-item scale asks participants to indicate how much each statement applies to them. Examples include: "am preoccupied with a desire to be thinner" and "am terrified about being overweight." For each item, participants chose between six options: 1 (*never*), 2 (*rarely*), 3 (*sometimes*), 4 (*often*), 5 (*usually*), and 6 (*always*). Mean scores ranged from 1.42 to 4.42 ($M = 2.51$, $SD = 0.49$). The scale showed good reliability for this sample: $\alpha = .85$.

Self-discrepancies. To measure participants' perceptions of their body shapes and sizes, as well as assess how they wished they looked (ideal) and how they perceived others desired them to appear (ought), we included three versions of the SFRS. We asked the participants to look at the nine body figures three times. After each display of the SFRS, we asked them to select the one that most closely resembled how they looked now (actual), how they wished to look (ideal), and how they perceived others thought they should look (ought). The means for each of these items were: actual ($M = 4.81$, $SD = 1.50$), ideal ($M = 3.30$, $SD = 0.83$), and ought ($M = 3.64$, $SD = 0.89$), with lower scores reflecting a thinner body type. Scores ranged from 2.00 to 9.00 for actual, 2.00 to 6.00 for ideal, and 2.00 to 8.00 for ought.

In order to determine body image dissatisfaction, we created discrepancy scores by subtracting participants' scores of ideal and ought from their scores of actual. The resulting scores represented the ideal and ought discrepancies for participants' self-perceptions of body image, with higher scores indicating a greater ideal discrepancy. Scores for ideal discrepancy ranged from .00 to 5.00 ($M = 1.49$, $SD = 1.10$), and scores for ought discrepancy ranged from −1.00 to 5.00 ($M = 1.06$, $SD = 1.16$). We recoded the negative discrepancy scores ($n = 4$) to reflect absolute numbers, so that higher discrepancy scores represented greater body dissatisfaction. These discrepancies served as measures for participants' body ideals.

Food choices. The food choice questionnaire was designed by Steptoe et al. (1995) to assess what considerations individuals take into account when selecting food items. For our study, we asked respondents about their general food choices and their food choice behaviors when around others. Participants were asked to indicate their level of agreement with 12 items on a 4-point Likert scale, from 1 (*not at all important*) to 4 (*very important*). Examples include: "It is important to me that the food I eat on a typical day is low in calories," "It is important to me that the food I eat on a typical day

helps me control my weight," and "It is important to me that the food I eat on a typical day *when I am around other people* is nutritious." Mean scores for food choice ranged from 1.25 to 3.92 ($M = 2.95$, $SD = .50$, $\alpha = .86$). Mean scores for food choice around others ranged from 1.00 to 4.00 ($M = 2.75$, $SD = .70$, $\alpha = .94$). Higher scores indicate a stricter diet, or greater degree of selectivity in choosing healthy, nutritious foods that are low in fat and artificial ingredients, but high in vitamins and minerals.

Exposure to aging media. To assess participants' exposure to programs featuring women over the age of 40 who appear younger, thinner, and sexier than what might be considered normal, we asked them to indicate how many times they had seen a series of current popular television shows and films. This procedure has been used in other studies of individuals' exposure to particular genres of screen media (Harrison, 2001; Wilson, Martins, & Marske, 2005). Participants indicated how many times, if any, they had seen each television program and film. Examples of the television programs include: *Cougar Town*, *Hot in Cleveland*, and *The Real Housewives of Beverly Hills.* Examples of the movies include: *Eat Pray Love*, *Knight & Day*, and *The Back-up Plan.* The options were 0 (*never*), 1 (*once*), 2 (*a few times*), and 3 (*more than a few times*).

In order to determine if the actresses in these programs fit our definition of an aging beauty (i.e., perceived to be younger than they actually are), a subsample of participants ($n = 50$) also responded to the following question: "Based on attractiveness, appearance, and body shape/size, how old do you believe these actresses look? Please use the following scale to respond." Participants then rated 22 midlife actresses (e.g., Jennifer Lopez, Teri Hatcher, Elisabeth Shue, Shannen Doherty, Salma Hayek) on an interval age scale (0 = *I'm not familiar with this actress*, 1 = *under age 30*, 2 = *31–35*, 3 = *36–40*, 4 = *41–45*, 5 = *46–50*, and 6 = *50+*).

We then calculated the percentage of respondents who believed each actress to be younger than her actual age. For example, 83% of this subsample believed Jennifer Lopez was in an age category younger than 41–45 years. Because Lopez is 43 years old, we concluded that she is a good representation of an actress who appears and is perceived to be younger than her actual age. We repeated this process for all 22 actresses. Of these, seven actresses were rated as either the same age or older than their actual ages. We subsequently removed any television programs or films that featured these actresses from our composite index of aging beauty media. Table 1 presents a full list of the 30 television programs and 15 films that were used to make this measure. Responses pertaining to the 36 television shows and 16 movies were summed to create a composite score of overall aging media viewing. Scores for the measure ranged from 23 to 74 ($M = 52.28$, $SD = 9.50$).

Overall television viewing. We assessed overall television viewing to control for the possibility that heavy exposure to aging media might reflect a

TABLE 1 Television and Movie Exposure Featuring Women Over Age 40

Television exposure: Most-viewed programming on network and cable that feature women over age 40	Movie exposure: Highest grossing films from 2010 that featured women over age 40
90210	*The Back-up Plan* (2010)
The Bachelor	*The Bounty Hunter* (2010)
The Big Bang Theory	*Bunraku* (2010)
Bob's Burgers	*Cyrus* (2010)
Bridalplasty	*Eat Pray Love* (2010)
The Closer	*Frankie and Alice* (2010)
Cougar Town	*Grown Ups* (2010)
CSI	*Knight & Day* (2010)
Dancing With the Stars	*Rabbit Hole* (2010)
Desperate Housewives	*Secretariat* (2010)
Family Guy	*Sex & the City 2* (2010)
Fashion Police	*The Switch* (2010)
The Good Wife	*Valentine's Day* (2010)
Grey's Anatomy	*The Whistleblower* (2010)
Hawaii Five-O	*You Will Meet a Tall Dark Stranger* (2010)
Hot in Cleveland	
How I Met Your Mother	
Jersey Shore	
Law & Order: SVU	
Mad Men	
Mike & Molly	
NCIS	
Off the Map	
Pretty Little Liars	
Private Practice	
The Real Housewives of Beverly Hills	
The Real Housewives of Orange County	
Rules of Engagement	
She's Got the Look	
The Simpsons	
Two and a Half Men	

tendency to watch lots of screen media (e.g., film buffs) rather than this particular type of programming. Using an adaptation of an already-established scale (Shrum, Wyer, & O'Guinn, 1998), participants were asked to specify the number of hours of television watched per week in three categories: average weekday, average Saturday, and average Sunday. The weekly viewing scores were computed by summing the hours for each day, and then adding the weekday hours (multiplied by 5) to the weekend hours. Scores ranged from 6 to 84 hours per week ($M = 24.59$, $SD = 14.58$).

Perceived television reality. To assess perceptions of how realistic media are, we used a modified version of Rubin's (1981) Perceived Realism Scale (PRS). Participants were told to "Please think about the television you watch, and indicate on the scale below how much you agree with the following statements." Sample items included: "Television presents things as

they really are in life" and "Television lets me really see how other people live." Respondents rated each item on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Mean scores for the 5-item scale ranged from 1.00 to 6.00 ($M = 2.68$, $SD = 1.08$). The scale showed reasonable reliability: $\alpha = .73$.

RESULTS

Descriptive Analyses

Table 2 presents the intercorrelations of all the continuous study variables. Differences between older and younger midlife women was tested with a multivariate analysis of variance, which revealed no significant main effect for age, Wilks' λ (10, 144) = .95, $F =$. 71, $p = .72$, $\eta^2 = .05$.

Hypothesis 1: Eating Disorder Symptomatology

The first hypothesis posited that among midlife women, heavy viewers of aging media would report stronger eating disorder symptomatology than would light viewers. To test this, we conducted a hierarchical multiple regression analysis, with control variables in the first block and aging media exposure as the predictor variable in the second block. The control variables were age, height, ratings of actual body, perceived reality, and overall weekly television viewing. In the first step, only ratings of actual body ($\beta = .21$, $p = .009$) were positively associated with stronger eating disorder symptomatology. The second step of the analysis, which tested the hypothesis, was significant, $R^2 = .09$, $\Delta R^2 = .03$, $F(1, 151) = 5.70$, $p = .018$. In other words, after controlling for a variety of variables, greater exposure to aging beauties in television and films ($\beta = .19$, $p = .018$) did predict stronger eating disorder symptomatology. Hypothesis 1 was supported.

Hypothesis 2: Body Self-Discrepancies

The second hypothesis posited that among midlife women, greater viewing of aging beauty screen media would be positively associated with greater self-discrepancies (actual–ideal and actual–ought). To test this hypothesis, we conducted two regression analyses: one testing for ideal discrepancy, and one testing for ought discrepancy. An ideal discrepancy represents the difference between a participant's perceived actual body size and participant's desired body size. An ought discrepancy represents the difference between participants' perceived actual body sizes and their assessment of what others think their body sizes should be. We conducted hierarchical multiple regression analyses, with the same control variables used for hypothesis 1 in the first block. The outcome variables were ratings of ideal body for the first

TABLE 2 Intercorrelations of All Continuous Study Variables

	1	2	3	4	5	6	7	8	9	10	11
1. Age	1.00										
2. Height	.14	1.00									
3. Weight	.07	.28**	1.00								
4. BMI	−.01	−.18*	.89**	1.00							
5. Overall television	−.02	−.07	.13	.16*	1.00						
6. Aging media	−.16	−.03	.07	.07	.22*	1.00					
7. Ideal discrepancy	.02	−.08	.58**	.64**	.17*	.12	1.00				
8. Ought discrepancy	.02	−.05	.55**	.59**	.14	.08	.80**	1.00			
9. Food choice (FC)	.10	.06	−.12	−.16	.02	.05	−.18*	−.19*	1.00		
10. FC (others)	.02	.10	−.01	−.06	.15	.18*	−.07	−.09	.76**	1.00	
11. EAT	−.04	−.07	.11	.13	.08	.22**	.39**	.28**	.19*	.19*	1.00

Note. Height was measured in inches. Weight was measured in pounds. Aging media was assessed by asking how often participants had viewed 30 television shows and 15 movies, with response options: 0 = *never*, 1 = *once*, 2 = *a few times*, and 3 = *more than a few times*. Overall television was calculated by summing total hours in a week. Aging anxiety was assessed with a 7-point scale: 1 = *strongly disagree* to 7 = *strongly agree*. Food choices and food choices around others were assessed with a 4-point scale: 1 = *not at all important* to 4 = *very important*. Eating disorder symptomatology was assessed with a 6-point scale:1 = *never*, 2 = *rarely*, 3 = *sometimes*, 4 = *often*, 5 = *usually*, and 6 = *always*.

*$p < .05$. **$p < .01$.

analysis, and ratings of the ought body for the second analysis. Aging media exposure was the predictor in the second block.

Both regression tests were statistically significant. In the first step, ratings of current body ($\beta = 0.38$, $p < .001$) were positively associated with higher ideal body scores. The second step of the analysis was also significant, $R^2 = .49$, $\Delta R^2 = .03$, $F(1, 150) = 7.99$, $p = .005$. In other words, exposure to aging beauties depicted in television and films ($\beta = -0.56$, $p = .005$) did predict thinner perceptions of ideal body type, above and beyond the influence of the control variables, including current body type.

The next analysis testing the outcome of ought body scores was also statistically significant. Again, in the first step, ratings of current body ($\beta = 0.26$, $p < .001$) were positively associated with ought body scores. The second step of the analysis was significant, $R^2 = .26$, $\Delta R^2 = .04$, $F(1, 149) = 7.28$, $p = .008$. Thus, after controlling for several variables, exposure to aging beauties in screen media ($\beta = -0.70$, $p = .008$) did predict lower ought body scores (i.e., thinner figures). Because our results show that aging media are significantly associated with perceptions of ideal and ought body type, controlling for perceptions of current body type, we concluded that Hypothesis 2 was supported.

Hypothesis 3: Food Choices

Hypothesis 3 predicted that among midlife women, greater aging beauty media viewing would be positively associated with stricter food choices. We, again, tested this prediction by again conducting hierarchical regression analyses with the same set of control variables. We ran two analyses: one for food choice in general, and one for food choice around others.

In the first analysis, which tested whether aging media exposure predicted greater control of food choice, the overall model was not statistically significant, $R^2 = .08$, $\Delta R^2 = .00$, $F(1, 151) = .28$, $p = .596$. However, in the first step, ratings of actual body ($\beta = -0.24$, $p = .003$) were negatively correlated with greater control of food choice among middle-aged women. We then ran a hierarchical regression analysis with food choice around others as the dependent variable. In the first step, none of the variables were significantly associated with greater control of food choice around others. However, the model was significant, $R^2 = .09$, $\Delta R^2 = .03$, $F(1, 149) = 5.21$, $p = .024$. Therefore, heavier exposure to aging beauties in screen media ($\beta = 0.16$, $p = .024$) was associated with greater control of food choice, but only when around others. We concluded the hypothesis was partially supported.

Hypothesis 4: Body Ideals as Mediators

Hypothesis 4 predicted that ideal and ought discrepancies would mediate the relationship between aging media and reports of stronger eating disorder

symptomatology and stricter food choices among midlife women. We elected to use the PROCESS macros designed for SPSS by Preacher and Hayes (2008) to test this hypothesis. This approach assesses the significance of a mediating variable and its indirect effect on the dependent variable by using a bootstrapping method to generate multiple distributions of the sample data. This resolves the low statistical power and distributional violations that render traditional significance tests inappropriate (Preacher & Hayes, 2008). The macros created 1,000 samples and corresponding bias-corrected 95% confidence intervals. There is evidence of mediation if the confidence intervals for the mediator do not contain zero. We conducted six iterations of this test: three testing for mediation evidence of ideal self-discrepancy between aging beauty media and each of the three dependent variables (i.e., disordered eating, stricter food choice, and stricter food choice around others), and three testing for mediation evidence of ought self-discrepancy between media exposure and the three dependent variables. We once again included the same set of control variables as used for the previous hypothesis tests.

Of the six tests, one was statistically significant. Our results indicate that ideal self-discrepancy does mediate the relationship between aging beauty media and disordered eating. The coefficient of the indirect path is positive (0.181, $p = .009$, 95% CI: 0.063, 0.345). The confidence interval associated with the indirect path from aging beauty media through ideal self-discrepancy to disordered eating did not contain zero. See Table 3 for results and Figure 1 for an illustration of this model.

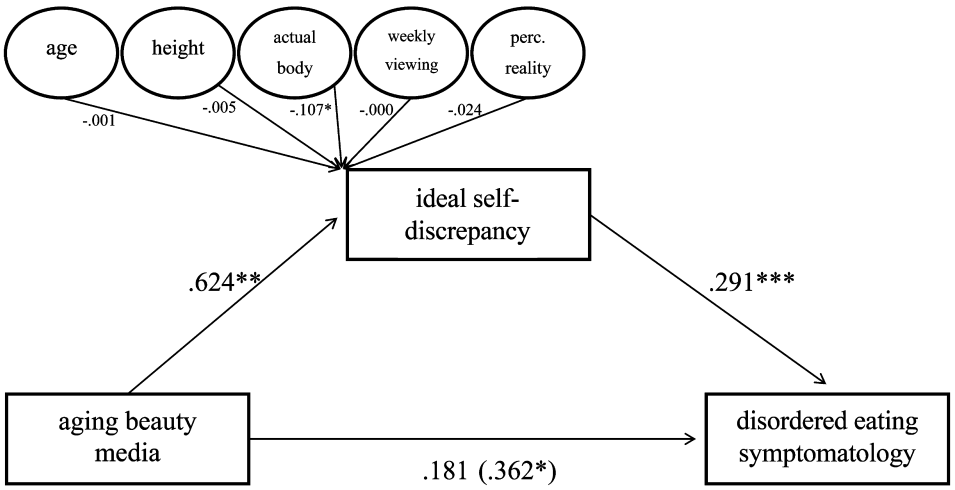

FIGURE 1 Ideal self-discrepancy as a mediator in the relationship between aging beauty media and disordered eating symptomatology. Unstandardized path coefficients are presented. The coefficient in parentheses represents the total relationship between variables before the mediators were included in the model. Control variables are displayed in circles. $^{*}p < .05$; $^{**}p < .01$; $^{***}p < .001$.

TABLE 3 Test for the Association Between Aging Media Exposure and Disordered Eating Symptomatology as Mediated by Self-Discrepancies

Controls	Coefficients[a]	SE		
Age	−.001	.004		
Height	−.005	.011		
Actual body	−.107*	.044		
Weekly viewing	−.000	.003		
Perceived reality	−.024	.035		
Predictors	**Coefficients**	**SE**	R^2	
Ideal discrepancy	.291***	.061		
Aging beauty media	.181	.151	.46***	
Direct effect	**Coefficients**	**SE**	**95% LLCI[b]**	**95% ULCI**
Aging beauty media → Disordered eating symptomatology	.181	.151	−.118	.480
Indirect effect	**Coefficients**	**SE**	**95% BootLLCI[c]**	**95% BootULCI**
Aging beauty media → Ideal disc. → Disordered eating symptomatology	.181**	.070	.067	.367

Note. $N = 157$. SE = standard error, LLCI = lower level confidence interval, ULCI = upper level confidence interval. Number of bootstrap samples for bias-corrected bootstrap confidence intervals = 1000.

[a] = Unstandardized coefficients.

[b] = 95% confidence intervals.

[c] = 95% bootstrapped bias-corrected confidence intervals.

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

DISCUSSION

The results of this study indicate that exposure to aging media is related to midlife women's eating disorder symptomatology, body image perceptions, and food choices around others. In particular, we found that viewing these media was associated with stronger reports of disordered eating, greater discrepancies between actual body size and women's ideal body types, greater discrepancies between actual body size and perceptions of how others wanted them to look, and stricter food choices when around other people. Additionally, our results demonstrate that ideal self-discrepancies mediate the relationship between aging beauty media and greater eating disorder symptomatology. This study is the first to investigate the association between aging media and midlife women's perceptions of their body, their food choices, and their eating disorder symptomatology.

In terms of specific findings, Hypothesis 1 predicted that the more that aging media was viewed, the stronger the reported eating disorder symptomatology. This hypothesis was supported. This result suggests that

these films and television shows featuring aging beauties do portray a body ideal that is related to women trying to attain similar bodies by engaging in behaviors that are symptomatic of eating disorders. This is consistent with previous research investigating the link between ideal images and disordered eating among young women (e.g., Harrison, 2000), but our study expands this work by incorporating an older sample.

Aside from eating disorders, our data also suggest that body image can be affected by exposure to these media. In particular, Hypothesis 2 posited that heavier viewers of aging beauty media would report greater self-discrepancies than would lighter viewers. This was supported in that there was a significant relationship between viewing these media and reporting a desire to have a thinner body type as well as the perception that others wanted them to be thinner. In other words, women who consumed a large amount of aging beauty programming also reported a larger discrepancy between their actual body size and the size they perceived others wanted them to have. This finding implies that viewing this programming leads midlife women to perceive that their partners, friends, colleagues, children, or perhaps even strangers desire a smaller body for them than the one they currently inhabit. Even when a significant other or friend may not actually take issue with the way a woman looks, our data demonstrate that a woman viewing high amounts of these shows could hold this perception. This sensitivity is dangerous because it alters a woman's satisfaction with her body and could be associated with a midlife woman's propensity to alter that body via eating disorders or even cosmetic surgery (Kally & Cumella, 2008; McLean et al., 2010; Nabi, 2009).

The results related to Hypothesis 3 also demonstrate that viewing this content can influence women's perceptions of those around them. This hypothesis predicted a positive association between viewing aging beauty media and reporting stricter food choices. The data show that viewing did not predict midlife women's food choices in general, but did predict their food choices around others. In other words, heavier viewing of aging beauty programming was associated with more selective decisions about food among midlife women. Whereas women may be comfortable with their bodies and comfortable with the food choices they make, they may perceive that others wish them to be thinner or healthier. For example, if a woman perceives that her friends or partner wish she had a thinner body, this same woman may also be more restrictive with her diet when in public in order to convey the impression that she is trying to achieve the body standard her social circle demands. Furthermore, this could have implications for eating disorders; that is, women who feel restricted in their food choices around others may make up for it by bingeing when alone.

Finally, Hypothesis 4 predicted a mediation influence of body ideals on the association between aging beauty media exposure and the outcomes of disordered eating and stricter food choices. We found one statistically

significant relationship: Ideal self-discrepancies mediated the association between aging beauty media and disordered eating symptomatology. This is consistent with Harrison (2001), who found that this discrepancy does mediate the association between exposure to thin-ideal media and eating disorder symptomatology among college women. Our results expand this finding by employing an older sample and different media content. As is the case with all cross-sectional designs, our data cannot establish causality. An alternative explanation may be that women with ideal self-discrepancies selectively choose to view aging beauty media, which subsequently increases their disordered eating symptomatology. Other scholars have suggested that this mechanism may be the process at play among women (Knobloch-Westerwick & Crane, 2012)—that is, selective exposure to these aging beauty media may be used by midlife women to motivate them to engage in more damaging eating behaviors in an attempt to achieve their ideal body. Future research should explore this possibility.

Our study is not without limitations. One drawback of this study is that we only investigated the link between media exposure and women's body-related concerns. We only included women in our study because of the media attention given to what has been called the *Desperate Housewives* Effect (McHugh, 2006; Pannasch, 2008). However, in addition to media consumption, part of the drive for women to feel pressure to conform to culturally constructed body ideals could also be a result of socially defined notions of femininity (Murnen & Smolak, 2009). In a meta-analysis of 26 studies (mostly from North America) that investigated the link between body image, eating concerns, and femininity, Murnen and Smolak (2009) found that older women and women most familiar with feminist thinking were most likely to report positive body image scores. This suggests that it could be processes such as objectification or pressure to conform to feminine standards that drive negative body image among midlife women as much as or more so than the effect of consuming media. The results of our study also confirm this previous research and demonstrate that older women were less likely to report negative body image and eating disorder symptomatology than younger women, regardless of media exposure. Furthermore, men may not be exempt from these potential effects. Whereas women may feel the pressure to conform because of notions of femininity, men may also feel compelled to achieve an ideal body standard as conveyed through media images. For example, recent films such as *The Expendables* (2010) or *Taken 2* (2012) feature midlife men who are extremely fit. Future research should include measures of femininity and feminism when investigating these links among women, as well as explore any potential links between media and body issues among midlife men.

Another limitation is that our data are correlational in nature and cannot be used to justify causality; that is, our data do not support any causal claims. It could be that women who already have eating disorder symptomatology

or a distorted perception of what they think others want their body to look like are the same women who naturally seek out media that feature these aging beauties. Rather than being influenced by media consumption, they may be seeking out this aging media content in order to find role models and justification for their attempts to change the shape and size of their bodies. Future research should address this issue of causality by employing experimental methodology and longitudinal survey research.

Another limitation concerns the sample size. A larger sample could uncover results not measureable with this small sample of women, particularly the differences between single and partnered women. Future research should also employ more specific controls with regards to other screen media, in order to assess the relative weight of viewing ageless beauties versus other beauties in general. Whereas this study is an important first step in addressing the influence of these types of programming on midlife women, a larger sample in future research could begin to unpack the complexities associated with age.

A final limitation concerns the methodology. In particular, we did not have a cover story or distracter questions, which may have made the research interest very obvious to the participants. This may have biased the responses because participants were providing the answers they believed we wanted, rather than their true beliefs. The recruitment of participants via snowball sampling is another limitation as it does not provide a representative sample of all midlife women. Both of these methodological limitations could have biased responses or influenced the findings in a meaningful way.

Future research should explore how these media are linked with other relational outcomes, such as dating behaviors or relational beliefs. Furthermore, what about the influence on cosmetic surgery? In a survey of over 26,000 women, roughly 21% of those aged 36–65 reported being interested in undergoing cosmetic surgery (Frederick, Lever, & Peplau, 2007). What is the association between viewing aging beauty media and this willingness to undergo cosmetic surgical procedures? Slevec and Tiggemann (2010) surveyed older women in Australia and found that television exposure predicted endorsement and consideration of cosmetic surgery. These researchers also noted that body dissatisfaction was a significant predictor in older women's consideration of actual cosmetic surgery. Does the content of aging beauty media, or other age-related shows like the Australian program *10 Years Younger in 10 Days*, enhance this type of effect? Finally, previous literature and our study do not distinguish between the desire for thinness and the desire for youthfulness. Our study does explore eating-related concerns, but future research should distinguish between the body issue of thinness and the more global concept of youthfulness. Future research should investigate these issues in order to provide more information about how real-life middle-aged women are influenced by the idealistic aging beauties of contemporary programming.

The research presented here provides new evidence that exposure to screen media can be related to eating disorder symptomatology, body image concerns, and food choices among midlife women. We are aware of no previous research that has looked at these variables within the context of aging beauty programming among a sample of middle-aged women. We replicate previous work that suggests there are few basic differences between older and younger women in terms of body-related concerns (e.g., Frederick et al., 2006), yet, our study does provide new evidence that screen media use—particularly consumption of aging beauty media—is associated with variations in reported body-related concerns, such as stricter food choices and disordered eating symptomatology. Our study helps build on existing research related to self-discrepancy theory, in addition to building on the extant work related to body concerns and relational outcomes of a non-college-aged sample. Most importantly, our data suggest that these aging beauty media can influence midlife women to have significant concerns about how other people view their body and their food choices. In essence, these results could be useful for practitioners treating disordered eating as well as midlife women who seek to understand more about how media may be influencing their health and other perceptions.

NOTE

1. All of the studies cited in this article employ samples from the United States, unless otherwise noted (e.g., Australian sample).

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