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Running Head: INFLUENCES ON WOMEN'S PERCEPTIONS OF CELEBR

An Examination of Factors Related to Women's Perceptions of Female Celebrities:

Body Satisfaction, Awareness and Internalization of Thinness Standards, and Maternal Influence

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Abstract

Recent research has shown that some women perceive images of media differently from other women, potentially leading to greater body dissatisfaction. The present study examines women's perceptions of thin and heavy female celebrities in relation to the women's level of body satisfaction (measured by the BSQ-34), level of awareness and internalization of social thinness standards (measured by the SATAQ), and perceptions of their mothers' concern with body shape (measured with 4 Likert-type questions). All groups significantly overestimated the sizes of heavy celebrities' bodies. No significant differences in perception of the thin or heavy celebrities were found between groups high, medium, and low in body dissatisfaction, groups high and low in awareness, groups high and low in internalization, or groups high and low in maternal influence. Descriptions of the study's implications and limitations, as well as suggestions for further research, are discussed.

The ability to accept one's physique is a very important stage of development, which appears to be becoming more and more of a difficult stage to reach. Achieving satisfaction with one's own body appears to be a rare experience, especially for women. In the last decade, there has been a big increase in women's body dissatisfaction (Sondhaus, Kurtz, & Strube, 2001). Several studies have found large discrepancies between women's current body sizes and their ideal sizes (Demarest & Allen, 2000; Tiggemann & Williamson, 2000). It appears that body weight ideals are becoming so thin that they are impossible for most women to achieve. A large number of possible explanations have been proposed to account for the development and maintenance of body dissatisfaction (Heinberg, Thompson, & Stormer, 1995). Among the most common explanations in the research are sociocultural influences, including images that portray women as unrealistically thin.

Media Influences on Body Dissatisfaction

Many different types of media (television, magazines, movies, etc.) are constantly promoting the thin ideal of female figures to young and vulnerable viewers. The television shows that many young adolescents prefer watching present a distorted and unrealistic picture of women's bodies in society. Fouts and Burgraff (1999) found that underweight females are dramatically over represented in television sitcoms, whereas females who are overweight are highly under represented. Television is not the only form of media highly represented with thin women. The majority of magazines read by teenage girls are strongly supportive of the thin ideal; even the magazines that are thought to promote the healthiest body size contain more thinner women on average than are represented in the population (Cusumano & Thompson, 1997). While we know that the vast majority of stimuli that women encounter in the media are

skewed toward thinness, an important question stemming from this knowledge seems to be, what effect does this have on women, if any?

There is a great deal of debate in the literature as to how much blame can be placed on the media concerning the issues of decreased body satisfaction and later development of eating disorders. Dunkley, Wurtheim, and Paxton (2001) found that almost ninety percent of their participants judged media ideals as more socially desirable than their own current size, suggesting that exposure to the media imposes pressure on females sometimes termed "a drive toward thinness." A study done by Turner et al. (1997) examining the short-term effects of media exposure found that women who read fashion magazines prior to completing a body satisfaction survey perceived themselves much more negatively than women who read a news magazine. On the other hand, there is a great deal of research that has shown mere exposure to media images to offer no predictive value in determining body satisfaction (Cusumano & Thompson, 1997).

Recent research has explained women's perceptions of media images as a predictor of body satisfaction. Is it possible that some women look at the media from a different perspective than others? King, Touyz, and Charles (2000) found that women with lower body satisfaction perceived thin female celebrities to be thinner than they actually were, whereas women with higher body satisfaction perceived the thin celebrities more accurately. This finding suggests that women who differ in how they feel about their own bodies tend to also differ in to how they perceive the media images they are exposed to. The present study will attempt to replicate these results and proposes that distorted perceptions of media images result from low body satisfaction and serve to maintain it, rather than mere exposure to thin media images.

Awareness and Internalization of Social Standards of Thinness

The media's continual use of slender women has promoted in society a thin ideal body standard for women. The level of awareness of this thin ideal may also serve as a strong predictor of how women feel about their own bodies, and consequently, how they perceive what they see in the media. Awareness of societal values has been found to be negatively related to body satisfaction (Cusumano & Thompson, 1997). That is, as an individual's recognition of society's value of thinness increases, the satisfaction they feel with their own body decreases.

Another key feature of body dissatisfaction related to an individual's awareness of these standards might be the degree to which they have accepted or internalized the standards as their own values (Heinberg, Thompson, & Stormer, 1995). Cusumano & Thompson (1997) found that internalization of social norms of appearance accounted for a substantial amount of body satisfaction even after controlling for the role of awareness. This finding suggests that while it may be difficult to avoid becoming aware of societal standards, it is even more important to resist internalizing these standards as an individual's own values.

Maternal Influence

While a substantial amount of research has centered on media contribution to body satisfaction, there is also a large literature focused on the role of family socialization, specifically maternal influence. The Modeling Hypothesis of Transmission suggests that mothers who diet often and worry about their own weight pass these habits on to their daughters (Abramovitz & Birch, 2000). Abramovitz and Birch (2000) found that girls whose mothers reported current or recent dieting were more than twice as likely to articulate ideas about dieting themselves as girls whose mothers had not engaged in dieting.

The present study will be examining the following three hypotheses:

- 1. Women with low body satisfaction will underestimate thin celebrities' body sizes, while women with high body satisfaction will judge thin celebrities more accurately. Both women with high and low body satisfaction will tend to overestimate the size of heavy celebrities' bodies.
- 2. There will be an interaction between women's awareness of social standards of thinness and the degree to which women accept these standards (awareness). Women who are highly aware of social thinness standards, and who internalize these standards, will distort the celebrities to a greater extent than women who are less aware and internalizing of these standards.
- 3. Women who perceive their mothers as being preoccupied with concerns about body shape and size, for both themselves and their daughters, will distort the celebrities to a greater extent than women who see their mothers as being less concerned with body shape and size.

Method

Participants

Participants were 57 female undergraduate students from a small mid-western university. Data from 15 participants in the original sample were discarded on the basis that the participant fell into one or more of the following categories: 1) failed to recognize at least 7 of the 8 celebrities, 2) age was 30 years old or higher, or 3) answered yes to one or more of three eating disorder screening questions.

All participants were recruited from freshman and sophomore level undergraduate psychology courses. Participants were given the seven dates and times that the sessions would be held and were able to select which one they wanted to attend. Participation was completely voluntary and all participants received one unit of extra credit for their psychology course. Measures

Celebrity Selection. A pilot study was run to select the nine celebrities used in the present study based on familiarity. Eight female participants viewed 27 full-length photographs of various female celebrities. During each photograph presentation, participants answered the following questions: 1) Do you recognize this celebrity? (1-yes, 2-no) and 2) Do you rate this celebrity as being thin, medium, or heavy with regards to weight? (1-thin, 2-medium, 3-heavy). Data from all participants was pooled and the nine celebrities were selected as the four most frequently recognized and consistently judged as thin (Courtney Cox, Sarah Michelle Gellar, Jennifer Love Hewitt, and Gwyneth Paltrow), the four most frequently recognized and consistently judged as heavy (Queen Latifah, Rosie O'Donnell, Oprah Winfrey, and Ricki Lake), and one highly recognized and consistently judged as medium (Britney Spears) to be used as the sample item. The eight volunteers were all from the introductory psychology course and received course credit for their participation.

Celebrity Recognition. A booklet containing the nine selected celebrities used in the experimental task along with a brief description of each containing their names and occupation (talk show host, actress, singer, etc.) was made to determine the participant's familiarity with the celebrities. Each photograph was adjusted so that all nine were the same height with the proportions kept in tact. The sample item (Britney Spears) was placed first with the remaining items ordered randomly.

Celebrity Distortion Display. Each of the nine celebrity photographs was distorted using Adobe Photoshop. Each photograph was altered six times, resulting in a final display of each

celebrity composed of the accurate image and images that were 10% thinner, 20% thinner, 30% thinner, 10% heavier, 20% heavier, and 30% heavier than reality. The images were randomly ordered on each display and were numbered from 1 to 7 from left to right. The celebrity displays were presented in the same order the celebrities were presented in the booklet. Since the original ordering of the celebrity images and displays was random, it was unnecessary to counterbalance the order of the presentation across participants.

Because previous research has shown that it is possible for participants to select the accurate image by focusing only on the face of the celebrity (King, Touyz, and Charles, 2000), the faces of each celebrity were colored in with their own skin color using Adobe Photoshop. Each celebrity was identified with their name, which was printed in the bottom right corner of the screen.

The displays were presented in the classroom using Microsoft PowerPoint. Participants were given twenty seconds to view each celebrity display before the screen was advanced to the next display.

General Information. A personal information sheet was developed to collect general demographic information (age, height, weight, ethnicity, and grade level) and information regarding the participant's relationship with her mother and previous or past experience with an eating disorder. Five questions assessed participants' subjective view of maternal influence on body satisfaction and overall relationship with mother. Five questions assessing methods of weight control were used to screen out individuals with possible eating disorders.

Body Dissatisfaction. The Body Shape Questionnaire (BSQ) is a 34-item self-report measure of concerns about body shape, in particular the phenomenology of "feeling fat" (Cooper, Taylor, Cooper, & Fairburn, 1987). The BSQ can be completed in approximately ten minutes. Both the concurrent and discriminant validity of this measure have been shown to be good.

Awareness/Acceptance of Social Standards of Thinness. The Sociocultural Attitudes Toward Appearance Questionnaire (SATAQ) is a 14-item self-report scale designed to document an individual's level of awareness of a societal value of thinness along with their level of acceptance of society's prevailing message (Heinburg, Thompson, & Stormer, 1995). The SATAQ is composed of 8 questions regarding internalization and 6 regarding awareness with the alphas being .88 and .71, respectively.

Procedure

Participants first signed informed consent and were assigned a participant number to be used to identify their data. The celebrity booklets, along with a reply sheet identified with their participant number, were administered with the following instructions:

> The booklets that have been placed in front of you contain full-length photographs of nine female celebrities. Each page in the booklet is composed of one photograph and a brief description of the celebrity in the photograph, and the question of, "Do you recognize this celebrity?" At this time, I would like you to open the book, and beginning with the first page, go through and identify whether or not you recognize each of the nine celebrities, marking the number 1 on the reply sheet if you do and a number 2 if you do not. Please be careful to place your response next to the appropriate celebrities' name on the reply sheet.

After every participant completed this task, the booklets were collected, and each participant was asked to turn over their reply sheet to the other side to be used for the celebrity distortion task.

The participants were directed toward the projection screen at the front of the room where the following directions were displayed and read aloud to them:

Each of the following displays contains seven different body images of one of the nine celebrities you just viewed in the celebrity booklet. Of the seven images, only one is the accurate portrayal of the celebrity's body size, and the other six are distorted manipulations. On the sheet in front of you, your task will be to choose for each display, which image is the accurate one. Each image will be paired with a number from 1 to 7. Circle the number that you believe corresponds to the accurate image next to the appropriate celebrity's name. The faces of the celebrities are colored in, but you will be able to identify them by reading their names in the bottom right corner of each display. We will now begin with the sample item. Are there any questions?

The celebrity distortion task took approximately five minutes to complete at which time the reply sheets were collected.

Next, each participant was given a packet containing three questionnaires in a manila envelope, each one identified by their participant number, and given the following instructions:

The envelopes that have been placed in front of you contain three self-report questionnaires. Some of the requested information may be very personal to you, so I would like to remind you that all of the information I collect from you is completely confidential. At this time, take the questionnaires in the exact order that they appear in the packet. Please take the time to read and think about each question before answering.

When you are finished completing all of the questions, please insert all three questionnaires back into the envelope in the same order you filled them out.

The first two questionnaires were the Body Shape Questionnaires (BSQ) and the Sociocultural Attitudes Toward Appearance Questionnaire (SATAQ). Because both questionnaires deal with concerns related to opinions about body shapes, they were counterbalanced across the sessions with half of the participants completing the BSQ first and the SATAQ second, and the other half completing the forms in the reverse order. In all sessions, the personal information form was completed last. Completion of the entire packet took approximately twenty minutes.

There were 7 sessions held in total. The number of participants in each session ranged from 4 to 19. Each session took approximately forty minutes to complete.

Results

General Information

Demographic Information. Participants' ages ranged from 18 to 29 (M=20.7, SD=3.3). Participants' height ranged from 59 to 72 inches (M=65.7, SD=3.0) and weight ranged from 110 to 245 pounds (M=149.4, SD=34.3). The Body Mass Index (BMI) for each participant was computed for each participant with the following formula:

Participants' BMIs ranged from 18.3 to 43.5 (*M*=24.4, *SD*=5.9). Participants were divided into three categories (underweight, normal, and overweight) based on norms gathered from the Center for Disease Prevention and Control (http://www.cdc.gov/nccdphp/dnpa/bmi/resources.htm). Analyses were done to examine whether participant's perceptions of the celebrities were related to their BMIs. Using a one-way

ANOVA, no differences between BMI groups were found in perceptions of the thin celebrities' body sizes, F(2, 39) = .197, p > .05, or the heavy celebrities' body sizes, F(2,39) = .188, p > .05.

The majority of participants were Caucasian (n=40), along with Hispanic American (n=1) and Native American (n=1). Most participants were freshmen (n=15) or sophomores (n=20), however, there were also PSEO students (n=2), juniors (n=3), and seniors (n=2).

Eating Disorder Screening. Five questions were selected to screen out individuals with possible eating disorders. However, only three were used as screening questions in the final analyses, because the other two initial questions were endorsed by one-third to one-half of the participants. The five initial questions and their responses are shown in Table 1.

Table 1. Eating Disorder Screening Responses

	Percent of Responses		
Questions	Yes	No	
Over the past year, have you experienced an intense fear of gaining weight?*	56.1%	43.9%	
Have you made yourself vomit in order to prevent weight gain?	7%	93%	
Have you used laxatives, diuretics, or enemas as a method of losing or preventing weight gain?	7%	93%	
Have you fasted or exercised excessively to lose weight or prevent weight gain?*	35.1%	64.9%	
Have you ever been diagnosed as having an eating disorder?	5.3%	4.7%	

^{*}These questions were thrown out due to the high percentage of yes responses.

BSQ-34

Participants' scores on the body satisfaction questionnaire ranged from 43-151 (M=92.5, SD=30.61). Participants were placed into one of three groups based on their individual scores:

low, medium, or high body dissatisfaction. Scores ranged from 43-74 for the low group, 75-100 for the medium group, and 105-151 for the high group. Each group consisted of 14 participants.

Distortion percentages for the low and high body dissatisfaction groups were tested for significant differences from 100 (the accurate perception). Analyses found neither the low body dissatisfaction group (M=95.2) or the high body dissatisfaction (M=97.26) to significantly underestimate the thin celebrities' body sizes, t(13) = 1.78, p>.05 and t(13) = 1.66, p>.05, respectively. However, both the low body dissatisfaction group (M=104.29) and the high body satisfaction group (M=105.89) were found to significantly overestimate the size of the heavy celebrities' bodies, t(13) = 2.71, p=.018 and t(13) = 2.76, p=.016, respectively.

Using one-way ANOVAs, no significant differences in celebrity body size perceptions between the low, medium, and high body dissatisfaction groups were found for the thin celebrities, F(2, 39) = .835, p > .05, or the heavy celebrities, F(2,39) = .2.94, p > .05. Group statistics are reported in table 2.

Table 2. Celebrity Perceptions as a Function of Body Satisfaction

	Thin Celebrities		Heavy Celebrities	
Body Dissatisfaction	Mean	Std. Dev.	Mean	Std. Dev.
Low	95.18	10.12	104.29	5.92
Medium	98.93	7.32	100.00	5.80
High	97.26	5.23	105.89	8.00

^{*}Note: The mean numbers represent each group's average distortion percent. Numbers closest to 100.0 indicate the most accurate estimations.

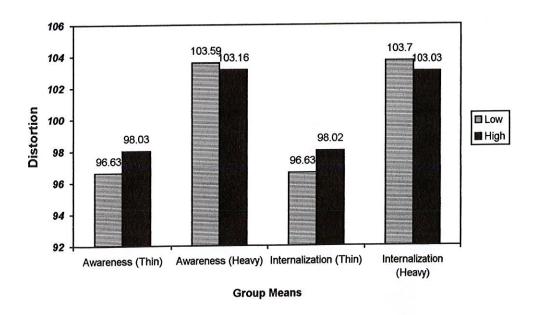
SATAQ

Awareness. Participants' scores on the awareness subscale of the SATAQ ranged from 10-29. A median split was used to divide participants into two groups: the low awareness group

(n=23), scores ranging from 10-21, and the high awareness group (n=19), scores ranging from 22-29. Analyses showed no group differences in perceptions of the thin celebrities' body sizes, F(2,39) = .329, p > .05, or the heavy celebrities' body sizes, F(2,39) = .039, p > .05.

Internalization. Participants' scores on the internalization subscale of the SATAQ ranged from 11-37. A median split was used to separate participants into two groups: the low internalization group (n=23), scores ranging from 11-24, and the high internalization group (n=19), scores ranging from 26-37. No group differences were found in perceptions of the thin or heavy celebrities' body sizes, F(1,40) = .141, p>.05 and F(1,40) = .039, p>.05, respectively. Group statistics are reported for awareness and internalization in chart 1.

Chart 1. Celebrity Perceptions as a Function of Awareness and Internalization

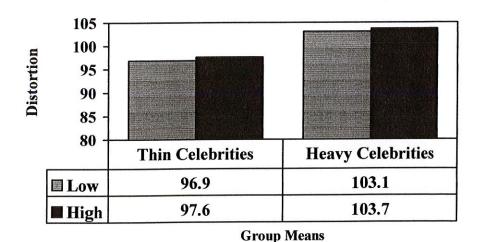


Maternal Influence

Participants' scores on the maternal influence questions were computed by summing their responses to the Likert-type questions. The scores ranged from 5 to 28. Participants were then

divided into two groups using a median split. The low maternal influence group's (n=21) scores ranged from 5-11, representing the participants who did not perceive their mothers as being very concerned with body shape and size. The high maternal influence group's (n=21) scores ranged from 12-28, representing the participants who perceived their mothers as being highly concerned with body shape and size. No differences were found between the high and low maternal influence groups in their perceptions of the thin celebrities' body sizes, F(1, 40) = .086, p > .05, or the heavy celebrities' body sizes, F(1, 40) = .075, p > .05. Group statistics are show in chart 2.

Chart 2. Celebrity Perceptions as a Function of Maternal Influence



Discussion

The present study examined whether women differing in body satisfaction, awareness and internalization of social standards of thinness, and the perceptions they had about their own mothers concerns with body shape or size would differ in the way they perceived thin and heavy celebrity body sizes. Contrary to the hypotheses, women's perceptions of female celebrities'

body sizes were not found related to body satisfaction, awareness or internalization of social thinness standards, or maternal influence.

While no differences in the perceptions of thin celebrities' body sizes were found, hypothesis one was partially supported by the finding that both the low and high body dissatisfaction group significantly overestimated the size of the heavy celebrities. It appears that women in this sample are able to recognize the thin celebrities' body sizes fairly accurately, however they are for some reason perceiving the heavy celebrities as heavier than they actually are. This finding has an important implication for the socialization of females in our culture. It seems that society, including all of the multimedia that is consumed each day, has directed individuals to place extremely high values on thinness. Many media are aimed at making women believe that very thin women are happier and more successful, and it seems as though this stereotype has aided in the development of a very negative stereotype towards heavier women. The negative stereotype is evident in this study in that women were able to accurately perceive the differing thin celebrities' body sizes, but seemed to place the celebrities not meeting the thin ideal automatically into the general category of overweight by consistently overestimating their body sizes. It seems important that society should work at breaking this negative stereotype that has been assigned to overweight individuals. There seem to be many levels of thinness; however, when a person fits in the overweight category, it appears that people may no longer pay attention to their body size, merely labeling these people as "fat." A shift in focusing on body healthiness, rather than body size, would seem to be beneficial for our thinness-driven society.

Although past research has shown a difference in perceptual distortions of thin celebrities' bodies between individuals high and low in body satisfaction, this study failed to

repeat the finding. There are several possible reasons that could support the lack of similar findings between the present study and the original study done by King, Touyz, and Charles (2000). The present study used different celebrities than were used in the original study, since a copy of the original images could not be obtained. The display of the present study's images in the distortion task may have been different from that of the original study. It is possible that the images were too small or too close together. In the original study, participants were allowed to sit at a user-controlled computer able to advance to the next screen whenever they were ready. The present study's method is fairly different in having participant's sit in a classroom with the screen automatically advancing for them. It is possible that participants were not able to distinguish between the body sizes as well from their seating position in the room, as they would have been had they had a computer screen right in front of them. Another difference of interest is that the original study was done in Australia, and it is possible that the large difference in geographic location plays a role in the lack of similar results. A suggestion that could be made for a change in methodology for both the original and the present study might be to drop the use of the celebrity booklet. This booklet allows participants to see the accurate size of the celebrity just minutes before they are asked to choose the accurate image on the distortion display. Perhaps simply asking participants on paper and pencil to report if they are familiar with each of the celebrities and their recent work could be a new method to employ.

A comparison of participant's BSQ-34 scores in the high and low body dissatisfaction groups between the King et al. (2000) study and the present study was done to test if the groups were statistically comparable. Using one sample t-tests, no significant difference was found between the low dissatisfaction group in the King study (M = 56.44) and the low dissatisfaction group in the present study (M = 60.36), t(13) = 1.55, p>.05; however the high dissatisfaction

group in the present study (M = 128.71) was found significantly more dissatisfied than the high dissatisfaction group in the King study (M = 113.36), t(13) = 3.57, p = .003. This finding is hard to explain. Because the present study's highly dissatisfied group is significantly more dissatisfied than the original study, it would be expected that the results would have been even stronger in the predicted direction; however this was not the case. This is an area of research that needs more study.

It is assumed that the failure to find total support for hypothesis one is related to the lack of significant results in hypotheses two and three. Previous research has focused on the relationship of awareness and internalization of social thinness standards and maternal influence to body satisfaction. The present study's hypotheses were built on the logic that if both of these variables are related to body satisfaction, and body satisfaction has been shown related to perceptions of female celebrities, than maybe these variables (awareness/internalization and maternal influence) are related to female celebrity perceptions as well.

The research on awareness and internalization is very interesting. Cusumano and Thompson's (1997) finding that women who are more aware of, and especially more internalizing of social standards, have lower body satisfaction theoretically makes sense. In the same study, they also failed to find a relationship between mere exposures to media to be related to body satisfaction. The present study attempted to show that exposure to media is not what lowers women's body satisfaction, and that instead it is the way women perceive the media. It would be interesting to see if the exact study that was done in Australia (King et al., 2000) was done again, this time also examining awareness and internalization, if the anticipated result of hypothesis two would be found.

Research on the Modeling Hypothesis of Transmission has been supported in various studies; however, many studies have failed to find any relationship between mother and daughter's dieting attitudes and behaviors. While the modeling hypothesis may be valid in some cases, it is also important to note that some studies have not supported it and others found support for it only under certain circumstances. Ogden and Steward (2000) found no association between mothers' and daughters' body satisfaction; instead, factors related to their relationship, such as autonomy and projection, appeared to be the strongest predictors of daughters' dieting behaviors, implying that the impact of maternal attitudes on daughter's body satisfaction may vary with the style of the mother-daughter relationship. It would be of value to further research this area. Perhaps running the present study again with some minor improvements in the method and a different measure of maternal influence that focuses more on the relationship style between the mother and daughter would unfold different results.

A major hindrance to the present study in general is its very small sample size. A larger sample would have allowed for larger groups, meaning that there would have been a better representation of individuals both high and low in body dissatisfaction. Another limitation of the findings is that there was a great deal of error variance. The standard deviations in all of the analyses were considerably large. Again, this is an area that would largely benefit from an increase in the sample size.

It is crucial to consider the importance of research in the area of body satisfaction and the several other factors that have been found to be related to, and perhaps even contributing to the overall societal decrease in body satisfaction in the recent decade. The importance lies in the consequences that can come from very poor body satisfaction. Poor body satisfaction can and does lead many young women to turn to extreme dieting behaviors, which often result in eating

disorders. Eating disorders are complex conditions that arise from a combination of long-standing behavioral, emotional, psychological, interpersonal, and social factors (Berg, 2000). Once started, however, they can create a self-perpetuating cycle of physical and emotional destruction (Berg, 2000). Psychologists are continually learning about the underlying causes of these emotionally and physically damaging conditions. Because eating disorders are such a widespread and devastating epidemic, it is important that research into this area continue so that the nation can make a shift from focusing on various treatments to use with eating-disordered individuals to preventing individuals from adopting these destructive ways. If future research is able to show further support for women's perceptions of female celebrities differing as a function of these factors linked to eating disorders, it would be very important for society to shift from not only condemning the medias' content, but also to educate women on how to accurately and realistically perceive the content, pointing out that the models that we see in the world of television and magazines aren't representative of what women are supposed to look like in the real world.

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