"I KNOW YOU ARE NOT REAL": SALIENCE OF PHOTO RETOUCHING REDUCES THE NEGATIVE EFFECTS OF MEDIA EXPOSURE VIA INTERNALIZATION

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Abstract: Mass media are one of the most powerful conveyors of beauty ideals, promoting an unrealistic image of female beauty that is impossible for the majority of females to achieve. Internalization of such ideal standards leads to negative affect, body-focused anxiety, and dissatisfaction. Present study compared two different approaches aimed at reducing such negative outcomes, one based on awareness of the deceptive nature of media techniques (i.e., photo retouching), and the other based on the use of "real" women as models. One hundred and fifty-one female undergraduates participated in the study. Results showed that retouching salience can reduce the level of internalization of beauty ideals and thus the negative effects of media images exposure, such as negative mood and decrease in self-esteem. On the contrary, ideal images and "real" images play a similar role in fostering internalization of beauty ideals. Implications are discussed.

Key words: mass media, positive and negative mood, state self-esteem, photo retouching

Introduction

Among the possible mechanisms for transmission of ideals, such as through family and peers, the mass media are probably the most powerful conveyor of beauty ideals, promoting an unrealistic image of female beauty that is impossible for the majority of females to achieve (Levine & Murnen, 2009). Indeed, the media uniformly idealize an artificial icon of female beauty that is predominantly slim, yet incredibly toned and curvaceous, with perfect skin and hair (Want, 2009).

Socio-cultural theory attributes many negative psychological outcomes among Western women to the media's projection and promotion of this "body perfect" ideal. Literature has provided convincing empirical evidence for the relationship between exposure to media models and women's body dissatisfaction and drive for thinness (e.g., Grabe, Ward, & Hyde, 2008; Groesz, Levine, & Murnern, 2002; Tiggemann, 2003). The implications of these findings for women's well-being and physical health have been well documented, in terms of depression (Grabe & Hyde, 2009), body shame and anxiety (Grabe & Hyde, 2009; Harper & Tiggemann, 2008), lower self-esteem (Bardone-Cone & Cass, 2007; Rollero, 2013), negative mood (Rollero, 2013; Tiggemann & McGill, 2004) and disordered eating (Harrison & Cantor, 1997). As Grabe and colleagues (2008) showed in their meta-analysis, these effects of media exposure are demonstrated in both the experimental and the correlational literature, regardless of assessment technique, individual difference variables, media type, or other study characteristics.

However, it is not exposure to "body perfect" ideals *per se* that seems detrimental: the real problem seems to come when people internalize such standards of appearance (Giles & Close, 2008). The process of internalization of beauty ideals refers to the extent to which an individual regards the societal norms of size and appearance as appropriate standards for his or her own appearance (Thompson & Stice, 2001). These standards, in turn, determine which visible body attributes are important for "being beautiful". In sum, media convey beauty ideals and the internalization of these messages may guide the perception of one's body and worth (Rollero, & Tartaglia, 2013; Vandenbosch & Eggermont, 2012).

The meta-analysis conducted by Groesz and colleagues (2002) showed that women with higher levels of internalization at baseline are adversely influenced by media images the most. Specifically, media internalization leads to negative affect and body-focused anxiety (Dittmar, Halliwell, & Stirling, 2009; Dittmar & Howard, 2004). Moreover, internalization of sociocultural standards of appearance significantly predicts women's drive for thinness and body dissatisfaction (Bair et al., 2012; Lokken, Worthy, & Trautmann, 2004; Tiggemann, 2003).

However, the level of internalization of media standards should not be considered as an individual unchangeable trait. Indeed, a recent approach focused on media literacy aims at decreasing media internalization and thus reducing its negative consequences. This approach enables individuals to adopt a critical evaluation of media content, so that they can identify, challenge and propose alternatives to cultural ideals promoted in the mass media (Hobbs & Jensen, 2009). As López-Guimerà and colleagues argued (2010),

media literacy can significantly reduce one important dispositional risk factor: internalization of the thin beauty ideal (López-Guimerà et al., 2010). Indeed, individuals are unaware of the extent to which media play a significant role in promoting internalization of the current beauty ideal. Media images that set the standards of beauty are perceived as real and normative but are essentially impossible to attain (López-Guimerà et al., 2010).

One of the few studies carried out to test the effects of media literacy has actually shown that school-based media literacy lessons can significantly reduce the level of internalization of media ideals in young adolescent boys and girls (Wilksch, Tiggemann, & Wade, 2006). Following the approach of media literacy, another recent research (Slater et al., 2012) experimentally investigated the impact of warning labels to fashion images. Such labels were placed on idealized media images to inform viewers that images had been digitally altered. Women who viewed images with warning labels reported lower levels of body dissatisfaction than females who were exposed to the same images with no warning label.

Another body of research has examined the effects of exposure to media that do not focus on the thin ideal. The evidence of a positive influence has been somewhat unclear. On the one hand, studies of magazine exposure have found that women express more positive body image following exposure to average-size models than when exposed to thin models (e.g., Dittmar et al., 2009; Dittmar & Howard, 2004). On the other hand, where exposure to average-size women in television commercials or programs has been examined, participants who were exposed to "real women" felt sadder and showed more restrained eating than partici-

pants exposed to thin models (Anschutz et al., 2009; Swami & Smith, 2012). Anschutz and colleagues (2009) suggested that the emphasis placed on the use of "real women", facilitating identification with the models in the commercials, heightens awareness of beauty ideals in general and self-awareness regarding body figure. These two perspectives, i.e., one based on media literacy and the other fostering the presence of "real women" in media, have not been directly compared yet.

The present study was designed to investigate the effect of awareness of digital alteration of media images, i.e. retouching salience, compared to the presence of no retouched media images and to the presence of retouched media images. Since literature highlights the mediational role of internalization (Bair et al., 2012; Giles & Close, 2008; Groesz et al., 2002; López-Guimerà et al., 2010; Tiggemann, 2003; Vandenbosch & Eggermont, 2012), we hypothesized that, compared to the other conditions, retouching salience would decrease the level of internalization, as underlying the digital alteration would emphasize the unrealistic character of images. As unrealistic, such images should become less appropriate standards for individuals' appearance. On the contrary, the presence of no retouched women, facilitating identification with the models and heightening awareness of beauty ideals should pave the way to internalization, as well as the presence of retouched images.

The level of internalization, in turn, should increase the negative mood and decrease the self-perception in terms of attractiveness (Dittmar et al., 2009; Slater et al., 2012). Since attractiveness can be considered as one dimension of state self-esteem (Heatherton & Polivy, 1991), we tested the effects of media

images via internalization also on the other two dimensions of state self-esteem, i.e. social and performance self-esteem. Based on previous studies (Bardone-Cone & Cass, 2007; Rollero, 2013), we expected that internalization should reduce both social and performance self-esteem.

Figure 1 shows the hypothesized model.

Method

Participants

A total of 151 female undergraduates participated in this study. Their mean age was 21.27 years (range: 19-26 years, $SD = 2.43$). Their mean BMI was 20.51 (range: 14.70-29.73, $SD = 2.33$).

Materials and Procedure

Data were collected in a classroom during a break. Participants were randomly assigned to one of three conditions (retouching; no retouching; retouching salience). The study was presented as an investigation of the effectiveness of marketing techniques.

Participants viewed full color and full-page photographs that looked like magazine advertisements. In the retouching condition, participants viewed 4 photographs featuring models, whose image was digitally modified. In the retouching salience condition, participants viewed the same 4 digitally modified photographs and read a sentence that explicitly referred to digital alteration[1]. In the

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[1] "As you probably know, almost all media images receive some form of digital alteration or enhancement. The practice of digitally altering media images is widespread across many fashion, media and advertising industries."
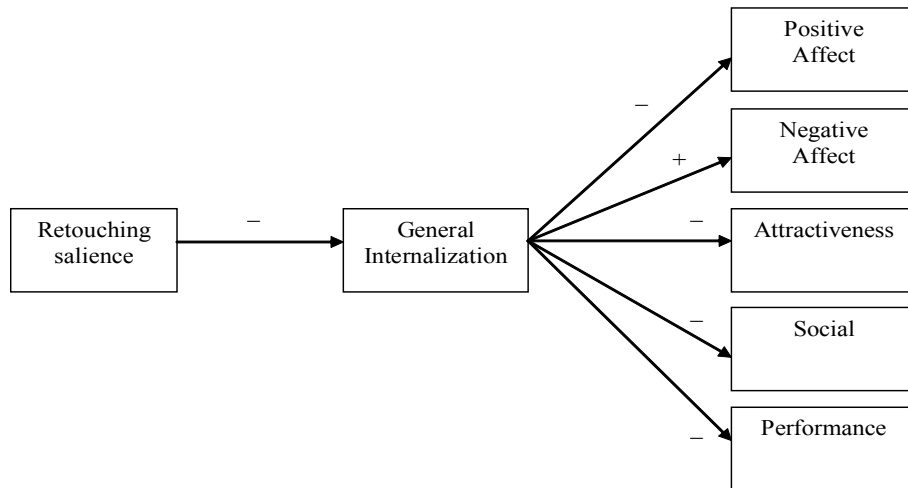
Figure 1 The hypothesized path diagram

no retouching condition, participants viewed the same 4 photographs, but with no artificial modification. Finally, all participants completed a questionnaire.

Measures

Positive and negative mood. The Positive and Negative Affect Schedule was administered (Watson, Clark, & Tellegen, 1998). Twenty adjectives are rated from "not at all" (1) to "extremely" (5) in terms of the degree to which the participant feel that way. Mean scores were computed for the Positive Affect (PA) adjectives ($\alpha = .87$) and the Negative Affect (NA) adjectives ($\alpha = .86$);

State self-esteem. The State Self-Esteem Scale (Heatherton & Polivy, 1991) is a widely used 20-item inventory that measures momentary self-esteem. It can be divided into *Attractiveness*, *Social*, and *Performance*

subscales. Items are rated on a 5-point Likert scale ranging from 1 (not at all) to 5 (extremely). For the current study alphas were respectively .83 for Attractiveness, .73 for Social, and .74 for Performance subscales.

Internalization of media standards. The 9-item Internalization-General subscale of the Sociocultural Attitudes Towards Appearance Questionnaire-3 (SATAQ-3; Thompson et al., 2004) was used. Items are rated on a 5-point Likert scale (1= definitely disagree, 5 = definitely agree). (Cronbach's alpha = .89).

To strengthen the cover story, in the questionnaire several distracter questions were included regarding their enjoyment of advertisements.

Results

First, we tested the effect of the experimental condition on Internalization. Partici-

pants in the retouching salience condition showed lower levels of Internalization (M = 1.66, SD = .72) than participants in both the retouching (M = 2.09, SD = .70) and in the no retouching conditions (M = 2.14, SD = 1.07, F (2, 144) = 4.42, p < .05, post hoc Bonferroni).

Next, we examined the correlations between Internalization and the outcome variables. No significant relation was found between Internalization and Positive Affect (r = -.12, *n.s.*), whereas Internalization was positively related to Negative Affect (r = .29, p < .01). Internalization was negatively correlated to Attractiveness (r = -.38, p < .001), Social self-esteem (r = -.48, p < .001), and Performance (r = -.37, p < .001).

Finally, we developed a structural equation model. The model proved acceptable according to all the fit indexes χ^2 (7) = 6.03; p = .09; GFI = .98; Adjusted GFI = .95; CFI =

.99. All estimated parameters were significant, with the exception of the influence of Internalization on Positive Affect (Figure 2). Compared to the other conditions, retouching salience significantly decreased Internalization, which in turn enhanced Negative Affect and lessened all the dimensions of self-esteem.

Discussion

The present results reveal that only retouching salience can reduce the level of internalization of beauty ideals and thus the negative effects of media images exposure, such as negative mood and decrease in self-esteem. On the contrary, retouched images and not retouched images play a similar role in fostering internalization of beauty ideals.
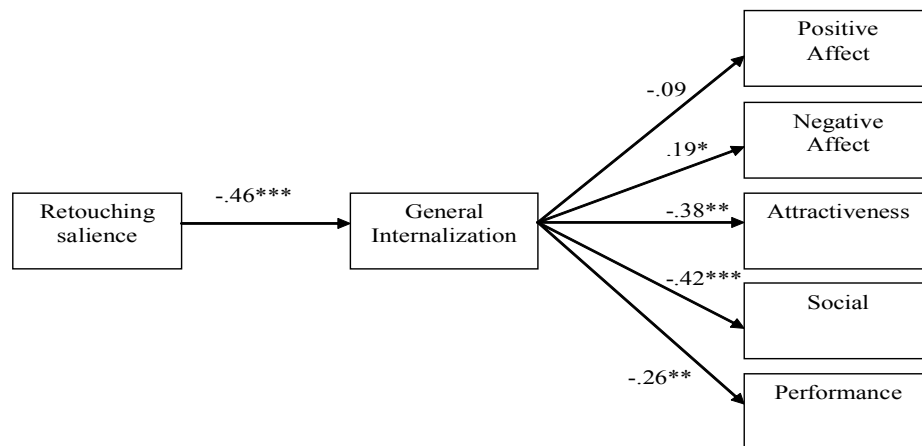
*** p < .001   **p < .01   *p < .05

Figure 2 Path diagram and standardized regression weights

The current study aimed to compare two different approaches concerning media exposure, one promoting a critical view of media, and the other promoting the presence of "real" persons in the media. According to the first perspective, based on media literacy approach, when individuals become aware of the artificial and deceptive nature of media techniques, their level of internalization of beauty standards is reduced. The other perspective is based on a social comparison approach. Since the great majority of women, when viewing images of "perfect" models, are comparing their own appearance to that of someone who is "better" and feel dissatisfied and ashamed, exposure to "real" women should reduce the gap in the comparison and thus the negative psychological consequences. However, as previous studies have shown (Anschutz et al., 2009; Swami & Smith, 2012), the exposure to models *per se* heightens awareness of beauty ideals in general and self-awareness regarding body figure, no matter how "real" the model is. Rather, women exposed to "real" models may also experience greater self-awareness on their own bodies as a function of the explicit focus on "real" women.

Indeed, the present results reveal that the most effective way to reduce the negative consequences of media exposure is related to awareness of the artificial and deceptive nature of proposed images. Moreover, the current study confirms the key role played by internalization as mediator: media convey beauty ideals, but is it the internalization of these messages that guides the perception of one's body and worth (Vandenbosch & Eggermont, 2012)?

This study has some limitations. First, it is a post-test only design in which both the dependent measures (mood and self-esteem) and the mediator (internalization) were administered only after the presentation of the experimental stimuli. A pre- to post- test design was not used because of concern that the use of such pre-test measures might reveal the true purpose of the study or influence the post-test. However, further research should investigate pre-test level of internalization, negative mood and state self-esteem. Second, the sample was restricted to white University students and thus results may not generalize to groups of older or younger females (see Rollero & Fedi, 2013). Third, we did not measure the sexual orientation of participants. Thus, it is currently unknown if this effect is specific to heterosexual participants. Finally, we investigated only magazine exposure, although it is well known that magazines and television may not operate in the same way (Tiggemann, 2003).

Despite the above limitations, the present study contributes to underline potential protective factors against the negative outcomes of media exposure. Since media are so important in conveying values and ideals, promoting a critical approach to media can ameliorate some of the known dangerous effects of viewing images that feature unrealistic beauty standards.

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„VIEM, ŽE NIE SI SKUTOČNÝ/Á": ZDÔRAZNENIE RETUŠOVANIA FOTOGRAFIE ZNIŽUJE NEGATÍVNY VPLYV MÉDIÍ POMOCOU INTERNALIZÁCIE

Ch. R o l l e r o

Súhrn: Masmédiá sú jedným z najsilnejších sprostredkovateľov ideálu krásy, prezentujú nerealistický obraz ženskej krásy, ktorý väčšina žien nikdy nedosiahne. Internalizácia týchto ideálov vedie k negatívnym emóciám, anxiete zameranej na telo a k nespokojnosti. Táto štúdia porovnávala dva rozdielne prístupy zamerané na zníženie týchto negatívnych dôsledkov. Jeden prístup je založený na uvedomovaní si klamlivej povahy mediálnych techník (t.j. retušovanie fotografie) a druhý je založený na využívaní „skutočných" žien ako modeliek. Výskumu sa zúčastnilo 151 vysokoškoláčok. Výsledky ukázali, že zdôraznenie retuše môže znížiť úroveň internalizácie ideálu krasy, a tým aj negatívne účinky mediálnych obrázkov, ako napríklad negatívnu náladu a pokles sebaúcty. Naopak, ideálne obrázky a „skutočné" obrázky hrajú podobnú úlohu pri podpore internalizácie ideálov krásy. Dôsledky diskutujeme.