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Disclaimer labels on fashion magazine advertisements: Does timing of digital alteration information matter?☆

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ABSTRACT

The study aimed to investigate whether a message informing readers about digital alteration read before exposure to thin ideal advertisements would enhance the effectiveness of disclaimer labels. Participants were 280 female undergraduate students who viewed eleven thin ideal fashion magazine advertisements. Half viewed the advertisements in their original format, and half viewed the same advertisements with a digital alteration disclaimer label. Prior to viewing the advertisements, participants read either a brief message informing them that advertisements are commonly digitally altered, or a control message. Irrespective of experimental condition, exposure to the thin ideal advertisements led to increased body dissatisfaction, with social comparison predicting this increase. Neither the disclaimer label nor the pre-exposure message, nor their combination, led to reductions in perceived realism, social comparison, or body dissatisfaction. However, trait appearance comparison moderated the effect of pre-exposure message on perceived realism, such that women high on trait appearance comparison in the digital alteration pre-exposure message condition rated the models as relatively more realistic than did women low on this trait. It was concluded that more research is needed to identify brief and easy-to-implement universal prevention strategies that can reduce the negative effects of thin ideal media imagery on women's body image.

1. Introduction

Widespread body dissatisfaction among women in western societies has been well documented, with sociocultural factors generally considered to play a major role (Dittmar, 2009; Engeln-Maddox, 2005; Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999; Tiggemann, 2011). Indeed, meta-analyses have identified idealised images in the media as having a pervasive negative influence on women's body image (Grabe, Ward, & Hyde, 2008; Groesz, Levine, & Murnen, 2002; Levine & Murnen, 2009; Want, 2009). This has generally been attributed to upward social comparison, whereby women compare their appearance with that of the idealised models and find themselves wanting (Thompson et al., 1999; Want, 2009). Recently, these ideals have been rendered even more unrealistic due to the common practice of digital altering and enhancing media images (Harper & Tiggemann, 2008; Krawitz, 2014). As body dissatisfaction has been identified as a major risk factor for eating disorders (Posavac, Posavac, & Weigel, 2001; Stice, 2002; Stice, Schupak-Neuberg, Shaw, & Stein, 1994), the negative effects of thin ideal media exposure have become an important societal concern.

Internationally, policy makers and governments have been searching for quick and easy-to-implement universal prevention strategies in an attempt to prevent women from feeling dissatisfied with their bodies following idealised media exposure (Krawitz, 2014; Paraskeva, Lewis-Smith, & Diedrichs, 2015; Paxton, 2015). A number of countries, including Israel, France, and Australia, have introduced population level preventative recommendations or legislation that suggest or require a disclaimer label be attached to any digitally altered media image (Charlton, 2015; Geuss, 2012; Krawitz, 2014; Paxton, 2015). The rationale underlying this social policy is that a disclaimer label will highlight the appearance of a model as unrealistic and therefore inappropriate as a comparison target, thereby reducing social comparison and resultant body dissatisfaction (Paraskeva et al., 2015; Tiggemann, Slater, Bury, Hawkins, & Firth, 2013).

There is good reason to expect that disclaimer labels would potentially ameliorate negative effects on body dissatisfaction, as media literacy programs which encourage participants to critically analyse media images and messages have shown some success (Levine & Murnen, 2009; Posavac et al., 2001; Yamamiya, Cash, Melnyk, Posavac, &

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Posavac, 2005). However, investigations of the effectiveness of disclaimer labels have been less successful. One study has found that disclaimer labels attached to women's magazine fashion shoots led to reduced body dissatisfaction (Slater, Tiggemann, Firth, & Hawkins, 2012), but other studies that have investigated disclaimer labels on fashion magazine advertisements have found no such benefit (Ata, Thompson, & Small, 2013; Bury, Tiggemann, & Slater, 2015; Tiggemann et al., 2013).

One potential reason as to why disclaimer labels may not have been effective in reducing body dissatisfaction in the latter studies is that they may not have reduced social comparison, as reported by Bury et al. (2015) and Tiggemann et al. (2013). This negative finding is consistent with recent conceptualisations of social comparison that such comparisons can occur automatically, even when they are inappropriate (Bessenoff, 2006; Gilbert, Giesler, & Morris, 1995; Paraskeva et al., 2015; Want, 2009). Thus, it may be that the digital alteration message contained in a disclaimer label comes too late, after women have already spontaneously made their upward comparisons with the models. Hence providing women with information about digital alteration *before* exposure to thin ideal advertisements may better allow them to inhibit appearance comparison processing or cognitively prepare to 'mentally undo' inappropriate comparisons (Gilbert et al., 1995), and thereby preserve body satisfaction.

Thus the major aim of the current study was to investigate whether a brief digital alteration informational message presented before viewing fashion magazine advertisements would increase the effectiveness of disclaimer labels in reducing body dissatisfaction. It was expected that such a message would prime women to prepare themselves to avoid making inappropriate comparisons (Gilbert et al., 1995; Want, 2009). Specifically, it was predicted that prior information would interact with the disclaimer label, such that with the provision of prior information, disclaimer labels would reduce perceived realism, social appearance comparison, and body dissatisfaction. State appearance comparison was expected to mediate change in body dissatisfaction. Trait appearance comparison was also assessed as a possible moderator of effects. Women who have a higher tendency to compare on the basis of appearance may be more cognitively primed to attend to any information related to appearance (Yamamiya et al., 2005) and, as a result, may not be able to prevent themselves from making (inappropriate) comparisons. Accordingly, they would be expected to benefit less from any intervention.

2. Method

2.1. Design

A 2 × 2 between subjects experimental design was employed to investigate the effect of pre-exposure informational message (control, digital alteration) and disclaimer label (no label, label) appended to thin ideal fashion magazine advertisements. Major dependent variables were body dissatisfaction, state appearance comparison, and perceived realism. Trait tendency for appearance comparison was examined as a potential moderating variable.

2.2. Participants

Participants were 280 female undergraduate students at a South Australian university aged between 18 and 30 years, with a mean age of 20.42 ($SD = 2.99$). The average body mass index of 22.69 ($SD = 5.26$) was within the normal weight range (World Health Organisation, 2011). The majority of participants identified as White (76.8%), with 18.6% Asian and 4.6% 'other'.

2.3. Materials

2.3.1. Pre-exposure message

A short printed informational message (control, digital alteration) was presented to participants on the cover of a folder. The digital alteration information message read: "As you may be aware, nearly all images in fashion magazine advertisements (like those you are about to view) are airbrushed or digitally altered to improve the appearance of the models in the advertisements". The control message was designed to be of the same structure and length, and read: "As you may be aware, there are many different types of magazines available such as fashion, gardening, celebrity news and gossip, home styling, craft and hobbies, parenting, lifestyle, television, pets and business".

2.3.2. Thin ideal stimuli

The stimuli consisted of eleven thin ideal advertisements (plus four product advertisements) sourced from popular women's fashion magazines, including *Cleo*, *Marie Claire*, and *Vogue*. The fifteen advertisements were chosen from an initial pool of 50 advertisements (30 thin ideal, 20 product) to represent a typical fashion magazine collection. Each advertisement contained one female model representative of the thin ideal, with at least three quarters of the model's body visible.

The advertisements were printed on high quality A4-size photographic paper. There were two different versions of each advertisement: the original advertisement, and that advertisement with a disclaimer label ("Warning: This image has been digitally altered"). Labels were in size 12 Calibri font enclosed within a thin border. Research has demonstrated that participants do notice such disclaimer labels when affixed to fashion advertisements (Ata et al., 2013; Bury, Tiggemann, & Slater, 2014; Bury et al., 2015).

2.3.3. Body dissatisfaction

Following Heinberg and Thompson (1995), seven visual analogue scales (VAS) were used to obtain measures of mood (five items) and state body dissatisfaction (weight dissatisfaction, appearance dissatisfaction) both before and immediately after viewing the 15 magazine advertisements. The mood items (not analysed here) were included to mask the focus on body dissatisfaction. Each scale consisted of a 100 mm continuous horizontal line with endpoints labelled "none" and "very much". A score for body dissatisfaction was calculated by averaging the VAS measures of 'weight dissatisfaction' and 'appearance dissatisfaction'. Scores ranged from a possible 0 to 100, with a higher score indicating greater body dissatisfaction. Heinberg and Thompson (1995) reported good construct validity for the body dissatisfaction VAS. In the current study, internal consistency was acceptable (pre-exposure $\alpha = 0.83$; post-exposure $\alpha = 0.88$).

2.3.4. State appearance comparison

Three items constructed by Tiggemann and McGill (2004) were used to measure state appearance comparison retrospectively. The first item asked participants to rate the extent to which they thought about their appearance while viewing the advertisements (1 = *no thought about my appearance*, 7 = *a lot of thought*). The second and third items asked participants to what degree they compared their overall appearance and specific body parts to those of the models in the advertisements (1 = *no comparison*, 7 = *a lot of comparison*). Internal reliability was high ($\alpha = 0.92$).

2.3.5. Perceived realism

The four-item scale developed by Tiggemann et al. (2013) was used to measure perceived realism of the models in the advertisements, where a higher score indicated greater realism (e.g., "The models in the advertisements looked like they would look like in person"). For each item, participants indicated their agreement using a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*). Internal reliability was acceptable ($\alpha = 0.81$).

2.3.6. Trait tendency for appearance comparison

The Physical Appearance Comparison Scale (PACS) of Thompson, Heinberg, and Tantleff (1991) was used to measure the trait tendency to engage in social comparison based on appearance. The five items