

Photo-shopped images, how can we not be influenced?

Prevention of a negative body image in women by labeling retouched female model pictures



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Abstract

The documentary 'Beperkt Houdbaar (2007)' states that retouched model images create an unrealistic female body norm and, therefore, could have a negative impact on women's body image. This study will examine a prevention factor for the emergence of a negative body image. Namely, adding a 'photo-shopped' label on retouched model images which will inform viewers that the picture is unrealistic.

Female participants first completed the 'body dissatisfaction scale' (EDI-II), to assign them in a body satisfied or a body dissatisfied group. Next, they were exposure to condition dependent images and, thereafter, they completed the MBSRQ.

This 4 x 2 (condition x body satisfaction) between subject factorial design showed no significant differences in MBSRQ scores. Moreover all hypotheses were rejected; labeling has no effect. This possibly is explained by the fact that women in western society are constantly bombarded by the media with model images (Posavac, Posavac & Weigel, 2001). Plausibly women have either adapted or maladapted and therefore no effect is found.

Prologue

We, Wieger and Annelieke, have come to the end of our psychology study. All those years of hard work is now crowned with this master thesis. Already in our bachelor years our interests were very similar. We both accomplished our bachelor thesis concerning the topics beauty and cosmetic surgery. We think these are very interesting themes, since nowadays the western society is indissoluble linked with beauty, sexualizing the female body and cosmetic surgery.

Herein the media is seemingly of great influence. When you open a magazine or put on your television you get overwhelmed by beautiful, barely dressed and, above all, slim women. Obviously women are society's outcast after size 36 and are not allowed to be happy with their looks. We are intrigued by the fact that the media has created this social norm wherein women need to be thin; thus in a way promoting plastic surgery.

Why do women listen to these ideals that are forced upon them? Maybe it is some sort of habituation, because women were already influenced by images many centuries ago. When you look at painting from those times, you see chubby women with clear feminine curves. At that time 'chubby' was the ideal female body, because when women were heavier it meant that they were rich. The stupid thing is that, now the economy is treating us well, women need to be thin. Everybody "obeys" the media images; nowadays almost everyone is on a diet or has been on one and beside that surgery has become a common phenomenon. Businesses concerning these branches are, of course, laughing their ass off; making tons of money.

The problem is that currently most of the model images are retouched, and because of that an unrealistic image of the female body is created. Women need to be more beautiful and thin; they need to be "perfect". We were fascinated by the documentary 'Beperkt Houdbaar' wherein this unrealistic image is discussed and wherein the presenter Sunny Bergman calls for photo-shopped labels in magazines. Through these labels women will be alarmed that the model images are retouched, thus unrealistic. Moreover they will not compare themselves with these images. We were inspired by this plea for 'photo-shopped labels' regarding our master thesis.

We hope you will enjoy reading our thesis as much as we enjoyed writing it. Second, we want to give our special gratitude to Drs. L. Verspui, the supervisor of this research. Because of her help and comments we managed to come to a completion of this thesis.

Wieger Prins and Annelieke Zwaans

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Introduction

Nowadays when you open a glossy magazine you get overwhelmed by beautiful, thin women; women who have the perfect, ideal and sexual body. The problem is that these days advertisements, especially those of female fashion models, are retouched (Beperkt Houdbaar, 2007¹). In the documentary 'Beperkt Houdbaar' (2007) the manipulation of this ideal beauty is discussed. Presenter Sunny Bergman (political scientist and philosopher) stresses that the media has created an unrealistic and stereotypical norm concerning women's appearance and body. Models are "perfectionized" (e.g. thinner, bigger breasted) (Beperkt houdbaar, 2007). Logically women often experience a discrepancy between their own body and that of models and this could have a negative impact on women's body image.

Woertman, professor psychology at University Utrecht (The Netherlands), says that appearance is a dominant factor for femininity; women feel more feminine when they are evaluated as beautiful (Beperkt houdbaar, 2007). Other researchers have encountered that women who are evaluated as beautiful, are thought of as being more skilled concerning several aspects: "what is beautiful is good" (Dion, Berscheid & Walster, 1972; Eagly, Ashmore, Makhijani & Longo, 1991; Langlois et al., 2000). Beside that, women want to be judged as normal (Davis, 1995). Reasonably women could be negatively affected by this stereotypical norm: "A lot of visual images are forced upon us by the media, so in fact we should ask how we can not be influenced" (Woertman in Beperkt Houdbaar, 2007).

This thesis will investigate a preventive factor for the emergence of a negative self image in women. Namely, a 'photo-shopped' label on retouched model pictures, as was recommended in de documentary Beperkt Houdbaar (2007), which will warn women that the model images are unrealistic.

This thesis will examine, first, if body dissatisfied women have a more negative body image after being exposed to photos of female models than body satisfied women. Second, if women exposed to retouched photos of female models have a more negative body image compared to women exposed to non-retouched photos of female models. Third, if women who are exposed to retouched photos of female models without a label have a more negative body image compared to women exposed to the same photos with the 'photo-shopped' label.

¹ 'Beperkt houdbaar', translated 'limited sustainability', is a documentary about the manipulability of beauty ideals and states that retouched model images create an unrealistic female body norm.

Influence of the media on body image

Everyday people are bombarded by visual advertisements that encourage them to buy particular products or services (Lindner, 2004). These images are supposed to act as socializing agents that influence our attitudes, values, beliefs, and behaviors (Kang, 1997). Advertisements include statements about gender roles with regard to appropriate behavior and appearance for men and women. A study of Kilbourne (1990) revealed that there is indeed a relationship between the way women are portrayed in advertising and people's ideas about how women are supposed to behave and the roles they are supposed to fulfill within society. Obviously advertisements are a powerful product. They unconsciously influence the social norm in a society and thereby the attitude and behavior of people.

The media highlights thinness as the ideal standard of female attractiveness and is therefore seen as the most powerful messenger of socio-cultural pressures (Stice, Schupak-Neuberg, Shaw & Stein, 1994; Evans, Gilpin, Farkas, Shenassa, & Pierce, 1995; H. Posavac, S. Posavac & Weigel, 2001). It is perceived by women as the main source of pressure to be thin, and women who are exposed to heavy models report less body image disturbances than women exposed to thin models (Irving, 1990, as cited in Posavac et al., 2001). Other research found that women who are frequently exposed to the media are more likely to have eating disorder symptoms (Stice et al., 1994). Moreover, H. Posavac, S. Posavac and E. Posavac (1998) found that most female participants who viewed ten images of fashion models for a brief interval reported increased weight concern. They stress that since this manipulation was sufficient to produce an adverse effect on weight concern, it stands to reason that a lifetime of exposure to media images may produce more serious problems.

Posavac et al. (2001) say that body image disturbances have severe consequences and therefore prevention is an important goal for psychological research. They thought that increased body dissatisfaction could be counteracted by alerting women to the fact that most model images are unrealistic. Posavac et al. (2001) investigated a couple of intervention programs whereby participants were alerted through a video message that (a) media images are inappropriate targets for comparison because the model's beauty is artificial (i.e. enhanced through a variety of techniques not available to women in everyday life), or/and (b) that the majority of women are genetically predisposed to be heavier than fashion models. After the video intervention participants were shown a set of model pictures. Posavac et al. (2001) found that participants exposed to an intervention program reported less body image disturbances than participants not exposed to an intervention program. The perceptual process is, in this way, a conscious process whereby women know they are being fooled.

Sunny Bergman (Beperkt Houdbaar, 2007) presented an easy, more practical intervention. Namely, a label on retouched model pictures which says: 'photo-shopped'. Due to the documentary Beperkt Houdbaar (2007) some Dutch magazines used the 'photo-shopped' label. Even the Dutch playboy was willing to use the label, but they presumed that it would not work: "The problem is more profound than we think; there is nothing you can do about the eccentric body experience of women". Eventually the playboy backed out, they said it would be offensive for the models. Moreover the Dutch glossy magazines did not join; they believed that photo-shopping is part of the artistic freedom and beside that they did not want to disturb their created dream world with labels.

The influence of automatic perceptual activity on body image

The above literature states that advertisements are a powerful product. They unconsciously influence the social norm in a society and thereby the attitude and behavior of people. Apparently visual advertisements influence our self-conception and the conception of others. Are we aware of the effect of these perceptions? Bargh and Chartrand (1999) revealed that perceptual activity is largely automatic and not under conscious or intentional control (an orange can not be seen as purple through an act of will). Perception is a pathway by which the environment directly causes mental activity, specifically the activation of internal representations of the outside world (Bargh & Chartrand, 1999). Apparently we unconsciously interpret perceived representations and they unconsciously influence our thoughts and behavior. So when women see a picture of a beautiful and slim model it unconsciously influences their thoughts (e.g. her body is better in shape than mine, she is more beautiful than I am, I am fat) and behavior (e.g. eating less, sport more, spending more time on appearance).

The external environment affects behavior non-consciously through a two-level process: automatic perceptual activity, followed by automatically creating behavioral tendency through a perception-behavior link (Bargh & Chartrand, 1999). Barg and Chartrand (1999) stress that the entire environment-perception-behavior string is automatic; conscious control in producing behavior is out of question. Berkowitz says that such a mechanism is subject to media effects on behavior and modeling effects more generally (Berkowitz 1984, 1997, as cited in Bargh & Chartrand, 1999). For instance the perception of aggressive behavior on television activates the perceivers own behavioral representation of aggressiveness and thereby stimulating aggressive behavior (Bargh & Chartrand, 1999). Bargh, Chen and Burrows (1996) found the same result; when unconsciously activating characteristic constructs or stereotypes during an unrelated task (priming) participants were more likely to act in line with the content of the primed construct or stereotype. So perception of model pictures activates the perceivers own

behavioral representation of beauty and thereby stimulating behavior that is concentrated on their own appearance.

Mental categories (e.g. the approach of a really fast car is dangerous, it is best to avoid an aggressive person) are absolutely essential in simplifying and understanding environmental information (Bruner, 1957; Smith & Medin, 1981, as cited in Bargh & Chartrand, 1999). The perception-action link exists for a good reason; creating adaptive behavior when conscious control is absent (Bargh & Chartrand, 1999). Stereotypes, however, can be maladaptive forms of categories, because their content does not correspond with reality (e.g. women should be slim, all immigrants are criminal). Therefore they could cause problems in social interaction (Chen and Bargh, 1997), behavior and thoughts about the self. The media is presumed to be a medium that creates stereotypes, like women need to be beautiful and thin. Most women want to assemble this stereotype and therefore they will, for example, spend more time on their looks and worry about their nutrition intake.

But what happens if we see an unrealistic image? The above literature states that people unconsciously interpret perceived representations and those representations unconsciously influence their thoughts and behavior. Consequently people will not stop and ask themselves: "is this image real or unreal"? Except when the image does not correspond with our mental categories; an image of a rabbit with horse legs and dog ears will not be questioned.

Label effectiveness

In previous research labeling seems to be successful. Research on label effectiveness for condom packages (Bleakley, Fishbein & Holtgrave, 2008) found that labels influence participants' beliefs and intentions. However, it depends on the context of the message; the effect of the label was only significant when it was aimed at the efficacy of the condom instead of the risks of sexual intercourse. Other label research examined the influence of the nutritional labeling (Driskell, Schake & Detter, 2008). Usually people take the easy way and eat what they like best, a quick meal, a cheap meal et cetera. This could lead to bad eating habits. Koster (2009) stresses that the unconscious nature of decision making plays an important role in food related behavior. Past behavior, habit and hedonic appreciation are usually better predictors of actual food choice behavior than psychological constructs like attitudes and intentions (Koster, 2009). Driskell et al. (2008) tested if labeling nutrition bytes would change the eating habits of adults eating in dining halls at a Midwestern university and assessed the differences between sexes. It seemed that the labeling had a positive impact on food choices, especially for women, and it would probably do so at other dining halls.

Conclusion & hypotheses

Accordingly in some cases labels are effective. Nevertheless, even if all magazines would join the usage of the “photo-shopped” label, the question remains if such a label is an actual preventive factor for the emergence of a negative self image. As described earlier we perceive and interpret an image unconsciously. If we repeatedly get indoctrinated by particular kinds of images, like retouched model pictures, a stereotypical norm is created; women have to be thin and beautiful. To end this ridiculous norm the unconscious process has to be broken down. Research on label effectiveness looks promising, however in this case another area is investigated, therefore the hypotheses are explorative. In general it is expected that the “photo-shopped” label will prevent negative impact on self image at an explicit level, because women become aware that the model images are unrealistic; thus will not compare themselves with the models.

In spite of all research on the influence of media on body image it can be suggested that not all young women are equally affected by media exposure (Posavac et al., 1998). Specifically, says Posavac et al. (1998), the minority of women who are consistently satisfied with their own body shape may not find exposure to media images threatening. On the contrary, women who are already body dissatisfied will logically be negatively affected by the media standards. Therefore the *first hypothesis* assumes that already body dissatisfied women will have a more negative body image after being exposed to photos of female models than body satisfied women.

The retouched photos represent unrealistic standards whereby the participants will experience a discrepancy between their own body and that of the models (Beperkt Houdbaar, 2007). On the contrary participants shown the non-retouched photos will perceive a realistic image of female bodies and the discrepancy will be smaller or not present at all. Therefore *second hypothesis* assumes that women exposed to retouched photos of female models without the ‘photo-shopped’ label will have a more negative body image compared to women exposed to non-retouched photos of female models.

The perceptual process will be, because of the label, a conscious process whereby women know they are being fooled and will therefore not compare themselves with the models. On the other hand, when no label is used, the process will be unconscious and the participants will think that the representation is the normal standard. Consequently they will compare themselves with the models. Thus *last hypothesis* assumes that women who will be exposed to retouched photos of female models without the label will have a more negative body image compared to women exposed to the retouched photos with the ‘photo-shopped’ label.

Subjects & methods

Participants & procedure

Previous research on the influence of media images of female models is generally focused on young adult females (Posovac, et al., 1999; Botta, 1999). Due to the open and large nature of the internet this research is focused on Dutch females of all ages ($n= 237$; age: $M=29,3$; $SD=12,1$). Post hoc tests showed no effect for age and no outliers were found, therefore no age boundaries were made.

The participants were recruited via internet, through Dutch sites as www.hyves.nl and mailing. They were also recruited through flyers at the university of Utrecht and local supermarkets. To mask the aim of the research participants were asked to partake in an online marketing research. Through an internet link they were able to open the online questionnaire which was developed in www.netq.com.

Participants were randomly assigned to one of the four *photo conditions* (see table 1 and 2). Then they started by completing the "Body Dissatisfaction" subscale from the EDI-II-NL (Strien, 2002). These items were masked by the SATAQ-3 (Thompson, Berg, Roehrig, Guarda & Heinberg, 2004). The participants score on the EDI-II Body Dissatisfaction subscale determined the assignment to one of the *two body satisfaction condition*. Subjects with a score of 31 or higher were assigned to the *Body dissatisfied* participant group en subjects with a score of 30 and lower were assigned to the *Body satisfied* participant group (see table 2).

The second phase of the trial (photo phase) consisted of one of the 4 sets of 10 photo's (see design). All subjects were asked questions concerning each of the photos to focus their attention on them. In the last phase they had to complete some subscales from the MBSRQ (Brown, Cash & Mikulka, 1990); the Appearance Evaluation, Appearance Orientation, Overweight Preoccupation and Body Area Satisfaction.

Table 1. 4x2 Between-Subject Factorial Design. Cell Layout.

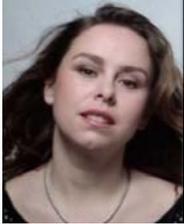
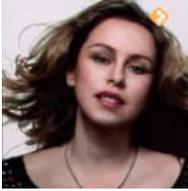
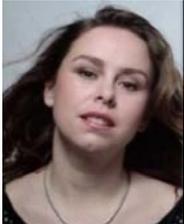
5 x 2	1. Photo's of Cars	2. Photo's of Models w/o Label	3. Retouched Photo's of Models w/o Label	4. Retouched Photo's of Models with label
A. Body Satisfied	Body Satisfied  No label	Body Satisfied  No label	Body Satisfied  No label	Body Satisfied  'Photo-shopped' label
B. Body Dissatisfied	Dissatisfied  No label	Dissatisfied  No label	Dissatisfied  No label	Dissatisfied  'Photo-shopped' label

Table 2. Distribution of participants and age among the conditions (4x2).

Independent Var. (4x2)		Age				
Condition	Body Satisfaction	N	Mean	SD	Minimum	Maximum
Controle (Cars)	Body Satisfied	31	31,52	14,30	21	69
	Body Dissatisfied	35	31,29	13,44	21	69
Not retouched/ No Label (Female Models)	Body Satisfied	30	25,83	6,33	21	50
	Body Dissatisfied	27	29,63	10,94	21	57
Retouched/ No Label (Female Models)	Body Satisfied	33	29,82	12,39	21	66
	Body Dissatisfied	25	26,96	12,16	16	72
Retouched/ Label (Female Models)	Body Satisfied	28	28,93	13,66	13	72
	Body Dissatisfied	28	29,75	11,46	20	62

Instruments

The Body Dissatisfaction subscale from the Eating Disorder Inventory (EDI-II-NL; Strien, 2002) is used to measure participant's satisfaction with their own body. The BD-subscale has 9 items (e.g. "I am satisfied with the shape of my body"), which uses a 5-point scale ranging from *definitely disagree* (1) to *definitely agree* (6). It's a good quality questionnaire; the Cronbach's Alpha on students was .94 (Strien, 2002). The alpha in the present research is .93.

The Sociocultural Attitudes Toward Appearance Questionnaire (SATAQ-3; Thompson et al., 2004) is translated in Dutch and used to measure the social influence on body image and eating disturbances, but in this research primarily to mask the Body Dissatisfaction subscale. This 30 item questionnaire has 4 subscales. First, the Internalization-General subscale with 9 items (e.g. "I compare my body to the bodies of people who are on TV"). Second, the Internalization-Athlete subscale with 5 items (e.g. "I compare my body to that of people in "good shape"). Third, the Pressure subscale with 7 items (e.g. "I've felt pressure from TV or magazines to lose weight"). Last, the Information subscale with 9 items (e.g. TV programs are an important source of information about fashion and "being attractive"). All SATAQ-3 subscales use a 5-point Likert-scale ranging from *definitely disagree* (1) to *definitely agree* (5). The subscales have demonstrated excellent reliability. The Cronbach's Alphas are .96 for Internalization General, .95 for Internalization Athlete, .92 for Pressure and .96 for Information (Thompson et al., 2004). The alphas in the present research are: Internalization General .89, Internalization Athlete .74, Pressure .92, and Information .87.

Furthermore, from the Multiple Body-Self Relations Questionnaire-appearance scale (MBSRQ-AS; Brown et al., 1990), four adapted and translated subscales were used (Woertman, not published). The Appearance Evaluation and Appearance Orientation subscales are used to measure how participants evaluate their own body and how much time they spend on their looks. The AE subscale has 7 items (e.g. "I like the way I look without my clothes") and an Alpha of .99 (Brown et al., 1990), in previous research the Alpha is .87. The AO subscale has 12 items (e.g. "It is important that I always look good"). In previous research AO had an alpha of .99 (Brown et al., 1990), in current research the Alpha is .71. To measure participant's body satisfaction this study also used the 9 item Body Area Satisfaction subscale (e.g. "In what extent are you satisfied with your face?"), according to Williams & Cash (2001) this subscale has good construct validity. Also the 3 item Overweight Preoccupation subscale is used to measure the participant's attitude towards their weight en weight management (e.g. "I'm on a diet tot lose weight"). MBSRQ subscales mentioned above use a 5-point Likert-scale ranging from *definitely disagree* (1) to *definitely agree* (5). No Previous alphas were found, however current research showed an alpha of .72. The BAS Subscales measures the participant's satisfaction with their own body. Unlike the Body Dissatisfaction subscale, the BAS asks the participant in what level the participant is satisfied with a specific body part (e.g. "Face"). The BAS subscale is tested through the use of a 5-point ratings of (1) *dissatisfied* to (5) *satisfied*. No previous alphas were found. The alpha of the current research is .80.

Design

The experiment took form of a Between-Subjects Factorial Design 4 (photo condition) x 2 (Body satisfaction condition). In every condition participants were shown a different set of 10 photo's during the photo phase of the trial. Participants in condition 1 were shown pictures of cars (control group). In condition 2 they were shown photos of female models with no label. Subjects in condition 3 were shown retouched photos of female models with no label. In the last condition participants were shown retouched photos of female models with a 'photo-shopped' label.

Preliminary Analyses & Data analyses

After downloading the data, unfinished trials, those of men and those of participants not agreeing with the privacy policy were excluded from the datasheet. Women were classified on their scores of the BD subscale, with the boundaries determined post hoc using a cluster analysis. Women with a score of 30 or lower were classified as "Body Satisfied" and with a score of 31 or above as "Body Dissatisfied". Age was also taken into account, but showed no significant difference in scores. Furthermore no outliers were found. Levene's test of equality of error variances showed no significant results with the Appearance Orientation, Overweight Preoccupation and Body Area Satisfaction. A significant result was found with Appearance Evaluation. To compensate for this result, alpha levels of ANOVA on Appearance Evaluation were set to .01 instead of .05.

The MBSRQ scores of every cell of the 4 x 2 design are compared using an ANOVA. Hypotheses 1 'body dissatisfied women will have a more negative body image after being exposed to photos of female models than body satisfied women' can be falsified by comparing the MBSRQ scores of the participants in the body satisfied group to the participants in the body dissatisfied group on each of the experimental conditions with the control condition (Cells 1A and 1B, see table 1).

The effects of the photo condition 'non-retouched photos compared to retouched photos' (hypotheses 2) are found by comparing the MBSRQ scores of participants in 2A, 2B cells to the participants in 3A, 3B and 4A, 4B cells (see table 1).

The effect of the label is found by comparing cells 3A, 3B to 4A, 4B (Hypotheses 3 'no label compared to photo-shopped label') (see table 1).

Results

A 4 x 2 (Condition x Body satisfaction) ANOVA on Appearance Evaluation (AE), Appearance Orientation (AO), Overweight Preoccupation (OP) and Body Area Satisfaction (BAS) was used to determine discrepancy between the control group, the non-retouched photo group, the retouched image group and the retouched image group with label. Results of the ANOVA were tested post hoc using the Tukey Honestly Significant Test (see Table 3 and chart 1 a till d).

Table 3. Descriptive statistics MBSRQ scores in a 4 x 2 (Condition x Body Satisfaction).

Dependent Var.	Condition	Body Satisfied			Body Dissatisfied		
		Mean	Sd	N	Mean	Sd	N
AE	Controle Not Retouched/ No Label	29,05	3,85	19	23,70	5,99	47
	Retouched/ No Label	29,26	4,18	23	24,15	5,11	34
	Retouched/ No Label	31,07	3,51	27	22,68	6,37	31
	Retouched/ Label	29,84	4,14	19	22,92	5,75	37
AO	Controle Not Retouched/ No Label	42,00	6,99	19	42,09	7,79	47
	Retouched/ No Label	36,30	6,87	23	41,29	8,00	34
	Retouched/ No Label	40,04	5,69	27	43,71	5,33	31
	Retouched/ Label	39,58	5,75	19	40,95	6,05	37
OP	Controle Not Retouched/ No Label	7,05	3,10	19	8,74	3,49	47
	Retouched/ No Label	5,43	2,27	23	8,76	3,17	34
	Retouched/ No Label	5,67	2,72	27	9,26	3,46	31
	Retouched/ Label	5,63	3,17	19	9,22	3,36	37
BAS	Controle Not Retouched/ No Label	39,53	4,07	19	31,02	6,37	47
	Retouched/ No Label	38,17	4,56	23	31,21	5,53	34
	Retouched/ No Label	37,44	7,34	27	28,84	6,63	31
	Retouched/ Label	37,63	6,99	19	30,35	5,37	37

AE = Appearance Evaluation, AO = Appearance Orientation, OP = Overweight Preoccupation, BAS = Body Area Satisfaction.

Appearance Evaluation

(See chart 1a) A significant main effect for Body Satisfaction (AE: $F(1,229)=83.063$, $p=.000$) was found. Body satisfied participants score significant higher on AE and thus evaluating their body more positively than Body Dissatisfied participants.

The analysis failed to show a main effect for Condition for AE (AE: $F(3,229)=.124$, $p=.946$). This means the type of photo shown to the participant does not have any effect on how people evaluate their body. In combination with the body satisfaction no interactions between the 2 variables (body satisfaction x condition) show a significant effect (AE: $F(3,229)=1.211$, $p=.306$). This means that the participant being satisfied or dissatisfied does not have any influence on the effect of the different photos (conditions) on the AE scores.

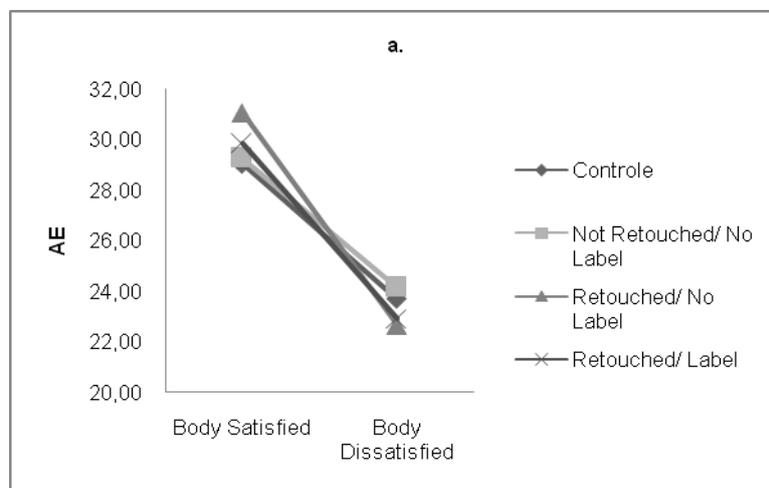


Chart 1a. MBSRQ's Appearance Evaluation subscale scores on a 4 x 2 (Condition x Body Satisfaction). AE = Appearance Evaluation.

Appearance Orientation

An effect was found for Body Satisfaction ($F(1,229)=7.600$, $p=.006$). Body Satisfied participants score significant lower on AO, thus spending less attention on their looks than body dissatisfied participants.

Furthermore a main effect was found for Condition on AO ($F(3,229)=2.812$, $p=.040$). These results mean the photo shown to the participant has significant influence on the attention spend on the participants' looks. A post hoc test, using Tukey Honestly Significant Difference Test, showed that none of the multiple comparisons were significant. The control group's scores on AO seem almost equal between body satisfied and dissatisfied. Participants shown photos of non retouched female models without label and retouched female models with label spend less attention to their looks compared to the control group. Body dissatisfied participants' scores on AO of the same pictures score higher and almost equal to the control group. Body satisfied participants shown photos of retouched female models without label also spend less attention on their looks than the

control group, however body dissatisfied participants spend more time on their looks than the control group.

Nevertheless no interaction between Body Satisfaction and Condition was found ($F(3,229)=1.462$, $p=.226$). The participant being satisfied or dissatisfied does not have any influence on the effect of the different photos (conditions) on the attention participants spend on their looks.

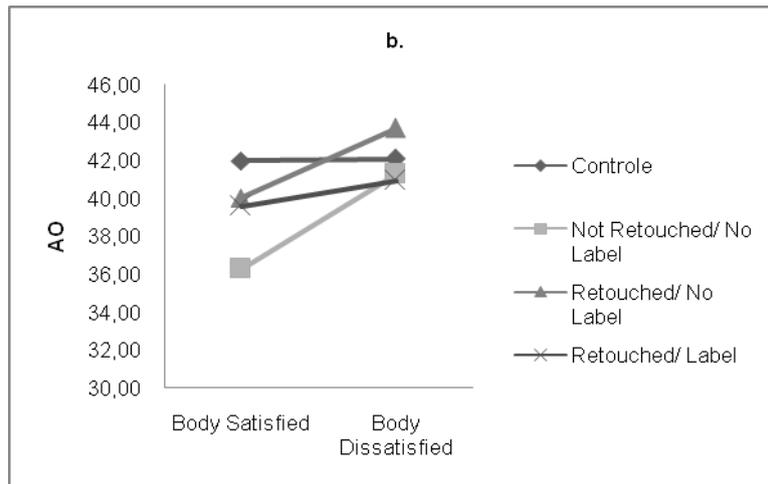


Chart 1b. MBSRQ's Appearance Orientation subscale scores on a 4 x 2 (Condition x Body Satisfaction). AO = Appearance Orientation.

Overweight Preoccupation

Body Satisfied participants are significantly less concerned with their weight than Body Dissatisfied participants ($F(1,229)=49.739$, $p=.000$). However the type of photo being shown to the participants had no significant effect on their weight concern ($F(3,229)=.579$, $p=.629$). Also no significant interaction effect was found ($F(3,229)=1.115$, $p=.344$). Body satisfaction does not have any influence on the effect of the different photos (conditions) on the participants' weight concern. (See chart 1c).

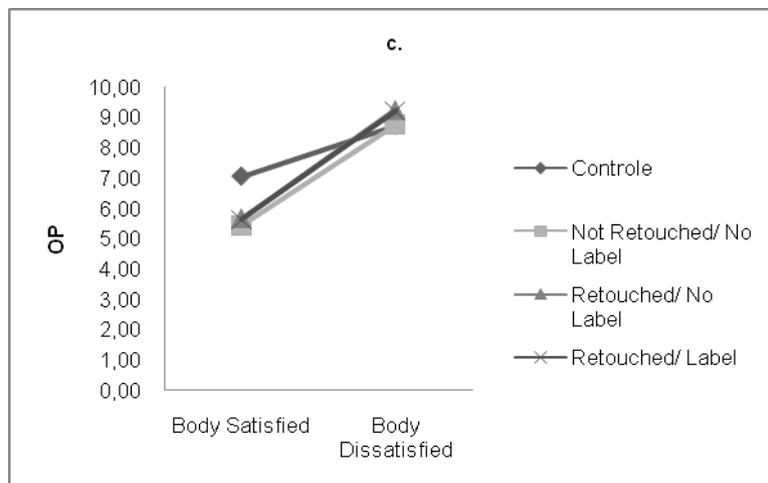


Chart 1c. MBSRQ's Overweight Preoccupation subscale scores on a 4 x 2 (Condition x Body Satisfaction). OP = Overweight Preoccupation.

Body Area Satisfaction

The Body Dissatisfaction subscale from the EDI-II measures a very similar construct as the BASS. Obviously a significant effect on participants' scores of their satisfaction of their body was found between the body satisfied and the body dissatisfied ($F(1,229)=92.091, p=.000$). However no significant effect was found for Condition ($F(3,229)=1.307, p=.273$), which means the photo shown had no effect on the body satisfaction. Also, the participant being satisfied or dissatisfied does not have any influence on the effect of the different photos (conditions) on the BAS scores ($F(3,229)=.266, p=.850$).

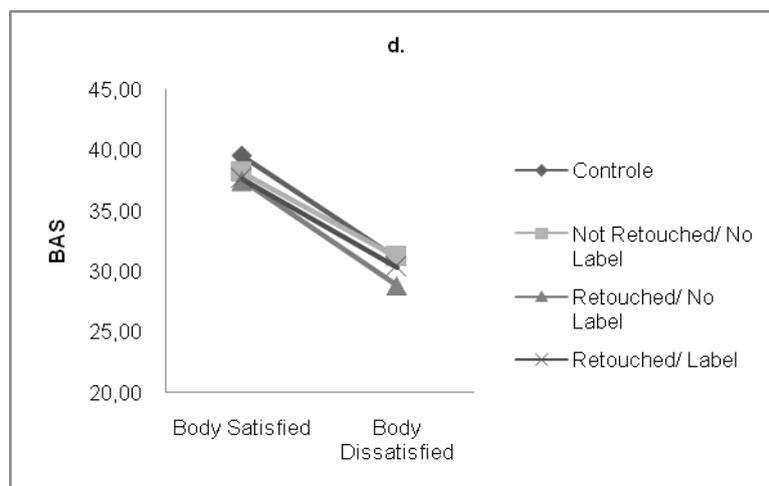


Chart 1d. MBSRQ's Body Area Satisfaction subscale scores on a 4 x 2 (Condition x Body Satisfaction). BAS = Body Area Satisfaction.

Photo-shop & label effect

After comparing the scores between the two satisfaction groups of each experimental condition with the control condition (Cells 1A and 1B, see table 1) no significant effect on the MBSRQ scales was found. Body dissatisfied women do not have a more negative body image after being exposed to photos of female models than body satisfied women. Therefore hypothesis 1 is rejected.

After comparing the MBSRQ scores of participants in cells 2A and 2B to the participants in cells 3A, 3B, 4A and 4B (see table 1), no significant effects of the photo condition were found. Women exposed to retouched photos of female models do not have a more negative body image compared to women exposed to non-retouched photos of female models. Thus hypothesis 2 is also rejected.

No significant effect of the labels is found after comparing cells 3A, 3B to 4A, 4B (see table 1). Women exposed to retouched photos without a label do not have a more negative body image than women exposed to the same photos with the 'photo-shopped' label. Therefore the last hypothesis is also rejected.

Discussion and conclusion

As was expected in the first hypothesis the already body dissatisfied women had a more negative body image after being exposed to photos of female models than body satisfied women. However in both groups no significant differences between the conditions, except on the Appearance Orientation subscale were found. AO showed a significant result on condition, but post hoc no specific significant differences were found. Unlike the assumption, participants exposed to model photos do not score significantly higher than participants exposed to neutral (car) images.

Moreover, the second hypothesis was also rejected; women exposed to retouched photos of models did not score more negative on body image than women exposed to non-retouched photos.

Last, the third hypothesis was rejected; women exposed to retouched photos of female models without the 'photo shopped' label did not score more negative on body image than women exposed to the same photos with the label. Consequently women do not score different if they are shown a retouched picture with or without the 'photo-shopped' label, contradicting the statements made in the documentary 'Beperkt houdbaar' (2007).

So, none of the hypotheses were supported by current research and, also, the results from previous research (Posavac et al., 1998) were not replicated. Furthermore the current results did not support the assumption that labeling retouched model pictures with a 'photo-shopped' label is a preventive factor for the emergence of a negative body image. Moreover current data suggests that photos do not have any effect on body image at all. It is supposed that females' concern with weight and body image has reached epidemic proportions and such concern is now considered a normal part of the female experience (Cash & Henry, 1995; Cash, Winstead, & Janda, 1986; Silberstein, Striegel-Moore, & Rodin, 1987; as all cited in Posavac et al., 2001), thus is not solely induced by being exposed to photos of female models. Another explanation could be that females in the western culture are immune to the effects of (retouched) model pictures, due to the constant bombardment with these images. This exposure may lead to mal-adaptation or adaptation.

An entire different explanation is a possible effect of the documentary *Beperkt Houdbaar* (2007). Maybe the documentary raised awareness, similar to the awareness of a label, and therefore the process was already under intentional control. Or possibly the label was not able to make the perceptual activity a conscious process and is therefore not suitable to prevent the emergence of a negative body image.

Methodological limitations

Using the internet as a medium for this research had major advantages. Since recruitment of participants was easy, a laboratory was not needed, there were no extra expenses (e.g. paying the participants, rent of laboratory) and it saved time (i.e. we did not have to be present in the laboratory). Nevertheless using the internet had limitations as well. The setting in which the trials were taken was not fixed; participants were free to choose when or where they took the test. Therefore participants could have been distracted without our knowing, thus influencing the results. Another problem was that the participants were anonymous. As a result participant's demographic data, like sex and age, could not be checked. Consequently there is a possibility that participants are not who they say they are. The biggest problem was that no supervisors were present when participants completed the questionnaire; hence participants did not feel any pressure to finish the survey. Participants were only allowed to take the test once (which was accomplished by saving their computer's IP-number) and had to complete it uninterrupted. So when the questionnaire was interrupted or stopped it immediately led to drop outs.

Probably Posavac's et al. (1998) research conditions were more beneficial concerning the results. Namely it took place in a laboratory where the experimenter had more control regarding these conditions. First, the setting in which the participants took the test was fixed. They were alone in the laboratory with the experimenter, thus could not be distracted. Second, because the experimenter would actually see the participant's, demographic data could be checked; e.g. is it a man or women, does the age correspondent with the participant? For this reason participants were most likely who they said they were. Third, because the experimenter was present, the participants felt pressure to finish the test. Probably this minimized drop outs.

Several other limitations of this study are evident as well. First, after the questionnaire participants were not asked the awareness of the experimental hypothesis. Possibly some participants knew what the questionnaire was measuring and this could have influenced their answers. Because the questions asked via the MBSRQ (at the end of the experiment) are obviously about self image it could be better to do the manipulation check after the first trial (SATAQ-3 and EDI-II-NL-BD) or after the photo conditions. Moreover current research used other instruments (i.e. EDI-II BD subscale, SATAQ-3 and MBSRQ) than Posavac et al. (1998) (i.e. EDI-II BD subscale and the Weight Concern subscale of the Body Esteem Scale). Furthermore Posavac et al. (1998) only used the Body Dissatisfaction Subscale (EDI-II) in the first trial, whereas current research also used the SATAQ-3 to mask this subscale. Because of these different instruments current

research could be measuring something slightly different than previous research from Posavac et al. (1998).

Moreover most pictures of female models are seen in magazines. It could be that seeing them on a computer screen via internet had a different impact on the participants.

Additionally we were not able to trace the model photos used by Posavac et al. (1998), thus current research used other model pictures. The small availability of model photos (i.e. both retouched and not retouched, and wherein the upper body is clearly in sight) has led to a wide range of models, photo styles and photo sizes. This heterogeneity maybe had a negative effect on the data. Moreover no pilot study on the attractiveness of the used pictures was done.

Future implications

As previously described, the data is possibly effected by different matters. Therefore more exploration needs to be done towards the risk factors involved in the influence of media images on weight concern and body image, because not every 'body dissatisfied' woman seems to be vulnerable for media images. Moreover, more research is needed to determine the effect of retouched images on body image to provide a more solid empirical evidence for its effects. Third, further research is necessary to investigate if labeling raises awareness, thus making the perceptual process conscious and therefore could prevent the emergence of a negative self image. On the contrary, as found in current explorative research, it is also possible that labeling has no effect, thus not able to prevent the emergence of a negative body image. Therefore, research also needs to determine whether females' negative body image and weight concern has really taken epidemical proportions. In other words is there mal-adaption or adaption to the constant bombardment of media images of beautiful women?

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Appendix A. Tables and Charts

Table 1. 4x2 Between-Subject Factorial Design. Cell Layout.

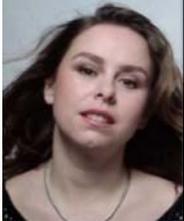
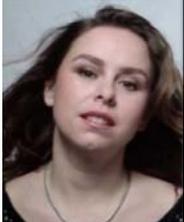
5 x 2	1. Photo's of Cars	2. Photo's of Models w/o Label	3. Retouched Photo's of Models w/o Label	4. Retouched Photo's of Models with label
A. Body Satisfied	Body Satisfied  No Label	Body Satisfied  No Label	Body Satisfied  No label	Body Satisfied  'Photo-shopped' Label
B. Body Dissatisfied	Dissatisfied  No Label	Dissatisfied  No Label	Dissatisfied  No label	Dissatisfied  'Photo-shopped' label

Table 2. Distribution of participants and age among the conditions (4x2).

Independent Var. (4x2)		Age				
Condition	Body Satisfaction	N	Mean	SD	Minimum	Maximum
Controle (Cars)	Body Satisfied	31	31,52	14,30	21	69
	Body Dissatisfied	35	31,29	13,44	21	69
Not retouched/ No Label (Female Models)	Body Satisfied	30	25,83	6,33	21	50
	Body Dissatisfied	27	29,63	10,94	21	57
Retouched/ No Label (Female Models)	Body Satisfied	33	29,82	12,39	21	66
	Body Dissatisfied	25	26,96	12,16	16	72
Retouched/ Label (Female Models)	Body Satisfied	28	28,93	13,66	13	72
	Body Dissatisfied	28	29,75	11,46	20	62

Tabel 3. Descriptive statistics MBSRQ scores in a 4 x 2 (Condition x Body Satisfaction). AE = Appearance Evaluation, AO = Appearance Orientation, OP = Overweight Preoccupation, BAS = Body Area Satisfaction.

Dependent Var.	Condition	Body Satisfied			Body Dissatisfied		
		Mean	Sd	N	Mean	Sd	N
AE	Controle Not Retouched/ No Label	29,05	3,85	19	23,70	5,99	47
		29,26	4,18	23	24,15	5,11	34
	Retouched/ No Label	31,07	3,51	27	22,68	6,37	31
		29,84	4,14	19	22,92	5,75	37
AO	Controle Not Retouched/ No Label	42,00	6,99	19	42,09	7,79	47
		36,30	6,87	23	41,29	8,00	34
	Retouched/ No Label	40,04	5,69	27	43,71	5,33	31
		39,58	5,75	19	40,95	6,05	37
OP	Controle Not Retouched/ No Label	7,05	3,10	19	8,74	3,49	47
		5,43	2,27	23	8,76	3,17	34
	Retouched/ No Label	5,67	2,72	27	9,26	3,46	31
		5,63	3,17	19	9,22	3,36	37
BAS	Controle Not Retouched/ No Label	39,53	4,07	19	31,02	6,37	47
		38,17	4,56	23	31,21	5,53	34
	Retouched/ No Label	37,44	7,34	27	28,84	6,63	31
		37,63	6,99	19	30,35	5,37	37

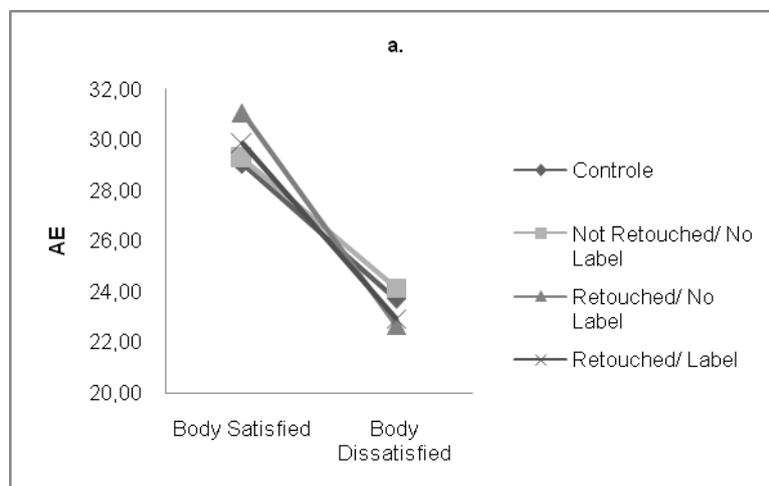


Chart 1a. MBSRQ's Appearance Evaluation subscale scores on a 4 x 2 (Condition x Body Satisfaction). AE = Appearance Evaluation.



Chart 1b. MBSRQ's Appearance Orientation subscale scores on a 4 x 2 (Condition x Body Satisfaction). AO = Appearance Orientation.

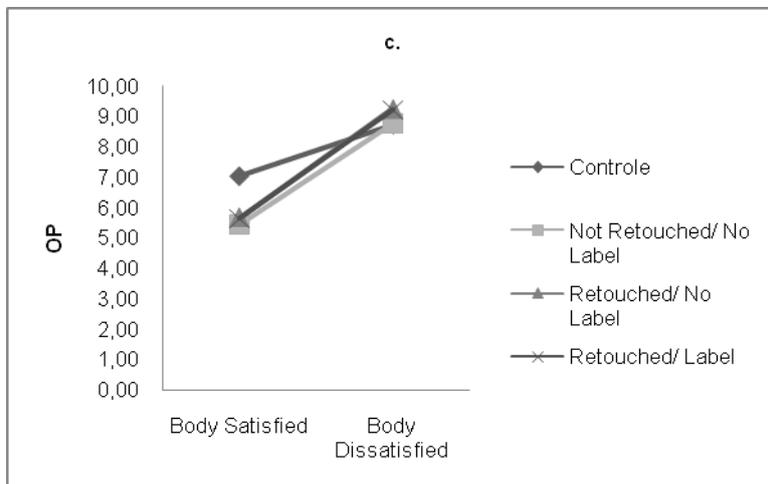


Chart 1c. MBSRQ's Overweight Preoccupation subscale scores on a 4 x 2 (Condition x Body Satisfaction). OP = Overweight Preoccupation.

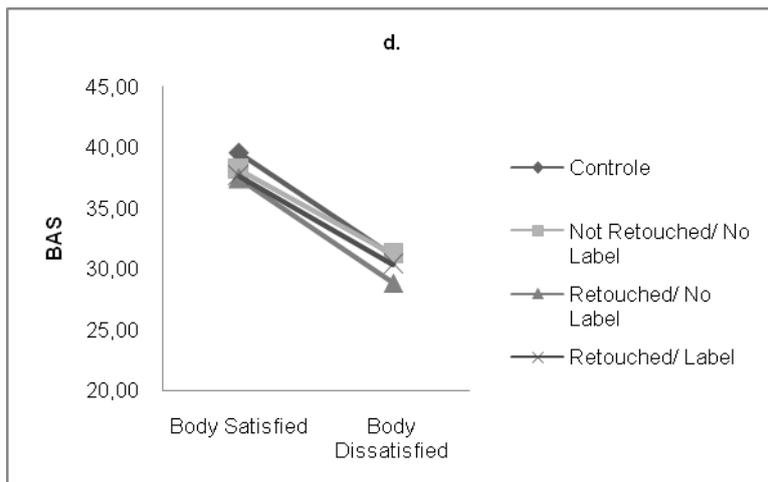


Chart 1d. MBSRQ's Body Area Satisfaction subscale scores on a 4 x 2 (Condition x Body Satisfaction). BAS = Body Area Satisfaction.

Appendix B. SPSS ANOVA Output

Descriptive Statistics

Dependent Variable: Appearance Evaluation (MBSRQ)

Condition	Body Satisfaction (2cluster)	Mean	Std. Deviation	N
Controle (Cars)	Body Satisfied	29,05	3,851	19
	Body Dissatisfied	23,70	5,992	47
	Total	25,24	5,956	66
Not retouched/ No Label (Female Models)	Body Satisfied	29,26	4,180	23
	Body Dissatisfied	24,15	5,106	34
	Total	26,21	5,351	57
Retouched/ No Label (Female Models)	Body Satisfied	31,07	3,507	27
	Body Dissatisfied	22,68	6,369	31
	Total	26,59	6,694	58
Retouched/ Label (Female Models)	Body Satisfied	29,84	4,140	19
	Body Dissatisfied	22,92	5,746	37
	Total	25,27	6,178	56
Total	Body Satisfied	29,90	3,925	88
	Body Dissatisfied	23,40	5,792	149
	Total	25,81	6,052	237

Levene's Test of Equality of Error Variances(a)

Dependent Variable: Appearance Evaluation (MBSRQ)

F	df1	df2	Sig.
3,631	7	229	,001

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept+Condition+BS_2cluster+Condition * BS_2cluster

Tests of Between-Subjects Effects

Dependent Variable: Appearance Evaluation (MBSRQ)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	2447,070(a)	7	349,581	12,917	,000	,283
Intercept	152934,746	1	152934,746	5651,102	,000	,961
Condition	10,074	3	3,358	,124	,946	,002
BS_2cluster	2247,907	1	2247,907	83,063	,000	,266
Condition * BS_2cluster	98,335	3	32,778	1,211	,306	,016
Error	6197,386	229	27,063			
Total	166525,000	237				
Corrected Total	8644,456	236				

a. R Squared = ,283 (Adjusted R Squared = ,261)

Multiple Comparisons

Dependent Variable: Appearance Evaluation (MBSRQ)
Tukey HSD

(I) Condition	(J) Condition	Mean Difference (I-J)	Std. Error	Sig.	99% Confidence Interval	
					Upper Bound	Lower Bound
Controle (Cars)	Not retouched/ No Label (Female Models)	-,97	,941	,733	-3,93	1,99
	Retouched/ No Label (Female Models)	-1,34	,936	,479	-4,29	1,60
	Retouched/ Label (Female Models)	-,03	,945	1,000	-3,00	2,95
Not retouched/ No Label (Female Models)	Controle (Cars)	,97	,941	,733	-1,99	3,93
	Retouched/ No Label (Female Models)	-,38	,970	,980	-3,43	2,68
	Retouched/ Label (Female Models)	,94	,979	,771	-2,14	4,02
Retouched/ No Label (Female Models)	Controle (Cars)	1,34	,936	,479	-1,60	4,29
	Not retouched/ No Label (Female Models)	,38	,970	,980	-2,68	3,43
	Retouched/ Label (Female Models)	1,32	,975	,530	-1,75	4,39
Retouched/ Label (Female Models)	Controle (Cars)	,03	,945	1,000	-2,95	3,00
	Not retouched/ No Label (Female Models)	-,94	,979	,771	-4,02	2,14
	Retouched/ No Label (Female Models)	-1,32	,975	,530	-4,39	1,75

Based on observed means.

Descriptive Statistics

Dependent Variable: Appearance Oriëntation (MBSRQ)

Condition	Body Satisfaction (2cluster)	Mean	Std. Deviation	N
Controle (Cars)	Body Satisfied	42,00	6,992	19
	Body Dissatisfied	42,09	7,790	47
	Total	42,06	7,516	66
Not retouched/ No Label (Female Models)	Body Satisfied	36,30	6,865	23
	Body Dissatisfied	41,29	7,998	34
	Total	39,28	7,894	57
Retouched/ No Label (Female Models)	Body Satisfied	40,04	5,687	27
	Body Dissatisfied	43,71	5,330	31
	Total	42,00	5,755	58
Retouched/ Label (Female Models)	Body Satisfied	39,58	5,748	19
	Body Dissatisfied	40,95	6,046	37
	Total	40,48	5,930	56
Total	Body Satisfied	39,39	6,533	88
	Body Dissatisfied	41,96	6,984	149
	Total	41,00	6,919	237

Levene's Test of Equality of Error Variances(a)

Dependent Variable: Appearance Oriëntation (MBSRQ)

F	df1	df2	Sig.
1,792	7	229	,090

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept+Condition+BS_2cluster+Condition * BS_2cluster

Tests of Between-Subjects Effects

Dependent Variable: Appearance Oriëntation (MBSRQ)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	875,534(a)	7	125,076	2,748	,009	,077
Intercept	359242,921	1	359242,921	7892,448	,000	,972
Condition	383,986	3	127,995	2,812	,040	,036
BS_2cluster	345,910	1	345,910	7,600	,006	,032
Condition * BS_2cluster	199,586	3	66,529	1,462	,226	,019
Error	10423,461	229	45,517			
Total	409778,000	237				
Corrected Total	11298,996	236				

a. R Squared = ,077 (Adjusted R Squared = ,049)

Multiple Comparisons

 Dependent Variable: Appearance Oriëntation (MBSRQ)
 Tukey HSD

(I) Condition	(J) Condition	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Upper Bound	Lower Bound
Controle (Cars)	Not retouched/ No Label (Female Models)	2,78	1,220	,106	-,38	5,94
	Retouched/ No Label (Female Models)	,06	1,214	1,000	-3,08	3,20
	Retouched/ Label (Female Models)	1,58	1,226	,572	-1,59	4,75
Not retouched/ No Label (Female Models)	Controle (Cars)	-2,78	1,220	,106	-5,94	,38
	Retouched/ No Label (Female Models)	-2,72	1,258	,137	-5,98	,54
	Retouched/ Label (Female Models)	-1,20	1,269	,780	-4,49	2,08
Retouched/ No Label (Female Models)	Controle (Cars)	-,06	1,214	1,000	-3,20	3,08
	Not retouched/ No Label (Female Models)	2,72	1,258	,137	-,54	5,98
	Retouched/ Label (Female Models)	1,52	1,264	,627	-1,75	4,79
Retouched/ Label (Female Models)	Controle (Cars)	-1,58	1,226	,572	-4,75	1,59
	Not retouched/ No Label (Female Models)	1,20	1,269	,780	-2,08	4,49
	Retouched/ No Label (Female Models)	-1,52	1,264	,627	-4,79	1,75

Based on observed means.

Descriptive Statistics

Dependent Variable: Overweight Preoccupation (MBSRQ)

Condition	Body Satisfaction (2cluster)	Mean	Std. Deviation	N
Controle (Cars)	Body Satisfied	7,05	3,100	19
	Body Dissatisfied	8,74	3,486	47
	Total	8,26	3,443	66
Not retouched/ No Label (Female Models)	Body Satisfied	5,43	2,273	23
	Body Dissatisfied	8,76	3,172	34
	Total	7,42	3,268	57
Retouched/ No Label (Female Models)	Body Satisfied	5,67	2,717	27
	Body Dissatisfied	9,26	3,464	31
	Total	7,59	3,598	58
Retouched/ Label (Female Models)	Body Satisfied	5,63	3,166	19
	Body Dissatisfied	9,22	3,359	37
	Total	8,00	3,688	56
Total	Body Satisfied	5,90	2,820	88
	Body Dissatisfied	8,97	3,355	149
	Total	7,83	3,494	237

Levene's Test of Equality of Error Variances(a)

Dependent Variable: Overweight Preoccupation (MBSRQ)

F	df1	df2	Sig.
1,074	7	229	,381

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept+Condition+BS_2cluster+Condition * BS_2cluster

Tests of Between-Subjects Effects

Dependent Variable: Overweight Preoccupation (MBSRQ)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	564,969(a)	7	80,710	7,979	,000	,196
Intercept	12078,950	1	12078,950	1194,190	,000	,839
Condition	17,578	3	5,859	,579	,629	,008
BS_2cluster	503,095	1	503,095	49,739	,000	,178
Condition * BS_2cluster	33,843	3	11,281	1,115	,344	,014
Error	2316,280	229	10,115			
Total	17416,000	237				
Corrected Total	2881,249	236				

a. R Squared = ,196 (Adjusted R Squared = ,172)

Multiple Comparisons

 Dependent Variable: Overweight Preoccupation (MBSRQ)
 Tukey HSD

(I) Condition	(J) Condition	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Upper Bound	Lower Bound
Controle (Cars)	Not retouched/ No Label (Female Models)	,84	,575	,467	-,65	2,32
	Retouched/ No Label (Female Models)	,67	,572	,645	-,81	2,15
	Retouched/ Label (Female Models)	,26	,578	,970	-1,24	1,75
Not retouched/ No Label (Female Models)	Controle (Cars)	-,84	,575	,467	-2,32	,65
	Retouched/ No Label (Female Models)	-,17	,593	,992	-1,70	1,37
	Retouched/ Label (Female Models)	-,58	,598	,768	-2,13	,97
Retouched/ No Label (Female Models)	Controle (Cars)	-,67	,572	,645	-2,15	,81
	Not retouched/ No Label (Female Models)	,17	,593	,992	-1,37	1,70
	Retouched/ Label (Female Models)	-,41	,596	,899	-1,96	1,13
Retouched/ Label (Female Models)	Controle (Cars)	-,26	,578	,970	-1,75	1,24
	Not retouched/ No Label (Female Models)	,58	,598	,768	-,97	2,13
	Retouched/ No Label (Female Models)	,41	,596	,899	-1,13	1,96

Based on observed means.

Descriptive Statistics

Dependent Variable: Body Area Satisfaction Scale (BASS)

Condition	Body Satisfaction (2cluster)	Mean	Std. Deviation	N
Controle (Cars)	Body Satisfied	39,53	4,074	19
	Body Dissatisfied	31,02	6,371	47
	Total	33,47	6,955	66
Not retouched/ No Label (Female Models)	Body Satisfied	38,17	4,559	23
	Body Dissatisfied	31,21	5,531	34
	Total	34,02	6,172	57
Retouched/ No Label (Female Models)	Body Satisfied	37,44	7,340	27
	Body Dissatisfied	28,84	6,629	31
	Total	32,84	8,152	58
Retouched/ Label (Female Models)	Body Satisfied	37,63	6,986	19
	Body Dissatisfied	30,35	5,371	37
	Total	32,82	6,852	56
Total	Body Satisfied	38,12	5,959	88
	Body Dissatisfied	30,44	6,012	149
	Total	33,30	7,042	237

Levene's Test of Equality of Error Variances(a)

Dependent Variable: Body Area Satisfaction Scale (BASS)

F	df1	df2	Sig.
1,090	7	229	,370

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept+Condition+BS_2cluster+Condition * BS_2cluster

Tests of Between-Subjects Effects

Dependent Variable: Body Area Satisfaction Scale (BASS)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	3435,032(a)	7	490,719	13,591	,000	,294
Intercept	254206,510	1	254206,510	7040,546	,000	,968
Condition	141,592	3	47,197	1,307	,273	,017
BS_2cluster	3325,047	1	3325,047	92,091	,000	,287
Condition * BS_2cluster	28,790	3	9,597	,266	,850	,003
Error	8268,292	229	36,106			
Total	274437,000	237				
Corrected Total	11703,325	236				

a. R Squared = ,294 (Adjusted R Squared = ,272)

Multiple Comparisons

Dependent Variable: Body Area Satisfaction Scale (BASS)

Tukey HSD

(I) Condition	(J) Condition	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Upper Bound	Lower Bound
Controle (Cars)	Not retouched/ No Label (Female Models)	-,55	1,087	,958	-3,36	2,26
	Retouched/ No Label (Female Models)	,62	1,081	,939	-2,17	3,42
	Retouched/ Label (Female Models)	,65	1,092	,934	-2,18	3,47
Not retouched/ No Label (Female Models)	Controle (Cars)	,55	1,087	,958	-2,26	3,36
	Retouched/ No Label (Female Models)	1,17	1,121	,722	-1,73	4,07
	Retouched/ Label (Female Models)	1,20	1,131	,715	-1,73	4,12
Retouched/ No Label (Female Models)	Controle (Cars)	-,62	1,081	,939	-3,42	2,17
	Not retouched/ No Label (Female Models)	-1,17	1,121	,722	-4,07	1,73
	Retouched/ Label (Female Models)	,02	1,126	1,000	-2,89	2,94
Retouched/ Label (Female Models)	Controle (Cars)	-,65	1,092	,934	-3,47	2,18
	Not retouched/ No Label (Female Models)	-1,20	1,131	,715	-4,12	1,73
	Retouched/ No Label (Female Models)	-,02	1,126	1,000	-2,94	2,89

Based on observed means.

Appendix C. Netq Questionair

Incl. photos and scoring (pen & paper version)

Note: the Pen and Paper version still includes a fifth condition 'not retouched with label' (condition 3) which was later removed from the trails. The jump after 'vragenlijst 1' to 'Before_labelled_1' (first question of the condition 3) was removed to exclude condition 3 from the random assignment. **In this thesis condition 3 and 4 are condition 4 and 5 in this appendix.**