

“Too thin is no longer in”

The influence of exposing ‘healthy vs. too thin’ models on body discrepancy, attitude and purchase intention.

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The present study examined the effects of exposure to model types (healthy vs. too thin) on women’s body discrepancy level, attitude towards advertisement and purchase intention. It was argued that next to the type of model, the congruence between the model and the product was important as well. Within this present study, the interaction (congruence) between the model and product was therefore added as an extra dependent variable. In line with other researches, we set up hypotheses. Unfortunately, in our study we were not able to find significant evidence to support any of our hypotheses and we were therefore not able to claim that the model type (too thin vs. healthy) had an influence on body discrepancy, attitude, buying intention or congruence.

Results did show that a large part of the samples evaluated themselves with a high body discrepancy rate, meaning that they wanted to lose one body size or more. This led to a higher intention to do sports and work on a healthy body. Furthermore, significant results were found for the effect between the type of model and the perceived attractiveness. Participants perceived a healthy model as more attractive and ‘healthy looking’ compared to the thin model. We could also confirm that the type of product had an effect on buying intention. Participants were more willing to buy a healthy product than an unhealthy product. Additionally, this present research claims that congruence between the model and the product plays an important role in the effectiveness of the advertisement, however, follow up research should examine this more thoroughly and focus more on whether or not participants actually notice the congruence or non-congruence within the advertisement. The study (n=111) was mainly conducted within the cafeteria of a University where women were randomly assigned to one of the four conditions (1. thin model vs. healthy product, 2. thin model vs. unhealthy product, 3. healthy model vs. healthy product, 4. healthy model vs. unhealthy product).

Keywords: Beauty ideals, models, self-discrepancy, attitude, purchase intention, congruence.

We are living in a society where people seem to be more obsessed with health and beauty control. Starting with young girls who compare themselves with thin Barbie dolls or fairy tale princesses, continuing with (young) women, obsessed with the beauty ideal which the media display. Women now a days seem to have an unrealistic idea of what beauty perfection is. Can this be changed by exposing more healthy looking models in the media? And if yes, will these healthy models in advertisements still sell the products as good as thin models do? Although several studies have been conducted on the topic of beauty ideals and images, thin models, as well as social comparison and self-discrepancy, there are still some gaps that suggest further research.

“I looked at a Barbie doll when I was 6 and said, ‘This is what I want to look like.’ I think a lot of little 6-year-old girls, or younger even now are looking at that doll and thinking, ‘I want to be her.’” (model Cindy Jackson on CBS News, 2004. Cited in Dittmar et al., 2006).

Almost every female will remember being a 6 year old, brushing Barbie’s hair and dressing her up. Not to mention dreaming about being a Disney princess just like Cinderella or Snow White... Remarkably, playing with a thin Barbie doll or watching that ‘perfectly’ shaped princess, already influences a girls’ perception of a beauty ideal at a very young age. A study of Dittmar & Halliwell. (2006) showed that young girls experience body dissatisfaction after exposure to a Barbie doll. Apparently, the thin body shape of the doll already seems to be seen as ‘perfection’ at a young age. The pervasiveness of ‘role models’, like a thin Barbie doll or a perfect Cinderella, seems to contribute to an unrealistic beauty ideal when we grow older. What started out like the innocence of self-identification with a doll, might turn out to threaten a ‘healthy society’. Females might not feel intimidated by a shape of a doll anymore, but at an older age the doll becomes that ‘perfectly’ thin model, exposed on every advertisement now a days. These thin models seem to influence a females’ perception of what beauty perfection is.

WHERE IT ALL STARTS – THE STANDARD OF THE BEAUTY IDEAL

Playing with Barbie dolls and watching Disney’s fairytales seems to be so innocent, however it unconsciously effects a girls’ perception of beauty perfection at a young age. According to Baker & Grauerholz (2003), the fairytales we grow up with, promote an unrealistic feminine beauty ideal. Let’s face it, the good princesses are always beautiful, sweet and... thin. Additionally, a study of Dittmar & Halliwell (2006) argues that young girls experience a body dissatisfaction after exposure to a Barbie. According to the authors, a Barbie doll represents an unrealistic thin body ideal to young girls within an age of 5 to 8 years old. This can cause a decreasing self-esteem, as well as a dissatisfaction of their own body and it even stimulates a desire to be thinner. Within magazines and television, thin female models are much more represented than average-, or plus size models. This exposure to thin females contributes to an international ‘thin- beauty ideal’ (Spitzer et al., 1999). According to Bandura (2001), as we grow up the media plays an important role in shaping beauty ideals by creating ideals that influence the society and their perceptions about what is desirable and popular. Un realistic perception of beauty perfection can have dangerous consequences, like eating disorders, discussed in the following topic.

THE DANGEROUS SIZE ZERO- THE EFFECTS ON WEIGHT CONTROL BEHAVIOUR

“Nothing tastes as good as skinny feels.” Kate Moss, the model, has been accused of encouraging teenage girls to become anorexic after claiming she lives by the motto: “Nothing tastes as good as skinny feels.” (Kate Moss, cited in the Telegraph on November 19, 2009)

Several studies indicate that images of thin models negatively influence females' self-esteem (Groesz et al., 2002). A negative self-esteem/ self-image can cause even more problematic effects like eating disorders. Women tend to use two components to predict body satisfaction/dissatisfaction. 'Current' and 'ideal' body size seem to determine the overall satisfaction a woman has over her own body (Williamson et al., 1993). The level of satisfaction occurs when women compare their ideal body image with their current image. This is based on the Self-Discrepancy Theory (SDT), which will be discussed later on.

According to a study of Field et al. (1999), the (often unrealistic) beauty ideals exposed in the media influence girls' weight behavior and control. Based on their study, the authors advise to persuade the media industry to use more actresses and models who have a 'healthy' body shape.

According to Nicoli (2011) there is a strong correlation between body image dissatisfaction and compulsive eating. Looking at the results of these studies, one might highlight the danger of creating an unrealistic beauty ideal. The exposure of too thin models causes an unrealistic beauty ideal, which in turn leads to body dissatisfaction, compulsive eating or other eating disorders. But why are people so vulnerable when it comes to matching to a thin beauty ideal? This needs a better understanding in how people need to compare themselves with others.

WHY DO WE HAVE THE URGE TO MATCH THE BEAUTY IDEAL? – THE ROLE OF SOCIAL COMPARISON

Sociable, intelligent, sexually warm, less lonely, more popular and more sociably skilled are a few of the characteristics of a physically attractive person, compared to a physically unattractive person (Feingold, 1992). No wonder why people feel the urge to be beautiful and no-one can deny that being beautiful is often related to being thin. According to a study of Irving (1990), some women feel pressured to be thin because of the media. The study showed that average-shaped models were considered as being less attractive than thin models were. “Having one's physical appearance scrutinized, or beheld, is a common experience for women, and feeling physically attractive is an important contributor to women's feelings of self-worth “ (Paxton & Phythian 1999, cited in Darlow & Lobel, 2010. P.833). The importance of self-presentation has to do with the secureness of a women's social position. Women who are vulnerable to a continuously changing beauty ideal, will compare their own identities and looks based on what the media claims to be popular (Becker, 2004). The pressure of having a social status means to be willing to compete with ideal symbols, often based on body appearances (Becker & Hamburg, 1996). A study of Festinger (1954) showed that people evaluate themselves by comparing themselves to other persons, which is called the 'Social Comparison Theory' (SCT). People compare their own attractiveness with the appearances of models exposed in advertisements. Tiggeman (2010) studied social comparison of women and thin models. It appeared that women had an increased body dissatisfaction after being exposed to the thin idealized images. Even though these ideals that models represent are often unrealistic, it might lead to a lower satisfaction of their own physical attractiveness (Richins, 1991).

An interesting study of Mussweiler (2003) mentions a “selective accessibility model” that separates 2 processes: 1) Similarity testing, in which the person tries to find similarity with another person; and 2) in the dissimilarity-testing process, the person tries to select

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dissimilarities. Within the first stage, assimilation occurs, whereas the second stage will lead to contrast. According to Bittner (2011), who examined goal striving and assimilation and contrast effects, the pursuit of conscious goals is influenced by the process of comparison. In this research the author claimed that people who were assimilated to a moderated goal, experienced more similarities than people who experienced contrast. Conform the Self-Discrepancy Theory (SDT) people tend to experience dissatisfaction when there is discrepancy between the current and ideal body image (Higgins, 1987). As this theory will be interesting for the proposed research, it will be more outlined within the next topic.

WHAT HAPPENS WHEN WE LOOK AT THIN MODELS? – SELF DISCREPANCY THEORY

The results of a study of Halliwell & Dittmar (2004) showed that looking at thin models increases concern about weight. On the other hand, exposure to models that have an average body shape does not increase any concerns regarding weight control. This highlights the fact that the thin size of a model leads to body image anxiety (Halliwell & Dittmar, 2004). But what happens when a person starts to compare their own body with a portrayed body image within the media? Higgins (1987) created the Self-Discrepancy Theory (SDT), which mainly suggests that people tend to experience dissatisfaction when there is discrepancy between the current and ideal body image. Higgins (1987) claims in this theory that there are three basic domains of the self: The actual self, the ideal self, and the ought self. The actual self, represents who you actually are, or what aspects you believe you actually have. The ideal self, represents who you want to be and which attributes you or someone else ideally wants you to possess. The ought self, represents the person that you or someone else think you should (ought to) be, for instance by the pressure of the media or society.

A dissatisfaction occurs when there seems to be a discrepancy between the actual self and the ideal,- or ought self. According to the author, a discrepancy leads to sadness, and other negative emotions. When a person does not experience discrepancy, it will lead to positive emotions like happiness and satisfaction (Higgins, 1987).

Youjeong & Sunder (2012) asked participants in their research to create a virtual character as a self-representative (avatar) of the ideal-self or the actual-self. Within a virtual environment they tried to help participants to create their ideal body image and have a healthy virtual lifestyle. Within this study the authors examine whether or not creating self-resembling avatars could counteract the negatives emotions of self-discrepancy, like depressions or negative attitudes. The authors claim that the gap between the actual-self and the ideal-self is associated with negative emotional states. These emotional states like unhealthy lifestyles but also feelings of depression are often unconscious and often influenced by (unrealistic) images within media.

Exposure to thin models leads to body discrepancy and negative states. However, it would be interesting to know whether exposure to healthy models could lower the body-discrepancy level and lead to positive attitudes and behaviors instead. However, when looking from a marketers perspective, one might wonder whether this change from thin to 'healthy' models will have an effect on advertisement effectiveness as well. Do 'healthy' models sell the product on an advertisement as good as thin models do?

AN ATTRACTIVE PACKAGING – DO HEALTHY MODELS SELL?

Fashion magazine Vogue promotes the use of ‘healthy models’ in their magazines, which indicates no longer the use of models with size zero. However, the question remains whether or not this so called ‘size zero’ is better in selling the product? A study of Tiggeman (2010) showed that when the media exposed an image which directly affected body satisfaction, both the product and the brand name, had a poorer recall. Apparently women are vulnerable for the impact of social comparison in media, which in turn had an influence on their product recall and consumer behavior (Tiggeman, 2010). A study of Halliwell & Dittmar (2004) showed that advertisements were effective, despite of the ‘thinness’ of the model. Based on their study, in which they have researched several models with different sizes, results revealed that the media can easily use bigger models.

However, within their study, the authors mention the results from a study of Gillian (2000), which seems to have a different conclusion: “Statistics have repeatedly shown that if you stick a beautiful skinny girl on the cover of a magazine you sell more copies... At the end of the day, it is a business and the fact is that these models sell the products” (Gillian, 2000, p. 7, cited in Halliwell & Dittmar, 2004, p.105). These two studies seem to have contradicting results, which asks for further research. Especially the fashion media needs to develop a particular image or identity, because this is where their selling can be successful (Becker, 2004). It is important that marketers create an awareness of a gap between the own body and the ideal, plus the promise (the product) that gives the solution (O’Connor, 2000. Mentioned in Becker, 2004. P.534). Apparently, the body (the ideal) and the promise (the product) are related. The model should be a visual of what the product promised. Meaning that the advertisement is only credible when the model and the product are in harmony, so when there is congruence between the two.

THE CREDIBILITY – THE IMPORTANCE OF CONGRUENCE WITHIN THE AD

Models are often used to be an endorser of a product or brand. Several research have been conducted focusing on endorsers and their role within the advertisement. In this present research we assume that celebrity endorsers are similar to “the model”, based on the following definition: “The celebrity endorser is defined as any individual who enjoys public recognition and who uses this recognition on behalf of a consumer good by appearing with it in an advertisement” (McCracken, 1989, p.310). Based on this definition, a model on an advertisement can also be seen as a product endorser. According to a study of Misra & Beatty (1990), the better suited, matching or congruent the endorser and the product are perceived to be, the more positive the responses towards advertising will be. This in terms of attitude or even purchasing intent (Misra & Beatty, 1990). Apparently, a congruence (perceived match) between the model and the product leads to a higher believability of the advertisement and the more favorable the attitude towards the product will be (Kamins & Gupta, 1994). Misra & Beatty (1990) studied the congruence between a spokesperson (endorser) and the product. The authors based their research on recall. Results indicated that when a spokesperson is congruent with the brand, the product recall is significantly higher. So apparently, not only the body size of the model, but also the match with the product is important. A study from Kamins (1990) showed that it is more effective when there is a match (connection) between the endorser and product. According to this author, a model who is matched with the product is perceived as more credible and therefore, the advertisement is perceived as trustworthy as well. Buunk et al. (2011) suggests that women become aware of their own physical attractiveness by evaluating themselves with the model on the add. Their research claims that this evaluating *Too Thin is no longer In- The influences of exposing healthy versus too thin models.*

process shows up when media advertises beauty products with a certain model (endorser). When the person feels assimilated to the model, the person would experience a more positive attitude towards the ad, compared to when the person experiences contrast.

In line with the discussed theories in previous section, we argue that the body size of models within the media have a large effect on women's perception of beauty perfection, social comparison, self-esteem, attitude and willingness to buy the product. Women compare themselves to a model within the advertisement and based on these comparisons they feel assimilation or contrast (Bittner, 2011; Kamins, 1990), or a level of self-discrepancy (Higgins, 1987). The bigger the discrepancy rate (contrast), the more negative the attitude will be. This in turn effects advertisement effectiveness (attitude towards the ad and buying intention).

When it comes to buying intention, studies showed some inconsistent findings. Halliwell & Dittmar (2004) argue that a plus size model would sell the product just as good as a thin model. However, a study of Gillian (2000) showed that a thin model would sell the product best.

In order to find more consistent results, we examined participants' general buying intention after exposure to both a thin and a healthy looking model in this present study. Results will show in what way the model influences participants intention to buy the product.

Apparently, media advertisements should expose the perfect model in order to cause a right discrepancy level which will lead to an effective advertisement. However, according to Kamins (1990), an effective advertisement (positive attitude and buying intention) does not only depend on the exposed model. According to the researcher, the ad is only effective when it is credible and trustworthy. This can only be accomplished when there is a match (congruence) between the model and the product.

Some studies aimed to research the effects of a model's body size on advertisement effectiveness, and in particular 'attitude' and 'buying attention'. Other studies specifically looked at the congruence between the model (endorser) and the product. However, few studies included both aspects. Therefore, within this present research we will examine these gaps, in order to gain clearer insight in the effects of models and products on women. First of all, this present research will study the inconsistency within the previous findings of buying intention. The contradicting results of Halliwell & Dittmar (2004), who claimed that bigger models sell the product just as good as the thin models do, and Gillian (2000) who claimed that only thin models sell, suggest for further research. This present will address these contradictions. Additionally, since not many studies included body size and congruence with the product in their researches, this present research studies not only the model, but the product and the interaction between those two as well. Furthermore, another aspect which contributes to the scientific field, is that the present study will focus on healthy looking models, meaning models with an average body size. This is rather different from other studies that mostly studied thin vs. plus size models.

Based on these theories and scientific gaps, hypotheses were made and discussed in the following section.

PRESENT RESEARCH

This present study was designed to argue that the use of healthy vs. extremely thin models within advertisements has an influence on body discrepancy, attitude towards the advertisement and buying intention of women. First of all, the body discrepancy level is based on Higgins' Self-discrepancy theory (1987) and represents the gap between the actual self (how you see yourself) and the ideal self (how you want to be). We suggest that exposure to a healthy model will make women feel more similar to the model, which results in a smaller gap between the actual,- and the ideal self. This will therefore result in a lower body-discrepancy level. Contrarily, when women are exposed to an extremely thin model, they would feel dissimilar, which will lead to a bigger gap between the actual,- and ideal self and women would therefore experience a higher body discrepancy rate. So based on this Self-Discrepancy theory (1987), it is suggested **(H1)** that women experience a lower self-discrepancy level (positive) when they see a healthy model, whereas they experience a high self-discrepancy level (negative) when they see an extremely thin model.

According to Higgins (1987) a higher level of body-discrepancy leads to negative emotions. In line with this, Halliwell & Dittmar (2004) argue that the negative emotions can cause a negative attitude towards own body image and can eventually lead to a negative attitude towards the advertisement as well. Apparently, women experience different emotions when they are exposed to models within an ad. These emotions influence the attitude that women create towards the advertisement. Derived from the study of Halliwell & Dittmar (2004), it is hypothesized **(H2)** that women who are exposed to a healthy model, will experience a more positive attitude towards the ad, whereas exposure to an extremely thin model should lead to a negative attitude.

The previously mentioned hypotheses expect that the body size of the model has an influence on the attitude towards the ad. However, research also showed that the type of model can affect other aspects within advertising as well, for instance buying intention. A study of Halliwell & Dittmar (2004) showed that advertisements were effective, despite of the 'thinness' of the model. A bigger model would therefore sell the product just as good as a thin model. However, a study of Gillian (2000) gave some contradicting results. According to this author, skinny girls sell the product better. These contradicting results suggest further research. The question still remains, whether or not thin models sell the product better than 'bigger' models? Therefore, in line with the study of Gillian (2000), we claim that skinny girls sell product best. It is hypothesized **(H3)** that women who are exposed to a healthy model, will have a lower purchase intention, whereas exposure to a thin model will lead to a higher purchase intention.

Sub hypotheses. Based on previously mentioned theories, we can suggest that the body shape of models can have an influence on body discrepancy, attitude and buying intention. However, we suggest that not only the model has an influence on the viewer, but other factors can play a role as well. Earlier research on the domain of models in advertisements (Cohn, 1992, Halliwell and Dittmar, 2004, Smeesters et al., 2010) have some limitations when it comes to including the type of product and the congruence (match) between the model and the product. According to Kamins & Gupta (1994) people experience congruence between an endorser and a product, when it is believable and trustworthy. The better suited, matching or congruent the endorser and the product are perceived to be, the more positive the responses towards advertising will be (Misra & Beatty, 1990). Apparently, a perceived congruence between the model and the product will result in a more positive attitude towards the ad. This in terms will lead to more purchase intention as well (1990).

Derived from this study plus the previously mentioned limitations in other studies, it can be

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hypothesized that an interaction effect between the model and the product is expected. The better the match between the product and the model is, the more positive the interaction between the model and product will be. This assumption leads to our fourth hypothesis in which we claim that an interaction between the model and product is expected.

(H4) It is expected that an interaction between product and model will occur in which a match (congruence) between the model and product will lead to a positive attitude towards the ad and a mismatch will lead to a negative attitude. Additionally, **(H5)** it is suggested that an interaction between product and model will occur in which a match (congruence) between the model and the product, will lead to a higher buying intention, whereas a mismatch will lead to a lower buying intention.

One study was conducted to examine these hypotheses.

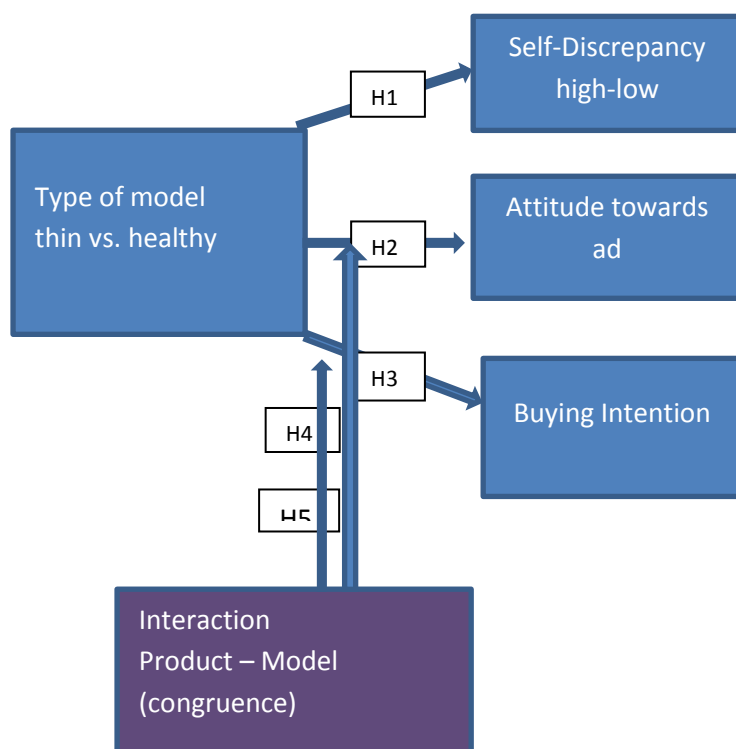


Figure 1. Theoretical model

STUDY

PRE-TEST- WHAT IS CONSIDERED AS BEING 'HEALTHY' OR 'TOO THIN'?

In order to investigate what the influences are of too thin vs. healthy models, it was important to first understand what is considered as 'too thin' or 'healthy' within the Dutch female population. The purpose of the pre-test was to examine whether or not the manipulated pictures of models were considered as 'too thin' and 'healthy'. Additionally, the pre-test was also used to examine the perceived "healthiness" of 6 different breakfast products. Participants were randomly assigned to 2 conditions (healthy vs. thin). To check the manipulation of the perceived thinness of the model and idealness of the model's body, participants were asked to indicate their agreement with statements on a 7-point Likert scale, with 1 representing strongly agreement and 7 representing strongly disagreement. The statements were as follows: "This model is too thin" and "This model has the ideal body figure". Participants were asked to rate the thinness and attractiveness of the models on a scale from 1-7 as well, with 1 representing "very attractive" or "very healthy" and 7 representing "very unattractive" or "very unhealthy".

To examine the perceived healthiness of the products, the participants were exposed to 6 different breakfast products like pancakes, yoghurts, fruits etc. and asked to rate the level of healthiness of these products on a 7-point Likert scale as well. Within these measurements, 1 represented "very healthy product" whereas 7 represented "very unhealthy product". The online questionnaires were sent to 22 females (11 per condition), within the age of 18 to 25 years old.



Model 1: Too Thin

Model 2: Healthy

Figure 2. Manipulated models pre-test

PRE-TEST RESULTS MODELS

A t-test for independent samples was used to analyze participants' ratings on the perceived thinness, attractiveness and healthiness of the models. As expected, participants actually perceived model 1 as 'too thin' ($M=1.45$, $SD=0.934$), compared to Model 2 ($M=5.55$, $SD=1.508$), $t(20)=-7.650$, $p<.001$. No significant results were found concerning the attractiveness of both models, however model 2 was perceived as more healthy looking ($M=2.18$, $SD=0.874$) compared to model 1, ($M=6.00$, $SD=0.894$), $t(20)=10.127$, $p<.001$. Furthermore, model 2 was perceived as having a more 'ideal body shape' ($M=2.73$, $SD=1.04$) than model 1 ($M=4.91$, $SD=1.104$), $t(20)=3.201$, $p<.001$.

PRE-TEST RESULTS PRODUCTS

All participants were asked to rate the healthiness of 6 different breakfast products. Results showed that within the whole sample, product 6: a bowl with yoghurt, fruits and muesli was perceived as most healthy ($M=1.43$, $SD=0.68$). Follow up's were product 4: a healthy sandwich ($M=2.71$, $SD=1.15$) and product 1: a fruit smoothie ($M=3.33$, $SD=2.35$). Product 5: a breakfast burger was rated as most unhealthy breakfast product ($M=6.86$, $SD=0.36$), followed by product 2: Pancakes ($M=6.33$, $SD=0.97$) and product 3: Bacon and Eggs ($M=6.24$, $SD=1.73$). Based on these results, product 6 (fruit, yoghurt, muesli) was used in the main study as the "healthy breakfast product", whereas product 5 (breakfast hamburger) was used as the "unhealthy breakfast product".



Figure 3. Manipulated breakfast products pre-test

MAIN STUDY

Method.

Design. The research studied the independent variables: type of model (healthy vs. thin) and type of food (healthy food vs. unhealthy food). The dependent variables can be divided into: a) level of self-discrepancy, b) attitude towards the ad, c) purchase intention and d) congruence. This was translated into a 2x2 between-subject design.

Participants. A university cafeteria was used to recruit most of the participants. Additionally, friends and relatives were also a part of the sample. The final sample consisted out of 101 females with a mean age 25 years old ($M=24.46$, $SD=3.29$) ranging from 18 to 35. Participants were all educated with a HBO bachelor or WO master degree. The study used a between-participants design, using four different advertisement conditions; condition 1: thin model vs. healthy product. Condition 2: thin model vs. unhealthy product. Condition 3: Normal healthy model vs. healthy product and Condition 4: Normal healthy model vs. unhealthy product. All participants were randomly assigned to one of the four conditions and therefore exposed to one of the four advertisements.

Stimuli. Each condition was exposed to one of the four advertisements, especially created for this study. The advertisements showed a model, a breakfast product, a slogan and a brand name (fictive). These last two were added to be able to create a realistic advertisement and therefore are not important as separate variables in this study. Adobe Photoshop software was used to stretch the size of the model, thereby keeping the appearance of the model as constant as possible. The model was fully dressed with simple jeans and a top, not showing any unnecessary skin, as this could have been distracting or influence the perceived attractiveness. The same computer software was used to add the images of the breakfast products next to the model (figure 1).



Figure 4. Stimulus materials main study

Procedure.

Participants (all female within the age of 18-35 years old) were approached mainly at a university cafeteria, to participate in a study about perceived physical healthiness among Dutch women, with breakfast behavior in particular. They were asked to take a seat in a more quiet place, in order to fill in the questionnaire without any distractions. Participants were randomly assigned to one of the four conditions: (1. Too thin model vs. Healthy product), (2. Too thin model vs. Unhealthy product), (3. Healthy model vs. Healthy product), (4. Healthy model vs. Unhealthy product). The participants were asked to take their time to fill in the questionnaire and remove themselves from any surrounding distractions (e.g. mobile phones, conversations etc.).

In the beginning of the questionnaire participants were asked to indicate the extent to which they were engaged in activities related to maintaining good health. These questions were asked to make the cover story more believable and to focus the reader's attention on their own body image. Additionally, these questions were measured before exposure to the advertisement with the model. This in order to make the participants answer the questions without being influenced by the exposed model. As a control condition, exactly the same questions were asked at the end of the questionnaire as well. This in order to measure whether or not participants still had the same health and sport intention after being exposed to the ad.

After the first health behavior questions, the participants were exposed to the advertisement and asked to closely take a look at it. Assuming that the body shape of the model has an intensified unconscious effect on the reader's own body image (Youjeong & Sundar, 2012), the reader was asked to continue following questions which would indicate their current and ideal body size (Stunkard's pictorial diagram, 1983). Then, some general information like age and education were asked at the end. After completing the questionnaire, participants were thanked for their cooperation.

Measures.

Health behaviors/sport intention: The health questions in the beginning of the questionnaire were asked to increase the credibility of the cover story and establish the physical healthiness of the participant. These questions were asked before exposure to the advertisement, in order to measure participants' health and sport intentions without influences of the model or product. The participants were told to cooperate on a study on perceived physical healthiness among Dutch women, with breakfast behavior in particular. The questions were measured before exposure to the advertisements. The scale was composed of five, five-point items measuring participants' intention to exercise. These items could be answered on a scale ranging from 1 to 5 (1= definitely no, 2= no, 3= maybe, 4= yes, 5= definitely yes). These items provided an Alpha value of .86 (Prestwich et al., 2003).

Self-discrepancy: Participants' self-discrepancy between their actual self and their ideal self was measured by Stunkard, Sorensen, and Schulsinger's pictorial diagram (1983). The diagram (figure 2) contained nine female schematic figures that ranged from 1, associated with a very thin figure, to a 9 associated with a very overweight figure. Participants were asked to indicate their answers by selecting the number associated with the drawing that look most like their own figure ("which figure is closest to your usual appearance") and the drawing that the participant most wanted to look like ("which of these figures would you like to look like") (Cohn & Adler, 1992, for a similar procedure). To yield the body discrepancy index, the number which participants selected for their ideal figure (ideal self) was subtracted from the number which they selected for their current figure (actual self).

For example, if a participant selected 6 for their current figure, and 3 for their ideal figure, then her body discrepancy rating would be 3. Therefore a positive number indicated that the participant wanted to be thinner, whereas a negative number indicated that the participant wanted to be heavier. In addition, a high number indicated that the participant felt a high degree of body discrepancy. Studies indicate that the current and ideal size ratings meet acceptable standards of reliability (Thompson, 1995).

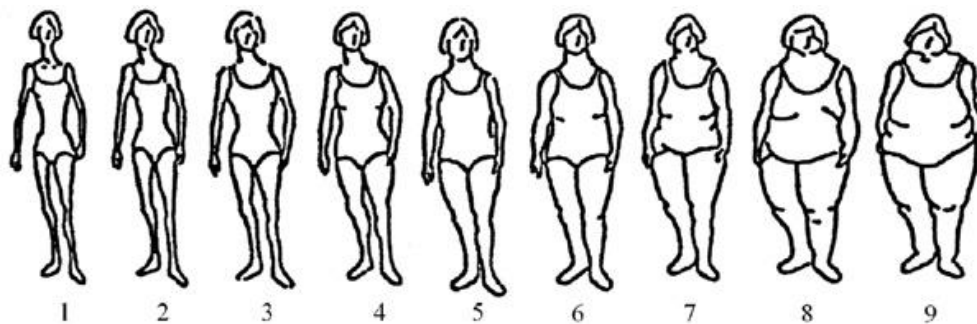


Figure 5. Pictorial Diagram (Stunkard et al., 1983)

Attitude towards breakfast consumption : Similar to the measurements for health behavior, the attitude towards breakfast consumption was assessed to make the cover story more credible. This attitude was assessed as the mean of four items each measured on a 7-point semantic differential scale, e.g. 'I think eating breakfast regularly is. . . ' good-bad, harmful- beneficial, unnecessary—necessary, unenjoyable—enjoyable, all scored +1 to +7. The four items had an acceptable internal consistency of .75 (Wong and Mullan, 2009).

Attitude towards the advertisement: The attitude towards the overall advertisement was measured by asking participants what their general opinion was about the advertisement. The scale was composed of five statements ('I dislike this ad', 'this ad is appealing to me', 'this ad is attractive to me', 'this ad is interesting to me', 'I think this ad is bad') and used a seven-point response format. An alpha of .91 was reported for the scale (Lee and Mason, 1999).

Attractiveness of the model: Perceived model attractiveness of each stimulus image was assessed on a three-item (adapted from Loken and Peck, 2005), five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). (See a study from Brian and Foxall (2010) for a similar procedure with adapted version).

Perceived congruence between model and product: Perceived congruence between the product and the model was measured by asking the participants to what extent they found the product and model a 'match' or 'mismatch'. Congruence was measured globally on a three-item scale ('Product and model go well together', 'Product is well matched with the model', 'In my opinion the model is very appropriate as an endorser for the product'). Participants could indicate to what extent they (dis)agreed on these statements on a 7-point Likert scale ranging from 1 (totally agree) to 7 (totally not agree) An alpha of .84 was reported (Fleck & Quester, 2007).

Purchase intention: Purchase intention was measured by a 4 item rating scale, asking to what extent the participant would like to buy, try, seek out or patronize the product. These items could be answered on a 5-point scale (1=Definitely no, 5=Definitely yes) and formed an overall index of participants inclination to buy a specific good. Several Alpha's have been reported of which .91 the highest, measured by Kilbourne, Painton & Ridley (1985).

RESULTS

Test of hypotheses. A factorial between group analysis of variance (ANOVA) was used to test the hypotheses. The ANOVA was based on the 2 (type of model: healthy versus too thin) x 2 (type of product: healthy versus unhealthy) between-subjects experimental design, in which we used the type of model and product as independent variables and body discrepancy, attitude, purchase intentions as dependent variables. To support our first hypothesis, it was expected that exposure to a healthy model would lead to a lower level of self-discrepancy, which would narrow the gap between the actual-self and the ideal-self (Higgins, 1987). Contrary to what was expected, the main effect of the type of model on the level of body discrepancy was statistically insignificant, $F(1,97) = 0,48$, $p = 0,490$.

Expected was that the type of model would have an effect on the overall attitude women had towards the advertisement. We suggested that a healthy model would cause a more positive attitude towards the advertisement. However, the main effect of the type of model on attitude towards the advertisement however was also not significant, $F(1,97) = 0,05$, $p = 0,817$.

We tested the effects of the model on buying intention and expected a higher buying intention after exposure to a thin model. Contrary to our expectations, the main effect of the type of model on buying intention was not significant, $F(1,97) = 0,02$, $p = 0,883$.

There was no interaction effect between the model and the product on attitude toward the advertisement, $F(1,97) = 0,001$, $p = 0,981$ and buying intention, $F(1,97) = 0,08$, $p = 0,783$. This was contrary to our expectations, as we hypothesized that congruence between the model and the product would lead to positive attitudes towards the advertisement and a higher buying intention. Not enough significant evidence was found to support this theory. An additional analyses was used to diagnose possible explanations for these insignificant results. Preview results showed that congruence between the model and the product did not affect the attitude towards the add and the buying attention (hypotheses 4 and 5 rejected). This might be due to the fact that there were no differences within the conditions where participants were exposed to an advertisement with congruence (thin model+ unhealthy breakfast, or healthy model + healthy breakfast). The question therefore remains: did the participants in condition 1 and 3 experience less congruence than the participants in the conditions 2 and 4? To test this, we ran an Univariate analyses for the two groups (congruence vs. no congruence), using the groups as independent variables and the total level of congruence as dependent variable. Results showed that there was no significant evidence to claim that there were differences between the two groups when it comes to congruence, $F(1,99)$, $p = 0,438$. The non-congruence group ($M = 4.19$, $SD = 1.67$) seems to have a little higher mean than the congruence group ($M = 3.92$, $SD = 1,82$). However this difference is so small that it is not statistically significant. Even in its insignificance, it is still an interesting results which we will further address within the discussion section.

Following the mediation criteria by Baron and Kenny (1986), attractiveness was tested as a mediator of the interaction effect of model and product type on attitude and buying attention. First, ANOVA on attractiveness as a dependent variable indicated a statistically significant between the two manipulated factors ($F(1, 98) = 19,23$; $p = 0.001$). Participants who were exposed to a healthy model ($M = 3.068$, $SD = 0.80$) rated the model as significantly more attractive than the participants who were exposed to a thin model ($M = 4.37$, $SD = 0.86$). To satisfy the other criteria for mediation, an analysis of covariance (ANCOVA) was conducted, with the type of model, type of product, their interaction, and attractiveness as a covariate.

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However, no other ANCOVA results reached statistical significance.

An ANOVA with buying intention as a dependent variable showed a main effect between the type of product on buying attention and was found to be significant, $F(1,97) = 6.57$, $p = 0.012$ (figure 5). Participants who were exposed to a healthy product ($M = 2.97$, $SD = 0.11$) had higher buying intention than participants who were exposed to an unhealthy product ($M = 2.57$, $SD = 0.11$).

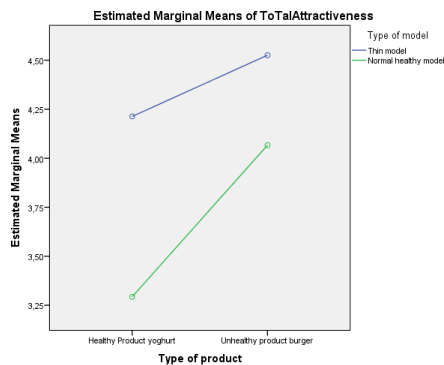


Figure 6. Interaction effect between type of product and type of model on attractiveness.

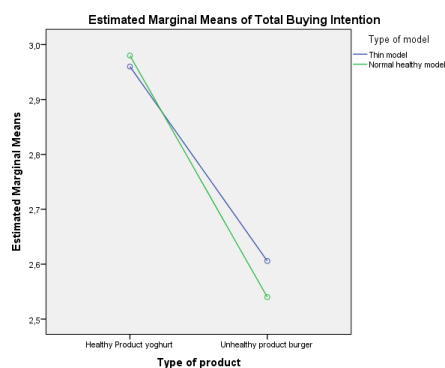


Figure 7. Interaction effects between type of product and type of model on buying intention.

Additional results: Health behavior and sport intentions. Participants were asked to answer some questions concerning sport behavior before they were exposed to the advertisement with the model. As a controlling variable, at the end of the questionnaire (after several exposures to the ad), the same questions were asked again. This measurement was taken to see whether or not participants would change their sport intentions after they were exposed to the model. Analyses did not give any interesting results on this topic. Answers of the first section of questions were similar to the second section, indicating that the advertisement did not have any effect on participants' sport intentions.

Body image: Interesting to note is that results showed that most of the participants (44.6%) wanted to lose one body size to meet their ideal figure and 25.7% was actually satisfied with their current body size. A reason for this could be that women are aware of their body size and how they want to look like, despite of the model pictures they were exposed to. Based on Stunkard's pictorial diagram, figure 4 was seen as most 'ideal' by most of the participants in both conditions.

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Effects of sample means: Another interesting result within this present study is the closeness of the averages of the samples, displayed in the table below. As shown in table 1, means are remarkably similar, even though participants were randomly assigned into two totally different conditions.

	Thin model		Healthy model	
	Mean (M)	Std.Deviation (SD)	Mean (M)	Std.Deviation (SD)
Body Discrepancy	0.88	0.13	0.13	0.76
Attitude	3.68	0.16	3.62	0.16
Buying intention	2.78	0.11	2.76	0.11

Table 1. Means and Standard Deviations of dependent variables per group

GENERAL DISCUSSION

The present study examined the influence of model types (too thin versus healthy) on self-discrepancy, attitude towards advertising and buying intention. In line with earlier studies within the domain of advertising effects and models, results showed that not only the type of model had an influence on women. Apparently, congruence between the model and the product plays an important role in the credibility and trustworthiness of the advertisement as well (Misra & Beatty, 1990). Within this present study, the interaction (congruence) between the model and product was therefore added as an extra dependent variable. In line with other researches that studied body discrepancy, body ideals, model exposure and advertising, we set up hypotheses. Unfortunately, in our study we were not able to find significant evidence to support any of our hypotheses and we were not able to claim that the model type (too thin vs. healthy) had an effect on body discrepancy, attitude, buying intention or congruence.

First of all, findings did not support our hypothesis that women experience a lower self-discrepancy level (Higgins, 1987) after exposure to a healthy model. These non-significant results were not in line with Higgins' theory in which he describes how women tend to experience a bigger gap between their self-image and their ideal image once they are confronted with the ideal-self. Within the present study, participants were explicitly asked to rate their own body-discrepancy level based on a Pictorial Diagram (Stunkard et al., 1983). However, this did not give the results we expected. Results did not show significant effects of the type of model on the level of body discrepancy. A possible explanation for this might be based on how women have a clear opinion about their own body and how their ideal body should be. It could be that women already made up their mind in the amount of weight they want to lose and are completely determined to hold on to that goal, despite of what people say or the type of models they see. In their head, the 'ideal body goal' must be achieved and this goal could not be influenced by the size of models they are exposed to. It does not matter whether a woman is thin or big, according to Youjeong & Sundar, 2012, it all depends on how the person perceives her own body shape. How a person looks at her own body effects the total satisfaction or dissatisfaction of one's body image.

Furthermore, several researchers who have conducted their study about body image, used BMI percentages as a variable. For instance a study of Papies & Nicolaije (2010) examined the effects of slim and plus sized models on restrained eaters' self-evaluation. Their study showed that a similarities mindset led to more positive self-evaluations after exposure to a slim model. However this effect only occurred among restrained eaters with a relatively high BMI (body mass index).

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It can be argued that the examination of the BMI of each individual participant was a missing moderator within the present research. This might be one of the possible reasons why no significant results were found.

A study of Halliwell & Dittmar (2004), suggested that exposure to an extremely thin model leads to a negative attitude towards own body image and advertisement effectiveness. Our hypothesis, derived from this study, did not reach a statistical significance level. Therefore, our conclusions were not in line with the study of Halliwell & Dittmar (2004) and we could not claim that women experience more negative attitudes after exposure to a thin model, compared to exposure to a healthy model. In the present study, the attitude towards the advertisement was measured by asking participants' opinions about the add. Attitude however can be influenced by several other factors as well, for instance emotional status or familiarity with the product or brand. Participants' emotional status at the time of the survey could have affected the way they responded. Participants could have experienced personal negative emotions (for example; sadness, anger) which could have affected the test results. Additionally the involvement with the product could have had an influence on the results as well. According to Petty et al. (1983), attitudes are a better predictor of behavioral intentions (buying intention) on high, rather than low involvement with the product. This means that, the more involved the person is with the product, the more positive the attitude and the better the buying intentions are. With product involvement we refer to the level of a consumer's interest in purchasing a certain product type and how committed they are to purchase a given product. It is possible that a lack of product involvement could have therefore resulted into insignificant results. Other reasons that might have influenced participants self-evaluation on body discrepancy could have been personal characteristics like jealousy. It could be possible that participants felt intimidated by the thin model which might have led to a jealousy towards the model and a more negative attitude or a lower buying intention.

Previous studies revealed some inconsistencies regarding the influence of models on buying behavior. Halliwell & Dittmar (2004) claimed in their study that 'bigger' models sell the product just as good as the thin models do, however in this same study they also cite a statement of Gillian (2000), in which it is claimed that only thin models sell the product. Present research based its predictions on Gillian's (2000) study and suggested that thin models do sell the product better than healthy models do, however no significant evidence was found to support this hypothesis. Even though our hypotheses were based on Gillian's findings (2000), some extra research resulted in information what might lead to a plausible explanation for the insignificant results.

We based our hypothesis on the following statement: "Statistics have repeatedly shown that if you stick a beautiful skinny girl on the cover of a magazine you sell more copies... At the end of the day, it is a business and the fact is that these models sell the products" (Gillian, 2000, p. 7, cited in Halliwell & Dittmar, 2004, p.105). However, the statement within Gillian's research is mentioned by a spokesperson for a modeling agency that represents top models like Naomi Campbell and Claudia Schiffer. This means that it is based on an assumption rather than empirical results. The fact that our hypotheses were based on Gillian's work and this was partly based on an assumption might raise some question about the reliability of our theoretical background for this hypothesis as well. If the statement within his study (2000) only assumed that thin models would sell better than bigger models, instead of actually having empirical evidence for this theory, this could be the reason why present study did not find significant empirical evidence for this theory either.

Previous research (Cohn, 1992, Halliwell and Dittmar, 2004, Smeesters et al., 2010) have some

limitations when it comes to including the importance of the type of product instead of only focusing on the type of model. People perceive an advertisement as congruent, when it is believable and trustworthy (Kamins & Gupta, 1994). The better suited, matching or congruent the endorser and the product are perceived to be, the more positive the responses towards advertising will be (Misra & Beatty, 1990). This present study therefore included the extra variable: “Interaction (congruence) between model and product”. Even though we predicted that an interaction between the model and the product would have an influence on attitude and buying intention, no significant evidence could be found to support this theory. Interesting enough, this contradicts previous studies (Kamins & Gupta, 1994, Misra & Beatty, 1990), who did find significant results for the influence of congruence on advertisement effectiveness. A limitation that might be an explanation for these contradictions, is the fact that in present study the perceived congruence by the participants was not individually measured. In this study it was only assumed that within condition 2 (thin model versus unhealthy product) and condition 3 (healthy model versus healthy product) participants would perceive the model and the product in the advertisement as not congruent. As mentioned in the results section, present research therefore added additional analyses to measure the perceived congruence within the advertisement. ANOVA results revealed that there were no differences in perceived congruence within all groups. This means that participants within the not –congruence conditions (condition 2 and 3) somehow did not even seem to evaluate the advertisement as not-congruent. Our assumption rather than empirical proof that advertisement 2 and 3 would be perceived as not-congruent might be a logical explanation for the insignificant results of hypotheses four and five. Follow up research should focus more on pre-testing the perceived congruence between model and product within the advertisement.

Even though our hypotheses could not reach significant level, we did find some other interesting results. The type of model seemed to have a significant effect on the perceived attractiveness. Results indicated that participants perceived the healthy model as more attractive than the thin model. This contradicts to our results derived from the pre-test in which no differences were found on perceived attractiveness. Within this pre-test participants did perceive the healthy model as more healthy looking and having an ideal body shape. The fact that within the pre-test no differences in attractiveness could have been found is most likely due to the small sample size that was used (n=22). In the main study however, the size of the model did have an effect on perceived attractiveness. Apparently, even though we live in a society where we constantly get exposed to thin models, people do not necessarily associate this thinness with attractiveness. Why is this? McCarthy (1989) conducted a study in which she examined the ‘thin ideal’. The author claims that the thin ideal has its biggest impact during puberty. This impact occurs in puberty particular because within this period physical changes increase, girls get more aware of the ideal body size and being sexual attractive becomes important. Within our study, the sample size did not include girls in puberty, but older women between 21 and 35 years old who, according to McCarthy (1989), are less influenced by thin images. It could be that when we would have held this study among girls in puberty, we would have had different (significant) results. Another interesting aspect is the role of men within this society. Men preference for thin women is often exaggerated by women (McCarthy, 1989). A study of Fallon and Rozin (1985) claimed that men were rather attracted to heavier figure for their ideal feminine body. Even though everyone will be confronted with the thin body ideal that the media display, a too thin body size is not always considered as attractive. It might have a higher impact within puberty (McCarthy, 1989), but at a certain age women might gain a different interpretation of the meaning of attractiveness. Women might tend to realize that men

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do not necessarily find thin body's attractive and choose for another interpretation of 'being attractive' for instance 'attractiveness equals healthiness'.

Another significant result within our study was the effect of the product type on buying intention. Participants tend to have a higher buying intention when they were exposed to a healthy food product rather than an unhealthy product. Dutch research agency GfK claims a trend in having a healthy lifestyle. According to them, a remarkable trend within society is the desire to have a better food pattern. This might be an possible explanation why clear significant effects between the type of product and buying intention were noticeable. As we expected our pre-test results revealed that women found the thin model "too thin" and the healthy model "healthy looking". In line with the current health trends this sounds like a logical effect. Women these days tend to follow a trend in which healthiness is more important. This lifestyle influences the perceived attractiveness of models' body sizes as well. Thin model are not attractive anymore, but healthy looking models are more attractive.

Overall, we can conclude that whereas other studies found that the body size of a model within the advertisement has an influence on self-discrepancy (Higgins, 1987), attitude (of Halliwell & Dittmar, 2004) and buying intention (Gillman, 2000, Halliwell & Dittmar, 2004), present research could not support these findings. In this study, we specifically choose to actually approach participants face to face and let them fill in the questionnaire with supervision. This way the participants were forced to read the questionnaire in detail and no environmental factors could influence or distract them. Nonetheless, no significant results could be found. Several aspects can be an explanation. Some of them were already mentioned before: Body discrepancy can be influenced by the determination of holding onto a personal body image goal, attitude towards the ad can be influenced by emotional status, familiarity or involvement with the brand/product. Additionally, no significant proof was found to conclude that the congruence between the model and product had an effect on attitude and buying behavior. Additional analyses showed that this was due to the limitation that participants did not perceive the advertisements as congruent or non-congruent. Furthermore, test reactivity or social desirability could have played a role as well. Test reactivity refers to changes in behavior caused by certain research measurements. In this present study, it could be possible that participants gave more social desirable answers, because questions were perceived as too personal. The mentioned limitations within this study offers opportunities for further research.

Implementations and social relevance

Unfortunately, this study did not result in significant evidence to support our hypothesized theories. However, this does not mean that the research could not contribute to science and society. Specifically, it is remarkable that many previous studies already researched the domain of models and advertisements and found significant results, claiming that the body size of the model has an influence on body discrepancy, attitude and buying intention. This present study was not in line with these findings, which addresses the fact that future research is needed.

This research however provides in valuable information on marketers and product developers in how people perceive thin and healthy looking model exposure. It can motivate product sellers to use healthy looking models, since they are perceived as being more attractive than too thin models. Additionally, it can be advised to consider congruence between the model and the product, because previous literature claimed that congruence makes the advertisement more trustworthy. Furthermore, especially the type of product seems to have an influence on the buying intention. Beyond advertising, this study provides insights for societal issues as well. It can be advised to *Too Thin is no longer In- The influences of exposing healthy versus too thin models.*

product managers to demonstrate the importance of healthy food products. It is important to note that this desire to be thinner seems to become an actual problem in society. Several research claim that that images of thin models negatively influence females self-esteem (Groesz et al., 2002). According to a study of Field et al. (1999), unrealistic beauty ideals exposed in the media influence girls' weight behavior and control. However, lifestyle trends show that people are starting to find it important to have a healthy lifestyle, buy healthy products and seem to find too thin models less attractive than healthy looking models. Product managers should respond to this by offering healthy products in combination with a healthy looking model. It is best advised to use healthy looking models, since these are perceived as more attractive and more healthy looking. This study could stimulate media, product managers and marketers to encourage this trend in healthy lifestyle by exposing more healthy models instead of too thin models.

Since the media is for a big part responsible for an overall unrealistic (unhealthy thin) body ideal, advertisers should use healthy looking models to enable women to integrate the overall 'healthiness' of the body and to create a more realistic and healthy image of body perfection.

SUMMARY OF LIMITATIONS AND FUTURE RESEACH

Within the discussion section, several limitations were noted within this experimental research. First, it can be argued that the BMI (Body mass index) as a moderator should be used in order to better measure participants personal body discrepancy level. Additionally it should be noted that experimental procedure asked participants to measure their body discrepancy rate based on self-evaluation. Social desirable answers could have influenced the reliability of the results.

Second, the attitude results could have been influenced by emotional status, personal characteristics or product involvement. Furthermore, it was speculated that our hypotheses for buying behavior was based more on an assumption than empirical results. Since there are still contradicting results in whether thin models sell the products better than plus-size or healthy models, further research is needed to examine this more thoroughly.

Additionally we argue that the congruence between the model and product is of importance within advertisement effectiveness. Since the congruence manipulations within this present study were not pre-tested, further research should further explore this interactions effect.

Finally, healthy models seems to be perceived as more attractive than thin models and especially healthy products lead to a more positive buying intention. Within this study it is argued that the experimental procedure sample were women between an age of 20 and 35 years old. As a study of McCarthy (1989) claims that especially girls going through puberty are most vulnerable for unrealistic body ideals, further research should be directed towards participants under the 20 years old.

CONCLUSION

Despite the limitations noted, this present research contributes to our knowledge on the effects of thin and healthy models on body discrepancy, attitude and buying intention. Based on preview studies within this area, this present study offers analyses concerning females' body perceptions and the effectiveness of models' body shapes within the media. We are living in a society where people seem to be more obsessed with health and beauty control. Starting with young girls who compare themselves with thin Barbie dolls or fairy tale princesses, continuing with (young) women, obsessed with the thin beauty ideal which the media display. However, using a thin beauty image is not necessarily effective.

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