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No body is perfect

MSc Thesis | Carmen Heukers

No body is perfect

Master Thesis

About the ability of consumers to compensate their food intake when self-objectification is triggered and if body appreciation diminishes this effect.



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Preface

This report contains the results of an experiment conducted for the master thesis by student Carmen Heukers. This thesis was conducted for the MCB department of Wageningen University. The research for this experiment was partly based on the previous bachelor thesis and the PhD subjects of Evelien van de Veer, PhD student at Wageningen University and second supervisor of this thesis.

This report contains the results of the experiment conducted for this thesis which included a taste test in an environment with objects that trigger self-objectification and a questionnaire that triggers body appreciation.

The road of this report was quite difficult for me, since writing a thesis is not one of my strengths. I always enjoy working together in a group and to motivate others. So writing a whole thesis by myself was challenging. But I am very thankful that it worked out in the end with the patience and help of my two supervisors Erica van Herpen and Evelien van de Veer.

Carmen Heukers

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Abstract

Nowadays the media constantly reminds consumers of the ideal body image. The ideal body image for women in our western society is a thin body shape. Since this thin body shape is not realistic to obtain for most women, the degree in which they are satisfied with their own body declines. When women compare their own bodies to bodies of other women, self-objectification is triggered. Self-objectification means that women internalize an observers perspective to evaluate their body. At Wageningen University two experiments were conducted on self-objectification and the ability of consumers to compensate their food intake. The results show that participants have more difficulty in compensating their food intake when self-objectification is triggered.

Intuitive eating might help consumers to regain their ability to compensate their food intake. Intuitive eating is defined as understanding of, and eating in response to internal hunger and satiety cues coupled with a low preoccupation with food. Intuitive eating is triggered when consumers perceive that significant others in their life accept their internal self and external body shape and weight, which results in honouring their internal hunger and satiety signals and eat according to these signals instead of eating as a result of emotional distress.

Body appreciation helps consumers to eat more intuitively. Body appreciation means that consumers unconditionally approve and respect their own body and is connected to a positive body image. So when body appreciation is triggered, consumers might be able to compensate their food intake.

An experiment was conducted to see if female participants had more difficulty in compensating their food intake when self-objectification was triggered, and if body appreciation diminishes the effect of self-objectification. Four expectations are formulated which are tested in the experiment.

1. It is expected that consumers who are hungry, eat more snacks than consumers who are satisfied, in the neutral condition.
2. It is expected that consumers in the self-objectification condition have more difficulty in compensating their food intake.
3. It is expected that consumers in the body appreciation condition are able to compensate their food intake better than in the self-objectification condition.
4. It is expected that consumers in the self-objectification and in the body appreciation condition have less difficulty in compensating their food intake than in the self-objectification condition.

The results of the experiment show no significant effect for self-objectification. It seems that overall participants ate more when they were hungry, and less when they were satisfied in the experiment when body appreciation was triggered. Also participants in the body appreciation condition when satisfied ate less snacks than participants in the neutral condition who were satisfied. So it seems that body appreciation has an effect on the ability of consumers to compensate their food intake.

Keywords: self-objectification, compensate food intake, body appreciation, intuitive eating, women.

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Chapter 1. Introduction

Food and appearance are two aspects that preoccupy the minds of consumers all over the world, especially in our Western society. The first, food, is on our mind because of the numerous options western consumers have to satisfy their hunger on a daily basis. There are so many options that consumers do not need to be hungry at all. Therefore a lot of consumers consume too much which lead to a high Body Mass Index and to consumers who are unhappy about their appearance. These two aspects are therefore closely related and this paper describes their relation.

Consumers feel the need to obtain an ideal body figure. The ideal body figure in our society for women is a thin body shape and for men fitness and health. So the need to stay thin and fit is rising dramatically. It is difficult to stay thin and fit in a society where over consuming is starting to be a big issue. More and more men, women and even children struggle with obesity. This is because fast food restaurants are increasing and unhealthy snacks are cheap and easy to get. Also consumers are less active due to technological inventions like the car, the computer and the television. In conclusion, consumers want convenience and food that tastes good. This leads to decisions that are not always the healthier ones.

These new technologies also support the mass media. Examples of mass media are the television, the computer and also bill boards and magazines. These media reaches a lot of consumers and have a lot of influence on how consumers see themselves and what the cultural norms and ideals are (Anschutz et al, 2009). The impact of the media starts at a very young age and the media portrays a lot of models who have a thin, fit and perfect body shape. Sometimes the models are (made) so thin that the body shape is unrealistic or unhealthy. Consumers see these ideal bodies on a daily basis and want to obtain these body shapes. Therefore consumers feel a lot of pressure in obtaining this ideal body figure. A reaction of consumers to the overload of perfect body images is monitoring their own body. When consumers monitor their body their attention is drawn to the outward appearance, which reduces attention to other cues (Fredrickson and Robert, 1997). This monitoring leads experiences of anxiety, negative moods, dissatisfaction of their own body and negative self-perception of their attractiveness (Harper and Tiggemann, 2007).

Because consumers are constantly reminded of the ideal body image by the media, the degree in which consumers are satisfied with their own body declines drastically and this leads to major health risks (Lewis, 1992). Thin models and actresses trigger self-objectification. Self-objectification means that consumers judge their own body in a way a third person would. Not only advertisements and television featuring thin models triggers self-objectification. Also when confronted with their own body, self-objectification is triggered. This may happen with a mirror or when trying on clothes (Roberts and Gettman, 2004).

Thin models portrayed by the mass media also influences the eating behaviour of consumers. These days consumers have a tremendous choice of different food products.

A lot of these food products are unhealthy and when over consuming these products the body shape of consumers will be a lot bigger than the desired thin body shape. It also seems that consumers have more difficulty in interpreting their internal hunger cues and therefore they overeat. This phenomenon raises a lot of questions, therefore different investigations are conducted to try to find some answers. Wageningen University is also involved in some of the investigations concerning this dilemma.

1.1 WUR studies about self-objectification and food compensation

The WUR continued investigating self-objectification and the eating behaviour of consumers by investigating the eating behaviour of participants when they were increasingly aware of their body by a mirror or an advertisement featuring thin models which enhances self-objectification. This has been investigated in two different studies. The results of the first study show that when participants are aware of their own body via a mirror, they eat more M&M's after drinking a high caloric milkshake in comparison to a low caloric milkshake. The second investigation shows that participants, when confronted with an advertisement featuring a thin model, had more difficulty compensating their food intake than participants who did not see advertisements with models. In conclusion, when consumers start monitoring their own body their ability to compensate their food intake declines (Van de Veer et al, 2010).

The cause as to why participants react in this way was investigated in a previous study, related to this investigation. In this experiment female students participated by answering a series of questions on the computer. The experiment consisted of two conditions. Half of the participants were randomly assigned to the condition where they were confronted with ten advertisements featuring thin models at the beginning of the experiment. The other half of the participants were confronted with the same advertisements only without the models. The results of this experiment were not significant, so no conclusions could be made about the effect self-objectification has on women. Since there must be an effect triggered to make self-objectification occur the search continues on finding an explanation.

1.2 Problem statement

Since body appreciation might be a factor in the eating behaviour of consumers, it seems to be an important link in self-objectification. When consumers appreciate their body they might have less difficulty in compensating their food intake, because they will eat more intuitively. A way to trigger self-objectification could be with subtle environmental cues.

1.3 Main question and sub questions

To understand why consumers have difficulty in compensating their food intake an investigation is conducted. With this investigation the following main question, which is formulated on the next page, is investigated.

Main question:

Does body appreciation have a positive effect on the ability of consumers to compensate their food intake when self-objectification is triggered?

To answer the main question, the following three sub questions are formulated.

Sub questions:

1. Is there a difference in food intake between participants who are hungry or satisfied?
2. Do consumers have difficulty in compensating their food intake when self-objectification is triggered?
3. What is the effect body appreciation has on the ability of consumers to compensate their food intake when self-objectification is triggered?

Chapter 2. Self-objectification

As the previous chapter indicates, no results have been found as to what happens internally when self-objectification is triggered. This chapter provides some background information on self-objectification.

2.1 The observers perspective

The effect that occurs when consumers are confronted with, for example, thin models is called self-objectification. The self-objectification theory claims consumers internalize an observers perspective as a primary view of their physical selves whereby they monitor their own body. Consumers are in the position to compare themselves to models with ideal thin bodies because of all the fashion magazines and television programs that are available (Anschutz et al, 2009). Mass media is a very powerful communicative tool and reaches a high number of consumers. Mass media does not only provide consumers with ideas about the concept of beauty, it is also a very important source for information about dieting, because it increases the awareness on weight loss strategies and disturbed eating behaviour over time (Anschutz et al, 2009). Magazines are the most powerful and pervasive influence on women concerning objectification by negatively influencing body image, mood and self-perception of physical attractiveness (Kang, 1997). In real life women feel their body is 'public domain' because it is increasingly gazed at, commented on and otherwise evaluated by others (Brownmiller, 1984 in Fredrickson and Roberts, 1997).

When women self-objectify, their attention is drawn towards their body and they try to see their own body as to how an observer would see it. Self-objectification is triggered when women are trying on clothes in front of a mirror, by the presence of a camera, a male gaze, or by reading body related words (Roberts and Gettman, 2004). For men self-objectification is triggered by different cues. Men self-objectify when they are confronted with fitness magazines featuring healthy and fit male models (Morry and Staska, 2001).

Self-objectification can lead to feelings of shame, anxiety, negative moods and body dissatisfaction (Harper and Tiggemann, 2007). These feelings can lead to restrained eating and reduced opportunities for peak motivational states and diminish consumers awareness of internal bodily states (Fredrickson and Roberts, 1997). These experiences can result in mental health risks such as unipolar depression, sexual dysfunction and eating disorders. Women self-objectify more than men do (Roberts and Good, 2010.) and the degree in which women self-objectify differs between women (Fredrickson and Roberts, 1997). However, the state of self-objectification can be increased in situations where attention is focused on physical appearance (Roberts and Gettman, 2004).

When self-objectification is triggered in women, they are less accurate in detecting internal physiological sensations such as a heartbeat, stomach contractions and blood-glucose levels. Men on the other hand are not affected in this way.

Also to determine how they feel, men use these cues better than women (Fredrickson and Roberts, 1997). An assumption Fredrickson and Roberts (1997) make is that women are so diligent in monitoring their own bodily appearance that fewer perceptual resources are available to monitor inner cues.

A reason why women might have difficulty paying attention to their bodily cues is because the majority of women diet a large part of their lives. Therefore they are used to repress feelings such as hunger to achieve an ideal slim body. This suppressing can lead to a generalized insensitivity for internal cues (Polivy et al, 1989 and 1990 in Fredrickson and Roberts, 1997). This means that women, when confronted with thin models in advertisements, may have difficulty to detect and interpret the internal cues that may occur.

2.1.1 Men and women

Self-objectification seems to be different for women and men. First of all more women than men are susceptible to self-objectification (Roberts and Good, 2010). The difference between men and women is that women judge themselves on physical attractiveness whereas men judge themselves on physical effectiveness (Lerner and Karabenick, 1974). There are two explanations as to why women might be more susceptible for self-objectification, namely because the way in which women are portrayed in advertisements with more focus on their bodily appearance than men and to handle situations in everyday life. Because the way a female body looks to others influences a woman's life experience more than that of a man. For example, obesity affects the social mobility of women in a negative way, but has no effect on men (Cash et al, 1977). Physically attractive women are also likely to have better dating experiences and marriage opportunities. Again this does not apply to men. So attractiveness determines women's social and economical success (Unger, 2001). In this case self-objectification is a strategy to determine how others will treat them, which affects their quality of life.

There are a few studies that focuses on self-objectification on men and women. One example is the study about trying on a swimsuit. Women and men were asked to try on a swimsuit or sweater in front of a full length mirror. The outcome shows that this process only produces body shame by women and not by men. Also women performed worse on a math test compared to men after seeing themselves in the mirror with a swimsuit on (Fredrickson, Roberts et al, 1998). This shows that body shame, when self-objectifying, is bigger for women.

In another research men and women were asked to sample three different margarine products (high fat, low fat and regular). The study shows that the presence of a mirror had the same effect on the eating behaviour of men and women. Though overall women ate less fatty margarines than men (Sentyrz and Bushman, 1997).

Another difference between men and women is the effect of magazines. Beauty magazines seem to have a big effect on women and fitness magazines on men.

For men fitness magazines seem to trigger, mediated by internalization, self-objectification and beauty magazines trigger self-objectification for women. Fitness magazines, mediated by internalization, predicted body shape dissatisfaction. These findings suggest that magazine reading is related to concerns with physical appearance and eating behaviours. Many of the relationships found for women are similar for men. 51% of women and 36% of men scored over zero on the questionnaire, indicating a large emphasis on appearance (Morry and Staska, 2001).

Strelan and Hargreaves (2005) asked participants to fill in a three piece questionnaire. The result was that women were more likely to self-objectify than men. Self-objectification was negatively related to body satisfaction for women but not for men. Both women and men objectified women more than they objectified men, although women's objectification of other women was not significantly different than their objectification of men. Men objectified women more than women did, and women objectified men more than men did. Women were more likely to objectify other women than to objectify themselves. Higher self-objectification among both women and men was related to increased objectification of other women and men, but the relationships were stronger for women.

Overall the difference between men and women is that women judge themselves on physical attractiveness (thin body shape) whereas men judge themselves on physical effectiveness (fitness of the body) (Lerner et al, 1974). Because self-objectification seems to have more effect on women, this study will focus mainly on women.

2.2 Environment as a trigger for self-objectification

Self-objectification can be triggered or magnified in certain situations and in certain environments. Different studies found connections between the trait self-objectification and different environments where consumers deal with in their life. Examples of environments that seem to trigger self-objectification are being a member of a fitness centre (Prichard and Tiggemann, 2005), attending ballet lessons as a child (Tiggemann and Slater, 2001) and having to participate in gymnastics in high school. This last two environments seem to have such a big impact, that as an adult these consumers still experience body shame (Parson and Betz, 2001). These environments have this big impact on the self-objectification of consumers because it brings an awareness of observer's perspective on their body. Based on this knowledge Fredrickson and Roberts (1997) propose that self-objectification can be context dependent and triggered or magnified in certain situations.

Tiggeman and Boundy (2008) have experimentally manipulated features in the physical environment to investigate if subtle cues in the environment lead also to self-objectification. Examples of subtle cues are a male gaze or a sentence task containing self-objectifying words.

Tiggemann and Boundy (2008) found that drawing attention to the appearance, in any way, increases self-objectification. These researchers used a set of bathroom scales, two full length mirrors and a small display of fashion magazines in the laboratory room to make subtle environmental changes. So this manner of manipulating seems to be an effective and useful way to trigger self-objectification in this study as well.

2.3 Body dissatisfaction

Your body shape is very important, because you cannot hide your weight. This means that obese consumers can expect negative responses from others (Allon, 1979). Consumers who are overweight are frequently blamed for their condition. That is why consumers have internal standards to avoid high caloric food. They do not want to be obese or suffer from a bad health (Gershof, 1995 in Sentyrz and Bushman, 1998). So when consumers confronted with thin models eat high caloric food, they may experience negative feelings because it is against their own internal standards. The negative feelings that can occur are shame, guilt and self blame (Allon, 1979). Females are more likely to be obese than men and are more concerned about eating, body weight, physical appearance and have lower self-esteem. 60% of adolescent girls consider themselves to be overweight (Fallon and Rozin, 1985). Because of the fact that the body shape of women has a big effect on their social lives, Crocker et al (1993) investigated if women interpret their weight as the cause of positive and negative experiences. This was investigated by letting women fill in a questionnaire about themselves including height and weight. The researcher told them that a male participant was doing the same. Then women would receive positive or negative feedback about the willingness of the male to date them. Negative feedback from a male made overweight women feel worse than normal/underweight women. Also their self-esteem decreased. This means that overweight women connect negative feedback about themselves, even when their appearance is not involved (Crocker et al, 1993).

Women however, are not very good in estimating their appearance. Women overestimate their weight more than men do. Also they perceive their figure as larger than ideal or attractive. But it is important to note that the ideal figure of women is thinner than the figure that is most attractive to men (Fallon and Rozin, 1985).

Also body shame seems to be strongly related to self-objectification. The researchers Fredrickson et al (1998) found that the Body Mass Index of participants is a predictor of the body shame participants experience. The shame consumers experience makes them want to hide and escape the painful gaze of others or disappear. Also consumers experience feelings of worthlessness and powerlessness (Lewis, 1992).

Body dissatisfaction means that consumers evaluate their body in a negative way. This evaluation could be about specific body parts or about the body as a whole. This body dissatisfaction is found to moderate the effects of thin ideal media exposure on body esteem, weight satisfaction and depression (Bessenoff, 2006). So this seems to influence the food consumption of consumers. This also means that body acceptance (the opposite of body dissatisfaction) can influence the eating behaviour of consumers in a positive way.

Chapter 3. Intuitive eating

Many consumers in this society overeat and have difficulty in eating based on their hunger cues. That is why more and more consumers are obese and/or eat unhealthy. A new phenomena that could help consumers to only consume food when their body needs it is intuitive eating.

Intuitive eating is defined as a strong connection with, understanding of, and eating in response to internal hunger and satiety cues coupled with a low preoccupation with food (Tylka, 2006). In other words, it is about your awareness of how your body responds to certain foods. Consumers who eat intuitively choose their foods not primarily based on their taste but on their ability to help the body function well (Tylka, 2006).

Intuitive eating seems to be something that is inborn, and something that changes over time by the influence of the environment. It seems that infants and small children self-regulate their energy intake by adjusting their food intake in response to the energy content of foods that they consume. Children lose this ability when they learn to focus on external cues instead of internal hunger cues. This happens when parents encourage children to eat. This encouragement can over-ride their own hunger signals as a measurement of how much they should eat (Johnson and Birch, 2004). Also the desire of children to eat restricted foods when available, even in the absence of hunger, affect their ability to compensate their food intake. Johnson and Birch (2004) suggest that parents provide healthy food choices for their children, but allow them to control how much they consume.

Intuitive eating seems to consist of three central and interrelated components:

1. Unconditional permission to eat when hungry and what food is desired at that moment.
2. Eating to satisfy physical hunger rather than to cope with emotional fluctuations and/or distress.
3. Reliance on internal hunger satiety cues to determine when and how much to eat.

Also researchers found positive associations between intuitive eating behaviour and self-esteem, life satisfaction, proactive coping and optimism. The negative associations that were found were about body image disturbance and disordered eating (Tylka, 2006).

When the consumer believes that significant others accept them for who they are, intuitive eating can be the result (Carper et al., 2000). This theory is based on the belief that the degree to which consumers perceive that significant others in their life accept their internal self and external body shape and weight, the more likely they are to honour their internal hunger and satiety signals and eat according to these signals (Avalos and Tylka, 2006).

When negative environmental influences seem to trigger self-objectification and influence disordered eating by women, positive environmental influences could contribute to intuitive eating.

Chapter 4. Body appreciation

A way to make self-objectification less powerful might be to turn around the feeling of body shame consumers experience, by focussing on body acceptance. Avalos and Tylka (2006) investigated a model in which a positive body image was linked to intuitive eating.

Body appreciation means that consumers unconditionally approve and respect their own body (Avalos and Tylka, 2006). Body appreciation is connected to a positive body image.

There are four components that characterize body appreciation.

1. A favourable evaluation of the body regardless of perceived congruence with the societal ideal appearance.
2. Body acceptance in spite of weight, body shape, and imperfections.
3. Respect for the body by attending to its needs and engaging in health behaviours.
4. Protection of the body by rejecting unrealistic images of the thin ideal bodies portrayed in the media.

The study of Avalos et al (2005) shows a positive association between body appreciation and psychological well being, like self-esteem, life satisfaction and optimism. Therefore they conducted a model based on these results.

Avalos and Tylka (2006) presented a model which shows two ways in which body acceptance can lead to intuitive eating. It starts with general unconditional acceptance and body acceptance by others. General unconditional acceptance and body acceptance by others indicates that when women perceive that others accept their body, they may be less preoccupied in changing their outer appearance and pay more attention to how their body feels and functions. Also the social influence to obtain a certain weight decreases. The model shows that general unconditional acceptance and body acceptance by others influence body function and body appreciation in women.

The body function indicates that the emphasis of the women on their body is not on their appearance but on their function and to keep them functioning well. When women take care of their body and its needs, their body function can also predict body appreciation.

Others opinions have a profound effect on how women feel about their bodies. Body dissatisfaction and shame occurs when the difference between a woman's body and the cultural ideal is brought to her attention (Fredrickson and Roberts, 1997).

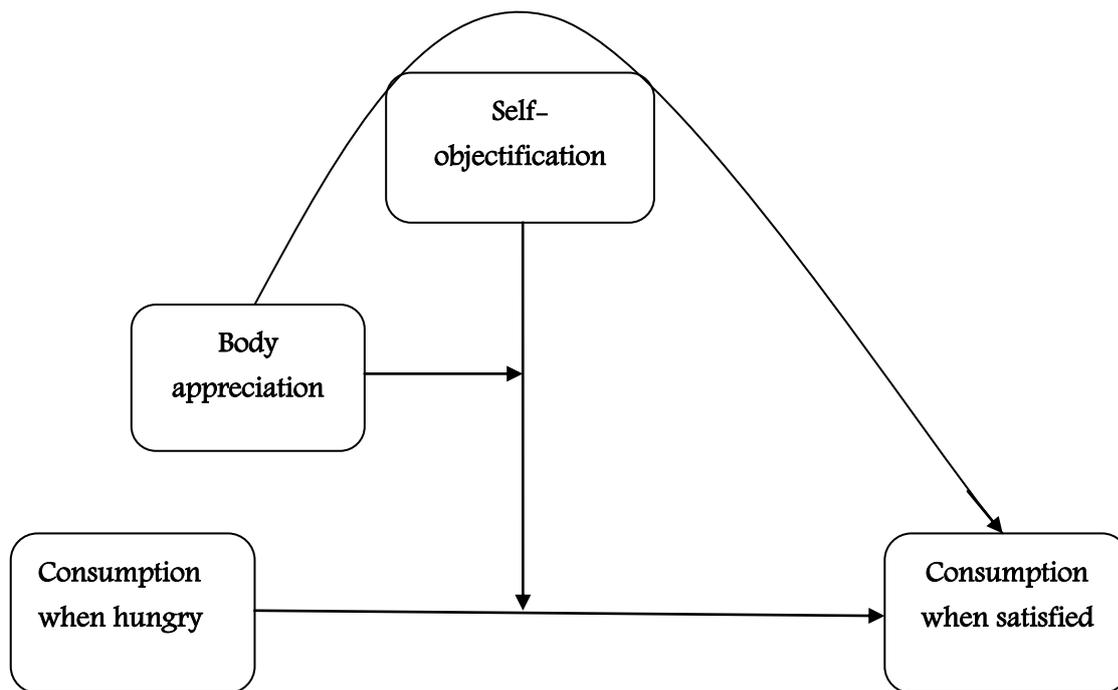
When women receive messages that their bodies do not need to be changed, they are less likely to feel a difference between her body and the cultural standard. Therefore Avalos and Tylka (2006) found that perceived body acceptance by others predicts body appreciation by women.

This emphasis on body appreciation has an influence on intuitive eating, as women feel more the need to take care of their bodies and listen to internal cues rather than focussing on body appearance and trying to obtain a slim body shape.

Chapter 5. Expectations for this research

In short this study will focus on food consumption, self-objectification and body appreciation. Given the information provided by previous studies a conceptual model can be made that describes the four main connections and their relation.

Figure 1: *Conceptual model*



The model above consists of four squares, each representing an important factor in this research.

The two squares on the bottom of the model represent the amount of snacks participants consumed during the experiment when they were either hungry or satisfied at the moment of participation.

Self-objectification is placed in the centre because this research wants to measure the effect of self-objectification on the food intake of participants.

Body appreciation is placed between self-objectification and consumption, because this research will investigate if body appreciation can diminish the effect that self-objectification has on the ability to compensate food intake by participants. Based on this theory four hypotheses can be formulated.

5.1 Hypotheses

This research consists of eight different conditions to measure the ability of consumers to compensate their food intake when self-objectification is triggered and if body appreciation can diminish this effect.

Below four expectations are formulated about the outcome of the experiment.

1. It is expected that consumers who are hungry, eat more snacks than consumers who are satisfied, in the neutral condition.
2. It is expected that consumers in the self-objectification condition have more difficulty in compensating their food intake.
3. It is expected that consumers in the body appreciation condition are able to compensate their food intake better than in the self-objectification condition.
4. It is expected that consumers in the self-objectification and in the body appreciation condition have less difficulty in compensating their food intake than in the self-objectification condition.

Chapter 6. Methods

To measure the ability of participants to compensate their food intake when self-objectification is triggered and to see if body appreciation can diminish this effect an experiment was conducted. The experiment contained three factors to measure the effect. The environment which triggers self-objectification, a questionnaire which triggers body appreciation and the amount of hunger of participants at the time of participation in the experiment to measure how well participants can compensate their food intake. This chapter will explain in detail how the experiment was conducted. A time schedule of the experiment is added in appendix I.

6.1 Participants

The participants in this experiment consisted of 160 females from Wageningen University. The age of the participants varies between 15 and 58 years old, with a mean age of 21.6 (SD= 4.88).

Participants have received a little ‘thank you’ present after participating. The present is chosen in such a way that it does not relate to the experiment, which means it cannot bring the focus to food or appearance. The duration of the experiment is an indicator for the amount of money that participants may receive after participating.

It was chosen to give the participants a present in the form of a two euro coin. This is chosen because it is very difficult to find a nice present that holds no connection to food related or appearance related products.

6.2 Design

The experiment consists of three different factors, which means the experiment is a 2x2x2 design. The three factors are; self-objectification, body appreciation and hunger and this means that there are 8 conditions. The different participants were all randomly assigned to one of the first two conditions. To make sure that there was a variety in the amount of hunger of the participants, the experiment was conducted during different times on a day. For example before lunch (hungry) or after lunch (satisfied).

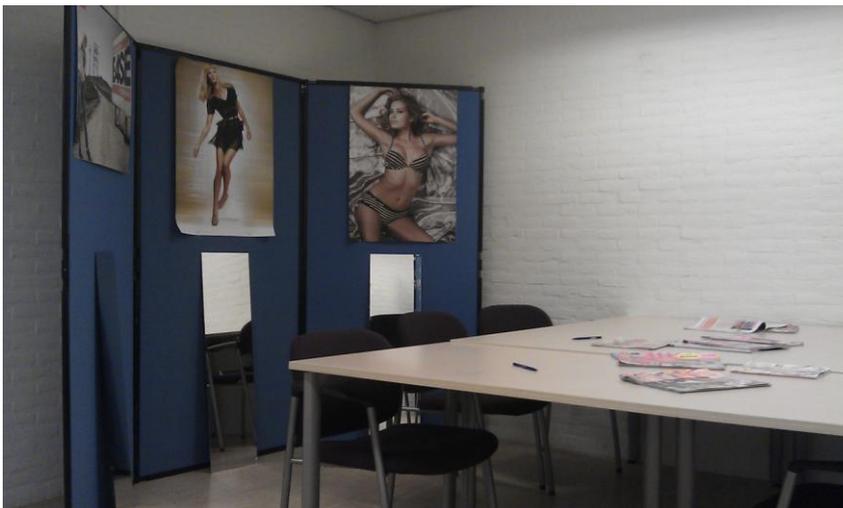
The first manipulation was the self-objectification factor. In this condition the environment, which was the research area, was manipulated by different objects which trigger self-objectification. Next, participants were asked to fill in a questionnaire containing questions that trigger body appreciation.

To measure the ability of participants to compensate their food intake a taste test was included. This taste test was conducted at different times to make sure enough participants participated who were hungry and enough participated who were satisfied, to see what effect hunger had on the ability to compensate the food intake in the different conditions.

6.3 procedure

The experiment was held at Wageningen University in the Leeuwenborch building, in different lecture rooms at the University and in the research room in the basement of the building. The experiment was held in the morning and in the afternoon to make sure that participants participated before or after lunch. This was necessary to make sure that the appetite of participants varied, so their ability to compensate their food intake could be measured.

The research area consisted of two different parts. When participants entered the research area the researcher asked the participants to sit down at a big table at the beginning of the room. This table was surrounded by blue screens so that it was separated from the area where the taste test was conducted. This was to make sure that the participants did not influence each other and that the self-objectification and body appreciation triggers could be activated before participants started with the taste test. In the self-objectification condition the blue boards were covered with posters of thin models and the table was covered with beauty magazines featuring thin models. The magazines were selected with care, by selecting magazines with covers featuring thin models with a lot of focus on their body. Pictures 1 and 2 give an impression of the research area in the self-objectification condition.



Picture 1. Research area (self-objectification)

Picture 2. Research area (self-objectification)



In the neutral condition the research area was clean containing only the furniture which are standard for the room such as a clean table, chairs and empty blue screens to divide the room. Pictures 3 and 4 give an impression of the research area in the neutral condition.



*Picture 3: Research area
(neutral)*

*Picture 4: Research area
(neutral)*



When the participants were seated, the researcher told the participants in the self-objectification condition that the images of thin models that surrounded them, was part of another experiment and had nothing to do with the experiment that they were participating in at the moment. Then the researcher left the participants for one or two minutes to collect the questionnaires that the participants had to fill in at the table. It was deliberate that the researcher left the participants alone for a minute, so that they could take in their surroundings and so that self-objectification could be triggered.

When the researcher returned participants were handed two questionnaires that they had to fill in at this table. The first questionnaire contained general questions about their age, weight, when was the last time they had lunch and if they participated in a taste test before. The complete questionnaires participants had to fill in at the experiment is included as appendix II.

When participants finished this questionnaire they continued with a second questionnaire. This questionnaire was supposed to trigger body appreciation and participants were randomly assigned to fill in the neutral questionnaire or the questionnaire containing body appreciation triggers. The introduction of the questionnaire was that we wanted to know how well consumers recall their memories. The neutral questionnaire consisted of two sets of questions about a favourite place. Examples of questions were ‘which place within Wageningen is your favourite place’ and ‘could you describe why this is your favourite’.

The other half of the participants answered a questionnaire containing questions about a compliment they received in the past about their appearance. The thought of this compliment should trigger body appreciation. Examples of questions were: ‘describe a compliment that you received in the past’ and ‘who gave you this compliment’. Also participants were asked to rate on a scale from 1 (easy) to 7 (difficult) how hard it was to remember this. Participants had to answer the questions about the two different compliments. This was set up in this way so that participants were thinking about the compliments thoroughly which leads to a stronger effect.

When participants were finished with the two questionnaires they were asked to hand the questionnaires over to the researcher, so that the researcher could guide the participants to the other part of the research area where the taste test was conducted.

In the other part of the research area tables were set up divided by blue screens so participants could participate in the taste test in peace without influence from the others. On the desk two bowls were lined up with a note that said ‘snack A’ and ‘snack B’. This was done so that participants knew which questions were for which snack. Picture 5 and 6 give an impression of the taste test.



Picture 5: Taste test

Picture 6: Taste test



The bowls contained 30 grams of the snack each. This was measured carefully because at the end the researcher wanted to know how many snacks were eaten by the participants. In the taste test two different snacks needed to be tested. The snacks that were tested are AH Sour Cream Onion and AH Wheat Trio. These snacks were chosen because of their size and flavor. The snacks needed to be small enough so participants could eat them in one bite and the flavor of the snacks needed to be generally liked. Picture 7 and 8 show the packaging of the two snacks that were used for the experiment.



Picture 7: AH Sour Cream Onion



Picture 8: AH Wheat Trio

On the desk the participants also found a new questionnaire containing questions about the snacks plus some extra questions to stall for time so that the participant had some more time to eat the snacks. The researcher told the participant that they could eat as many snacks as they wanted, because the researcher would be forced to throw the content of the bowls away with respect to the hygiene. The questionnaire started with questions about snack A, followed by questions about snack B. Examples of questions were ‘how sweet do you think snack A is’ and ‘how pleasant was the aftertaste of snack A’. Participants had to indicate on a line of 10 centimetres how much the question was applicable for the snack. So if they found the snack not sweet at all they could indicate this by marking the line at the left side and when they found the snack very sweet they had to mark the line all the way to the right. When the participants were finished marking all the lines for snack A and B, a second questionnaire was attached. This questionnaire was only added to give the participants extra time to eat the snacks. The questions contained a lot of text so that participants could just read and did not have to write stuff down. At the end they had to indicate on a scale from 1 (not at all) to 7 (a lot) how much they could identify themselves with the text.

At the end participants could walk to the front with their questionnaire. The researcher was there to collect them and to give them the two euro coin. When the participants left the room, the researcher measured the left over snacks in the bowls to determine how much of the snacks the participants consumed at the time of participation. In the table on the next page the procedure of the experiment is shortly summarized.

Table 1: *Experimental design*

| SO | BA | Hungry | Procedure. | | | |
|-----|-----|--------|-------------------------|-------------------|---------------------------|------------|
| No | No | Yes | Clean room | General questions | Favourite place questions | Taste test |
| No | No | No | Clean room | General questions | Favourite place questions | Taste test |
| No | Yes | Yes | Clean room | General questions | Compliment questions | Taste test |
| No | Yes | No | Clean room | General questions | Compliment questions | Taste test |
| Yes | No | Yes | Objects that trigger SO | General questions | Favourite place questions | Taste test |
| Yes | No | No | Objects that trigger SO | General questions | Favourite place questions | Taste test |
| Yes | Yes | Yes | Objects that trigger SO | General questions | Compliment questions | Taste test |
| Yes | Yes | No | Objects that trigger SO | General questions | Compliment questions | Taste test |

Chapter 7. Results

7.1 Preliminary analysis

First the data of all participants was analysed to see if participants needed to be excluded from the analysis. Data from women older than 30 years (N= 5) have been excluded from the analysis, because self-objectification might not have been sufficiently triggered because of their age.

Second the answers of the questionnaires have been studied, and it seems that not all the participants have completely and thoroughly answered the questions about body appreciation. This means that some participants have not answered the second part of the body appreciation questions on the back of the questionnaire or gave answers that were too short which indicates that they have not given this part enough attention, indicating that body appreciation might not have been triggered. Therefore, participants who did not answer the questions about body appreciation accordingly have been excluded from the analysis (N= 11).

The last group of participants who were excluded from the analyses are the outliers (N= 4) found in the data in respect to their food consumption during the experiment. The outliers were calculated by adding the eaten grams of both snack A and snack B together. Subsequently the three Standard Deviations are calculated for snack A and B using SPSS. Consequently participants who ate more than 53,7 grams of snacks during the experiment have been excluded from the analysis.

In the end 18 participants have been excluded from the analysis because they were outside the target age range, did not give body appreciation enough attention or have eaten too much of the snacks during the experiment. Some participants were both outside the target age range and outliers (N= 1) or outside the target age range and did not give body appreciation enough attention (N= 1). This leaves data of 142 participants in the dataset.

First it is important to check how the participants are divided between the experimental conditions self-objectification and body appreciation. As the table on the next page shows, the participants are almost equally divided between the four conditions.

Table 2: *Division of participants between conditions*

| Self-objectification | Body appreciation | N per condition |
|----------------------|-------------------|-----------------|
| No | No | 35 |
| Yes | No | 34 |
| No | Yes | 37 |
| Yes | Yes | 36 |
| Total N | | 142 |

7.2 Variable for appetite

An important factor in this experiment is the appetite of the participants at the moment of participation in the experiment. It is important to know the amount of hunger of the participants, because this makes it possible to measure how well participants could compensate their food intake in the self-objectification condition and if body appreciation had a positive effect on their ability to compensate their food intake. So first the hunger of participants at the time of participation should be charted. Initially it was planned to chart their hunger by letting them indicate how hungry they were, in other words by charting their perceived hunger.

7.2.1 Perceived hunger

The perceived hunger of participants is analysed through a question in the questionnaire: ‘how hungry are you at this moment?’ Participants could indicate how hungry they were on a scale from 1 (not hungry) to 7 (very hungry). This question was asked when participants were affected by self-objectification triggers. Thereby the perceived hunger of participants could already be influenced by self-objectification. When analysing the amount of perceived hunger of participants between the conditions, no significant effect was found $F_{(3,138)} = 2.660, p = .051$.

Therefore a new variable is created to measure how hungry participants were at the moment of participation. This variable is based on the food consumption of the participants prior to the experiment.

7.2.2 New variable for hunger based on prior consumption

This new variable is established by analysing how hungry participants were at the moment of participation. In the experiment participants were asked to give an indication of the timeline of their food consumption on the day of the experiment. Participants were asked if they had breakfast and how long ago. Next participants were asked if they had lunch and how long ago. Participants were also asked what the last thing was they consumed and how long ago. So this could have been their breakfast, lunch or a snack. With regard to this, data rules were prepared to place participants into two categories; hungry or satisfied.

First participants were divided into two categories: participants who had breakfast and participants who had lunch prior to the experiment. Participants who had a snack prior to the experiment are categorized later. So the first group of participants who had only breakfast or lunch were categorized by the rules stated in the table below. The table shows that participants who had their breakfast more than two hours ago were categorized as hungry. Also participants who had their lunch more than three hours ago were categorised as hungry. Next the participants who had a snack prior to the experiment were categorised. When participants had breakfast more than two hours ago and a snack more than one hour ago, they were categorized as hungry. Participants who had lunch more than three hours ago and a snack more than one hour ago were also categorized as hungry. None of the participants had eaten only a snack (without lunch or breakfast) prior to the experiment.

Table 3: *Division of participants into hungry or satisfied*

| Meals | Time (hours) | Hungry |
|-----------|-------------------|--------|
| Breakfast | Less than 2 hours | No |
| Breakfast | More than 2 hours | Yes |
| Lunch | Less than 3 hours | No |
| Lunch | More than 3 hours | Yes |
| Snack | Less than 1 hour | No |
| Snack | More than 1 hour | Yes |

There is a difference between the amount of time for breakfast, lunch and snack because it seems that participants ate breakfast that was a lot lighter than the lunch they consumed. Examples of snacks that they consumed are ice cream, chocolate or a piece of fruit.

The output of the frequency table, including the new variable for the hunger of the participants based on the amount of food they had eaten prior to the experiment, shows that 35,2 % of the participants were hungry and 64,8 % of the participants were satisfied. The table on the next page shows how the hungry and satisfied participants were divided between the conditions.

Table 4: *Division of participants between conditions*

| Self-objectification | Body appreciation | Hunger | N per condition |
|----------------------|-------------------|--------|-----------------|
| No | No | Yes | 13 |
| | | No | 22 |
| Yes | No | Yes | 12 |
| | | No | 22 |
| No | Yes | Yes | 15 |
| | | No | 22 |
| Yes | Yes | Yes | 10 |
| | | | 26 |
| Total N | | | 142 |

7.3 Difficulty of body appreciation condition

Also it is important to investigate how difficult the manipulation of the body appreciation questionnaire was for the participants.

Half of the participants were asked to describe two memories about their favourite place. The other half were asked to describe two memories about a compliment they received in the past. Afterwards they were asked to indicate on a scale from 1 (easy) to 7 (difficult) how difficult it was to remember this memory. It is important for the experiment that the level of difficulty is similar between the two conditions, because the two conditions must be equivalent to exclude that the level of difficulty is a process on its own in the experiment.

To check if the level of difficulty was the same between the two conditions an ANOVA test was conducted using the level difficulty of the two memories as a dependent variable and the condition body appreciation as a fixed factor. The data shows that it was significantly more difficult $F_{(1,140)} = 22.48, p < .001$ for participants to recall their memories about two compliments they received ($M = 3.56$) in comparison to participants who had to recall their memories about their favourite place ($M = 2.45$). This is unfortunate because it is not beneficial for the experiment if it was very difficult for the participants to remember a compliment. This because it should trigger body appreciation and if it was difficult for participants to remember, the trigger might not be sufficient enough. It might also backfire and participants will have more negative feelings, because the compliment is too difficult to remember and this is not good for their self-esteem.

When analysing the ANOVA test to see if participants who had more difficulty in remembering a compliment should be excluded from the analysis, the outcome of the ANOVA test was not more significant, so exclusion of this participants is not necessary.

7.4 Analysis of the results

To analyse the food consumption of the participants in the different conditions, an ANOVA test is conducted. With the use of the ANOVA tests the ability of participants to compensate their food intake is examined.

An ANOVA test is conducted using the amount of eaten grams of snack A and B as the dependent variable and body appreciation, self-objectification and the variable for hunger as a fixed factor.

7.4.1 Effect of self-objectification, body appreciation and hunger

The output of the ANOVA table shows no significant effect of self-objectification on the amount of snacks eaten $F_{(1,134)} = .001$, $p = .978$. So the self-objectification condition did not influence the amount of snacks that the participants consumed. It also shows no significant effect of body appreciation on the amount of snacks eaten $F_{(1,134)} = .006$, $p = .939$. So this output shows that the experimental manipulation had no effect above and beyond the effect of individual differences in performing in the experiment. It suggests that the two conditions did not affect the amount of snacks eaten by the participants.

An effect is found between the variable amount consumed of snack A and B and the variable of hunger of the participants $F_{(1,134)} = 4.111$, $p = .045$. So it seems that the data for measuring the amount of hunger is analysed correctly and that participants who felt hungry consumed more snacks than participants who were not that hungry.

Second the interaction between the three factors will be discussed. It seems that the interaction of self-objectification and body appreciation is not significant $F_{(1,134)} = .037$, $p = .848$. The interaction of self-objectification and real hunger is also not significant $F_{(1,134)} = .055$, $p = .815$. Also the interaction of body appreciation and real hunger on the amount of snacks eaten was not significant $F_{(1,134)} = 1.830$, $p = .178$. This suggest that there is no effect present.

However, the last interaction, the three way interaction, shows evidence of an effect between self-objectification, body appreciation and hunger $F_{(1,134)} = 4.015$, $p = .047$. So the amount of snacks consumed is different for participants in the self-objectification condition when their hunger level and body appreciation is taken into account. To investigate this effect more thoroughly self-objectification and body appreciation is analysed by splitting up the participants in the conditions.

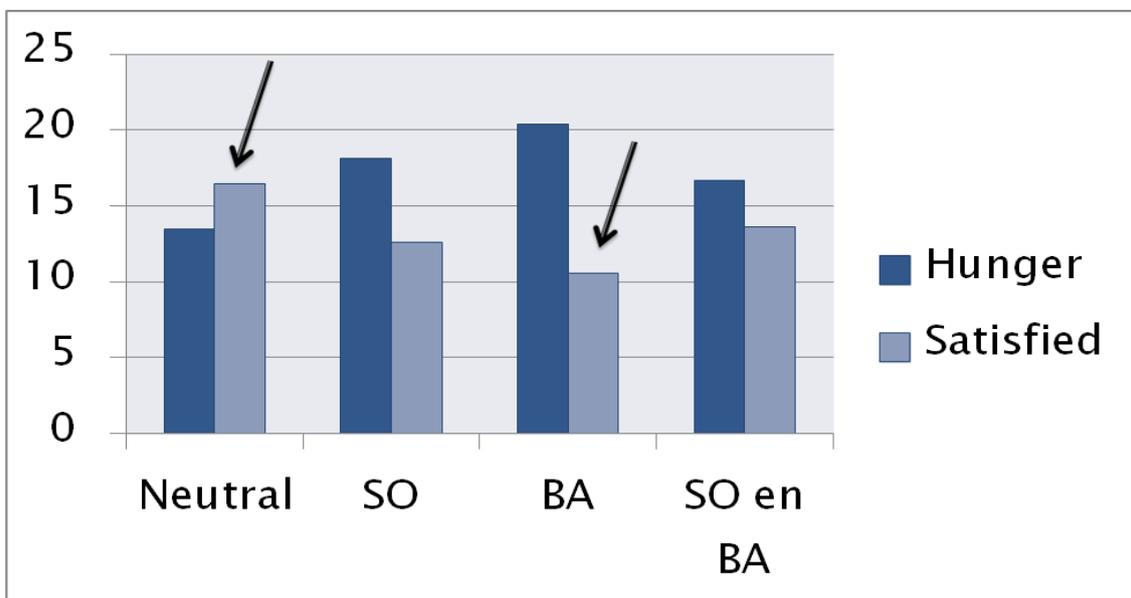
7.4.2 Split file with self-objectification

To investigate the 3 way interaction effect more thoroughly two new ANOVA analysis are conducted by splitting up the participants who were in the self-objectification condition and who were not in the self-objectification condition. The groups are split up and an ANOVA analyses is conducted using the consumption of snack A and B as dependent variable and body appreciation and the amount of hunger as fixed factors.

When self-objectification was triggered no significant effect for body appreciation $F_{(1,66)} = .007$, $p = .933$ and hunger $F_{(1,66)} = 2.744$, $p = .102$ was found. Also no interaction effect between body appreciation and hunger was found either $F_{(1,66)} = .227$, $p = .635$. When self-objectification was not triggered, body appreciation $F_{(1,68)} = 0.035$, $p = .853$ and hunger $F_{(1,68)} = 1.534$, $p = .220$ do not have a significant effect either.

However, when self-objectification was not triggered the interaction effect of body appreciation and hunger is significant $F_{(1,68)} = 5.377$, $p = .023$. This means that when self-objectification was not triggered participants who were not hungry ($M = 16.45$) ate more snacks than participants who were not hungry ($M = 10.55$) in the body appreciation condition. The arrow in the graph below shows the significant results.

Figure 2. Food consumption in the different conditions



To find out more about the effect found in the graph above, participants were split in the self-objectification and in the body appreciation condition together. When self-objectification was not triggered and body appreciation was not triggered, no significant effect was found for hunger $F_{(1,33)} = .550$, $p = .463$. When self-objectification was triggered and body appreciation was not triggered no significant effect was found for hunger $F_{(1,32)} = 2.894$, $p = .099$. When self-objectification was triggered together with body appreciation there was also no significant effect for hunger $F_{(1,34)} = .573$, $p = .454$.

No significant effect has been found when self-objectification was triggered. So further analysis on body appreciation might find more insight in the significant effect found between participants in the neutral condition and self-objectification condition.

7.4.3 Split file with body appreciation

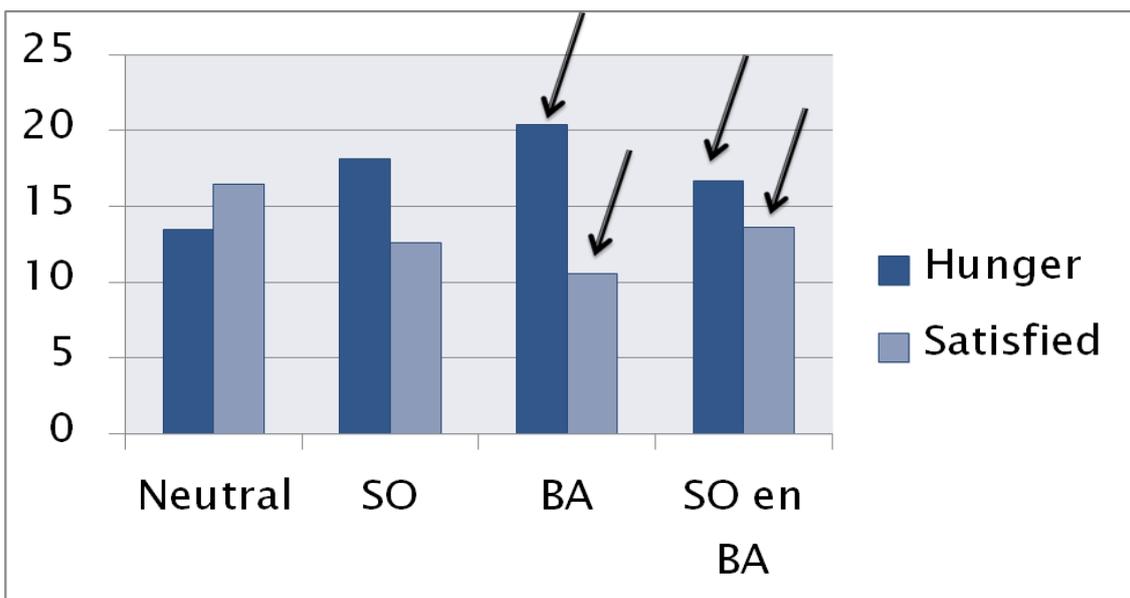
Two ANOVA analyses were conducted based on the group of participants that were not in the body appreciation condition and on the group of participants who were in the body appreciation condition. The groups are split up and an ANOVA analysis is conducted with the consumption of snack A and B as dependent variable and self-objectification and the amount of hunger as fixed factors.

The output of the ANOVA test based on the group of participants who were not in the body appreciation condition shows no significant effect on self-objectification $F_{(1,65)} = .026, p = .872$ and hunger $F_{(1,65)} = .245, p = .623$. Also there is no strong interaction effect of self-objectification and hunger $F_{(1,65)} = 2.692, p = .106$.

For the group of participants when body appreciation was triggered no significant effect on self-objectification was found $F_{(1,69)} = .013, p = .911$. However an effect is found for hunger $F_{(1,69)} = 5.365, p = .024$. So when body appreciation was triggered it seems that participants ate more when they were hungry ($M = 20,40$) and less when they were not hungry ($M = 10,55$). The interaction effect between self-objectification and hunger is not significant $F_{(1,69)} = 1.469, p = .230$.

When self-objectification was not triggered and body appreciation was triggered, a significant effect for hunger $F_{(1,35)} = 6.717, p = .014$ was found. Participants ate more snacks when they were hungry ($M = 16,70$) and less when they were satisfied ($M = 13,62$). The graph below shows the significant effects that were found (indicated with the arrows). So it seems that in general, in the condition where body appreciation was triggered, participants did eat more when they were hungrier and less when they were less hungry.

Figure 3. Food consumption in the different conditions



8. Discussion

The outcome of the experiment was not as expected. This chapter will illuminate the outcome, describe the shortcomings of this experiment and will give some recommendations for the future.

The aim of this thesis is to find new insights in the state of self-objectification by women. Self-objectification occurs when consumers try to judge themselves from an observers perspective. Previous studies at Wageningen university found that self-objectification has a negative influence on the ability of consumers to compensate their food intake. Articles on the topic of intuitive eating might be the answer. Alvalos en Tylka (2006) found that body appreciation could be an important factor in intuitive eating. Intuitive eating occurs when consumers eat based on their physiological hunger and satiety cues rather than situational and emotional cues. So with this information it could be possible that when consumers focus on body appreciation when self-objectification is triggered, their self-objectification state diminishes and their ability to compensate their food intake increases.

To find if body appreciation has an effect on the ability of consumers to compensate their food intake when self-objectification is triggered, an experiment was conducted in the form of a taste test. Based on prior knowledge found as a result of a literature study and the findings of the previous report on self-objectification and mass media some expectations were formulated at the beginning of the experiment and now will be discussed if the results are in line with the expectations.

It was expected that consumers who were hungry ate more snacks than consumers who were satisfied in the neutral condition. Unfortunately not all the results were significant. However participants in the neutral condition who were satisfied did eat a large amount of snacks. This was not as expected because this indicated that the participants did not compensate their food intake as well as was expected.

It was expected that consumers in the self-objectification condition had more difficulty in compensating their food intake. So it was expected that consumers ate more, even though they were satisfied in the experiment. Unfortunately the results for self-objectification were not significant, so no conclusion can be derived from the results.

It was expected that consumers in the body appreciation condition were able to compensate their food intake. The results show that participants in the body appreciation condition did eat significantly more when they were hungry and less when they were satisfied. So body appreciation seems to have a positive effect on the ability to compensate food intake.

And last it was expected that consumers in the self-objectification and in the body appreciation condition had less difficulty in compensating their food intake because body appreciation diminishes the effect of self-objectification on the ability of consumers to compensate their food intake.

The results show no significant effect for self-objectification but also here a positive effect of body appreciation on the ability of consumers to compensate their food intake is measured.

So in conclusion it seems that there is an effect of body appreciation on the ability of consumers to compensate their food intake. This could occur because body appreciation triggers intuitive eating, which makes consumers eat according to their hunger cues instead of emotional distress or external cues.

Self-objectification was not significant. This might mean that self-objectification was not triggered in the experiment, or maybe the trigger was not strong enough. There is also a possibility that self-objectification was triggered but that the effect could not be found in the results of the food consumption.

8.1 Shortcomings and recommendations

There are a couple of possibilities as to why this experiment did not have the results that were expected. The results shows that there was no effect of self-objectification. It is quite strange that self-objectification was not significant. This because self-objectification seems to be easily triggered, for example when consumers read body related words. Also in other experiments there does not seem to be a problem in triggering self-objectification. In this experiment a lot of objects that trigger self-objectification were present in the room. Also the objects were especially pointed out to the students with the story that this would not be part of this experiment and belonged to another one. When the experiment leader left the participants for a few minutes to gather the questionnaires most of the participants started to discuss the posters on the walls or started browsing thru the magazines presented in front of them on the tables.

What might have been a factor is the amount of participants and there relation to one another. Some participants came in alone and did not browse through the magazines but looked at their mobile phone during the absence of the researcher. Others came in big groups and might have been more focused on each other than the environment they were in. Therefore self-objectification might have been stronger for some participants than others. For future experiments it might be best to work on appointment. That would make it easier to control the amount of participants and the environment in which the experiment is conducted. Also the differences between the number of participants who participated collectively would be smaller. In this way the conditions will be more similar.

Self-objectification was triggered in a similar way in an investigation of Tiggemann and Boundy (2008), where they manipulated the environment as well. Self-objectification was triggered in this investigation by the use of props in the room. The big difference between that experiment and this experiment is the amount of participants at the same time. In the other experiment participants were participating one at the time.

At the end this experiment still leaves some questions unanswered. An important assumption in this experiment was that self-objectification makes participants consume more. This was not significant in this experiment. In the condition where self-objectification was not triggered but body appreciation was triggered the biggest difference was found in the amount of snacks consumed between hungry and satisfied participants, so it seems they were the best in compensating their food intake.

This means for further investigation that body appreciation seems to have an effect on the eating behaviour of participants. So there seems to be an effect of intuitive eating. This means that there is a possibility that this could have a positive effect on the ability of consumers to compensate their food intake. When they feel that significant others in their environment are positive about them, they eat less when they are not hungry. This is an effect that is worth investigating further. Maybe with other self-objectification triggers. There is a possibility that self-objectification will be triggered when participants are more focussed on the self-objectification triggers, for example when they have to stand in front of a mirror for some time or when they have to answer some questions about advertisements featuring thin models. An important factor in the trigger of self-objectification could be the focus of attention, because when participants are forced to focus more on thin models or their own body individually self-objectification could be triggered.

Since self-objectification is more and more triggered because consumers are more confronted with the ideal body image, more focus on body appreciation might diminish this effect. It might make consumers appreciate their own body more and it might affect the eating behaviour of consumers in a positive way because consumers might eat more intuitively. So to diminish the effect of self-objectification more focus should be on being happy with your own body. This should start on a young age before women adapt self-objectification traits. So mothers might teach their daughters at a young age that their body is perfect just as it is. It would also be great if big influences like the mass media would change their focus from featuring women with a thin body shape to women with a bigger body shape.

Picture 9: Real women



Picture 10: Thin models in ads

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Appendix I: Time schedule of the experiment

| Time | Who | Where | What | Comment |
|-------|--------------|---------------------------------------------------------------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10.00 | Researcher | Experimental room | Welcomes the group of participants and asks them to take a seat at the table in the centre | The researcher tells them the props in the room are from another experiment and leaves the participants in the room for 2 minutes so the participants have time to see the props. |
| 10.01 | Participants | Centre table | Answer first part of the questionnaire | |
| 10.10 | Participants | Are relocated to tables at the sides of the experimental room | They will take part in the eating test | The researcher will emphasize that they can eat as much as they want because leftovers are thrown away |
| 10.20 | Researcher | Experimental room | Will ask the participants to sign the paper and give them the present | Wait until all the participants are finished. |
| 10.25 | Researcher | Experimental room | Will collect data by collecting the leftovers from the participants | By weighing the leftovers on a scale |
| 10.30 | Researcher | Experimental room | Welcomes the new group of participants | While they are waiting in front of the door the researcher can offer them some magazines to read. |

Appendix II: Experiment

Leuk dat je mee wilt doen aan dit onderzoek. Hierbij vragen we je om een aantal vragenlijsten in te vullen waar ook een smaaktest onderdeel van uitmaakt.

Tijdens het onderzoek kan je je op elk moment terug trekken van deelname zonder verdere gevolgen.

Het beantwoorden van de vragenlijst is anoniem en er zal vertrouwelijk met de informatie om worden gegaan. De antwoorden zullen niet voor andere doeleinden gebruikt worden dan voor wetenschappelijk onderzoek. Alleen gemiddelde scores worden naar buiten gebracht zodat antwoorden niet aan individuele respondenten gekoppeld kunnen worden.

Succes bij het invullen van de vragenlijst en alvast hartelijk bedankt voor je medewerking!

We beginnen met een aantal algemene vragen die we graag van je willen weten voordat we verder gaan met het onderzoek.

Wat is je leeftijd (in jaren)? _____ jaar

Wat is je gewicht (in kg) op dit moment? _____ kg

Wat is je lengte (in meters)? _____ meter

Wat is je geslacht? Man / Vrouw

Heb je vandaag al ontbeten? Ja / Nee (Streep door wat niet van toepassing is)

Zo ja, hoe lang geleden heb je ontbeten?uurminuten geleden

Heb je vandaag al geluncht? Ja / Nee (Streep door wat niet van toepassing is)

Zo ja, hoe lang geleden heb je geluncht?uurminuten geleden

Wanneer heb je voor het laatst wat gegeten?uurminuten geleden

Wat heb je toen gegeten?

.....

.....

Heb je vandaag gesport of andere intensieve lichaamsbeweging gehad?

Ja / Nee (Streep door wat niet van toepassing is)

Hoeveel honger heb je op dit moment?

Helemaal geen 1 2 3 4 5 6 7 *Heel veel honger*
honger

Heb je wel eens eerder meegedaan aan een smaakonderzoek in de Leeuwenborch? Ja / Nee
(Streep door wat niet van toepassing is)

Hoe leuk vind je het om mee te doen aan smaakonderzoeken?

Helemaal niet leuk 1 2 3 4 5 6 7 *Heel erg leuk*

Nu willen we graag iets weten over de manier waarop mensen gebeurtenissen onthouden. Zou je daarom onderstaande vragen willen beantwoorden over complimentjes die je in het verleden gekregen hebt. Het is hierbij belangrijk om de situatie goed in te beelden, dus denk er even goed over na.

Neem je tijd en denk rustig aan een situatie waarin je van een familielid een complimentje gekregen hebt over je uiterlijk. Probeer de situatie goed voor de geest te halen en het moment helder voor je te zien. Heb je dit gedaan, beantwoord dan de onderstaande vragen.

Van welk familielid heb je in deze situatie een complimentje gekregen over je uiterlijk?

Kun je de situatie beschrijven waarin je dit complimentje over je uiterlijk gekregen hebt?

Welk gevoel gaf dit complimentje je?

Hoe makkelijk was het om de situatie te herinneren?

Gemakkelijk 1 2 3 4 5 6 7 *Moeilijk*

Neem weer even de tijd om nu rustig na te denken aan een situatie waarin je van een kennis, vriend of studiegenoot een complimentje gekregen hebt over je uiterlijk. Probeer de situatie goed voor de geest te halen en het moment helder voor je te zien. Heb je dit gedaan, beantwoord dan de onderstaande vragen.

Van welke bekende (kennis/vriend(in)/studiegenoot) heb je in deze situatie een complimentje gekregen over je uiterlijk?

Kun je de situatie beschrijven waarin je dit complimentje over je uiterlijk gekregen hebt?

Welk gevoel gaf dit complimentje je?

Hoe makkelijk was het om de situatie te herinneren?

Gemakkelijk 1 2 3 4 5 6 7 *Moeilijk*

Nu willen we graag iets weten over de manier waarop mensen gebeurtenissen onthouden. Zou je daarom onderstaande vragen willen beantwoorden over plaatsen waar je in het verleden bent geweest. Het is hierbij belangrijk om de situatie goed in te beelden, dus denk er even goed over na.

Neem je tijd en denk rustig aan een plaats binnen Wageningen wat je favoriete plek is. Probeer de situatie goed voor de geest te halen en het moment helder voor je te zien. Heb je dit gedaan, beantwoord dan de onderstaande vragen.

Welke plek binnen Wageningen is je favoriete plek?

Kun je deze plek beschrijven en waarom het je favoriet is?

Welk gevoel geeft deze plek je?

Hoe makkelijk was het om de situatie te herinneren?

Gemakkelijk 1 2 3 4 5 6 7 *Moeilijk*

Neem weer even de tijd om nu rustig na te denken aan een favoriete plek, alleen deze keer buiten Wageningen. Probeer de situatie goed voor de geest te halen en het moment helder voor je te zien. Heb je dit gedaan, beantwoord dan de onderstaande vragen.

Welke plek buiten Wageningen is je favoriete plek?

Kun je deze plek beschrijven en vertellen waarom het je favoriet is?

Welk gevoel geeft deze plek je?

Hoe makkelijk was het om de situatie te herinneren?

Gemakkelijk 1 2 3 4 5 6 7 *Moelijk*

Je kan nu beginnen met het smaakonderzoek. Geef een seintje aan de proefleider.

Smaakonderzoek

Voor je staan twee verschillende zoutjes. Wij willen testen hoe consumenten deze producten evalueren.

Je kan zoveel proeven als je wilt, het is in ieder geval belangrijk dat je een goed beeld vormt van de smaak.

Geef steeds aan in hoeverre je vindt dat de hieronder genoemde eigenschap het zoutje beschrijft. Vul apart de beoordeling in voor product A en product B.

Je kunt je antwoord aangeven door een streepje op een lijn te zetten. Je kan het streepje op elke positie op de lijn plaatsen, afhankelijk van of je antwoord meer past bij de term links of rechts van de lijn.

Voorbeeld:

Als je het product niet zoet vindt, zet je een streepje links op de lijn.

Helemaal niet zoet ————|————— *Heel erg zoet*

Als je het product zoet vindt, zet je een streepje rechts op de lijn.

Helemaal niet zoet —————|————— *Heel erg zoet*

Geef hieronder je beoordeling van product A

Hoe **zoet** vind je product A?

Helemaal niet zoet _____ *Heel erg zoet*

Hoe **zout** vind je product A?

Helemaal niet zout _____ *Heel erg zout*

Hoe **zuur** vind je product A?

Helemaal niet zuur _____ *Heel erg zuur*

Hoe **lekker** vind je product A?

Helemaal niet lekker _____ *Heel erg lekker*

Hoe **prettig** vind je de nasmaak van product A?

Helemaal niet prettig _____ *Heel erg prettig*

Hoe **prettig** vind je de textuur van product A?

Helemaal niet prettig _____ *Heel erg prettig*

In hoeverre zou je product A willen kopen in de supermarkt?

Zeker niet



Zeker wel

Geef hieronder je beoordeling van product B

Hoe **zoet** vind je product B?

Helemaal niet zoet _____ *Heel erg zoet*

Hoe **zout** vind je product B?

Helemaal niet zout _____ *Heel erg zout*

Hoe **zuur** vind je product B?

Helemaal niet zuur _____ *Heel erg zuur*

Hoe **lekker** vind je product B?

Helemaal niet lekker _____ *Heel erg lekker*

Hoe **prettig** vind je de nasmaak van product B?

Helemaal niet prettig _____ *Heel erg prettig*

Hoe **prettig** vind je de textuur van product B?

Helemaal niet prettig _____ *Heel erg prettig*

In hoeverre zou je product B willen kopen in de supermarkt?

Zeker niet

Zeker wel

In hoeverre houd je van zoutjes in het algemeen?

Helemaal niet

Helemaal wel

Het onderzoek is nu afgelopen.

Heb je opmerkingen of vragen betreffende dit onderzoek?

.....
.....
.....
.....
.....

Heel erg bedankt voor het meedoen!

Je kan de antwoorden inleveren bij de proefleider!