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Abstract

The success of the consumer society is dependent on the phenomenon of consumers purchasing products as instruments in achieving their ideal self. Media and advertising idealizing an unrealizable female body, which cannot be obtained by nature, continuously reminds women about their imperfections and drives consumption of products as impression management instruments. A common instrument is clothing, however, trying on clothes in a fitting room has been identified as a situation leading to women evaluating their bodies against ideals more critically, resulting in negative influences on their body images and lowering their purchase intentions. This development has given the apparel industry incentives to prohibit these negative outcomes and increase consumer experiences. There are many discussions and propositions about varying methods to make customers evaluate themselves and the garments more favorably in fitting rooms: such as smooth lightning, tilted mirrors, and even slimming mirrors.

As the first study in the world, this study intends to investigate a skinny *mirror's influence on female consumers' fitting room experiences in terms of perceptual and attitudinal aspects of body image, and her resulted shopping behaviour*. A double blind field experiment shows a skinny mirror's positive influence on females' perceptual and attitudinal body image, and a tendency of increased conversion ratios. Being the first study of its kind, the results are highly valuable for the apparel industry and the academic context, while simultaneously raising new questions and ideas for future research.

Key words: *apparel industry, consumer experiences, female body ideal, body image, fitting room, skinny mirror*

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1 Introduction

This introductory chapter explains how the western ideal female body has developed into being unreachable and how this is closely linked to women' consumption behaviour, making it an important area of study by social theorists. While this unreachable ideal is giving birth to needs among female consumers benefiting companies, it is also establishing body dissatisfaction and negative emotions among women, which in turn can have negative consequences also for companies. This development gives companies incentives to decrease such risks within shopping situations in which the female consumer is vulnerable, which in turn constitutes the foundation for the purpose of this study. Furthermore the research question is presented, followed by the limitations of the study and the disposition of the paper.

1.1 Background

Even though the area of physical attractiveness has been greatly discussed and investigated within the fields of art and philosophy, it is more recently that the topic has been widely interesting for psychological sciences (Swami et al., 2010). The body has been considered as biological and natural, as something supernatural outside of our culture. However, in recent years the body has become an object of study by social theorists, and our understanding for the body as a reflection of us and our culture has grown (Entwistle, 2000). Psychological and social sciences constitute the base for our understanding of consumer behavior. Knowledge about the ideal physical attractiveness, and how this ideal influences consumers body image and consumption habits, is therefore highly valued in order market products successfully (Solomon & Rabolt, 2003).

The female body ideal has been ever changing and varies across cultures and societies. However, there has always been a standard of female beauty reflecting the ideal attributes of a woman of a particular time. The changing society and the shifted role of the woman within it has therefore modified the female beauty ideal over time

(Bonafini & Pozzilli, 2011). With technological development came the birth of mass media, popularizing the consumer culture to a never before seen degree. Today, medial images of women are everywhere and the internalization of the female body ideal they represent has reached a previously unseen degree of perpetuation (Frith et al., 2005).

From being a mother or a mistress to being a career-oriented and independent individual, the woman body ideal has formed into a more linear, almost masculine body, stripped from feminine curves (Bonafini & Pozzilli, 2011). Today, desirable looks embodied by super models in media and advertising are marketed to women as the seasons "must have", but fact is that these images are so manipulated that the ideal they represent is unachievable for the ordinary woman (Craig, 2009).

That the culture of consumption and mass media in the western society has enabled the beauty ideal to be internalized by women in a new and more harmful way is agreed upon by most experts in the field (Swami et al., 2010). As a consequence of western media displaying unrealistic ideals characterized by underweight and highly retouched bodies, the majority of western women have a negative body image today (Swami et al., 2010). Exposure to western media is also a strong predictor of body ideals globally, adjusting them to the thinner; even in cultures where "you have gained weight" previously has been a compliment.

Industries thriving on beauty ideals such as cosmetics, diets or fashion, profit from women's urge to fit in, and their products have become necessities to even be socially acceptable. The link between consumption and beauty ideals grows stronger as ideals no longer can be obtained naturally, which benefit companies while harm consumers (Frith et al., 2005). A gap has been created between a woman's actual body and the ideal body she wish for. This gap, also called body-discrepancy, leads to body dissatisfaction, low body appreciation and low self-esteem. The result is a need for impression management behavior such as appearance creation (Jung et al., 2001). Marketers are not only creators of this gap and its resulted need, they are also

the solution to it, providing products and services that will help the consumer reduce the gap by fulfilling the need (Solomon & Rabolt, 2003).

A common instrument of appearance creation and impression management is clothing. However, the apparel shopping environment often leads to women evaluating their bodies more negatively. The fitting room leads to greater self-objectification, resulting in negative emotions and low purchase intention. Apparel companies are reducing their chances of sales themselves as exposure to media, such as fashion posters of skinny models in advancement of trying on clothes leads to a more negative experience for the female consumer (Grabe, Ward, & Hyde, 2008, in Tiggemann & Lacey, 2009).

There is surprisingly little literature concerning methods to increase the female consumer's fitting room experience and prevent her from leaving the store with negative emotions and empty handed. In fact, the only research on this topic found is a study by Baumstark and Park (2010), who investigated favorable dressing room lightning. However, there are many further suggestions about tilted mirrors and even skinny mirrors. A skinny mirror is a concave mirror making the consumer appear slightly slimmer. Whether these mirrors are only a myth, or a widespread strategy to increase consumer experiences and sales is yet unknown.

1.2 Purpose

Women in west are living in societies in which consumption culture is the norm and multi-billion dollar industries benefit on their insecurities. Media displaying unreachable ideals continuously reminds women about their imperfections, leading to women purchasing products for impression management and appearance creation. In the apparel industry, the fitting room constitutes the venue for where decision regarding purchase is taken. However, the female consumer does not only evaluate the products but also herself, against the unreachable cultural ideal. This behaviour results in a double negative effect; negative emotions for the consumer and lost sales for the store. To decrease these negative outcomes, it is a common perception that

stores are utilizing so called “skinny mirrors” in their fitting rooms. Therefore, for the first time in the academic context, this study aims at investigating a skinny mirror’s effect on the female consumers experience and shopping behaviour, in the situation of a fitting room

1.3 Research Question and Hypothesis Formulation

To investigate the topic described in the purpose, the following research question has been phrased:

How does a skinny mirror influence the female consumer’s fitting room experience in terms of perceptual and attitudinal aspects of body image, and her resulted shopping behaviour?

In order to answer this research question three hypotheses have been phrased. Building on the assumption that a female consumer who have been exposed to a skinny mirror will experience a more positive body image in the situation of a fitting room, since a skinny mirror will make her appear closer to today’s skinny ideal, the following hypothesis have been phrased:

1) Perceptual body image:

***H1** Female consumers who have been exposed to a skinny mirror in a fitting room experience less body-discrepancy between their perceived actual and perceived ideal body, compared to female consumers who have been exposed to a normal mirror.*

***H0** Female consumers who have been exposed to a skinny mirror in a fitting room do not experience lower body-discrepancy between their perceived actual and perceived ideal body, compared to female consumers who have been exposed to a normal mirror.*

2) Attitudinal body image

***H1** Female consumers who have been exposed to a skinny mirror in a fitting room have a more positive attitude towards their body, compared to female consumers who have been exposed to a normal mirror.*

***H0** Female consumers who have been exposed to a skinny mirror in a fitting room do not have a more positive attitude towards their body, compared to female consumers who have been exposed to a normal mirror.*

As a result of a more positive body image after being exposed to a skinny mirror in a fitting room, it is logical to assume that female consumers will experience higher purchase intentions. Therefore, a third hypothesis regarding the female consumers' conversion ratios has been phrased:

3) Purchase intentions

***H1** Female consumers, who have been exposed to a skinny mirror in a fitting room purchase more of the items tried on, compared to female consumers who have been exposed to a normal mirror.*

***H0** Female consumers, who have been exposed to a skinny mirror in a fitting room does not purchase more of the items tried on, compared to female consumers who have been exposed to a normal mirror.*

1.4 Limitations

This study is limited to investigation of Swedish female consumers' fitting room experiences in one store in Stockholm. However, it has been proved that cross-regional differences in body weight ideals and body dissatisfaction in west are very small (Swami et al., 2010), indicating that similar results would be derived from studies in other western countries. Furthermore, it would be favourable if the literature review was specifically focused on Sweden or Scandinavia, however due to limitations in such publications, literature presented in this study focusing on other western regions is assumed to be applicable.

1.5 Disposition

Initially, in chapter 2, the literature which this study is based on is presented in a literature review. The development of how the female body ideal has been portrayed through history in ancient art to today's advertisement is reviewed. Thereafter theories on how the present female body ideal is affecting women's body images and consumption behaviour are introduced. Lastly, the literature review is summarized into a theoretical framework and three hypotheses are phrased and motivated. In chapter 3 the methodology of this study is motivated and thoroughly presented. In chapter 4 results are presented and hypotheses are either accepted or rejected through statistical tests. Thereafter, in chapter 5, results are analysed and discussed by connecting them to the theories presented in chapter 2. The implications for the apparel industry and the scientific contribution are analysed and discussed, and suggestions for future research are discussed. In the last chapter, chapter 6, the study's initial purpose is connected with its overall result, concluding this thesis.

2 Literature Review

This theoretical chapter presents the fundamental concepts and theories relevant for this study. Through this chapter the female body ideal and its consequences will be covered from socio-cultural, psychological and consumption behavioural perspectives. Finally, the literature presented builds up to a theoretical framework, from which three hypothesis are phrased to answer the research question.

2.1 A Sociocultural Perspective on the Development of Female Body Ideals

Different media such as art, advertising, and fashion are reflections of the society, the culture and its ideals. Studies of media related to women's beauty are usually focused on two main areas: overall beauty and body ideal (Frith et al., 2004). This study is more focused on the latter. By analyzing media displaying female bodies throughout history it is clear that the desirable female body has changed dramatically, as a result of advancement within medicine (Ferrucci et al., 2010), technology, and the radical development of a woman's role in the society (Bonafini & Pozzilli, 2011).

2.1.1 The Female Body Ideal Portrayed in Ancient Art

Perhaps the oldest known figures of the female body, the statuette "Venus of Willendorf" (C. 30 000 BC) (Ferrucci et al., 2010), and "Venus of Frassassi" (C. 20 000 BC) (Figure 1), illustrates curvaceous female bodies with a Body Mass Index (BMI)¹ over 30, indicating obesity (World Health Organization, 2009). They are believed to be symbols of beauty, sexuality and love (Witcombe, 2013), expressing fertility and fecundity (Bonafini & Pozzilli, 2011), and symbolizing the woman as the creator of human life (Cunningham et al., 2013). The figures indicate the perception of a curvy

¹ BMI is a measure of relative weight based on an individual's mass and height: (body mass / height ² (World Health Organization, 2009)).

female body as attractive, healthy and of high socioeconomic status, a perception that dominated many centuries to come (Ferrucci et al., 2010).



Figure 1: "Venus of Willendorf" and "Venus of Frasassi"

"Aphrodite of Cnidus" (Figure 2), a Greek sculpture from c. 250 BC, illustrates female beauty and shape based on numerical proportions and geometrical precision. This unnatural ideal constituted a new perception of beauty and was the first standard of perfection accepted by a whole culture. Even though the estimate of BMI of this sculpture is less than the one of "Venus of Frasassi" and "Venus of Willendorf" (Figure 1), it is still much higher than today's ideal (Bonafini & Pozzilli, 2011).

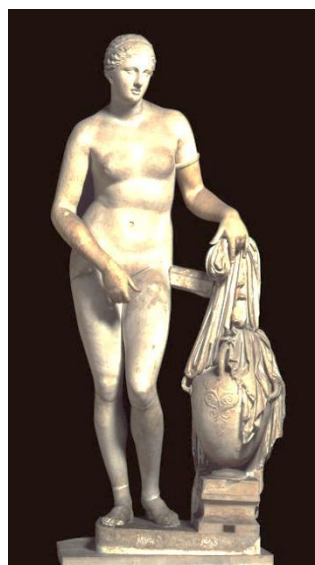


Figure 2: 'Aphrodite of Cnidus'

In contrast to the Greek sculptures of female beauty as physical idealization, the era of the Renaissance and Baroque focused more on beauty which belongs to our senses. Tiziano's 'Danae' from 1544-46 (Figure 3) illustrates a female beauty derived from fecundity and sensuality (Bonafini & Pozzilli, 2011).



Figure 3: 'Danae'

The 17th century illustrated a more naked form of the female body and celebrated close to unnatural curves (Ferrucci et al., 2010), such as in Jacob Jordaen's "The Daughters of Cecrops Finding Erichthonius" from 1617 (Figure 4). The female bodies illustrated in this painting would in today's measurements be considered as unhealthy and overweight (Bonafini & Pozzilli, 2011).



Figure 4: 'The Daughters of Cecrops Finding Erichthonius'

Round female bodies continued to a limited extent in the late 19th and 20th centuries such as in “The Birth of Venus” by Alexandre Cabanel from 1863 (Figure 5), which express a female ideal illustrated by smooth curves and feminine plumpness (Bonafini & Pozzilli, 2011).



Figure 5: ‘The Birth of Venus’

Ferrucci et al. (2010) argue that medical science revolutionized the female body ideal during the second half of the 20th century. As scientists discovered the health risks that come with obesity, the perception of generous curves as an ideal changed from indicating health, vitality and beauty, to being a sign of ugliness, unhappiness and frustration (Ferrucci et al., 2010).

2.1.2 Commercialization of the Female Body Ideal in Advertising

As the western society progressed technologically came the birth of consumerism, advertising and mass media, leading to a previously unseen level of perpetuation of female body ideals (Frith et al., 2004). The buxom Marilyn Monroe, personified the ideal in the 1950’s but was replaced by suitably nicknamed Twiggy (Figure 6) (Frith et al., 2005), the fashion icon of the 60’s with a BMI just slightly over 18 (categorized as under nutrition by World Health Organization, 2009). She embodied a new ideal and was characterized by her waif-like androgynous look (Cheever, 1996). The 60’s, when Twiggy became the first icon of our modern ideal, was also the period when birth

control became widely available to give power to women over their bodies, deemphasizing the fertile characteristics of the woman's body (Bonafini & Pozzilli, 2011).



Figure 6: Lesley Lawson (Twiggy) and Marilyn Monroe

The development of the woman's role in the society, from being a mother or a mistress to a career-oriented and independent individual, is argued to be reflected in the linear, almost masculine body ideal stripped from feminine curves (Bonafini & Pozzilli, 2011). Over the period 1922-1999, there was a major drop in BMI of winners of the beauty pageant Miss America, a drop from around 30 BMI to a BMI under 18.5, classified as under nutrition (Rubinstein & Caballero 2000). The female beauty ideal has developed from symbolizing natural fertility to proportions derived from mathematical calculations (Bonafini & Pozzilli, 2011). Bonafini and Pozzilli (2011) deduce this paradigm shift partly to the birth and power of commercial art and advertisement and the changing role of the woman's role in society.

Today, fashion and commercial models are only the raw material to advertising, magazines, and commercials. A commercial photography is often a construction of different body parts from different photos and even different models found in an inventory of disembodied parts (Ewen, 1988). Ewen (1988) argue that the image

created is distanced from reality through make-up, digital retouching, and mix-matching of body parts. All elements of the individuals natural beauty has been removed in order to create a vision of perfection, providing consumers with a model of a desirable appearance (Ewen, 1988). Lakoff and Scherr (1984) noted that the technological development including retouching lead to advertisers creating a "cult of unrealizable beauty" (Lakoff & Scherr, 1984, in Frith et al., 2004, p.290). Janice Dickinson, one of the first real "supermodels", reveals in her biography that: "it is technically impossible to make human flesh behave like an artist's perfectly arranged pixels" (cited in Craik, 2009:142). Another famous quote indicating this unrealizable beauty is from the world known supermodel Cindy Crawford who once said: "even I wish I looked like Cindy Crawford" (cited in Jhally et al., 2010).

The female body ideal of today is not natural, not even achievable by nature, only by technology. Venus, perhaps one of the most common pictorial associations of female beauty has been portrayed many times by great artists throughout history, as by Alexandre Cabanel in "The birth of Venus" (Figure 5). One of the most famous paintings of Venus is Sandro Botticelli's, from 1484-86. The Italian artist Anna Utopia Giordano experimented with the thought of "what would happen if Botticelli had Photoshop?", and retouched his masterpiece to let Botticelli's Venus meet the current western beauty ideal (Daily Mail, 2012). In Figure 7 one can see the original painting to the left, and the retouched Venus, with smaller waist, slimmer legs and increased breasts in the middle. As seen to the right in Figure 8, the photographer and artist Russell James took the adjustment even further by replacing Botticelli's Venus with a new Venus, concurrent with today's standard of beauty (Behance, 2014). Russell James's modern Venus is coherent by most female bodies in today's commercials. However, when placed next to the original, the dramatic shift of what is considered as a beautiful female body is very evident.



Figure 7: "The Birth of Venus" adjusted to fit today's ideal

2.2 The Influence of Western Media and Advertising on Cultural Ideals

As a result of continuous display of thin female bodies in media, western societies have an obsession with the weight and size of bodies (Solomon et al., 2013). "You can never be too thin or too rich" and "nothing tastes as good as skinny feels like", are quotes you are exposed to on a daily basis in our culture characterized by fattism (Solomon & Rabolt, 2003). Being obese is even worse than being disabled, according to primary school children (New York Times, 1988, in Solomon, 2013). When asked to determine what female body is the most attractive out of 9 bodies, arranged from underweight to overweight, and where number five is normal weight, both men and women in developed areas choose figure 3 (Swami et al., 2010). That the figure of an underweight female body is considered as most attractive is the result of western media idealizing it.

Even though the focus of the present study is on western women, it is interesting how the western ideal is spreading globally by media as companies become more

cosmopolitan and westernized. This indicates the strong affect western media has on cultural female body ideals, despite previous cultural ideals, and how it is spreading the cult of thinness globally (Craig, 2009).

Compared to the western ideal of thinness, the ideal in regions characterized by low-socioeconomic-status is or has been one of a more plump nature, indicating the woman's psychological traits of sexuality, fertility, and attractiveness (Brown, 1991 and Teti, 1995, in Swami et al., 2010), and even obesity has been evaluated more positively (Becker, 1995 and Brewis & McGarvey, 2000, in Swami et al., 2010). However, a study conducted by Becker (2004) showed that Fijian women, despite a strong cultural tradition of appreciation for large female bodies, are more and more attracted to the western ideal of beauty and "ethos of work on the body" (Becker, 2004, p. 553, in Swami et al., 2010). This indicates the strong effect of western media on deeply rooted cultural ideals.

The largest (to date) international study of attractive female body weight and female body dissatisfaction, surveyed 7,434 individuals in the 10 selected major world regions² (Swami et al., 2010). Even though the study showed significant cross-regional differences, exposure to western media was a significant predictor of body weight ideals globally. Women who are exposed to western media are deeply affected by the media, adjusting their body ideal to the thinner (Swami et al., 2010).

2.3 The Influence of Western Media and Advertising on Female Individuals

In west, where media and advertising idealizing a thin female body is status quo; women are continuously reminded of an unrealizable body ideal. Ussher (1989) describes this as "The pedagogy of personal inadequacy" whereby women are

² Southeast Asia, East Asia, South and West Asia, Oceania, Western Europe, Eastern Europe, Scandinavia, Africa, North America, and South America.

always encouraged to look for flaws in themselves in relation to an unobtainable and unachievable image of beauty and bodily size.

A woman's satisfaction with her body image is affected by how close it corresponds to the ideal desired by her culture (Solomon et al., 2013). Today, the desirable ideal is unreachable and close to underweight in western societies (Swami et al., 2010), resulting in most women being dissatisfied with their bodies. Swami et al. (2010) showed that there is a positive correlation between women living in high-socioeconomic-status sites and body dissatisfaction, and that dissatisfaction is commonplace in these regions (Swami et al., 2010). A majority of western women are dissatisfied with their body weight and as many as 85 per cent are unhappy with at least one aspect of their appearance. One-third are so uncomfortable with being naked that they refuse taking all their clothes off in front of their husband (Robertson, 2007, in Solomon et al., 2013). This cult of thinness is resulting in eating disorders, psychological unwell-being, and a sense of never being beautiful enough among women (e.g., Thompson et al., 1999, in Swami et al., 2010).

2.3.1 Cultural Ideals in Relation to Individuality and the Self

Even though our culture develops collective ideals which we strive to fulfill, there is also an emphasis on the self, that we are unique in nature, especially in western societies (Triandis, 1989, in Solomon et al., 2013). The idea of the self, that the human life is unique, developed in the late medieval times (between the eleventh and fifteenth centuries). The self can be understood from many different theoretical perspectives, however it is mostly agreed that the self consists of a private inner self, that is derived from the public outer self (Solomon et al., 2013). We all have certain beliefs about our own attributes which we evaluate; our self-concept (also called self-identity, self-perspective, or self-construction) is a collection of those beliefs. This collection generally embodies the answer to the question: who am I (Myers, 2009). The degree of positivity of one's self-concept is described as self-esteem (Solomon & Rabolt, 2003). Our body image is a large part of our self-concept (Solomon et al.,

2013), since our body constitutes the environment and the reflection of our self (Entwistle, 2000).

2.3.2 Body Image - a Substantial Part of the Self-concept

Our body image is influenced by ideals in our culture and is not a physical construct but a mental image of our body (Fallon, 1990, in Jung et al., 2001), as well as how we feel about that mental image (Cash 1990, in Jung et al., 2001). Body image is often described as a construct of both perceptual and attitudinal dimensions. Perceptual dimensions are those concerning our perception of our bodies such as weight, size, attractiveness and shape. The attitudinal dimension on the other hand concerns how we feel about that perception. This dimension consists of both self-appraisals and subsequent effect, and in addition how much effort and investment we place on our body image (Cash & Pruzinsky, 2004).

Being a subjective mental picture, involving many different aspects about the body and feelings towards it, body image is a complex multidimensional construct to measure. Many methods and techniques have been developed to assess varying aspects of body image. Figural drawing scales, also called silhouette or contour line drawings, are the most commonly adopted measures for perceptual aspects of body image (Gardner & Brown, 2010). These scales consist of a varying number of frontal images of bodies, ranging from underweight to obese. Typically respondents are asked to select the image that is most representative of their current and ideal body. The gap between the chosen figures then constitutes the body-discrepancy, a measure of body dissatisfaction (Gardner & Brown, 2010). These scales can also be used to measure body size distortion, meaning a gap between believed body size and actual body size (Gardner & Brown, 2010). Due to the large supply of figural drawing scales Gardner and Brown (2010) conducted a thorough review of available scales' validity and reliability. Swami et al. (2008) "Photographic Figure Rating Scale" (PFRS) (Figure 8) proved to give the most accurate measure of female body image (Gardner & Brown, 2010). Being the first scaled based on photos of real women, the

scale overcome many of the limitations associated with drawn figures, such as poor ecological validity and lack of realism (Swami et al., 2008).

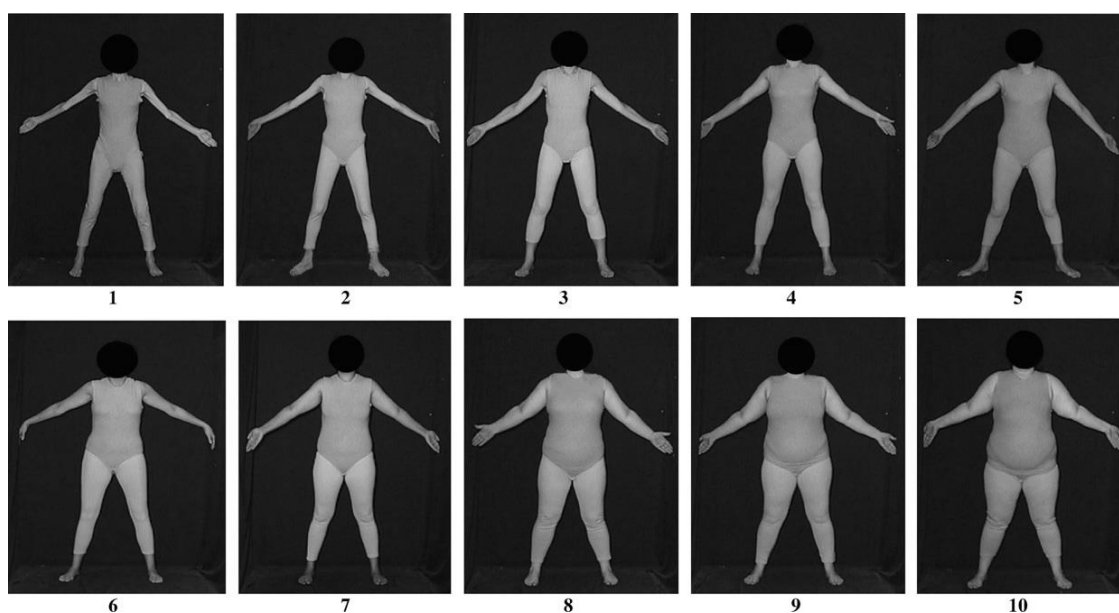


Figure 8: Photographic figure rating scale by Swami et al. (2008)

As with the large supply of figural drawing scales to assess perceptual aspects of body image, there is extensive literature on methods assessing the attitudinal aspects of body image. These methods typically involve different scales measuring varying aspects of attitudinal body image, such as body esteem, appearance orientation, and appearance evaluation (Avalos et al., 2005). The scales are commonly likert scales, in which the respondent is asked to take stand to a given set of related statements (Burns & Burns, 2008). Answers are summed up to an overall rating, indicating for example the respondent's degree of body shame. Typically these scales aim at measuring negative aspects of attitudinal body image and to what extent individuals adapt negative orientations toward their bodies (Avalos et al., 2005). Due to the multidimensional nature of attitudinal body image, Cash (2000) developed a multidimensional body-self relations questionnaire (BSRQ), measuring both attitudes and behaviours. The scale consists of six subscales: appearance evaluation, appearance orientation, fitness evaluation, fitness orientation, health evaluation, health orientation, and illness orientation (Cash, 2000). Alvalos et al.

(2005) adopted a more positive approach developing the “Body Appreciation Scale” (BAS), consisting of a set of questions measuring positive body image.

It seems to be a basic human motive to compare ourselves to others and cultural ideals (Solomon & Rabolt, 2003). Today’s body ideal being unreachable for most women, is therefore influencing both the perceptual and attitudinal aspects of women’s body images (Kim & Damhorst, 2010). How this development is closely related to consumption will be explained in the next section.

2.4 Body Ideal in Relation to Consumption and Impression Management

In our highly mobile society first impressions are of great importance (Ewen, 1988). The body has developed into an object which is the focus for increasing work: a part of one’s self and identity that is open for evaluation, change, and transformation (Entwistle, 2000). Since the body is experienced as a reflection of our self, impression management is a way to modify how we look in order to present ourselves in a certain way, often in order to reach the ideal of our culture (Jung et al., 2001). To close the gap between our actual and ideal body we often use so called impression management, meaning when we work strategically on our outer self to ensure that others see us more like the ideal self we want to be (Solomon & Rabolt, 2003). We work on our bodies to achieve our ideal, desirable, body, which in turn will bring pleasure (Entwistle, 2000), and higher self-esteem (Solomon & Rabolt, 2003). The ideal of today is a strong driver to consumption since it cannot be obtained by nature. This body-work behavior shapes our consumption habits of e.g. make-up, diet products, exercise centers, and clothing. This results in great power and success of companies providing and branding impression management products and services (Solomon et al., 2013).

Even though products can be bought because they are consistent with one’s actual self, they are often bought as instruments in the impression management process to

reach one's ideal self (Solomon & Rabolt, 2003). This is something marketers take advantage of, by displaying thin, beautiful, airbrushed women in advertising, who has unreachable beauty. Therefore, one can argue that marketers exploit consumers' tendencies to distort their body images by targeting products on their insecurities (Solomon et al., 2013). The result is negative emotions about one's body image, leading to women purchasing the product as an instrument in hope of becoming the person displayed in media (Solomon et al., 2013). However, it has been proved that even though young women who have been exposed to advertising displaying a thin ideal feel more badly about themselves, they tend to rate the advertised brand higher (Kees et al., 2008, in Solomon et al., 2013).

The success of the consumer society is dependent on the phenomenon of consumers purchasing products as instruments in achieving their ideal self. Shopping has therefore become both a social activity and a process of acquiring, maintaining, and transforming social identities (Craik, 2009). Targeting women's anxieties about themselves is a successful marketing strategy, since it both creates greater self-discrepancy between their actual and ideal selves, and presents the solution: a product that is claimed to close the gap (Jung et al., 2001).

A study showed that owning a product that is believed to have high aesthetical value increases our self-image, and makes us feel better (Townsend & Sood, 2012, in Solomon et al., 2013). Individuals who experience greater self-discrepancy are easier targets for marketers since they are either more attracted to the product or easier to convince (Cough et al., 1983, in Solomon et al., 2013). For example, females who are more self-conscious about their appearance tend to be heavy users of cosmetics. However, regardless of degree of body dissatisfaction; females in general are socialized to put special emphasis on clothing (Solomon & Rabolt, 2003).

2.4.1 Shopping for Clothes – an Embodied Practice

Clothing and body image are closely interrelated since clothing is an embodied practice (Tiggemann & Lacey, 2009). Early theories of motivation to dress by

anthropologists and psychologists focused on the technical functions of clothing such as to protect the body from natural elements (protection theory), to conceal private parts (modesty theory), and to draw attention to other parts (immodesty theory). However, for our modern society these theories can be argued to be too basic (Salomon & Rabolt, 2003). Given clothes ability to fulfill our desire to be accepted by others, to belong, to have social status and self-esteem, clothing is a product placed in the top of Abraham Maslow's "pyramid of needs" (Salomon et al., 2013). Therefore, adornment theory, which explains clothes as an instrument for personal decoration, aesthetic expression, and identity communication as main motivators, might be the most universal theory today (Solomon & Rabolt, 2003). Clothing has become a medium to express something about ourselves, building our identity by telling others about our gender, status, interests, and attitudes (Tiggemann & Lacey, 2009). However, other theories argue that motivational factors are too basic when it comes to fashion consumption and that one has to look into specific personality types to truly understand consumer behavior. Personal activities, interest and opinions, together with our self-concept type should be used when classifying different fashion consumers since these are more specific motivators (Costantino, 1998, in Craik, 2009). Studies have for example proved that body dissatisfaction goes hand in hand with clothing consumption, since women who are more dissatisfied with their bodies tend to choose clothing for camouflage (Tiggemann & Lacey, 2009).

Even though, it is not agreed upon what are the actual drives of most apparel consumers. However, clothes are generally considered as serving our individual, social and physical human needs, and as offering cultural representations and art forms (Kaiser, 1997). We transform our natural body into a social body with an identity through clothing. According to Craik (2009), the body can be considered as a socialized device which is equipped with technical mechanisms such as clothes in order to prepare ourselves for public display and to present ourselves in a desirable way. Entwistle (2000) argues that the dressed body is a product of culture, the social

force pressing upon the body, as well as individual actions taken to meet those forces and expectations

Historically clothes has worked as instruments to restrict the body, like the corset was sculpturing women's' waists into the desirable hour glass shape. However today, the body ideal requires a new form of discipline. The corset of the 19th century has been replaced by a modern corset of muscles creating a flat tummy, only achievable by exercise and diet control. The discipline has moved from being the garment as a tool from the outside of the body, to a discipline located on the inside, self-discipline (Entwistle, 2000). However, in contrast to body weight and body shape clothing is more controllable, which makes it different from other aspects of body image, and easier to adjust through processes of impression management. Clothing is therefore a great part of the extensive manipulation and body work involved in creating an ideal female appearance (Craik, 2009).

Today, women are constantly reminded how to dress for certain occasions and how one can be transformed into an ideal woman through the right clothes (Entwistle, 2000), making the activity of apparel shopping a common impression management activity. In fact, shopping for clothes is often considered as an enjoyable social activity for many women, often described as "retail therapy" that increase mood. However, studies indicate that shopping for clothes mean the opposite for many women (Tiggemann & Lacey, 2009).

2.4.2 Nothing Like 'Retail Therapy'

Colls (2004) argue that the fitting room together with the shop floor are spaces of consumption which provide the medium through which emotional relationships are formed between women, clothing and their bodies. However, shopping for clothes focus attention on females' bodies in a number of potentially negative ways: from the size and fit of clothes, to posters of thin models on the walls of the shop, to bright lights and multiple mirrors (Tiggemann & Lacey, 2009). Since clothing is sized, they are a means through which humans can categorize and quantify the size of their

bodies (Colls, 2004). However, due to the inconsistency of actual sizes from shop to shop, Colls (2004) argue that the trying on moment always includes uncertainty about the fit of the size and the potential negative experience that can follow from a fitting room experience. In fact clothes shopping, and especially trying on clothes, involve many aspects which might result in the opposite to enjoyment and “retail therapy”.

Femininity is closely related to fashion, as women design a certain look which becomes the object of the normatively male gaze (Craig, 2009). Fredrickson and Robert’s (1997) theory on objectification argue that the sexual objectification of women in western mass media gradually socializes women to adopt an observer’s perspective of their physical self. This results in self-objectification of one’s own attributes and evaluation of them towards cultural ideals (Fredrickson & Roberts, 1997). Exposure to media, such as fashion posters of skinny models in advancement of trying on clothes has for example been proved to result in a more negative experience for the female consumer (Grabe, Ward, & Hyde, 2008, in Tiggemann & Lacey, 2009).

A fitting room involves several elements such as bright lights and mirrors, leading to a closer than normal evaluation of the body and its fit in clothes (Tiggemann & Andrew, 2012). Tiggemann and Lacey (2009) argue that trying on clothes in the fitting room is a crucial factor contributing to clothes shopping becoming a negative experience for many women

2.4.3 The Horror of a Fitting Room

Standing in front of a mirror in a dressing room involves closer than normal scrutiny of not only the dressed body, but also the undressed body (Tiggemann & Lacey, 2009), resulting in a greater state of self-objectification. The consumer is evaluating her body in the mirror like looking through the eyes of someone else, seeing and evaluating herself as an object (Tiggemann & Andrew, 2012).

Tiggemann and Lacey (2009) proved propositions about self-objectification being partly dependent and triggered by contexts such as personality traits and certain situations, and found that women with higher BMI are more dissatisfied with their bodies and tend to enjoy shopping for clothes less than women of lower BMI rates. Women with higher BMI evaluate themselves more negatively, and their self-objectification process in a fitting room leads to a more negative experience (Tiggemann & Lacey, 2009), possibly as a result of their experience leading to greater body-discrepancy.

Furthermore, studies indicate that the more the body is exposed, the greater are the resulting negative emotions of the fitting room experience. For example, trying on a swimsuit has been proved to result in increased body shame and negative emotions (Fredrickson et al., 1998).

“...it appears that the wearing of bathers is a negative and stressful experience for most women, most likely because so few women can match the current societally-defined and virtually unattainable thin beauty ideal.” (Tiggemann & Andrew, 2012, p. 652)

As many apparel companies' advertising is reinforcing an unrealizable ideal, they are simultaneously obstructing their business due to the resulted negative shopping experiences in their fitting rooms (Tiggemann & Lacey, 2009). Negative self-evaluation and self-objectification behaviour during the shopping experience is very likely to decrease consumption, since the fitting room experience is a key part of the purchase decision process (Baumstark & Park (2010)).

2.4.4 Improving Consumers' Fitting Room Experiences

The atmosphere in a fitting room can be crucial to making a purchase for a consumer. In this situation the consumer makes their final evaluations about the products while assessing their personal appearance, and finally decides whether to buy the garment (Baumstark & Park (2010)). To prohibit consumers from leaving

fitting rooms without buying anything retailers can use several methods to increase the fitting room experience, such as music, crowding, scent, and lighting. Lighting has been proved to be a key instrument to create a positive store experience, and Baumstark and Park (2010) showed that the right lighting is important to make consumers evaluate their appearance more positively.

There is very limited research on methods to increase fitting room experiences. However, suggestions about smooth lighting decreasing visibility of body imperfections and tilted mirrors to give an impression of the consumer being slightly taller and slimmer are frequent. Another commonly proposed method is the use of so called “skinny mirrors”.

2.4.5 The Skinny Mirror

A skinny mirror is a slightly concave mirror, meaning that the mirror’s reflective surface is bulging inward making the person in front of it appearing slimmer and taller. It is yet unknown how widespread the usage of skinny mirrors in fitting rooms is. However, the company The Skinny Mirrors is currently the only known seller of concave mirrors to both private persons and companies. The exact effect of the mirror depends on the viewer’s measurements, however approximately 2-5 kilos are removed (The Skinny Mirrors, 2014) (see Appendix 1). The company argue that the mirror is not only a self-confidence booster for women to have in their homes, but also a powerful sales tool for stores to be placed in their dressing rooms. The mirror is claimed to eliminate risks of fitting room mirrors to be “unflattering” while increase customers’ positive feelings about their appearance, leading to increased purchase intentions (The skinny Mirrors, 2014).

“Your dressing room mirrors are a sales tool that will compliment your customer in an “intimate” setting where they normally would not allow a stranger to give feedback.”

(The Skinny mirrors, 2014).

The effect of a concave mirror in dressing rooms on customers' shopping experiences and sales has not yet been researched academically, why it is the purpose of this study.

2.5 Theoretical Framework and Phrasing of Hypothesis

The thorough literature review in this chapter, covering socio-cultural, psychological and consumption behaviour perspectives, has resulted in a theoretical framework to answer the research question of this study:

How does a skinny mirror influence the female consumer's fitting room experience in terms of perceptual and attitudinal aspects of body image, and her resulted shopping behaviour?

At first the development of the western female body ideal was investigated from a socio-cultural perspective on art, media and advertising. This review showed how the female body ideal has developed from natural feminine curves to an unreachable ideal characterized by under nutrition, mathematical calculations and digital retouching. From a psychological perspective it showed how the Individuals' impossible reach of today's ideal has resulted in most women experiencing negative body image. As for consumption behaviour, the review explained how consumption, cultural ideals, and body image, are closely linked together. Cultural ideals create negative body images, while simultaneously driving consumption. Impression management involves consumption related to one's body image and appearance. Clothing is therefore one of the most common impression management instruments, however shopping for clothes and especially trying on clothes involves many aspects with potentially negative outcomes, as the consumer is unable to reach the cultural ideal of today.

As a skinny mirror is slightly concave, making the consumer in the fitting room appear skinnier, hence closer to the cultural ideal, it is a logical to believe that the consumer will experience a more positive body image in the situation of a fitting room with a

skinny mirror. Since body image consists of both perceptual and attitudinal aspects two hypotheses concerning body image have been phrased in order to investigate a skinny mirror's influence on female's body image in connection to a fitting room experience:

2.5.1 Hypothesis 1: Perceptual Body Image

H1 Female consumers who have been exposed to a skinny mirror in a fitting room experience less body-discrepancy between their perceived actual and perceived ideal body, compared to female consumers who have been exposed to a normal mirror.

H0 Female consumers who have been exposed to a skinny mirror in a fitting room do not experience lower body-discrepancy between their perceived actual and perceived ideal body, compared to female consumers who have been exposed to a normal mirror.

2.5.2 Hypothesis 2: Attitudinal Body Image

H1 Female consumers who have been exposed to a skinny mirror in a fitting room have a more positive attitude towards their body, compared to female consumers who have been exposed to a normal mirror.

H0 Female consumers who have been exposed to a skinny mirror in a fitting room do not have a more positive attitude towards their body, compared to female consumers who have been exposed to a normal mirror.

2.5.3 Hypothesis 3: Conversion Ratio

As a result of a more positive body image after being exposed to a skinny mirror in a fitting room, it is logical to assume that female consumers will experience higher purchase intentions. Therefore a third hypothesis concerning the female consumption behaviour has been phrased:

H1 Female consumers, who have been exposed to a skinny mirror in a fitting room purchase more of the items tried on, compared to female consumers who have been exposed to a normal mirror.

H0 Female consumers who have been exposed to a skinny mirror in a fitting room does not purchase more of the items tried on, compared to female consumers who have been exposed to a normal mirror.

3 Methodology

This chapter gives a thorough explanation of the method used to conduct this study. Firstly, the sample and its participants are described. Secondly, the research design is presented and the venue and manipulator of the experiment are motivated. Thereafter the questionnaire, procedure, and data analytic strategy are presented. Lastly, the position of the study is motivated and its credibleness in relation to potential critique is discussed.

3.1 Participants

The participants of the experiment were female customers to the venue store of the experiment, who visited the store and tried something on in a fitting room. During the experiment period, between the 17-19 and 21-22 of July, 2014, there were 86 female customers who visited a fitting room in the store. Out of these 86 women 82 agreed to take part in the experiment, hence the response rate of the sample is very high. The 82 women can be characterized as a voluntary response sample (Bryman, 2012). Participants were randomly assigned to be in either the experiment group or the control group, resulting in two independent groups with 41 participants in each.

3.1.1 Description of Participants

Mean age of the participants was 48.5 years (SD=14.5), ranging from 15 to 90 years. Mean height was 1.66 m (SD=0.06), ranging from 1.48 to 1.80 m, and mean weight was 69.7 kl (SD=11.4), ranging from 50 to 95 kilos (Table 1). The calculated mean BMI of the participants was 25 (S =3.8) (Normal weight), ranging from 18.9 to 36.5. About 33 per cent of the participants reported themselves as single or different, while 67 per cent reported themselves as married or in a relationship (Table 1). A homogeneity test of the test groups showed that the two groups are homogeneous when it comes to age, height, weight, BMI and Civil status, hence there is no significant difference concerning self-reported demographics between the two groups

(Table 1). Homogeneous groups ensure that the result of the experiment was not affected by differences in the demographics of the test groups (Bryman, 2012).

Table 1: Description of participants and homogeneity test

	<i>Age</i>	<i>BMI</i>	<i>Civil status (1=Single, 2=Relation)</i>
<i>N</i>	82	82	82
<i>Range (min-max)</i>	75 (15-90)	18 (19-37)	1 (1-2)
Mean	48.45	25.21	1.67
Std. Deviation	14.55	3.84	0.47

T-test for homogeneity of test groups

		<i>Group Statistics</i>		<i>Levene's Test for Equality of Variances</i>	<i>t-test for equality of means</i>	
	Test Group	<i>N</i>	<i>Mean (SD)</i>	<i>F (Sig.)</i>	<i>t (df)</i>	<i>p (two-tailed)</i>
Age	<i>Control</i>	41	50.29 (15.1)	0.12 (0.74)	-1,15 (80)	0.25
	<i>Experiment</i>	41	46.6 (14.0)			
BMI	<i>Control</i>	41	25.63 (4.07)	0.80 (0.37)	1.01 (80)	0.32
	<i>Experiment</i>	41	24.78 (3.60)			
Civilstatus (1=single 2= relation)	<i>Control</i>	41	1.63 (0.54)	7.56 (0,01)	-1.13 (80)	0.26
	<i>Experiment</i>	41	1.76 (0.44)			

All variances assumed equal according to Levene's test

3.2 Research Design: Double Blind Experiment

In order to study the effect of a skinny mirror in a credible manner, a double blind experiment research design was implemented. An experimental research design rules out alternative causal explanations of findings deriving from two or more groups, where one is manipulated: experiment group, and one is not: control group. A double blind experiment is a method to minimize risk for bias and placebo effects by

ensuring that the researcher does not know to which group a respondent is assigned to. The researcher is then unaware of which research group is exposed to the experimental manipulation and is therefore unable to subconsciously skew results (Bryman, 2012). In this study there were two groups, the experimental group who was manipulated by a skinny mirror, and the control group which was exposed to a normal mirror. The experiment was double blind since participants was unaware of the manipulation and since me as the researcher was unaware of what group was exposed to the manipulation.

3.2.1 Finding the Right Venue for the Experiment: a Lingerie Store

One of the most body anxious situations for women today, leading to self-critique and negative emotions, is trying out lingerie or bikini in a fitting room (Tiggemann & Andrew, 2012). Since this particular shopping situation is very emotionally loaded for most women I also considered it to be the most interesting for this study. In order to test the effect of a skinny mirror on female consumers' fitting room experiences I therefore choose the situation of trying on lingerie and bikini. This situation also ensures that the body of the customer is highly exposed to the mirror. Furthermore, it was very important for me to study the real-life shopping situation through a field experiment, and not through a contrived setting, to receive as reliable results as possible. The criteria when choosing a store for the experiment was therefore that it was a store specialized on selling women's lingerie and swimwear and that it would allow me to do a field experiment on real customers in the store. Furthermore, it was critical that the particular store had two identical fitting rooms, in terms of space, lights, colours, curtains, interior etc., enabling manipulation of only one variable: the mirror. The store that fulfilled my criteria for the study and which agreed to be the venue for the experiment was Details in Stockholm, Sweden. Details is a chain of five stores purely specialized on female lingerie and swimwear with a broad target group due to the large spectrum of sizes, styles and prices (Details, 2014).

3.2.2 The Manipulative Instrument: a Skinny Mirror

The American company The Skinny Mirrors sponsored the study with the manipulative instruments: two identical looking full length mirrors. However, the glasses of the mirrors were different. One of the mirrors was concave leading to a slimmer figure (ca. 2-5 kilos smaller), while mirror number two was normal. The two mirrors were placed in two identical fitting rooms in one of Detail's stores, and constituted the manipulation of the experiment group. Since the skinny mirror's top frame is recommended to be placed aligned with the crest of the customers head (The Skinny Mirrors, 2014), the mirrors were placed suitable for the average tall Swedish woman (167 cm) (Statistiska Centralbyrån, Eng. Swedish Statistics, 2014), with a margin for taller women. Figure 9 provides a detailed illustration of the experiment set up and how the mirrors were installed in the fitting rooms.

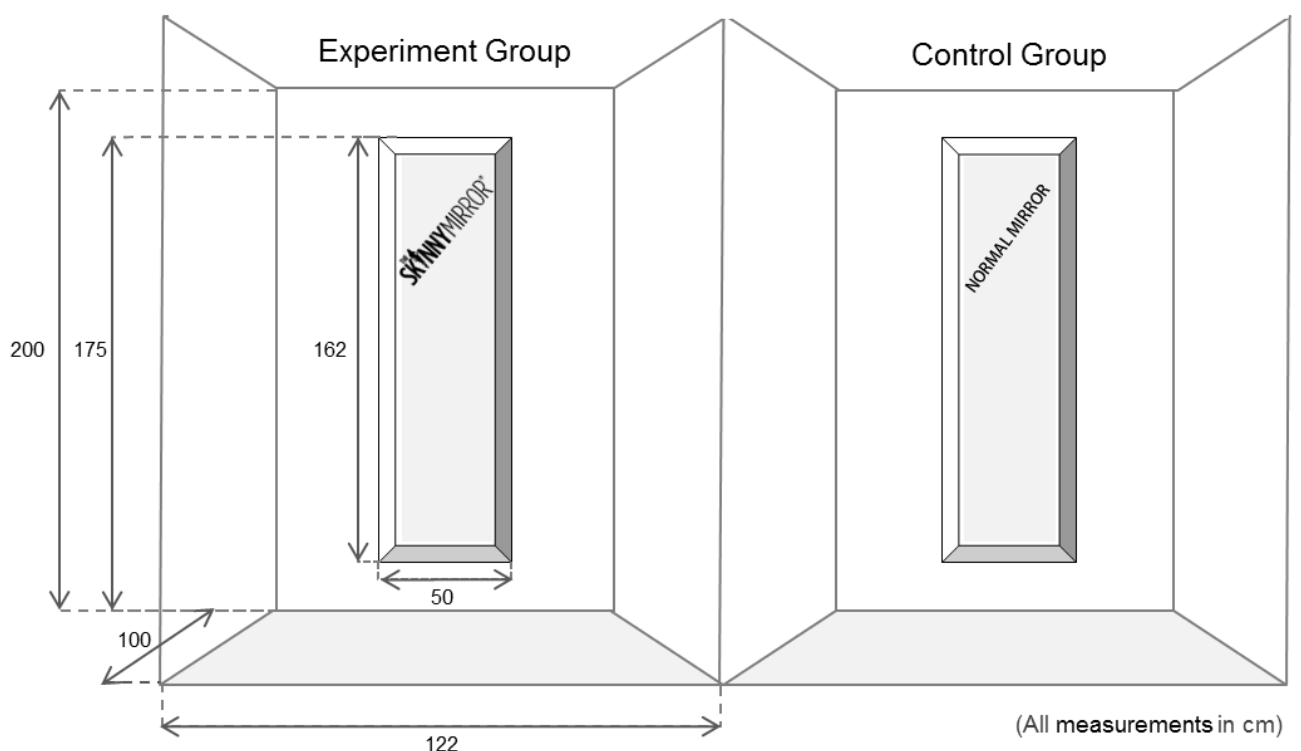


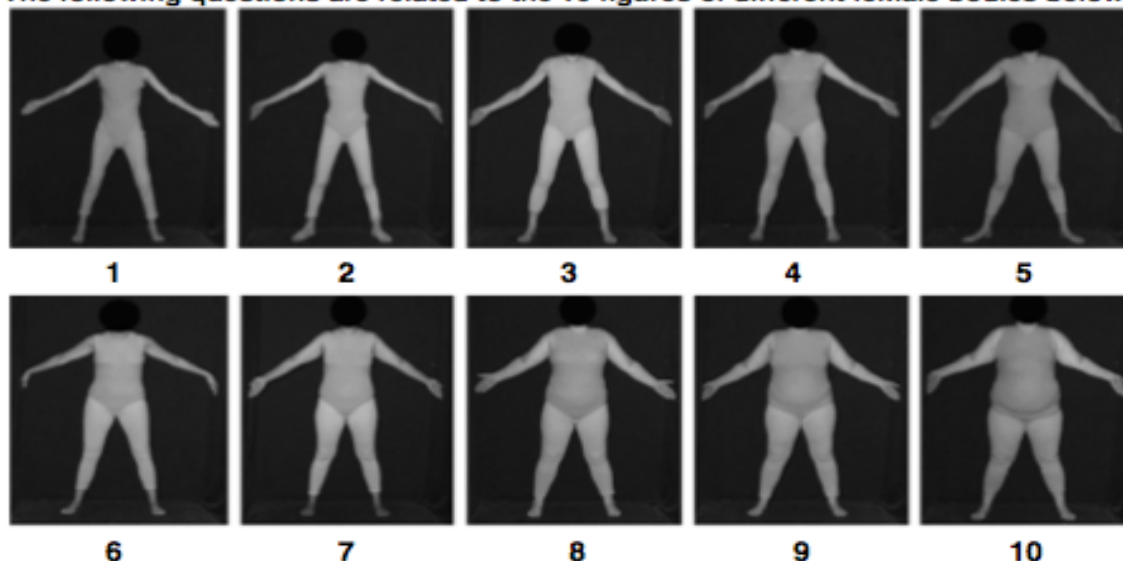
Figure 9: Experiment Installation

3.3 Measures: Questions and Observations

All participants of the experiment, meaning both the treatment group and the control group answered the same questionnaire (Figure 10), and were subjects of the same observation, regardless of what mirror they had been exposed to in the fitting room. The questionnaire and the observations were designed in order to test the three hypotheses phrased to answer the research question of this study. Additional questions regarding demographics and one open question regarding the overall shopping experience were added to the questionnaire.

Thank you for filling out this questionnaire. You are totally anonymous of course!

The following questions are related to the 10 figures of different female bodies below.



- 1) Mark the figure which best describes:**
- | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| a. Your own body _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. The body you would like to have _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. The most attractive body according to you _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. The most attractive body to others _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

2) To what extent does the following statements describe your fitting room experience?

- | | Strongly
Disagree | Disagree | I am
neutral | Agree | Strongly
Agree |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| a. I thought my body looked attractive _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. On the whole, I felt satisfied with my body _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. I had a positive attitude toward my body _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. I liked how my body looked without clothes _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. I felt comfortable with my body _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. I had an overall positive experience _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g. I liked trying on underwear/bikini _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| h. I left the fitting room with a positive feeling
about my body _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

3) How did your experience trying on underwear/bikini in Detail's fitting room?

4) Please fill in your:

- a. Age: _____ years
 b. Weight: _____ kilo
 c. Height: _____ cm

5) Please mark if you are:

- a. ☐ Single
 b. ☐ In a relationship / married
 c. ☐ Unsure/ other status

Many thanks for your participation!

Figure 10: Questionnaire

3.3.1 Perceptual Body Image: Body-discrepancy

The first hypothesis of this study aims at investigating the manipulations effect on the respondents' perceptual body image. To be able to study a skinny mirror's effect on the perceptual body image, Swami et al. (2008) "Photographic Figure Rating scale" (PFRS) (Figure 8) was applied. This is the figure rating scale which has been proved to have the highest validity and reliability when studying perceptual female body image through figural drawing scales (Gardner & Brown, 2010). Respondents were asked to choose from 10 pictures of female bodies, ranging from underweight (BMI, 12.51) to overweight (BMI, 41.23), the body most representative of their own as they perceive is and their ideal body as they see it (Figure 10, Question 1). The gap, in terms of BMI, between the chosen actual and ideal bodies, is a measure of body-discrepancy, which the most typical measurements of perceptual body image (Swami et al., 2008). In addition, the participants self-reported actual BMI was compared to their guessed BMI, as selected through the PFRS, to investigate if a skinny mirror leads to body size distortion.

3.3.2 Attitudinal Body Image: Body Appreciation and Appearance Evaluation

To investigate the second hypothesis regarding attitudinal aspects of body image, Avalos et al. (2005) "Body Appreciation Scale" and Brown et al. (1990) subscale "Appearance evaluation scale" constituted inspiration (Figure 10, Question 2a - 2e). The original questions were moderately rephrased in order to suit this particular research situation better. However, as originally the questions were phrased as statements following a likert scale model, which is suitable when investigating attitudes (Bryman, 2012). Answers were given on a five step scale, ranging from "1-strongly disagree" to "5 - strongly agree". To avoid forcing respondents to make a stand, the respondents were given the option to answer neutral by selecting the middle of the scale, number 3, "I am neutral". To investigate the respondents' attitudes to the particular fitting room experience more deeply, additional questions of

the same type were added to the questionnaire (Figure 10, Question 2f - 2h). Respondents' answers of the likert scales were summed up to a total rating of their attitudinal body image. Lastly, an open question regarding the overall fitting room experience was included to capture the respondents' spontaneous opinions regarding their fitting room experience (Figure 10, Question 3).

3.3.3 Conversion Ratio: Observations

The participant's shopping behaviour in terms of amount of items tried on and amount of items purchased was observed. These observations were the foundation to investigate the third hypothesis regarding purchase intentions. By dividing amount of items purchased with amount of items tried on, the conversion ratio was calculated:

$$\frac{\# \text{ Items Purchased}}{\# \text{ Items Tried On}} = \text{Conversion Ratio}$$

3.4 Procedure

Participants of this experiment were customers of the Details store who decided to try something on, during the experiment period. All participants were approached to give their allowance before entering the fitting room. They were then randomly assigned to one of the two fitting rooms. Participants assigned to fitting room number one were exposed to a normal mirror, hence no manipulation, and constituted the control group. Participants assigned to fitting room number two were exposed to the manipulation of a skinny mirror and formed therefore the "experiment group". Following the double blind experiment design, I was not aware of which fitting room incorporated the experimental manipulation.

The participants did not know anything about the mirrors while trying on in the fitting room, just that they were participating in an experiment. When leaving the fitting room they were asked to answer the questionnaire which I handed them personally. While respondents were answering the questions I was able to clarify and give assistance.

The questionnaire can therefore be classified as a supervised survey (Bryman, 2012). While participants were taking part in the experiment I made the observations needed to calculate their conversion ratio.

3.5 Data Analytic Strategy

The result of the experiment was analysed through the statistical program SPSS. To determine if a skinny mirror has an influence on the female consumer's shopping experience the answers of the experiment group and control group were analysed through an independent sample t-test. This test determines if there is a significant difference between the averages of one variable between the groups (Burns and Burns, 2008). Generally, an independent sample t-test assumes that groups are independent, variances of variables across the groups are equal, and that variables are normally distributed. The data of this study only fulfils the first two criteria. However, the t-test is considered as a robust test, and is therefore relatively insensitive to violations of normality. Further reasoning strengthening the use of t-test for this study is that the data can be approximated with normality when the sample size is greater than 30 and when the sample size of the two groups are equal (Pagano, 2004, p.339), criteria both true for this sample.

3.6 The Positioning of the Methodology

The overall methodology applied in this study can be characterized as of experimental nature. Experimental studies mostly fall under a positivity paradigm, meaning that objective empiric data is believed to constitute the foundation for the reality (Collis & Hussey, 2009). The positivity paradigm implies that knowledge about the world exists around us, and that we can get answers to our questions by collecting them. Experimental studies are typically used to enable investigation of relations between variables in one situation, for example the effect on dependent variables when manipulating independent variables (Collis & Hussey, 2009). In this study a skinny mirror was the manipulator, and the research question was how this manipulator influences the dependent variables: perceptual body image, attitudinal

body image and conversion ratio. As true for this study, research designed from a positivistic point of view does often build on hypotheses aimed for statistical analysis (Collis & Hussey, 2009). Additionally, this study can be argued to be of exploratory nature since it investigates an unexplored area that has not yet been a topic for research.

Furthermore this study can be characterized as quantitative, nevertheless with some qualitative elements. Data collected is mostly of numeric nature, and is analysed through statistical tests (Collis & Hussey, 2009). However, me as a researcher personally approaching, informing, guiding, observing and facilitating the experiment adds qualitative aspects to the data collection operation. Another way to classify a study is by deduction and induction, two types of approaching and using theory and empirics (Bryman, 2012). This research design being built on statistical testing of empirical data classifies it as deductive, as commonly with positivistic and quantitative methods (Collis & Hussey, 2009).

3.7 Critique and Credibleness

Experimental research designs are often held up as touchstones because they engender considerable confidence in the robustness and trustworthiness of causal findings. Internal validity can therefore be very strong in true experiments (Bryman, 2012), such as in this field experiment. Additionally, usage of statistical methods leaves little room for subjective interpretations, increasing the objectivity and robustness of the result (Collis & Hussey, 2009). Nevertheless, worth mentioning is that female body ideals and body image are areas of subjective nature which are highly complex to investigate and measure. Therefore, only methods with proven reliability and validity have been applied in this study.

Furthermore, it would have been favourable for validity if literature used as theoretical background for the study was specifically focused on Sweden or Scandinavia. However, fitting rooms and skinny mirrors being an unexplored area means that there is almost no literature available. Instead, literature on female body ideal, body image

and shopping behaviour focused on western regions, sometimes with Sweden included, has been assumed to be applicable also for this study.

The sample of this study cannot be argued to be a totally randomized probability sample; however there are aspects about it leading to randomness. For example, it can be argued that who decided to visit the particular store one of these particular days is very random in itself. Furthermore, reaching the “golden standard” of experiments, participants in this study were assigned randomly to their respective groups. This makes this study highly internally and ecologically valid and doubts regarding causal findings can be eliminated. The design of the experiment, being easy to replicate, can also be argued to increase the study’s reliability (Bryman, 2012).

Lastly, self-reported weight and height can lead to response errors, however previous studies have indicated that these morphological data are reported with acceptable adequacy (e.g., Spencer, Appleby, Davey, & Key, 2001; Stewart, 1982; Weaver et al., 1996) in Swami et al., 2008).

4 Result

In this chapter, results of the study will be presented following the structure of the three hypotheses concerning perceptual and attitudinal body image, and conversion ratio. Statistical tests of the results are presented leading to hypothesis acceptance or rejection. Additional findings are presented in the end of this chapter.

4.1 Perceptual Body Image: Body-discrepancy

The participants' body-discrepancy was measured as the difference between their perceived actual BMI and their perceived ideal BMI. Their actual and ideal BMI's were selected by Swami et al. (2008) "Photographic Figure Rating scale" (PFRS) (Figure 10, Question 1). An independent samples t-test of equality of means showed that the experiment group ($M=4.0$, $SD=3.56$) had smaller body-discrepancy than the control group ($M=5.93$, $SD=4.49$), $t(80) = 2.15$, $p < .05$ (Table 2). Therefore, the null hypothesis is rejected and H_1 below is accepted:

***H1** Female consumers who have been exposed to a skinny mirror in a fitting room experience less body-discrepancy between their perceived actual and perceived ideal body, compared to female consumers who have been exposed to a normal mirror.*

Table 2: Body-Discrepancy, Group Statistics and Independent Samples T-Test

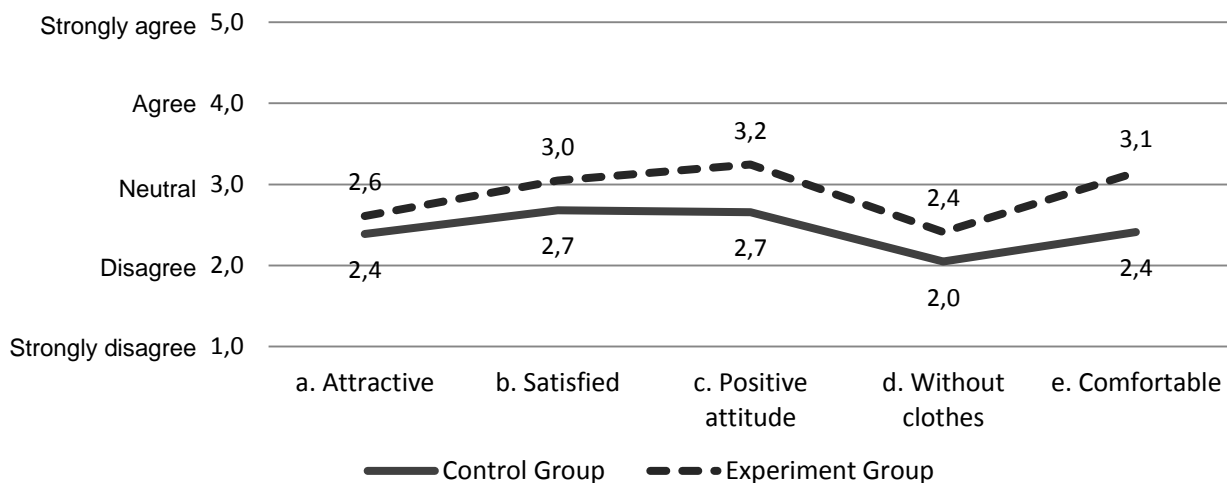
Group Statistics			Levene's Test for Equality of Variances	t-test for equality of means	
Test Group	N	Mean (SD)	F (Sig.)	t (df)	p (two-tailed)
Control	41	5.93 (4.49)	1.62 (0.21)	2.15 (80)	0.034
Experiment	41	4.00 (3.56)			

Variances assumed equal according to Levene's test

4.2 Attitudinal Body Image: Body Appreciation and Appearance Evaluation

The participants' attitudinal body images were measured as a likert scale rating inspired by Avalos et al. (2005) "Body Appreciation Scale" and Brown et al. (1990) subscale "Appearance evaluation scale" (Figure 10, Question 2a – 2e). Participants were agreeing to five statements by giving their answers on a five step scale, ranging from "1- strongly disagree" to "5 - strongly agree". As seen in figure 11 the experiment group were more positive to all of the five statements.

Figure 11: Attitudinal Body Image



An independent samples t-test showed that the experiment group ($M=14.46$, $SD=5.13$) had a more positive attitudinal body image than the control group ($M=12.19$, $SD=4.57$), $t(80) = -2.11$, $p < .05$ (Table 3). Therefore, the null hypothesis is rejected and H_1 below is accepted:

H1 Female consumers who have been exposed to a skinny mirror in a fitting room have a more positive attitude towards their body, compared to female consumers who have been exposed to a normal mirror.

Table 3: Attitudinal Body Image, Group Statistics and Independent Samples T-Test

Group Statistics			Levene's Test for Equality of Variances	t-test for equality of means	
Test Group	N	Mean (SD)	F (Sig)	t (df)	p (two-tailed)
Control	41	12.19 (4.57)	1.03 (0.31)	-2.11 (80)	0.038
Experiment	41	14.46 (5.13)			

Variances assumed equal according to Levene's test

4.3 Conversion Ratio: Observations

The participants' conversion ratios were calculated by observations of amount of items tried on through amount of items purchased. Even though the mean of the experiment group ($M=39.0\%$, $SD=29.0\%$) was higher than the mean of the control group ($M=30.6\%$, $SD=27.8\%$), an independent samples t-test showed that there were no significant difference of means, $t(80) = -1.34$, $p>.05$ (Table 4). Therefore, the higher mean of conversion ratio for the experiment group is only a tendency, and the null hypothesis below cannot be rejected:

H₀ Female consumers, who have been exposed to a skinny mirror in a fitting room does not purchase more of the items tried on, compared to female consumers who have been exposed to a normal mirror.

Table 4: Conversion Ratio, Group Statistics and Independent Samples T-Test

Group Statistics			Levene's Test for Equality of Variances	t-test for equality of means	
Test Group	N	Mean (SD)	F (Sig.)	t (df)	p (two-tailed)
Control	41	30.6% (27.8%)	0.22 (0.64)	-1.34 (80)	0.185
Experiment	41	39.0% (29.0%)			

Variances assumed equal according to Levene's test

However, as visible in table 5 the experiment group accounted for more sales. The experiment group bought 70 items in total (1.7 per customer) compared to the control

group's 59 items (1.4 per customer). Per cent of customers leaving the store without buying anything was also higher in the control group (27%), compared to the experiment group (12%) (Table 5).

Table 5: Sales per Test Group

Test Group	Total Items sold	Average sales/ person	Per cent no-sales customers
<i>Control</i>	59	1,4	27%
<i>Experiment</i>	70	1,7	12%

As seen in figure (12) the experiment group amount of items sold per customer is higher or the same as the control group in all categories, while the number of non-sales customers is two times higher in the control group. In total, the experiment group accounted for 54 per cent of the sales while the control group accounted for 46 per cent (Figure 13).

Figure 12: Items sold per participant

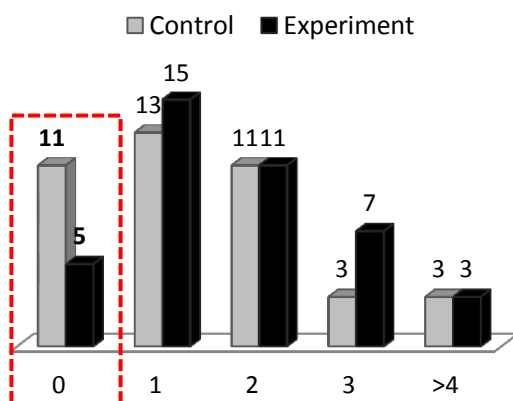
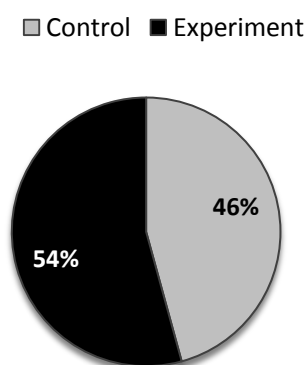


Figure 13: Sales per test group



4.4 Additional Results

Additional results not directly related to the hypotheses are presented in this section. An independent samples t-test showed that the experiment group ($M=2.88$,

$SD=2.17$) did not have significantly greater body size distortion than the control group ($M=2.83$, $SD=2.15$), $t(80) = -.1$, $p > .05$ (Table 6). The body size distortion is a measurement of the difference between the participants' selected BMI in the PFRS and their BMI calculated from their self-reported weight and height.

Table 6: Body Size Distortion, Group Statistics and Independent Samples T-Test

Group Statistics			Levene's Test for Equality of Variances	t-test for equality of means	
Test Group	N	Mean (SD)	F (Sig.)	t (df)	p (two-tailed)
Control	41	2.83 (2.15)	0.02 (0.89)	-0.1 (80)	0.92
Experiment	41	2.88 (2.17)			

Variances assumed equal according to Levene's test

Another independent samples t-test showed that there was no significant difference in BMI of bodies selected as "most attractive to me" and "most attractive to others" between the experiment group ($M=18.1$, $SD=2.2$ and $M=17.0$, $SD=1.8$) and the control group ($M=18.5$, $SD=2.0$ and $M=17.2$, $SD=2.5$), $t(80)=.85$, $p > .05$ and $t(80)=-.40$, $p > .05$ (Table 7).

Table 7: Most Attractive Body, Group Statistics and Independent Samples T-Test

Group Statistics				Levene's Test for Equality of Variances	t-test for equality of means	
Test Group		N	Mean (SD)	F (Sig.)	t (df)	p (two- tailed)
Attractive to me	Control	41	18.5 (2.0)	0.11 (0.74)	0.85 (80)	0.40
	Experiment	41	18.1 (2.2)			
Attractive to others	Control	41	17.2 (2.5)	0.02 (0.89)	0.40 (80)	0.69
	Experiment	41	17.0 (1.8)			

All variances assumed equal according to Levene's test

Furthermore, ratings of the likert scale concerning the participant's overall fitting room experience (Figure 14) was analysed through an independent samples t-test. The statistical analysis showed that there was no significant difference between the experiment group's ($M=9.17$, $SD=3.2$) and the control group's ($M=8.39$, $SD=3.2$) overall fitting room experiences, $t(80) = -1.1$, $p > .05$ (Table 8). However, as seen in figure 14, the experiment group scored higher on all three statements concerning their fitting room experience.

Figure 14: Overall Fitting Room Experience

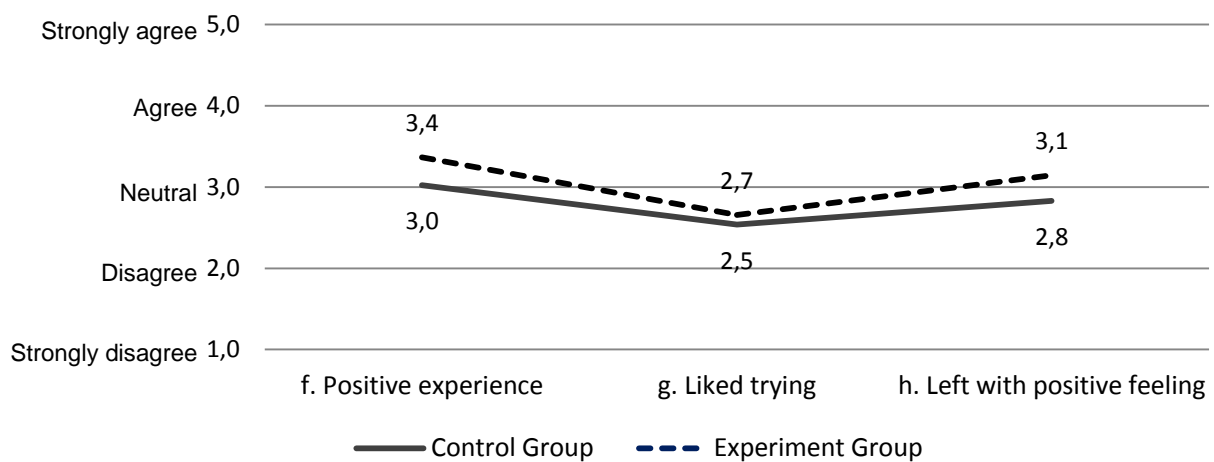


Table 8: Overall Fitting Room Experience, Group Statistics and Independent Samples T-Test

Group Statistics			Levene's Test for Equality of Variances	t-test for equality of means	
Test Group	N	Mean (SD)	F (Sig.)	t (df)	p (two-tailed)
Control	41	8.39 (3.2)	0.17 (0.68)	-1.1 (80)	0.27
Experiment	41	9.17 (3.2)			

Variances assumed equal according to Levene's test

Lastly, participants were asked to answer an open question regarding their fitting room experience in the Details store. Overall, participants expressed satisfaction with the service, however many also expressed the anxiety of trying underwear and swimwear out in a fitting room (Table 9)

Table 9: Participants describing their experience with own words

“Competent staff makes me feel comfortable. I always feel more positive about my body when I find underwear that fit me.” (Woman 45 years, BMI: 30)

“I felt pressure, as usual when you try underwear. “ (Woman 30 years, BMI: 24)

“I am not satisfied whit my body and get stressed and afraid if someone intervenes. When I try underwear I often mutter over my appearance, since it is not what I expect. It has been like this for a while.” (Woman 26 years, BMI: 27)

“My experience was ok, but I dislike my body anyway.” (Woman 27 years, BMI: 23)

“I am big, and there is rarely anything that fit me. However, the staff is friendly and helpful.” (Woman 59 years, BMI: 24)

5 Analysis and Discussion

The following chapter aims at analysing and discussing results, implications and contributions of the study in relation to the theory presented in chapter 2. The analysis and discussion follows the structure of the three hypotheses presented in the method. Lastly, managerial implications, scientific contribution and future research are discussed.

5.1 Perceptual Body Image

This study shows that a skinny mirror has an immediate positive influence on women's perceptual body image in connection to a fitting room experience (Table 2). This result follows the logic of Solomon et al. (2013), that a woman's body image is influenced by how close her body corresponds to the one idealized by her culture. A skinny mirror makes her look slimmer, meaning closer to the ideal female body, and therefore decrease her body-discrepancy resulting in a more positive perceptual body image.

A reason why a skinny mirror successfully decreased body-discrepancy immediately might be because the gap between women's perceived body size and ideal body size being as large as almost 6 BMI. In other words, body-discrepancy being so substantial for most women, might make it tangible and actable aspect of body image to target by a skinny mirror. It is not surprising that women experience a body-discrepancy of this magnitude when the BMI idealized by western media and advertising is under 18 (Swami et al., 2010), while BMI of a normal weight person is 19-25 BMI (World Health Organization, 2009). Supporting previous research (Swami et al., 2010) the present study confirms that the ideal female body is very thin. The body selected as most attractive by the participants was underweight with a BMI of 18.4. The body that was believed as being the "most attractive by others" was even more skinny with a BMI of just 17 (classified as underweight by World health

organization, 2009). The ideal body being this thin partly explains why most women experience a gap between their actual bodies and the body they wish for, and why many women explicitly expressed anxiety related to body size spontaneously in this study (Table 9).

Supporting previous literature arguing that body image is a mental image (Fallon, 1990, in Jung et al., 2001), this study showed that most women have a body size distortion. More specifically women believed that they were 2.9 BMI larger than they actually were. A skinny mirror had no significant effect on body-size distortion (Table 6). This is in line with Fallon's theory (1990, in Jung et al., 2001) on body image as a mental picture being influenced by the cultural context being built up over time, and not something that can be significantly affected by one experience. However, using a skinny mirror over time might adjust a woman's mental picture of herself. The Skinny Mirrors Company claims that a skinny mirror at home boosts confidence over time, even though the woman is fully aware of that it makes her look thinner than she really is (The Skinny Mirrors, 2014). Since most women seem to believe that they are larger than they really are, the mirror might function as an instrument to reduce their mental body size distortion, making them see themselves as they actually are over time.

5.2 Attitudinal Body Image

The present study showed that females who have been exposed to a skinny mirror in a fitting room significantly felt more comfortable with their bodies and had a more positive attitude towards their bodies (Table 3). Women's tendency to evaluate their appearance by more critical means while in a fitting room can, according to Tiggemann and Andrew (2012), be partly explained by the increased state of self-objectification in this situation. The fitting room situation leads to consumers evaluating their bodies as objects (Tiggemann & Andrew, 2012), to be compared to an unachievable ideal. The present study recognizes this behavior by showing that a skinny mirror in a fitting room results in women evaluating their appearance more positively. The logic behind this result is that a skinny mirror gives the consumer an

illusion of having a body closer to the ideal body. The consumer is still evaluating herself as an object, however since this object is closer to the ideal, the evaluation is more positive and she appreciates her body more.

Living in a culture in which media and advertising continuously encourage women to look for flaws in themselves in relation to the unachievable ideal of beauty and bodily size (Ussher, 1989); dissatisfaction is commonplace (Swami et al., 2010). A skinny mirror influenced women to immediately appreciate their bodies more and evaluate their bodies more positively. This result is in line with Swami et al. (2010) who argue that thinness is the most important aspect of the ideal female body in our culture. The influence of a skinny mirror on attitudinal body image would presumably be smaller if being skinny was not considered as highly important. However, confirming previous research this study showed that even though a skinny mirror led to women having a more positive attitudinal body image, their attitudinal body image was still neutral or negative (Table 3). Again, this supports the theory that an attitude is built up over time and that the body image is a mental picture that cannot be dramatically changed by one experience (Fallon, 1990, in Jung et al., 2001).

Furthermore, Robertson (2007, in Solomon et al., 2013) argues that many women are so uncomfortable with being naked that they refuse taking all their clothes off in front of their own husband. In the present study, a skinny mirror had no significant effect on attitude to the undressed body, and showed that as many as 60 per cent of the participants had a negative attitude towards their undressed body (Figure 11). This result shows that when impression management instruments such as clothing are removed from the body, a majority of women dislike their reflection in the mirror. Following Ussher's (1989) pedagogy of 'personal inadequacy' this result might be derived to the fact that women today are programmed by media and advertising to dislike their natural bodies. In our culture, the body has become an object to be worked on, a sculpture that has to be molded with different impression management instruments to be socially acceptable. Women have been taught to think about their undressed body as something that has to be manipulated, why women in this study,

regardless of mirror, did not like their undressed reflection (Figure 11) or the overall experience of trying on underwear and swimwear (Table 8).

5.3 Conversion ratio

Baumstark and Park (2010) concluded that the consumers fitting room experience is crucial to their purchase decision, since the fitting room is the space where the consumer evaluates the products and assess their appearance. A logical assumption following a skinny mirror's positive influence on females' attitudinal and perceptual body image is therefore that such a mirror leads to an increase also in purchase intentions. However, the present study showed no significant influence of a skinny mirror on conversion ratios (Table 4). Nevertheless, tendencies could be observed that a skinny mirror contributed to a higher conversion ratio (Table 5). During the experiment period, women who had been exposed to a skinny mirror bought on average 8.4 per cent more of items tried on compared to women who had been exposed to a normal mirror. Furthermore, there was a tendency of a skinny mirror to decrease the number of women leaving the store empty handed. Only 12 per cent of women trying out clothes in front of a skinny mirror did not buy anything, compared to 27 per cent non-purchasing customers in the control group (Table 5). This tendency points to a skinny mirror decreasing the non-buying customers by more than half. These findings indicate that a skinny mirror has the potential to increase sales substantially, which might explain why it is commonly purposed as an instrument to increase customers' fitting room experiences.

Homogeneous test groups (Table 1) and identical fitting rooms imply that these tendencies can be derived to a skinny mirror's influence. The variance regarding this factor was very high why it would be interesting to repeat the experiment with a larger sample size to see if the result would turn out the same.

5.4 Implications for the Apparel Industry

In the present study there was a tendency of a skinny mirror increasing sales with about 20 per cent, as customers who were exposed to a skinny mirror bought on average 1.7 items, compared to 1.4 items for customers who were exposed to a normal mirror. If this tendency is true also in other contexts skinny mirrors implies a great opportunity to increase sales through a relatively small financial investment. To understand its scale, a 20 per cent increase in sales for a store with 100 000 EUR in annual sales, would mean 20 000 EUR growth, a rise equal to nearly 2.5 months sales without skinny mirrors in the fitting rooms.

However, it is a moral question whether it is right or wrong of stores to use skinny mirror in their fitting rooms. Some might argue that it is an ugly sales trick, while others might say that there is nothing wrong with making consumers feel better about themselves by slightly "retouching" them in the fitting room when all images of female bodies around us are retouched today. Disagreement between right and wrong in this question implies that it is important to carefully consider a decision to utilize skinny mirrors. As an example, The Skinny Mirror Company has chosen to engrave all their mirrors with a clearly visible "skinny mirror" stamp in order to minimize the risk of anyone to feel tricked. This method can be an alternative in order to take advantage of the benefits of a skinny mirror while prohibit customers feeling tricked. An additional solution could be to provide customer with the choice to try clothes in a "skinny" or "normal" fitting room. Such a choice could also stimulate debate around today's unreachable ideal and how it influences womens' body images. Since a majority of women feel badly about their bodies today, a result of our culture idealizing an unrealizable body ideal, the right thing might be to start idealizing a normal female body. However, this would presumably take long time as body images are built up over time. Therefore a skinny mirror could both make consumers feel better in a vulnerable situation, while benefiting companies with increased sales immediately. However, the decision to implement skinny mirrors could benefit from being an agreement between consumers and companies, as the power over brands

resides among consumers today. Therefore, taking such a decision without agreement would potentially upset consumers, which can have devastating consequences for brand equity.

1.1 Scientific Contribution and Future Research

This study is the first of its kind and one of the few studies focusing on women's body images in relation to their fitting room experiences. It has showed a skinny mirror's positive influence on women's perceptual and attitudinal body image in connection to trying underwear or swimwear in a fitting room. In addition it indicates a tendency of a skinny mirror to increase purchase intentions. As with most research, especially when tapping into new areas, the result of this study opens up for future research.

This experiment was conducted in Stockholm, hence participants were mostly caucasian and big city habitants. It would therefore be interesting to repeat the experiment with participants with other demographics to see if for example women in west are more sensitive to a skinny mirror due to their higher exposure to the thin ideal in western media and advertising. This study focused on female consumers shopping experiences in fitting rooms and results were based on one experience. However, as body image is a mental construct being built up over time and affected by the body idealized by the culture (Fallon, 1990, in Jung et al., 2001), it would be intriguing to investigate a skinny mirror's effect over time with repeated experiences.

Furthermore, the experiment was performed in a store selling underwear and swimwear only. Trying on clothing in a fitting room, especially when exposing much of the body while trying on underwear and swimwear, is associated with anxiousness for many women (Tiggemann & Andrew, 2012). Trying out underwear or swimwear leads to increased body shame and a more negative perceptual body image, as most women cannot reach today's body ideal (Fredrickson et al., 1988). The experiment being conducted in a particularly susceptible situation might be a reason why a skinny mirror was a successful influencer on perceptual body image. In a situation identified as having great negative impact on body-discrepancy; a skinny mirror has a

bigger chance to decrease its negative outcomes, compared to situations with lower negative impacts. Therefore, it would be interesting to conduct similar experiments with a skinny mirror but in situations not known as having as great negative influences on body image. For example, trying on outerwear in a fitting room does not involve as high exposure of the body and has presumably not as negative influence on body image, which might make it a less responsive situation to the manipulation of a skinny mirror.

Our culture is characterized by Fattism according to Solomon and Rabolt (2003) and Swami et al. (2010) mean that thinness is the most important attribute of the ideal female body. Perhaps this is the reason why body dissatisfaction is mostly measured as the perceived actual body size and the perceived ideal body size; body-discrepancy (Gardner & Brown, 2010), and not by other types of body image perceptions such as body shape. Even though this study followed this, almost standardized measurement, it would be interesting to include additional measurements in future research. This could increase our understanding about female body image, body dissatisfaction, and their building blocks. This knowledge can hopefully help us improve female wellbeing and their consumer experiences in the future.

As this study was conducted as a field experiment participants were unaware of the manipulation of a skinny mirror. Consumer attitudes towards utilization of skinny mirrors in fitting rooms are therefore unknown. Nevertheless, this is an highly important topic for future research in order to give recommendations to companies about whether or not to implement skinny mirrors in their fitting rooms and how such an implementation can be carried out successfully.

6 Conclusion

This study aimed at investigating a skinny mirrors influence on the female consumer's experience in terms of perceptual and attitudinal aspects of body image, and her resulted shopping behaviour, in connection to a fitting room experience. The result showed that a skinny mirror significantly influences both perceptual and attitudinal body image, and had a tendency to influence conversion ratios positively.

Utilizing manipulative tools in fitting rooms to increase consumer experiences is commonly purposed, but surprisingly little research has been published within this area. Therefore, despite discussions about and interest in skinny mirrors, this study is the first of its kind, as no previous study has studied a skinny mirrors influence on females in a shopping situation. The interest in skinny mirrors is a result of our culture idealizing thin female bodies (Swami et al., 2010). As a woman's body image is influenced by how close it corresponds to today's unreachable ideal (Solomon et al., 2013), and as a fitting room results in her evaluating her body even more critically, most women trying out clothes have a negative experience. Therefore, a skinny mirror making the female consumer appear closer to the ideal, results in her evaluating both herself and the garments more positively. Following this logic, this field experiment showed that women who had been exposed to a skinny mirror experienced lower body-discrepancy, felt more comfortable with their bodies, had a more positive attitude to their bodies, and had a tendency to buy more.

The fitting room constitutes the most important space of consumption (Baumstark and Park, 2010), why it is crucial to improve consumers' fitting room experiences to increase sales and customer satisfaction. However, utilizing skinny mirrors is a moral question as it manipulates the customer. A middle way is therefore to be transparent about using skinny mirrors, or give the consumers the choice to use skinny mirrors or normal mirrors in the fitting room. Future research about consumer attitudes towards skinny mirrors in fitting rooms is therefore needed in order to utilize them in a favourable manner for both companies and consumers.

References

Articles & Books

- Avalos, L., Tylka, T.L. & Wood-Barcalow, N. (2005) The Body Appreciation Scale: Development and psychometric evaluation. *Body Image*. [Online] 2 (3), 285–297. Available from: doi:10.1016/j.bodyim.2005.06.002 [Accessed: 7 July 2014].
- Baumstarck, A. & Park, N.-K. (2010) The Effects of Dressing Room Lighting on Consumers' Perceptions of Self and Environment. *Journal of Interior Design*. [Online] 35 (2), 37–49. Available from: doi:10.1111/j.1939-1668.2009.01037.x [Accessed: 19 August 2014].
- Bonafini, B.A. & Pozzilli, P. (2011) Body weight and beauty: the changing face of the ideal female body weight. *Obesity Reviews*. [Online] 12 (1), 62–65. Available from: doi:10.1111/j.1467-789X.2010.00754.x [Accessed: 15 June 2014].
- Bryman, A. (2012) *Social Research Methods*. Oxford University Press.
- Brown, T.A., Cash, T.F. & Mikulka, P.J. (1990) Attitudinal Body-Image Assessment: Factor Analysis of the Body-Self Relations Questionnaire. *Journal of Personality Assessment*. 55 (1/2), 135.
- Burns, R.B. & Burns, R.A. (2008) *Business Research Methods and Statistics Using SPSS*. Los Angeles ; London, SAGE Publications Ltd.
- Cash, T. F. (2000). *The multidimensional body-self relations questionnaire*. MBSRQ Users' Manual. 3rd rev. Available from the author at:www.body-images.com
- Cash, T.F. & Pruzinsky, T. (2004) *Body Image: A Handbook of Theory, Research, and Clinical Practice*. Guilford Press.

- Collis, J. & Hussey, R. (2009) *Business Research: A Practical Guide for Undergraduate and Postgraduate Students*. 3rd edition. Hampshire, UK ; New York, NY, Palgrave Macmillan.
- Colls, R. (2004) 'Looking alright, feeling alright': emotions, sizing and the geographies of women's experiences of clothing consumption. *Social & Cultural Geography*. [Online] 5 (4), 583–596. Available from: doi:10.1080/1464936042000317712 [Accessed: 15 June 2014].
- Craik, J. (2009) *Fashion*. Oxford ; New York, BERG.
- Cunningham, L.S., Reich, J.J. & Fichner-Rathus, L. (2013) *Culture and Values: A Survey of the Humanities*. 8 edition. Boston, MA, Cengage Learning.
- Entwistle, J. (2000) *The Fashioned Body: Fashion, Dress and Modern Social Theory*. 1 edition. Cambridge : Malden, MA, Polity.
- Ewen, S. (1988) *All consuming images: the politics of style in contemporary culture*. Basic Books.
- Ferrucci, L., Studenski, S.A., Alley, D.E., Barbagallo, M., et al. (2010) Obesity in Aging and Art. *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences*. [Online] 65A (1), 53–56. Available from: doi:10.1093/gerona/glp166 [Accessed: 15 June 2014].
- Fredrickson, B.L. & Roberts, T.-A. (1997) Objectification Theory: Toward Understanding Women's Lived Experiences and Mental Health Risks. *Psychology of Women Quarterly*. [Online] 21 (2), 173–206. Available from: doi:10.1111/j.1471-6402.1997.tb00108.x [Accessed: 15 June 2014].
- Fredrickson, B.L., Roberts, T.A., Noll, S.M., Quinn, D.M., et al. (1998) That swimsuit becomes you: sex differences in self-objectification, restrained eating, and math performance. *Journal of personality and social psychology*. 75 (1), 269–284.

- Frith, K.T., Cheng, H. & Shaw, P. (2004) Race and Beauty: A Comparison of Asian and Western Models in Women's Magazine Advertisements. *Sex Roles*. [Online] 50 (1-2), 53–61. Available from: doi:10.1023/B:SERS.0000011072.84489.e2 [Accessed: 15 June 2014].
- Frith, K., Shaw, P. & Cheng, H. (2005) The Construction of Beauty: A Cross-Cultural Analysis of Women's Magazine Advertising. *Journal of Communication*. [Online] 55 (1), 56–70. Available from: doi:10.1111/j.1460-2466.2005.tb02658.x [Accessed: 15 June 2014].
- Gardner, R.M. & Brown, D.L. (2010) Body image assessment: A review of figural drawing scales. *Personality and Individual Differences*. [Online] 48 (2), 107–111. Available from: doi:10.1016/j.paid.2009.08.017 [Accessed: 7 July 2014].
- Jung, J., Lennon, S.J. & Rudd, N.A. (2001) Self-Schema or Self-Discrepancy? Which Best Explains Body Image? *Clothing and Textiles Research Journal*. [Online] 19 (4), 171–184. Available from: doi:10.1177/0887302X0101900403 [Accessed: 15 June 2014].
- Kaiser, S.B. (1997) *The social psychology of clothing: symbolic appearances in context*. New York, Fairchild Publications.
- Kim, H. & Damhorst, M.L. (2010) The Relationship of Body-Related Self-Discrepancy to Body Dissatisfaction, Apparel Involvement, Concerns With Fit and Size of Garments, and Purchase Intentions in Online Apparel Shopping. *Clothing and Textiles Research Journal*. [Online] 28 (4), 239–254. Available from: doi:10.1177/0887302X10379266 [Accessed: 15 June 2014].
- Myers, D.G. (2009) *Social Psychology, 10th Edition*. 10th edition. New York, NY, McGraw-Hill.

- Pagano, R.R. (2004) *Understanding statistics in the behavioral sciences*. Australia; Belmont, CA, Wadsworth/Thomson Learning.
- Solomon, M.R. & Rabolt, N. (2003) *Consumer Behavior: In Fashion*. 1 edition. Upper Saddle River, N.J, Prentice Hall.
- Solomon, M., Bamossy, G., Askegaard, S. & Hogg, M.K. (2013) *Consumer Behaviour: A European Perspective*. 5 edition. New York, Pearson Education Limited.
- Swami, V., Salem, N., Furnham, A. & Tovée, M.J. (2008) Initial examination of the validity and reliability of the female photographic figure rating scale for body image assessment. *Personality and Individual Differences*. [Online] 44 (8), 1752–1761. Available from: doi:10.1016/j.paid.2008.02.002 [Accessed: 7 July 2014].
- Swami, V., Frederick, D.A., Aavik, T., Alcalay, L., et al. (2010) The Attractive Female Body Weight and Female Body Dissatisfaction in 26 Countries Across 10 World Regions: Results of the International Body Project I. *Personality and Social Psychology Bulletin*. [Online] 36 (3), 309–325. Available from: doi:10.1177/0146167209359702 [Accessed: 15 June 2014].
- Tiggemann, M. & Andrew, R. (2012) Clothes Make a Difference: The Role of Self-Objectification. *Sex Roles*. [Online] 66 (9-10), 646–654. Available from: doi:10.1007/s11199-011-0085-3 [Accessed: 15 June 2014].
- Tiggemann, M. & Lacey, C. (2009) Shopping for clothes: Body satisfaction, appearance investment, and functions of clothing among female shoppers. *Body image*. [Online] 6 (4), 285–291. Available from: doi:10.1016/j.bodyim.2009.07.002.
- Ussher, J.M. (1989) *The Psychology of the Female Body*. Routledge, Chapman & Hall, Incorporated.

Witcombe, C.L.C.E. (2013) *Venus of Willendorf*. [Online]. Available from:
<https://itunes.apple.com/us/book/venus-of-willendorf/id630248700?mt=11> [Accessed:
15 June 2014].

Newspapers

Cheever, S. (1996) A Stick Figure: Twiggy. *The New York Times*. [Online] 24 November.
Available from: <http://www.nytimes.com/1996/11/24/magazine/a-stick-figure-twiggy.html> [Accessed: 15 June 2014].

Rubinstein S & Caballero B (2000) IS miss america an undernourished role model?
JAMA. 283 (12), 1569–1569.

Daily Mail (2012) *What if Botticelli had Photoshop? Artist re-imagines ten classic images of goddess of love Venus with the 'size zero' treatment*. [Online]. 8 February 2012.
Mail Online. Available from: <http://www.dailymail.co.uk/news/article-2098355/What-Botticelli-Photoshop-Artist-imagines-classic-images-goddess-love-Venus-size-zero-treatment.html> [Accessed: 8 August 2014].

Electronic sources

Behance (n.d.) *The Modern Day Venus*. [Online]. Behance. Available from:
<https://www.behance.net/gallery/15862307/The-Modern-Day-Venus> [Accessed: 8
August 2014].

Details [Online]. Available from: <http://www.details.se/> [Accessed: 16 July 2014].

Statistiska Centralbyrån (Swedish Statistics) (n.d.) *Medelvärdet av längd vikt och BMI 1988 89-2008 2011*. [Online]. Available from: http://www.scb.se/sv_/Hitta-statistik/sok/?query=längd,+vikt+och+BMI&tab=scb [Accessed: 21 August 2014].

The Skinny Mirror - Look and feel slimmer - eco-friendly. [Online]. The Skinny Mirror.
Available from: <http://theskinnymirrors.com/> [Accessed: 20 August 2014].

World Health Organization, *Global Database on Body Mass index: BMI Classification*

[Online]. Available from: http://apps.who.int/bmi/index.jsp?introPage=intro_3.html

[Accessed: 10 June 2014].

Documentaries

Jhally, S., Kilbourne, J., Rabinovitz, D. & Media Education Foundation (2010) *Killing us softly 4 advertising's image of women*.

Appendix 1: The skinny mirror



Illustration of the skinny mirror (The Skinny Mirrors, 2014)