Model Body Size in Cosmetics Advertisement. 
Impact on Self-Esteem, Attitudes and Purchase Intention.

SUPERVISOR
Prof. ALBERTO MARCATI

CO-SUPERVISOR
Prof. MAXIMO IBARRA

CANDIDATE
GIOVANNI PUPO
682011

ACADEMIC YEAR 2017/2018
To all the dreamers…
Don’t be afraid of becoming who you are.
# Table of Contents

ABSTRACT ................................................................................................................................. 3

CHAPTER 1: INTRODUCTION ............................................................................................... 4
1.1 Desire of Perfection ............................................................................................................. 4
  1.1.1 Positive effect of thin – thin sells? .............................................................................. 6
  1.1.2 Dove experience ........................................................................................................... 7
  1.1.3 Ultra-thin women decrease Self-Esteem ...................................................................... 8
  1.1.4 Social Comparison and Internalization ...................................................................... 9
1.2 Research problem ............................................................................................................. 11

CHAPTER 2: REVIEW OF THE LITERATURE ....................................................................... 13
2.1 Overview of Literature ..................................................................................................... 13
  2.1.1 Effect on Self-Esteem ................................................................................................ 14
  2.1.2 Effect on Body Satisfaction ....................................................................................... 15
  2.1.3 Effect on Model Attractiveness ................................................................................. 16
  2.1.4 Effect on Advertisement Effectiveness ..................................................................... 16
2.2 Conclusions ..................................................................................................................... 18
2.3 Direction of the thesis ....................................................................................................... 19

CHAPTER 3: RESEARCH METHODOLOGY ....................................................................... 25
3.1 Research Objectives ......................................................................................................... 25
3.2 Hypotheses ....................................................................................................................... 25
3.3 Variables ............................................................................................................................ 28
  3.3.1 Self-Esteem ............................................................................................................... 29
  3.3.2 Body Satisfaction ....................................................................................................... 29
  3.3.3 Body Mass Index ........................................................................................................ 30
  3.3.4 Attitude toward the Advertiser .................................................................................. 31
  3.3.5 Attitude toward the Product ...................................................................................... 32
  3.3.6 Attitude toward the Advertisement ......................................................................... 33
  3.3.7 Purchase Intention ..................................................................................................... 34
3.4 Experiment Design .......................................................................................................... 35
3.5 Appendix .......................................................................................................................... 39
  3.5.1 Questionnaires ......................................................................................................... 39
  3.5.2 List of Tables ............................................................................................................. 43
Abstract

This thesis confirms that "curvy" models can be used in marketing, at least in a cosmetic advertisement scenario, making women feel comfortable and accepted in each shape and size without renouncing to the maximization of sales. The media should increase the diversity of body forms portrayed to reduce women's obsession with thinness and consequently to decrease collateral effects such as eating disorders and depression. Being inclusive and understanding that beauty comes in all forms could improve the brand image in front of the costumer's eyes giving a more realistic look, closer to the costumer's fears. This research analyses how women are currently represented in the marketing industry and how these representations affect their buying behaviour. Specifically, the focus is on how different model's body size influence those females looking at them. Firstly, this thesis explores which effects produced showing different Instagram posts displaying an underweight and overweight model, promoting a body cream, on viewer's self-esteem and body satisfaction. Secondly, it examines the effects on the attitudes toward the product, advertisement, and the spokesperson to understand their impact on the consumer's purchase intention. A total of randomly-selected 379 female participants took part in this study; a quantitative analysis of the sample was conducted through the use of a web-based questionnaire which helped to understand and measure the variables cited above. The analysis revealed that even if the model body size did not have a significant effect on participant's self-esteem and body satisfaction it did have a substantial impact on their purchase behaviour and attitudes. In other words, the advertisement starring an overweight model sold more than the one starring the underweight, demonstrating that being skinny doesn't sell more and, on the contrary, non-thin models can be used more effectively in marketing. Reasons behind this effects as women's Competition, fear of Perfection or need for Reality are discussed.
Chapter 1: Introduction

1.1 Desire of Perfection

One of the most innate aspirations that almost every woman has is the desire to have a perfect body. For centuries, since the beginning of time, men and women have always done their best to reach the canons of beauty of their epoch. From Ancient Egypt to Classical Greece; from Rome to the Middle Ages; from the Renaissance to the Belle Époque until today, the common dilemma is always the same: the perfect body. Today we are in the era where the old saying "you cannot judge a book by its cover" is no longer valid anymore. Indeed, the cover has become more important than the book itself.

When advertising shows women and men, they represent models with perfect bodies with photoshopped features setting the human body to an unattainable standard. In particular, this is true for brands of cosmetics, luxury items and especially underwear clothing. These brands have always accustomed us to the presence of statuary and perfect bodies in their advertisements. Wherefore stereotypes are not easily overcome, and the idea of sensual or sexy always conveys a tonic shape, smooth skin, and sculptural figure.

In the current society, there is a tendency to follow thin ideal standards which can lead to, especially in countries where thinness is idealized, eating disorders (such as anorexia and bulimia) in women, and in particular to younger girls. It also happens because the media has played and still plays a crucial role in the adaptation of society to aesthetic taste. The press and, explicitly, social media have promoted and encouraged the concept of surreal beauty. It is also clear from the social media's feature (above all Instagram) to modify the images uploaded to make the users look prettier and perfect, alienating them from reality.

The increase of these problems is related to media and cultural forces which lead to more pressure on females that have the desire of conforming to models imposed by abstract perfection. In this direction, this desire to fit in pushes to modify their lifestyle including many behavioral changes. These behavioral changes, in many cases, have a negative impact on women's health.

Those who suffer from eating disorders base their self-esteem exclusively on the weight and shape of their aesthetic aspect, neglecting their intellectual and personal...
qualities. For many women, because the priority becomes social approval with the objective of pleasing others and themselves, they focus on reaching the ideal standards. The need of keeping common consent makes consumers lose individuality, which in turn, makes them more vulnerable. This vulnerability affects, above all, the personality and convictions of the most sensitive females.

Social opinions mix with personal ones and they sometimes switch each other; consequently, there is no more distinction between individual and society, which drives to the homologation of them.

The values of a person change and its maximum objective become to get as close as possible to the personages seen on magazine covers; as a result, thinness becomes synonymous with beauty and personal value.

Today, being able to reach the weight considered ideal is believed to be an example of willpower and determination, in fact, a woman who succeeds feels beautiful and robust, while having a few extra pounds is instead equal to loosing.

These events cause and explain the evolution of cultural standards which are internalized and used as a measure of comparison on the physical and social adequacy and have a strong influence on their body image, causing many disorders.

In this way, there is an internal conflict with one's own body caused by the need for social approval and the comparison with the standards imposed by society which makes them feel "I am not perfect enough."

It, therefore, happens when people identify with the reference models, generating a conflict between how they see themselves and what they aspire to, generating frustration, inferiority and a sense of inadequacy.

This sense of insufficiency, on the one hand, helps brands to sell a “solution” but on the other hand, damages consumer self-confidence and increasing their fragility.

To achieve the "unattainable" objective, these women alter the alimentary behavior that follows a distorted logic increasingly rigid, restrictive and eventually compulsive; they control what they eat and if they fail the guilt intervenes, feeding, even more, the vicious circle, which unknowingly affects their psychophysical health.
1.1.1 Positive effect of thin – thin sells?

In such manner, why are skinny models commonly used in advertising?

The positive effect of utilizing good-looking models to better influence opinions, attitudes and product's evaluation is well documented by literature (Baker and Churchill, 1977).

Baker and Churchill have been the first researchers in 1977 to prove that attractive models produced higher advertisement ratings, increasing credibility and acceptance of the advertised message.

Consequently, sex and physical attractiveness affect the aesthetic evaluation of the product generating more attraction towards it.

Despite the results, Baker and Churchill questioned whether beauty sells in all fields. For example, the less attractive model worked more for a brand of coffee than for the more attractive rival.

After them, Benoy Joseph in 1982 proved that consumers preferred physically pleasant communicators than ordinary or unappealing ones; an explanation could be that the beauty-standards are perceived more efficiently by the consumer having a positive impact on the product to which they associate.

Moreover, the person's favorable opinion toward a model could be transferred to the product or influence the message broadcasted (Joseph, 1982). A beautiful model that is idolized and appreciated for its aesthetic characteristics makes the good, sponsored by, look equally worthy with the result of a more appealing product. Consequently, gorgeous models which should have the quality of being pleasing or appealing to the senses can influence consumer’s perception. The use of attractive models leads to increased advertising effectiveness; in other words, it seems that thinness sells.

Thinness is used to sell in every market, from food to fashion, mostly because people assume, as stated before, that the model's attractiveness transfers to the product's characteristics. However, is it always true that "skinny sells"? The positive impact of the use of thin models in ads has received inconsistent support (Yu, 2014).

Past researchers showed that a skinny model size in the fashion industry has no main effect on the advertising effectiveness. As a consequence, the definition "thin sells" is a simplification of how women respond to advertising (Roberts, 2015).
1.1.2 Dove experience

Past researchers like Roberts (2015) stated that thinness does not always sell more; however, we continue to see it exposed and utilized everywhere. When we read a magazine or walk on the street, we rarely stumble on billboards that portray plus size women. In an industry like cosmetics where it seems very difficult to move away from the standards, something seems to happen. An example is Dove, which is a personal care brand owned by Unilever.

Unilever is one of the world’s largest health and beauty brands and spends millions of dollars each year on advertising. In 2004 it commissioned preliminary research to explore the global understanding of women, beauty and well-being – and the relationship between them.

The research conducted by a firm called StrategyOne in partnership with two academics, Dr. Nancy Etcoff from the Harvard University and Dr. Susie Orbach from the London School of Economics, to survey women across the globe in order to find out what beauty indicates to females in these days and the reasons behind it.

The research aimed to determine if it was possible to communicate and think about female beauty in authentic, satisfying and empowering ways (StrategyOne, 2004).

The study based on the growing problem concerning the representation of women's appearance in popular culture that was contributing to a concept of beauty that wasn't reliable or obtainable.

The study’s results showed that “Only 2% of women around the world choose beautiful to describe their looks, fewer even than choose “attractive” (9%), “feminine” (8%), “good-looking” (7%) or “cute” (7%)” (StrategyOne, 2004).

Moreover "four in ten women around the world strongly agree that they do not feel comfortable describing themselves as beautiful" (StrategyOne, 2004).

The report claimed that women think that the media depicts only a limited part of what makes a woman beautiful. These results showed that, in general, women’s body satisfaction and self-esteem are low.

Lower satisfaction means less fulfillment of wishes, expectations, or needs as well as self-esteem which means less confidence in personal worth or abilities.

On the whole, the problem is that the body size of the model affects many factors, including self-esteem and body state and trait anxiety. Indeed, past research has shown
that media illustrates women in an unrealistic way which can affect negatively female consumers (Dittmar, 2009).

Following these trends, many advertisers are changing directions and realizing that this idea of women in advertising is not always adequate.

In 2004, Unilever using its brand Dove, launched a Campaign called “Dove Campaign for Real Beauty” in which it was endorsing women with an average body size instead of the usual ultra-thin model.

The campaign was the result of the StrategyOne’s study which showed, as said before, that women recognize the beauty ideal described by the media as distant and unreal.

Although against the trend, the new advertisement campaign had great success, receiving a positive response from consumers. It aimed to increase women’s self-esteem and lower body anxiety while making women feel comfortable with their selves. Following this huge success, the question is clear: what is the ideal size for a model? Is the skinny model size standard right for the present population of females?

### 1.1.3 Ultra-thin women decrease Self-Esteem

The media has an unfavorable influence on how women perceive their selves, and more specifically, how teenagers are comparing themselves to the "perfection ideal" feel about their body (Thompson and Heinberg, 1999).

Studies demonstrate that displaying ultra-thin models in advertising leads to body dissatisfaction a substantial proportion of women (Halliwell and Dittmar, 2004).

Furthermore, the adverse effect on self-esteem and body satisfaction raises health problems such as eating disorders (anorexia or bulimia) or psychological disorders like depression (Grabe, Ward and Hyde, 2008).

Many social forces have boosted the thin ideal in the last twenty years and most of all by mass media which now are substituted by social networks.

Groesz et al. in 2002 showed that body image was more negative after exposure to thin model body size than after average size, plus size models or simple objects. It means that thinness scares more than fatness or that women fear more the comparison with the skinny. In another study, exposure to skinny models produced lower self-esteem and body satisfaction in contrast with exposure to robust women. (Wilcox et al., 2000)

For new brands, non-thin models are more attractive than thin models in contrast to well-established brands, where thin and non-thin are equally effective in advertising.
(Xuemei Bian and Kai-Yu Wang, 2015). It may mean that well-established brands have created preconceptions in their image through advertisements, where women expect to see what they have already seen previously.

Halliwell and Dittmar in 2004 proved that attractive, average-size models do not hurt body-esteem and can be used effectively in advertising to protect women's self-esteem. More specifically, they proved that it is the thinness of the model, instead of the attractiveness, that drives to increased body dissatisfaction.

Consequently, average size model could be used as a relief on body anxiety problems because previous researchers (Dittmar and Howard, 2004; Halliwell and Dittmar, 2004) proved that women had less anxiety after exposure to non-thin models than thin models or no models.

Average body size and ultra-thin models were identified as equally attractive, and they were also perceived as being equally effective in advertising. Consequently, they can be right endorsers while functioning as protection of women's self-esteem (Dittmar and Howard, 2004; Halliwell and Dittmar, 2004). As mentioned above, non-traditional models can make women feel comfortable and more accepted in a society where perfection reigns.

Many years later, another study confirmed that average-size female models could promote positive body image and appeal to consumers (Phillippa C. Diedrichs and Christina Lee, 2011). Increasing body size diversity in media imagery is an essential step towards promoting positive body image (Halliwell and Dittmar, 2004).

Previous researchers also documented that ultra-thin doesn't sell more than non-thin (Roberts, 2015); both sizes have no difference in advertisement effectiveness (Xuemei Bian and Kai-Yu Wang, 2015). Therefore, thinness sells, but not always more or however not without side effects on consumers. These collateral effects can be managed and eliminated by using different canons of beauty.

1.1.4 Social Comparison and Internalization

Being overloaded by many media messages, make us exposed to continuous evaluation of our person.

Since we are always subject to a conscious comparison between the self and the other, it generates an identification to a particular model and provokes a rejection of our
image. The decrease in self-esteem and body satisfaction is the result of two distinct processes: Social comparison and Internalization.

Social comparison theory, which was first proposed by Leon Festinger in 1954, states that people compare themselves to others to figure out their own opinions and abilities. The human being leads to comparison and competition from its birth. People can compare with others for different reasons: self-examination (for example, how good are in science) to learn from others (for example, how much other people studied to pass the science test?), and to feel better (for example, I am not useful in science, but at least I am better than most of the class).

Comparison, in many cases, leads to personal improvement because usually, nobody wants to feel inferior to others. However, if the sense of inferiority sometimes pushes individuals to grow, it could also force them to insecurities.

In the current context, these comparisons come out when a woman looks at an idealized image in advertising. Considering that just a few women can accomplish the unrealistic beauty standards depicted in most advertisements, social comparisons increase body dissatisfaction (Groesz et al., 2002; Grabe, Ward and Hyde, 2008).

Internalization is defined by Thompson and Stice (2001) as “the extent to which an individual cognitively ‘buys into’ socially defined ideals of attractiveness and engages in behaviors designed to produce an approximation of these ideals.”

Indeed, previous studies confirmed that Internalization is the measure in which people are conscious and incorporate appearance ideals.

Not all people internalize in the same way, with the same intensity and perception; some people are more affected by identifying themselves with others, and some are less concerned going their way without looking at the rest.

The people who internalize too much can be more influenced - and consequently become victims – by negative media's messages.

In any case, internalization can drive to conformity in a society where people incorporate social behaviors to fit in a specific group. There is a distinction between merely being aware of cultural standards of female beauty and internalizing them as a personal belief system. Awareness is the precursor of internalization but merely being aware of something does not necessarily means incorporating external models.

Many found out that awareness and Internalization of these cultural and social norms seem to predict and explain body satisfaction partially.
Although many individuals express awareness of these societal norms, not all internalize them; as a consequence, Internalization predicts body dissatisfaction more accurately than awareness.

Concluding seems that Internalization and Social Comparison moderates the effects of media exposure (Halliwell and Dittmar, 2004). Young women that internalize more and aim to a beauty perfection which is ultra-thin and unattainable usually suffer from body dissatisfaction, low self-esteem, and eating disorders (Groesz et al., 2002). Many studies have used Social Comparison and Internalization as moderators of the effect that thin models have on body satisfaction.

In the current study, because these two factors are not in the framework, they will be considered as limitations.

1.2 Research problem

The current research investigates the impact of body size on self-esteem, body anxiety and advertising effectiveness in a large sample of females.

In the social media era, the current advertisement is conveyed by Instagram because it represents the obsession of appearance, where the image is the main content; people fight for approval through "likes", and those who receive few likes suffer the shame of defeat and social exclusion.

Could the body size of the model influence consumer’s attitudes more than we think? The usage of two extreme body sizes as underweight and overweight has the purpose of better understanding the effects of size.

Finally, it is possible to test the pre-cultural beauty concept in Italy. Indeed, the underweight model utilized in this research, according to the Online Superdrug Doctor's study, should be the standard of the Italian beauty.

It means that if this model provokes anxiety in Italian women's mind, it should not be disclosed as a model of beauty. Do beauty ideals make people anxious? Does perfection create anxiety in women? Would it be better not to make consumers feel competitive with the models? If so, would the solution be to use a more common woman as a cure for this problem? Should be implemented a strategy to make all women feel beautiful?
Until now, the strategy of destroying consumer’s self-esteem to push them to buy the product to rebuild it has not always worked. Many brands, while showing amazing bodies, give the hope of becoming like the models after using their products. Does promoting a product that doesn’t keep the promise of beauty make the product lose its power?

Since products do not make miracles, they should make attainable promises.

Concluding, contributions of the present study to the previous literature include:

- The usage of remarkably different body size (underweight and overweight) coming from another study (https://onlinedoctor.superdrug.com/perceptions-of-perfection).

Indeed, previous studies have compared ultra-thin and average body size models; no one before has tested the effect of very opposite shapes;

- The further inclusion and analysis of attitudes toward the model, advertisement, and product.

All of the previous researchers mainly tested the influence on self-esteem and body satisfaction, but no one analyzed the effect on product and advertisement more in-depth;

- The usage of Instagram as the media chosen to study the above relationships.

Previous researchers conveyed the message utilizing traditional channels as magazine covers.
Chapter 2: Review of the Literature

This chapter gives an overview of the literature that precedes this study and has been utilized to analyze the current state of research finding the main contributions on this topic. The aim is to understand better where the present research positions and what additions it gives compared to previous studies uncovering which topics have already been studied and which not yet.

After a general overview, the chapter ends up with a conclusion that defines and summarizes the literature panorama. This summary leads to the direction of the thesis which develops in Chapter 3 with the formulation of the hypotheses.

2.1 Overview of Literature

The goal of this literature analysis is to explain and interpret current academic studies around the effect of model body size in advertising.

A general investigation of modern literature has examined earlier writings involving its effectiveness in marketing, its effects on women's self-esteem and attitudes. The question arises spontaneously: can non-thin be as successful as thin models in the current media climate? Moreover, can non-thin defend women from adverse effects caused by exposure to ultra-thin models?

In today’s world, size is everything. Media, and in particular, social media, has had a profound effect on women’s perception of ideal bodies; above all Instagram stands out due to the photo-sharing nature of the app. Magazines and social networks mainly employ underweight models, even though seventy-five percent of women would rather see advertisements portraying models of all sizes. (Dove, 2004).

Literature has proven that media images of women have become unrealistic, which can hurt female consumers (Dittmar, 2009).

In marketing, it is rare to see a ‘normal sized' model, as ads continuously show women well under their weight category (Dove, 2004).

Much of the existing literature has looked at the model size to help understand self-esteem and solve body issues (Dittmar and Howard, 2004; Halliwell et al., 2005; Groesz et al., 2002) contributing to change and to understand this trend.
To better comprehend and explain this topic, better analysis and overview of previous literature is needed (for a detailed analysis check the Appendix where, in chronological order, the significant contributions to this research are illustrated and explained).

The literature evolution could be summed up in four main pillars: *Self-Esteem, Body Satisfaction, Model Attractiveness and Advertising Effectiveness.*

Previous researchers mainly studied the effect of model body size plus giving significant contributions and argumentations to these four areas.

### 2.1.1 Effect on Self-Esteem

Following Martin and Gentry (1997), self-esteem may be affected when women compare their physical attractiveness with that of advertising models.

Female pre-adolescents rated their attractiveness based on the attractiveness of models they have previously viewed. They also rated themselves as less attractive after seeing good-looking bodies in advertisements.

Wilcox et al. (2000) confirmed that the exposure to skinny women made participants feel lower self-confidence and satisfaction with themselves comparing to women exposed to non-skinny models.

Considering the age of people exhibited to the advertisement, Stice et al. (2001) explained that even though the effect has been weak on adults, exposure to thin-ideal images has a lasting negative impact on youth in regards to eating habits, body image, and self-esteem.

Young females are more impressionable and subject to stronger influence by the exposure to thin body size.

Age apart, the other variable that could influence this effect is the working status, in fact, women in professional environments with less focus on appearance ideals experienced increased body-esteem when presented to average-sized models, whereas women in appearance-focused professions did not report such relief (Dittmar and Howard, 2004).

Lastly, Dens, De Pelsmacker and Janssens (2009) also confirmed that scantily clad models in advertisements hurt consumer's self-esteem.
Concluding, the adverse effect of the exposure to thin models on self-esteem is well documented by previous literature. In this sense, non-thin models could function as a relief to this phenomenon and help women to feel better.

### 2.1.2 Effect on Body Satisfaction

Posovac et al. in 1988 proved that global exposure to ideal thin media images did raise women’s level of body dissatisfaction. Successively, many others confirmed that showing ultra-thin media models lead to increased body image concerns amongst women which participated in the experiment. (Groesz, Levine, Murnen 2002). Body image in women was significantly more negative after viewing thin media images than pictures of average size models, plus size models, and inanimate objects. It implied that mass media promulgates a thin ideal that elicits body dissatisfaction. (Groesz, Levine, Murnen 2002).

It seems that it is not even the size of the model to cause such adverse effect, but it is the thinness. Indeed, thinner models made consumers feel more negative about their body image. Consequently, exposure to skinny models resulted in greater body-focused anxiety among who internalizes the thin ideal, even more, than exposure to average-size models or no models (Halliwell and Dittmar, 2004). Again, as said in the introduction, Internalization could work as a moderator of the effect.

Also, Grabe, Ward, and Hyde (2008) confirmed that exposure to mass media illustrating the thin-ideal body might link to body image disturbance in women. As a consequence, media images of women are defined unrealistically beautiful which leads to an adverse effect on the body image and behaviour of female consumers (Dittmar, 2009).

Curvy models could be a relief of this adverse effect; in fact, females had a more positive body image when viewing average-size models opposed to thinner models or no models at all. Researchers suggested that average-size shapes could promote positive body image and appeal to consumers (Phillippa C. Diedrichs and Christina Lee 2011). Yu (2014) noted that participants presented with slender model images showed greater body dissatisfaction and lower advertising effectiveness than those participants exposed to non-idealized model images.

In conclusion, many previous researchers underlined the adverse effect of ultra-thin body size on women body satisfaction.
On the other hand, seems that non-thin model could be used to fix and cure the previous cited adverse effects.

2.1.3 Effect on Model Attractiveness

The results from Peck and Locken’s research in 2004 proved that females reacted more positively to larger-sized models but only in a non-traditional context (a plus-size magazine). In fact, curvy models in ads were rated as more attractive when an instructional frame activated nontraditional beliefs (a new women's magazine that features larger-sized models) than when it activated traditional beliefs (a regular women's magazine) (Peck and Loken, 2004).

These results suggest that the context is crucial to understand this phenomenon. A specific context could modify people's attitudes and actions. In an increasingly connected and heterogeneous society, the context already tells us what we should expect from any situation. Prejudices also form expectations and through the individual-context interaction, as consequence choices and opinions can change dependently from it.

Model trustworthiness was higher after exposure to non-idealized models compared to the idealized ones in cosmetic advertisement circumstances (Antioco et al., 2012). In another research, participants evaluated average size models as being more attractive than size zero for new brands, whereas for well-established brands associated with size zero models, participants rated both average size and size zero ones as being equally attractive (Xuemei Bian and Kai-Yu Wang 2015).

In conclusion, non-thin figures could be evaluated more positively in a non-traditional context where consumers do not expect the exposure of a perfect body. Moreover, this body type can be useful in the cosmetic advertisement were women tend to trust spokespersons with a more "realistic" body size: an accurate figure that gives the impression of being closer to the consumer's everyday problems and feelings.

2.1.4 Effect on Advertisement Effectiveness

For the first time, Dittmar and Howard (2004) found out that publicity showing thin, average-size and no models was perceived as equally valid; concluding that the size of the model did not affect the effectiveness of the advertisement. As a consequence, the two conditions were similarly effective, regardless of the model's waist. It implies
that promoters can successfully use more significant, but attractive spokespersons and perhaps avoid increasing body-focused concerns in a considerable proportion of females (Halliwell and Dittmar, 2004). It is a significant result because for the first time both developed the idea that thinness does not always sell more, giving hope for the usage of spokespersons with unconventional bodies.

One year later, Halliwell, Dittmar, Howe (2005) further explored this topic, confirming that advertisements featuring ultra-thin and average-size models were equally valid. The results advocate that average-size, attractive figures could be used effectively in advertising, which may help to relieve body image concerns amongst these women.

Ten years later, Yu (2014), in the same direction but with different outcomes, suggested that increased body dissatisfaction after exposure to thin-idealized images not significantly or negatively influence advertising effectiveness.

Even if Yu (2014) did not find a significant correlation between body dissatisfaction and advertising effectiveness, it proved that thinness, in some cases, can reduce the marketing power. Indeed, those exposed to the thin ideal had higher body dissatisfaction and less advertising effectiveness.

On the other hand, considering the fashion market, Roberts (2015) found out that model size had no main influence on its effectiveness; as a result, the dimension of the body is not always crucial for more sales. Even if in this case, thin-ideal internalization moderates the model size – advertising effectiveness relationship.

Indeed, women who internalized the thin ideal were more open to thin models compared to average-size models. For low internalizers, model size has no significant impact on advertising effectiveness.

These findings suggested that the current "thin sells" fixation is a gross oversimplification of how women react to advertising.

In conclusion, previous literature has proved that thin and average-size size body are equally efficient; seems that size does not always matter about selling more.
2.2 Conclusions

This research wants to show that exposure to thin models can decrease body satisfaction and self-esteem. This effect could be emphasized by the cosmetic industry where a woman's self-expression is at her best. There are two primary motivations behind this lowering effect.

First of all, women tend to compare themselves with models they see in advertisements (*Social Comparison Theory*).

Secondly, they internalize external stimuli such as the thin ideal and put in place a behavior directed to produce an evaluation of these ideas (*Internalization*).

So, thin-ideal Internalization and Social Comparison moderates the model size – self-esteem relationship lowering or raising its influence.

Pre-adolescents are more sensitive to these effects; indeed, they are the most damaged subjects. These findings could suggest that lower size promoters are not always useful in every market sector.

On the other hand, exposure to non-thin models could act as a relief and consequently increase women's perception of themselves.

This research, also, wants to demonstrate that a “curvy” body can sell even more than a thin body. Previous literature suggests that model size does not lower the effectiveness of the advertisement. Although there is not always a clear correlation between body satisfaction and advertising effectiveness, studies show that more substantial, but attractive models are equally persuasive in marketing.

Furthermore, in a cosmetic advertisement scenario where consumers perceived larger women as more trustworthy, “thin-sells” could be an oversimplification of how women react to the advertisements.


2.3 Direction of the thesis

Previous studies focused more on revealing the adverse effects of thin-ideal exposure on body satisfaction and self-esteem but focused less on the impact through the product, model and purchase intention regarding the advertisement. Consequently, this research tries to fill up these gaps: further investigates what is the effect of showing overweight and underweight body size models on purchase intention and attitudes.

This thesis aims to further explore and analyze the theory under which ultra-thin models can damage women’s self-esteem, and increase physical appearance state and trait anxiety. On the other hand, it also aims to explore new fields such as attitudes toward the product, model, and advertisement including their intention to buy. In fact, if on the one hand, the effect on self-esteem and body satisfaction is evident on the other side, the impact on all the components of advertising is not very clear yet. Needs to be proved that further using non-thin model can be a benefit for the viewers, and plus-sized models could sell as thin models in marketing. Consequently, attitudes toward the model, advertisement and product were tested in different exposure conditions to control the results.

Finally, purchase intention will be analyzed to prove that using non-thin models does not decrease the intention of buying the product. Because Xuemei Bian et al. (2015) found out that larger size models were considered more attractive for new brands than not for well-established ones, the product has no brand explicated to don't influence the attitudes toward the questions. Showing non-thin image could work in markets where it is helpful to protect women's self-concept, such as the clothing and cosmetic industries without renouncing to an increase in sales.
2.4 Appendix

2.4.1 Chronological Literature Review

In chronological order, the most significant contributions which influenced and helped this research are illustrated and explained.

**Posovac et al. (1988)** "Exposure to media images of female attractiveness and concern with body weight among young women." Sex Roles, Vol. 38, Nos. 3/4. The main findings were that global exposure to ideal thin media images did raise women’s level of body dissatisfaction; nonetheless, for those who already had higher self-esteem, it did not influence/lower their current status.

**Martin and Gentry (1997)** "Stuck in the model trap: The effects of beautiful models in ads on female pre-adolescents and adolescents." Journal of Advertising, Vol. 26, No. 2 (Summer), pp. 19-34. The conclusion was that girls' perceptions and self-esteem might be affected when they compare their physical attractiveness with that of advertising models. Female pre-adolescents rated their attractiveness based on the attractiveness of models they have been exposed to before. They also rated themselves as less attractive after seeing good-looking models in advertisements.

**Wilcox et al. (2000)** “The Impact of Media Images of Super-Slender Women on Women's Self-Esteem: Identification, Social Comparison, and Self-Perception." Journal of Research in Personality 34, 278–286. They found out that the presentation of a skinny model made participants less self-confident and not satisfied with themselves contrasting with participants who saw a non-skinny model.

They observed that even though the effect has been weak on adults, exposure to thin-ideal images had a lasting negative impact on youth in regards to eating habits, body image, and self-esteem.

Young females are more impressionable and subject to stronger influence by the exposure to thin body size.


The main findings have concluded that showing ultra-thin media models lead to increased body image concerns amongst women which participated in the experiment. Body image in women was significantly more negative after viewing thin media images than pictures of average size models, plus size models, and inanimate objects. It implied that mass media promulgates a thin ideal that elicits body dissatisfaction.


Findings suggested that women in professional environments with less focus on appearance ideals experienced increased body self-esteem when exposed to average-sized models, whereas women in appearance-focused professions did not report such relief. Adverts showing thin, average-size and no models were perceived as equally valid.


The size of the model did not affect the effectiveness of the advertisement, but thinner models made female consumers feel more negative about their body image. In other words, exposure to thin models resulted in greater body-focused anxiety.
among women who internalize the thin ideal than exposure to average-size models or no models.

Advertisements were equally valid, regardless of the model's size. It implies that advertisers can successfully use more extensive, but attractive models and perhaps avoid increasing body-focused anxiety in a significant proportion of women.


Results suggested that females reacted more positively to larger-sized models but only in a non-traditional context (a plus-size magazine).

In fact, larger-sized female models in ads were rated as more attractive when an instructional frame activated non-traditional beliefs (a new women's magazine that features larger-sized models) than when it activated traditional beliefs (a regular women's magazine).


Findings suggested that exposure to ultra-thin models doesn’t lead to body anxiety; exposure to average sized models led to relief and lower reported levels of body anxiety. More importantly, advertisements featuring ultra-thin and average-size models were equally valid.

The results advocate that average-size, attractive models could be used effectively in advertising, which may help to relieve body image concerns amongst these women.


Results indicated that women had lower self-esteem with underweight images but did not like seeing the overweight pictures.

They showed that exposure to mass media illustrating the thin-ideal body might be the cause of body image disturbance in women.

Dens, De Pelsmacker and Janssens (2009) “Effects of scarcely dressed models in advertising on body esteem for Belgian men and women.”


Findings suggested that scantily clad models in advertisements hurt consumer's self-esteem.


Media images of women are unrealistic which leads to an adverse effect on the body image and behavior of female consumers.


The paper concluded that female consumers have a more positive body image when viewing average-size models in advertising, as opposed to thinner models or no models at all. They suggested that average-size female models could promote positive body image and appeal to consumers.


The paper's results suggested that self-esteem was higher after exposure to non-idealized models compared to idealized models.

Model trustworthiness was higher after exposure to non-idealized models compared to the idealized ones in a cosmetic advertisement context.

Participants exposed to thin-idealized model images showed greater body dissatisfaction and lower advertising effectiveness than those participants exposed to non-idealized model images.

However, increased body dissatisfaction after exposure to thin-idealized model images did not significantly or negatively influence advertising effectiveness.


In his study, model size had no main effect on advertising effectiveness in fashion advertisements. Moreover, thin-ideal internalization moderates the model size – advertising effectiveness relationship. Women who internalized the thin ideal were more receptive to thin models compared to average-size models.

For low internalizers, model size has no significant impact on advertising effectiveness. These conclusions suggested that the current “thin sells” fixation is a gross oversimplification of how women respond to advertising.


Participants evaluated average size models as being more attractive than size zero models for new brands, whereas for well-established brands associated with size zero models, participants rated both average size models and size zero ones as being equally attractive.
Chapter 3: Research Methodology

This chapter details both research objectives and variables examined to build the hypotheses. It also outlines the procedures employed to design the survey and therefore determines the outputs that will be applied to form the conclusions.

In the end, methods for statistical analysis and data processing will be discussed.

3.1 Research Objectives

This study sets out to determine whether the size of a model has an influence on body satisfaction and self-esteem for the spectators of an advertisement.

Successively, the objective is to find out if there is a correlation among BMI, self-esteem and body satisfaction.

Finally, the aim is to understand if the advertisement starring underweight or overweight bodies could influence women's attitudes and if these connect to purchase intention.

3.2 Hypotheses

There are six central hypotheses in this study, and each one will be discussed singularly. The first aim, as stated before, is to find a relationship between body size and self-esteem. “In general, exposure to non-idealized models leads to higher self-esteem compared to exposure to idealized models”(Antiocco et al., 2012).

Following Antiocco et al. (2012), the first hypothesis was formulated: self-esteem will be higher in the overweight condition than the underweight one.

H1. Exposure to a non-thin Body Size image increases Self-Esteem.
H. Exposure to a thin Body Size image decrease or not change Self-Esteem.

Secondly, the relationship between model body size and body satisfaction is further analyzed. As stated before, the physical appearance state and trait anxiety scale (PASTAS) was used to measure body satisfaction; lower physical appearance anxiety means higher body satisfaction.
Following Yu (2014) "Participants exposed to thin-idealized model images showed greater body dissatisfaction and lower advertising effectiveness than those participants exposed to non-idealized model images".

Halliwell and Dittmar (2004) found out that “Exposure to thin models resulted in greater body-focused anxiety among women who internalize the thin ideal than exposure to average-size models or no models”.

As a consequence of the previous researchers, the second hypothesis was formulated: body satisfaction will be higher in the overweight condition than the underweight one.

**H2. Exposure to a non-thin Body Size image decreases Physical Appearance State and Trait Anxiety, raising Body Satisfaction.**

**H3. Exposure to a thin Body Size image increases Physical Appearance State and Trait Anxiety, reducing or not changing Body Satisfaction.**

Thirdly, it is carried out a better exploration of the relationship between differences in body size and the model's evaluation. After the exposure to an ad for cosmetic products, model trustworthiness was significantly higher in the case of exposure to a non-idealized model compared to an idealized representation (Antiocco 2012).

In fact, following Antiocco (2012) expectations were that participants would evaluate the overweight image higher than the other one.

Considering that the product has no brand, participants could believe that the body cream is from a new brand; the purpose was to moderate the brand power.

Moreover, the study of Xuemei Bian, Kai-Yu Wang (2015) where "Participants evaluated average size models as being more attractive than zero-size models for new brands" enriches the following hypothesis.

As a result of previous literature, the third hypothesis was formulated: in the overweight condition, the attitude toward the model would be higher than the underweight one.

**H3. Exposure to a non-thin Body Size image increases model evaluation, raising Attitude to the Advertiser.**

**H3. Exposure to a thin Body Size image decreases model evaluation, lowering Attitude to the Advertiser.**
No previous research studied the impact of body size on attitudes toward the product. Studies have been conducted regarding advertising effectiveness but not explicitly considering the product features.

In this case, both utilitarian (useful, helpful, functional, necessary, practical) and hedonic (pleasurable, delightful, gratifying) characteristics were estimated. The goal was to demonstrate that the product would be preferred more when recommended by an overweight model.

**H4.** Exposure to a non-thin Body Size image increases the Product evaluation, raising the Attitude to the Product.

**H.** Exposure to a thin Body Size image decreases the Product evaluation, reducing the Attitude to the Product.

The relationship between model body size and attitude toward the advertisement is further analyzed. Following Halliwell and Dittmar in 2004 "Advertisements were equally effective, regardless of the model's size […] It implies that advertisers can successfully use larger, but attractive, models".

As a consequence of the previous research, the fifth hypothesis was formulated: participants exposed to the non-thin model would have a better reaction to the cosmetic advertisement.

Following Roberts (2015), the same effect for the two model size conditions was expected. Even if Yu (2014) found out that "however, inflated body dissatisfaction after exposure to thin-idealized model images did not significantly or negatively influence advertising effectiveness."

**H5.** Exposure to a non-thin Body Size image increases advertisement evaluation, rising Attitude to the Advertisement.

**H.** Exposure to a thin Body Size image lowers advertisement evaluation, decreasing Attitude to the Advertisement.

Following Halliwell and Dittmar (2004), it is assumed that the advertisement evaluation, as well as the purchase intention, would be higher in the non-thin condition compared to the thin one.

At least, respecting Roberts (2015) findings, purchase intention should not change between the two exposure conditions.

**H6.** Exposure to a non-thin Body Size image increases Purchase Intentions
**3.3 Variables**

The independent variable in this experiment is the model's shape, and accurately, their *Body Size* which was measured toward the BMI (Body Mass Index).

The two models, used in this study, have very different body size measure: the thin model has a Body Mass Index of 18 which is considered *underweight*, and the non-thin model has a Body Mass Index of 25.5 which is deemed to be *overweight*.

Two distant mostly opposite BMIs were chosen due to the objective of understanding what extreme sizes cause in women's mind.

What consequence has the exposure to *underweight* and *overweight* bodies on women's attitudes and purchase intention? Are they equally effective or something changes?

The advertised product is a body cream because it is more connected to insecurity and women’s desire to look better.

It can be considered as self-improvement good because women use it to look better and improve their physical appearance.

There were three exposure conditions: *underweight*, *overweight* and a *control* advertisement featuring just the product itself. Each participant surveys only one of the three states. Seven main dependent variables were analyzed: Self-Esteem, Body Satisfaction, BMI, Attitude toward the Model, Attitude toward the Advertisement, Attitude toward the Product and Purchase Intention.

Finally, a demographic section was completed to have a description of the sample which includes height and weight collected to calculate the BMI.
TABLE 3.2: Exposure Conditions and Variables

3.3.1 Self-Esteem

The Self-Esteem was measured by using the Rosenberg Self-Esteem Scale (Rosenberg, 1965) which is the most common measurement scale used by many researchers. It is calculated by adopting a 10-item scale that measures global self-worth by tracking both positive and negative feelings about the self.

The scale is usually utilized uni-dimensionally. All items were completed using a 4-point Likert scale format ranging from strongly agree to disagree strongly.

The above-cited variable has been measured using questions like "On the whole, I am satisfied with myself". Because its importance, this scale has been used by many researchers before, including Clay et al. (2005). "Internal consistency of Rosenberg's scale is reported to range from .77 to .88" (Clay et al., 2005).

3.3.2 Body Satisfaction

The Body Satisfaction was measured by using the Physical Appearance State and Trait Anxiety Scale (PASTAS: Reed, Thompson, Brannick, Sacco, 1991).

Some statements are listed to measure how participants feel anxious, tense, or nervous about their body after seeing the model.

Participants were asked to agree or disagree on a 4-point Likert scale format ranging from not at all to exceptionally so. There were questions such as, "Right now, I feel anxious, tense, or nervous about: the extent to which I look overweight".

---


This scale was used before by Dittmar in 2004 even if « " it was assessed with a shortened eight-item form of the state version of the PASTAS (Reed et al., 1991), measuring the immediate anxiety associated with various weight-related body sites" » (Dittmar et al., 2004). The first reliability « "range from .82 to .92 (Reed et al., 1991), Halliwell et al. (2004) report .94 for the shortened scale, including only weight-related body sites” » (Dittmar et al., 2004).

3.3.3 Body Mass Index

Following the World Health Organization definition: “Body Mass Index (BMI) is a simple index of weight-for-height that is commonly used to classify underweight, overweight and obesity in adults. It is defined as the weight in kilograms divided by the square of the height in meters (kg/m2). For example, an adult who is 70kg heavy and 1.75m tall will have a BMI of 22.9”.

The BMI chart is a globally recognized standard measurement involving the calculation of a person’s body size and it is the best and most utilized measurement to compare different body sizes. The scale ranges from underweight to obese.

<table>
<thead>
<tr>
<th>Classification</th>
<th>BMI (kg/m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Principal cut-off</td>
</tr>
<tr>
<td></td>
<td>points</td>
</tr>
<tr>
<td>Underweight</td>
<td>&lt;18.50</td>
</tr>
<tr>
<td>Severe thinness</td>
<td>&lt;16.00</td>
</tr>
<tr>
<td>Moderate thinness</td>
<td>16.00 - 16.99</td>
</tr>
<tr>
<td>Mild thinness</td>
<td>17.00 - 18.49</td>
</tr>
<tr>
<td>Normal range</td>
<td>18.50 - 24.99</td>
</tr>
<tr>
<td>Overweight</td>
<td>≥25.00</td>
</tr>
<tr>
<td>Pre-obese</td>
<td>25.00 - 29.99</td>
</tr>
<tr>
<td>Obese</td>
<td>≥30.00</td>
</tr>
<tr>
<td>Obese class I</td>
<td>30.00 - 34.99</td>
</tr>
<tr>
<td>Obese class II</td>
<td>35.00 - 39.99</td>
</tr>
<tr>
<td>Obese class III</td>
<td>≥40.00</td>
</tr>
</tbody>
</table>

(Source: WHO)

TABLE 3.3: BMI Standards

Following the Table, it is easy to distinguish between underweight (BMI<18.5) and overweight (BMI>25).

In this thesis, the usage of BMI has two scopes: to give a parameter to tell the difference between the two models' bodies and to find out if there is a correlation among BMI, Self-Esteem and Body Satisfaction.
So if from one side the purpose was to understand the immediate psychological impact of exposure to different types of BMI, on the other side the aim was to find a connection among these variables.

Does the BMI of a person influence its Body Satisfaction or does the Self-Esteem affect it?

<table>
<thead>
<tr>
<th>CORRELATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMI</td>
</tr>
</tbody>
</table>

TABLE 3.4: Correlations

### 3.3.4 Attitude toward the Advertiser

The Attitude toward the Model was measured by a scale that initially was composed by 5-point bi-polar adjectives.

The 5-point bi-polar adjectives have been transformed in just unipolar items to make the scale congruent with the other items utilized for the other variables in the study. It has the function of measuring the consumer's feeling and thinking about the advertiser. The adjectives analyzed were believability, attractiveness, competence, persuasiveness, and likeability.

Martin, Lee, and Yang developed the scale in 2004 which referred to the scale as Attitude toward the Model. It was measured in only two exposure conditions (underweight and overweight) except the control case because there is just the product with no endorser.

Considering the reliability, an alpha of .80 reported for the scale (Martin, Lee, and Yang, 2004); however, they did not report the analysis of the scale's validity, but they did indicate that the items loaded together in a factor analysis.

---

*Gordon C. Bruner II, A Compilation of Multi-Item Measures for Consumer Behaviour and Advertising Research, Volume 5.*
3.3.5 Attitude toward the Product

The Attitude toward the Product was measured considering both utilitarian and hedonic needs. In fact, both are part of the shopping decision process, however utilitarian motives are more task-oriented while hedonic seems to be a plus. The measurement scales utilized have the function of evaluating the consumer's feeling and thinking about the advertiser.

Firstly, the customer tries to satisfy its practical needs and subsequently thinks about its hedonic needs. In fact, following Dhar et al. (2000) "Hedonic goods provide more experiential consumption, fun, pleasure, and excitement (designer clothes, sports cars, luxury watches...), whereas utilitarian goods are primarily instrumental and functional (microwaves, minivans, personal computers)".

Generally speaking, utilitarian and hedonic aspects of a product are the drivers of the customer buying behavior. For example, when a customer is buying a cosmetic product may have utilitarian needs (obtain a drier skin) and hedonic needs (become more attractive). In other words, those two values drive customer satisfaction and behaviors. Therefore, they must be taken into consideration both because they can be an area of development and influence for marketing in the promotion of a product.

The perception and order of importance change according to the individual who in each choice mixes rationality with irrationality. These two aspects of the product’s characteristics have been measured utilizing both utilitarian and hedonic scales.

The hedonic aspects, estimated by utilizing 5-point unipolar items, included adjectives as pleasurable, delightful, gratifying. These items have been used by past researchers to assess a person's attitude about a product focusing on how enjoyable it is perceived relative to alternatives that the consumer is used to. One of these past researchers, mentioned above, has been conducted by Shiv and Nowlis (2004) which analyzed a brand of chocolate bars. Although sharing an item or two with some previous measures, this complete set seems to be created by Shiv and Nowlis in 2004. Considering its reliability, Shiv and Nowlis reported an alpha of .96 for the scale, but no evidence of its validity.

---

*Gordon C. Bruner II, A Compilation of Multi-Item Measures for Consumer Behaviour and Advertising Research, Volume 5.*
The **utilitarian** aspects, measured by utilizing 5-point unipolar items, were intended to find out the portion of a person's attitude resulting from perceptions of the functional performance of the product/brand or its expected performance.

The adjectives utilized were useful, helpful, functional, necessary, practical. Initially, the scale was composed of semantic differentials items, and successively, it has been transformed into unipolar items to use the same measuring method for both utilitarian and hedonic scales.

The scale was initially constructed by Voss, Spangenberg, and Grohmann in 2003 along with a companion scale (the hedonic dimension of attitude) as a result of theoretical and psychometric concerns with previous measures (Batra and Ahtola, 1991). The article reports on a set of six studies that in total provide considerable support for the uni-dimensionality, internal consistency, and validity of the scales. An alpha of .95 was reported for the scale's reliability by Voss, Spangenberg, and Grohmann in 2003.

### 3.3.6 Attitude toward the Advertisement

The Attitude toward the Advertisement was measured by utilizing a 5-point Likert scale with a set of five items instead of six ("I found it exaggerated" omitted).

The utilized scale has the function to measure a person's reaction to an exposition of the advertisement; participants to measure this variable, are asked to rate statements like "I got a positive impression".

Initially, it was a six-item, 7-point Likert-type scale, modified in this study to make it congruent with the other scales. Its origin is from De Pelsmacker, Geuens and Anckaert that in 2002 cited previous work by two of themselves as the source of the scale (De Pelsmacker, Decock, and Geuens, 1998). The scale original language was Dutch but successively translated into English for publication purposes (De Pelsmacker, 2004). The items composing this scale were part of a broader set used to capture various aspects of one’s Attitude toward an Advertisement. Mostly the set was analyzing the likeability toward the advertisement. They did indicate that an exploratory factor analysis was conducted of this scale’s six items as well as several other items, all having something to do with Attitude toward the Advertisement. The

---

5 *Gordon C. Bruner II, A Compilation of Multi-Item Measures for Consumer Behaviour and Advertising Research, Volume 5.*
authors noted that, as in their previous study (De Pelsmacker, Decock, and Geuens, 1998), a three-factor solution was found. The six items composing this scale loaded together and called "likeability" while the other two dimensions (with two items apiece) described as "clarity" and "informativeness." After all, considering the reliability, an alpha of .9098 was reported for the scale (De Pelsmacker, Geuens and Anckaert, 2002); however, the validity of the scale was not explicitly discussed by them.

### 3.3.7 Purchase Intention

The Purchase Intention was measured utilizing a scale composed of five-point Likert-type statements. It has the function of assessing the likelihood of a person buying a product displayed in an advertisement if the person was already considering the same kind of good. Purchase intention measured with questions like "If I were looking for this type of product my likelihood of purchasing the product in the ad would be high". Lepkowska-White, Brashear provided no information about the scale's origin, and Weinberger in 2003, however, it is explicit that critical phrases in these items are part of more traditional purchase intention scales. Thus, it may be best to view this scale as a modification of a previous scale. The authors developed an English version of the scale for use including an American sample and a Polish version of the scale for use in Poland. The Polish version was developed after the English version utilizing a double-back translation method. Considering the reliability, Lepkowska-White, Brashear, and Weinberger reported alphas of .90 (English) and .89 (Polish). Nevertheless, little evidence was provided in support of the scale's validity though Lepkowska-White, Brashear, and Weinberger in 2003 said that profile analysis indicated there was no response bias (Mullen, 1995).

---

*Gordon C. Bruner II, A Compilation of Multi-Item Measures for Consumer Behavior and Advertising Research, Volume 5.*
3.4 Experiment Design

As explained before, the underweight and overweight models’ pictures utilized in the questionnaire come from a previous study (https://onlinedoctor.superdrug.com/perceptions-of-perfection).

The research has been conducted by a British pharmacy, the Superdrug Online Doctors, which carried out a thorough study of what for many countries of the world means to have a "perfect body" or at least what is their perception of perfection.

In fact, the project, titled, "Perception of Perfection" does not show perfect bodies per se, but the diversity of what is the perception of the ideal body in each country.

Superdrug Online Doctor's research showed the changes in the appearance of the same woman in eighteen different images, in which the body is modified by many designers from different countries using Photoshop.

It is challenging to define "perfect body": several factors must be examined, such as the historical moment, the ethnicity, the culture, the geographical position, the fashion industry. Indeed, Superdrug Online Doctor's has commissioned eighteen designers from as many different countries of the world, the task of developing and modifying a starting image according to specific standards and that was typical of their country of origin. The designers were composed of fourteen women and four men, so the result mainly involved what women think. Consequently, the study produced an output of eighteen different bodies. The countries with the thinnest bodies were Italy and China: Italy is the second in the ideal of extreme thinness (49kg). Women's bodies from countries such as Colombia, Peru, Mexico, Spain have resumed the traditional beauty standards: large breasts, narrow waist, and wide hips.

According to the study, differently, from the European standards, the Italian model is distant to the "Mediterranean" body which usually described a healthy but soft woman in its forms.
Following the World Health Organization, underweight people have BMI<18.5 and overweight people have BMI>25.

The Italian body has a BMI of 18 which can be considered underweight, while the Spanish body has a BMI of 25.5 which can be regarded as overweight.

Italy and Spain, as countries, are very close to each other, both in distance and culture, but at the same time, the beauty standards are vastly different.

As said before, two very different bodies have been chosen to study the impact of opposite body types on participants better and to understand the effect of size as the dependent variable.

On the other hand, the "Italian perfect body" has been tested on Italian women to understand if it makes them feel better or worse. Is the beauty ideal making women feel comfortable with their body or not?

This vast difference between the two bodies helps to better understand the different reactions. Furthermore, the previous study opposed ultra thin body to average size model, and no one before has studied the effect of two bodies so distant and extreme in size.

As stated before, a body cream has been chosen, which is illustrated by Figure 3.2, because it is more connected to insecurity and desire to look better in women (self-improvement product); moreover, the product is non-branded to control brand's influence. A body cream assumes that the user has to touch itself and consequently has to be confident with its body. Confidence in one's body is intimately connected to
body-esteem. Moreover, all women use this type of product regardless their provenience or status with just one goal: improve their appearance.

FIGURE 3.2: Body Cream

Instagram is a free mobile application and a photographic social network. It consents to take pictures and to share them instantly even on other social media. Since its debut, in October 2010, it has experienced enormous popularity, and its rise does not seem to want to stop. Today it has over 600 million users and has become one of the most critical advertising platforms, mainly thanks to its photographic and visual appearance. An Instagram frame is used to give a contemporary look and to contextualize it with the most used social media advertising channel right now.

Additionally, as it is possible to see from figure 3.3, to obtain a clear distinction between thinness and attractiveness, three exposure conditions are presented in this study: underweight, overweight and no model (control condition).

The no models advertisement gave a guideline measure of how these women felt about their body in the absence of appearance, body and visual related pictures.

With the purpose of holding all the variables and factors other than body size, three types of images were used where the two bodies that come by the Superdrug Online Doctors study has been stretched utilizing a computer-based visual software similarly to Halliwell and Dittmar in 2004.

In the questionnaire’s introduction was explained to the participants that the survey goal was to understand more the cosmetic industry with the purpose of directing their attention to the product and not to the model body.

It was also asked to answer honestly and seriously because all questions were anonymously collected. The questionnaire was created on Qualtrics (a web-based statistical program that facilitates data collection and analysis) and sent randomly to all age women through Facebook and Instagram.
Away from the advertising exposure conditions, the survey questionnaires were identical. The sample is randomly composed of all age women with no precise target.

Summing up, participants of the online questionnaire were exposed to a body-cream advertisement. Each participant was presented randomly to one of the three exposure conditions: thin model, non-thin model and no model. They were first introduced to one of the three randomly assigned advertisement treatments then asked questions from the self-esteem and body trait-state anxiety scales. Successively, they completed scales measuring attitudes toward the product, advertiser, advertisement and purchase intention (for a detailed description check the Appendix of this chapter where there is the complete and detailed questionnaire form). In conclusion, a demographic section has been presented to have a description of the sample.
### 3.5 Appendix

#### 3.5.1 Questionnaires

**Self-Esteem**

<table>
<thead>
<tr>
<th>A volte non mi reputo all'altezza.</th>
<th>fortemente d'accordo</th>
<th>d'accordo</th>
<th>in disaccordo</th>
<th>fortemente in disaccordo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sento che non ho molto di cui essere orgogliosa.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>A volte mi sento inutile.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Vorrei poter avere più rispetto per me stessa.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Tutto sommato, sono incline a sentire che sono un fallimento.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nel complesso, sono soddisfatta di me stessa.</th>
<th>fortemente in disaccordo</th>
<th>in disaccordo</th>
<th>d'accordo</th>
<th>fortemente d'accordo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sento di avere un elevato numero di buone qualità.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Sono in grado di fare le cose come la maggior parte delle altre persone.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Sento di essere una persona di valore, almeno su un piano di parità con gli altri.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Ho un atteggiamento positivo nei confronti di me stessa.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>
### Physical Appearance State and Trait Anxiety

<table>
<thead>
<tr>
<th>Physical Appearance</th>
<th>Afatto</th>
<th>Leggermente</th>
<th>Moderatamente</th>
<th>Tanto</th>
<th>Tantissimo</th>
</tr>
</thead>
<tbody>
<tr>
<td>La misura in cui sembro in sovrapeso</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
<tr>
<td>Le mie cosce</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
<tr>
<td>Le mie natiche</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
<tr>
<td>I miei fianchi</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
<tr>
<td>Il mio ventre</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
<tr>
<td>Le mie gambe</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
<tr>
<td>Il mio giravita</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
<tr>
<td>Il mio tono muscolare</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
<tr>
<td>Le mie orecchie</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
<tr>
<td>Le mie labbra</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
<tr>
<td>I miei polsi</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
<tr>
<td>Le mie mani</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
<tr>
<td>La mia fronte</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
<tr>
<td>Il mio collo</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
<tr>
<td>Il mio mento</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
<tr>
<td>I miei piedi</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
</tbody>
</table>

### Attitude toward the Advertiser

<table>
<thead>
<tr>
<th>Attribute</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credibile</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
<tr>
<td>Attraente</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
<tr>
<td>Competente</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
<tr>
<td>Persuasiva</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
<tr>
<td>Simpatica</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
</tbody>
</table>
**Attitude toward the Product**

<table>
<thead>
<tr>
<th>PRODUC T</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piacerevole</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Deliziosa</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Gratificante</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Efficace</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Utile</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Funzionale</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Necessario</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Pratica</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>

**Attitude toward the Advertisement**

<table>
<thead>
<tr>
<th>ADVERTI SEMENT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ho avuto un'impressione positiva</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Penso fascia al caso mio</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>L'ho trovato interessante</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>L'ho trovato credibile</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>L'ho trovato atraente</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>
**Purchase Intention**

<table>
<thead>
<tr>
<th>[ ]</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1= poco</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>5= molto</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Se stessi cercando questo tipo di prodotto, la mia probabilità di acquistare quello dell'annuncio sarebbe alta.

Se dovessi acquistare questo tipo di prodotto, la probabilità che lo considerassi l'acquisto del prodotto nell'annuncio sarebbe alta.

Se dovessi comprare questo tipo di prodotto, la mia volontà di acquistare il prodotto nell'annuncio sarebbe alta.

**Demographic**

**Quanti anni hai?**
- ○ <18
- ○ 18/25
- ○ 26/35
- ○ 36/45
- ○ >46

**Da dove provieni?**
- ○ Città (più di 100mila abitanti)
- ○ Cittadina (tra 10mila e 50mila abitanti)
- ○ Paese (meno di 10mila abitanti)

**Qual è la tua occupazione?**
- ○ Studentessa
- ○ Lavoratrice autonoma
- ○ Lavoratrice dipendente
- ○ Disoccupata

**Qual è il tuo stato civile?**
- ○ Sposata
- ○ Vedova
- ○ Divorziata
- ○ Nubile
3.5.2 List of Tables

TABLE 3.1: Hypotheses framework
TABLE 3.2: Exposure conditions and variables
TABLE 3.3: BMI Standards
TABLE 3.4: Correlations

3.5.3 List of Figures

FIGURE 3.1: Model’s Body Size
FIGURE 3.2: Body Cream
FIGURE 3.3: Exposure Conditions
Chapter 4: Results, Analysis and Discussion

This chapter describes the procedure utilized to obtain the statistical results that will be used to confirm or not the hypothesis. The sample description and the results for each of the six variables are illustrated in detail.

4.1 Procedure

The data collected for the three questionnaires were combined into a single data set to make a joint analysis.

Qualtrics automatically captured and tabulated the data, and consolidated it into a file that was exported in SPSS format; the files loaded into SPSS for statistical analysis purposes. Before running the ANOVA test, for each group of variables, the Cronbach's alpha and a Factor Analysis have been conducted.

The Cronbach’s alpha is utilized to measure the internal consistency, that is, how closely related a set of items are as a group; it is considered to be a measure of scale reliability.

The Cronbach's alpha has been used, before conducting the factorial analysis, to understand which item (for each group of variables) needed to be eliminated because not reliable. After optimizing Cronbach's alpha score, removing the items that were poorly correlated, a Principal Component Analysis (PCA) has been conducted to reduce many individual items into a fewer number of dimensions and to simplify data, such as lowering the number of variables.

Indeed, PCA is a dimension reduction tool used to diminish a large set of variables to a smaller one that still includes most of the information within the large set.

PCA has been utilized to group similar variables into dimensions to construct a latent variable for each element detected, using the items submitted for each one.

After reducing the data and detecting the factors which are crucial for the analysis, Analysis of Variance (ANOVA) was administered to determine if there were differences among the groups. Running statistical tests such as ANOVAs will confirm or refute the previous hypothesis. Where ANOVA was significant, a Post-Hoc test was conducted to obtain an additional exploration of the differences among means.
between thin and non-thin groups. However, in this chapter, to don't confuse the reader, it is illustrated just the ANOVA procedure used to test the hypotheses. For the complete and detailed procedure (*Cronbach's alpha and Factor Analysis*) check the Appendix of this Chapter.

### 4.2 Sample: Respondent profile

A total of 379 women participated in the study. The demographic section of the questionnaire, with the objective to have an overview of the population interviewed, collected data as *Age, Provenience, Employment Status, Marital Status, Education Level, Height, Weight,* and *BMI.*

Mostly of the respondents were Students 60% (n=226) specifically High School 52% (n=198) from 18 to 25 years old 58% (n=221), of course, Unmarried 79% (n=301) coming from Small Towns 41% (n=156).

Average Weight was 60.56 kg while Height was 1,64 cm with a BMI of 22.4.

In the figures below there is a description of the sample considered in this thesis.

As we can see from the figure 4.1, most of the participants were from 18 to 25 years old and another significant part from 26 to 35.

![Figure 4.1: Age](image)

**FIGURE 4.1: Age**
As figure 4.2 below illustrates, Provenience was equally distributed. In fact, in descending order, the origin is assigned as Small Town (41%), Town (30%) and City (29%).

FIGURE 4.2: Provenience

As showed by the figure 4.3 below where Employment Status is described, in descending order, most of the participants were Students (60%), Employed (24%), Self-Employed (8%) and Unemployed (8%).

FIGURE 4.3: Employment Status
As the figure 4.4 below illustrates, in descending order most of the participants were Unmarried (79%) while a small part Married (18%) and almost none were Divorced (2%) and Widow (1%).

FIGURE 4.4: Marital Status

As figure 4.5 below illustrates, in descending order most of the participants had High School diploma (52%), another significant part Graduated from university (23%) or Master (21%) while almost none had a Ph.D. (1%).

FIGURE 4.5: Education Level
As illustrated in figure 4.6 below, the distribution of Weight has a mean of 60.56, which means that the average participant was 60.56 kg heavy.

As the figure 4.7 below illustrates, the distribution of Height has a mean of 1.64, which means that the average participant was 1.64 m tall.
As it is possible to see from the figure 4.8 below, the distribution of BMI has a mean of 22.4, which means that the average participant had a BMI of 22.4 which is pretty reasonable considering the other factors.

![Distribution of BMI](image)

**FIGURE 4.8: Distribution of BMI**

### 4.3 Self-Esteem

ANOVA has been conducted to determine if Self-Esteem differed among the groups, with the aim of checking if there was a body size effect on the variable tested. We can see from the table 4.1 that Self-Esteem average score for Thin is the highest (.05) and for Product is the lowest (.05) while for Non-Thin is about zero. Now we have to check if these differences are statically significant or not.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>95% Confidence Interval for Mean</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non Thin</td>
<td>134</td>
<td>.0009646</td>
<td>.0855951</td>
<td>-.1702568</td>
<td>1.721659</td>
<td>-1.96490</td>
</tr>
<tr>
<td></td>
<td>Thin</td>
<td>125</td>
<td>.0532966</td>
<td>.0905298</td>
<td>-.1258628</td>
<td>.2324820</td>
<td>-2.71799</td>
</tr>
<tr>
<td></td>
<td>Product</td>
<td>120</td>
<td>.0565863</td>
<td>.0903997</td>
<td>-2.355869</td>
<td>.1224143</td>
<td>-3.26730</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>379</td>
<td>.0000000</td>
<td>.0513655</td>
<td>-.101000</td>
<td>.101000</td>
<td>-3.26730</td>
</tr>
</tbody>
</table>

**TABLE 4.1: Descriptive of Self-Esteem**
As table 4.2 illustrates, the differences between the means are not statistically significant (F(2;376)=.368). Considering that the p-value (.692) is higher than the significance level (.05), we do not have sufficient proofs to reject the null hypothesis that the population means are all equal; we accept the null hypothesis of equal mean scores for the three groups.

<table>
<thead>
<tr>
<th>ANOVA</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.(p-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>.739</td>
<td>2</td>
<td>.370</td>
<td>.368</td>
<td>.692</td>
</tr>
<tr>
<td>Within Groups</td>
<td>377,261</td>
<td>376</td>
<td>1,003</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>378,000</td>
<td>378</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TABLE 4.2: ANOVA of Self-Esteem

Therefore, it is possible to conclude that the exposure to the three different types of the image does not affect the average score of Self-Esteem.

Because the differences among the groups are not statistically significant, Self-Esteem did not differ among the groups; as a result, no significant effect of body size on Self-Esteem found. Consequently, H1 (Exposure to a non-thin Body Size image increases Self-Esteem) is not confirmed.

The mean plot, illustrated in figure 4.9, displays the mean and confidence interval for each group.

Concluding, Self-Esteem did not change in the different exposure condition; in this case, model's body size did not affect women's Self-Esteem.
FIGURE 4.9: Mean Plot of Self-Esteem

4.4 Physical Appearance and Trait Anxiety

ANOVA has been conducted to determine Physical Appearance and Trait Anxiety differed among the three exposure conditions, with the aim of checking if there was a body size effect on the variable tested.

As illustrated in table 4.3, Physical Appearance average score for Thin is the highest (.068) and for Non-Thin is the lowest (-.046) while for Product is in the middle (-.02). Now we have to check if these differences are statically significant or not.

TABLE 4.3: Descriptive of Physical Appearance and Trait Anxiety
As we can see from the table 4.4, the differences between the means are not statistically significant (F(2;376)=0.461). Considering that the p-value (.631) is higher than the significance level (.05), we do not have sufficient proofs to reject the null hypothesis that the population means are all equal; we accept the null hypothesis of equal mean scores for the three groups.

<table>
<thead>
<tr>
<th>ANOVA</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSICAL_APPEARANCE</td>
<td>Sum of Squares</td>
<td>df</td>
<td>Mean Square</td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Between Groups</td>
<td>0.925</td>
<td>2</td>
<td>0.463</td>
<td>0.461</td>
<td>.631</td>
</tr>
<tr>
<td>Within Groups</td>
<td>377,075</td>
<td>376</td>
<td>1.003</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>378,000</td>
<td>378</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TABLE 4.4: ANOVA of Physical Appearance and Trait Anxiety

Therefore, we conclude that the exposure to the three different types of the image does not affect the average scores of Physical Appearance. Since the differences among the groups are not statistically significant, Physical Appearance did not differ among three exposure conditions; as a result, no significant effect of body size on Physical Appearance was found. Consequently, H2 (Exposure to a non-thin body size image decreases Physical Appearance State and Trait Anxiety, increasing Body Satisfaction) is not confirmed.

The mean plot illustrated in figure 4.10 displays the mean and confidence interval for each group.

Concluding, Physical Appearance did not change in the different exposure condition which means that, in this case, the model body size did not influence women's Body Satisfaction.
4.5 Attitude toward the Advertiser

Because in the control condition (product-only) there is no advertiser, ANOVA has been conducted to determine if there are differences between the two exposure conditions, with the aim of checking if there was a body size effect on the variable tested. As table 4.5 illustrates, average Advertiser score for Non-Thin is the highest (.30) and for Thin is the lowest (-.32) while for Product is not available. Now we have to check if this difference is statically significant or not.

<table>
<thead>
<tr>
<th>ADVERTISER</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>95% Confidence Interval for Mean</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non Thin</td>
<td>134</td>
<td>0.00350</td>
<td>0.9941227</td>
<td>0.08590414</td>
<td>-0.1304768 - 0.304768</td>
<td>0.4703069</td>
<td>-1.33795</td>
</tr>
<tr>
<td>Thin</td>
<td>125</td>
<td>-0.32202</td>
<td>0.9044181</td>
<td>0.09689361</td>
<td>-0.4821312 - 0.1619069</td>
<td>-0.1619069</td>
<td>-1.33795</td>
</tr>
<tr>
<td>Total</td>
<td>259</td>
<td>0.00000</td>
<td>1.0000000</td>
<td>0.08213698</td>
<td>-0.1223602 - 0.1223602</td>
<td>-0.1223602</td>
<td>2.88831</td>
</tr>
</tbody>
</table>

TABLE 4.5: Descriptive of Attitude toward the Advertiser

As it is visible from table 4.6, the differences between some of the means are statistically significant (F(1;257)=27.64) consequently Attitude toward the Advertiser differs between the two groups.
Because the p-value (.00) is lower than the significance level (.05), we reject the null hypothesis and conclude that not all of the population means are equal.

![ANOVA Table]

**TABLE 4.6: ANOVA of Attitude toward the Advertiser**

Therefore, we conclude that the average score for Advertiser variable of those who saw the Non Thin image is statistically different (and higher) than the average score of those who saw the Thin image.

In this case, because of the absence of the advertiser in the control condition the product exposure is not measured, there are just two groups so the Post-Hoc test was not conducted.

The analysis found a significant effect of body size on Attitude toward the Advertiser. Consequently, *H3* (Exposure to a non-thin Body Size image raises model evaluation, increasing Attitude to the Advertiser) is confirmed.

From the mean plot illustrated in the figure 4.11 to display the mean and confidence interval for each group, results are precise; the overweight was preferred to the underweight Advertiser.

Model’s body size influenced the perception and judgment that women had on the Advertiser showed in the ad.
4.6 Attitude toward the Product

ANOVA has been conducted to determine if there were differences between the groups, with the aim of checking if there was a body size effect on the variable tested. From the table 4.7, it is possible to see that Product average score is the highest (.19) and for Thin is the lowest (-.34) while for Non-Thin is high but not the highest (.14). Now we have to check if these differences are statically significant or not.

**TABLE 4.7: Descriptive of Attitude toward the Product**

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>95% Confidence Interval for Mean</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non Thin</td>
<td>131</td>
<td>.1416837</td>
<td>1.01943456</td>
<td>.08906841</td>
<td>-0.345275</td>
<td>.317849</td>
<td>-1.30865</td>
</tr>
<tr>
<td>Thin</td>
<td>121</td>
<td>-.3405043</td>
<td>.91566175</td>
<td>.08323289</td>
<td>-0.5052996</td>
<td>-1.757090</td>
<td>-1.30865</td>
</tr>
<tr>
<td>Product</td>
<td>117</td>
<td>.1936082</td>
<td>.97938908</td>
<td>.09054465</td>
<td>.0141733</td>
<td>.3728431</td>
<td>-1.30865</td>
</tr>
<tr>
<td>Total</td>
<td>369</td>
<td>.0000000</td>
<td>1.00000000</td>
<td>.05205792</td>
<td>-1.023683</td>
<td>1.023683</td>
<td>-1.30865</td>
</tr>
</tbody>
</table>

FIGURE 4.11: Mean Plot of Attitude toward the Advertiser
As illustrated by the table 4.8, the differences between some of the means are statistically significant ($F(2;366)=11.097$) consequently Attitude toward the Product differs among the groups. Because the p-value (.00) is lower than the significance level (.05), we reject the null hypothesis of equal mean scores for the three groups and conclude that not all of the population means are equal.

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>21,040</td>
<td>2</td>
<td>10,520</td>
<td>11.097</td>
<td>0.00</td>
</tr>
<tr>
<td>Within Groups</td>
<td>346,960</td>
<td>366</td>
<td>.948</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>368,000</td>
<td>368</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TABLE 4.8: ANOVA of Attitude toward the Product**

Therefore, we conclude that the average score for Product variable is not the same in the three groups. Considering that the difference between the groups is statistically significant, Attitude toward the Product differ among the three exposure conditions. It means that there is a significant effect of body size on Attitude toward the Product. Now we are going to check for which couples there is a statistically significant difference through a Post-Hoc test.

**POST-HOC TEST (Table 4.9)**

The difference in the average score (equal to .48) of non-thin compared to Thin, is statistically significant at .01 (p-value<.01). Therefore, the average Product score for Non-Thin is significantly higher than Thin.

The difference in the average score (equal to -.05) of Non-Thin compared to the product, is not statistically significant (p-value>.05). Therefore, the average Product score for Non-Thin and product is not significantly different.

The difference in the average score (equal to -.53) of Thin compared to the Product, is statistically significant at .01 (p-value<.01). Therefore, the average Product score for Thin is significantly smaller than the product.

Said differently, the Post-Hoc analysis results state that the Product was rated more positively in the Non-Thin condition (difference=.48 p=.000) than Thin and the Product was rated more positively in the No-Model condition (difference=.53 p=.000).
than Thin. Consequently, $H4$ (Exposure to a non-thin Body Size image increases product evaluation, raising the Attitude to the Product) is confirmed.

TABLE 4.9: Post-Hoc of Attitude toward the Product

As we can see from Figure 4.12, the Product was preferred in the Non-Thin condition where the Model was overweight.

Accordingly, there is always a big difference between underweight and overweight exposure conditions; in fact, the product is rated more positively when endorsed by the overweight than not by the underweight.

Instead, there is a not significant difference between no model and overweight.

Moreover, Attitude toward the Product was even higher in the no model condition than in the presence of the underweight model, which means that the average consumer preferred the Product sponsored by no model than not in the presence of the underweight. Finally, model body size influenced the perception and judgment that women had on the Product showed in the ad.
4.7 Attitude toward the Advertisement

ANOVA has been conducted to determine if there are differences among the three exposure conditions, with the aim of checking if there was a body size effect on the variable tested.

Considering the table 4.10, it possible to see that Advertisement average score for Product is the highest (.29) and for Thin is the lowest (-.43) while for Non-Thin is high but not the highest (.14). Now we have to check if these differences are statically significant or not.

<table>
<thead>
<tr>
<th>Advertisement</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>95% Confidence Interval for Mean</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non Thin</td>
<td>134</td>
<td>.1470127</td>
<td>1.02422893</td>
<td>.08647990</td>
<td>-0.0279971 to 0.3220225</td>
<td>-1.10341</td>
<td>2.97704</td>
</tr>
<tr>
<td>Thin</td>
<td>125</td>
<td>.4372669</td>
<td>.81470914</td>
<td>.07286980</td>
<td>-0.5814966 to -0.2930371</td>
<td>-1.10341</td>
<td>2.14165</td>
</tr>
<tr>
<td>Product</td>
<td>120</td>
<td>.2913221</td>
<td>1.0080338</td>
<td>.09136043</td>
<td>-0.1104194 to 0.4722249</td>
<td>-1.10341</td>
<td>2.97704</td>
</tr>
<tr>
<td>Total</td>
<td>379</td>
<td>.000000</td>
<td>1.00000000</td>
<td>.05136655</td>
<td>-1.010000 to 1.010000</td>
<td>-1.10341</td>
<td>2.97704</td>
</tr>
</tbody>
</table>

TABLE 4.10: Descriptive of Attitude toward the Advertisement
As illustrated by the table 4.11 the differences between some of the means are statistically significant (F(2;376)=20.387); consequently, attitude toward the Advertisement differs among the groups.

Because the p-value (.00) is smaller than the significance level (.05), *we reject the null hypothesis of equal mean scores for the three groups and conclude that not all of the population means are equal.*

**TABLE 4.11: ANOVA of Attitude toward the Advertisement**

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>38,981</td>
<td>2</td>
<td>18,490</td>
<td>20.387</td>
<td>.00</td>
</tr>
<tr>
<td>Within Groups</td>
<td>341,019</td>
<td>376</td>
<td>.907</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>378,000</td>
<td>378</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Considering that the difference between the groups is statistically significant, attitude toward the Advertisement differ among the three exposure conditions.

Therefore, we conclude that the average score for Advertisement is not the same in the three groups; as a consequence, there is a significant effect of body size on Attitude toward the Advertisement.

Now we are going to check for which couples there is a statistically significant difference through a Post-Hoc test.

**POST-HOC TEST (Table 4.12)**

The difference in the average score (equal to .58) of Non-Thin compared to Thin, is statistically significant at 0.01 (p-value<.01). Therefore, the average Advertisement score for Non-Thin is significantly higher than Thin.

The difference in the average score (equal to -.14) of Non-Thin compared to the product, is not statistically significant (p-value>.05). Therefore, the average Advertisement score for Non-Thin and product is not significantly different.

The difference in the average score (equal to -.72) of Thin compared to the product, is statistically significant at 0.01 (p-value<.01).

Therefore, the average Advertisement score for Thin is significantly smaller than Product. In other words, the Post-Hoc analysis says that the Advertisement was rated more positively in the Non-Thin condition (difference=.58 p=.000) than Thin and the
Advertisement was rated more positively in the No-Model condition (difference=-.72 p=.000) than Thin. Consequently, $H5$ (Exposure to a non-thin Body Size image increases advertisement evaluation, increasing Attitude to the Advertisement) is confirmed.

![Multiple Comparisons Table](image)

TABLE 4.12: Post-Hoc of Attitude toward the Advertisement

Using the figure 4.13 to display the mean and confidence interval for each group, we can better understand the results. As we can see from the Plot, the Advertisement on Instagram was preferred in the Non-Thin condition where the model was overweight. Accordingly, there is always a big difference between underweight and overweight exposure conditions; the Advertisement is rated more positively in the presence of the overweight than not in the presence of the underweight.

Instead, there is a not significant difference between no model and overweight exposure conditions. Moreover, attitude toward the Advertisement was even higher in the no model condition than in the presence of the underweight, which means that the average consumer preferred the Advertisement when in the presence of no model than not of the underweight. Model body size influenced the perception and judgment that women had on the Advertisement.
FIGURE 4.13: Mean Plot of Attitude toward the Advertisement

4.8 Purchase Intention

ANOVA has been conducted to determine if there are differences among the three exposure conditions, with the aim of checking if there was a body size effect on the variable tested. Following the table 4.13, we can see that Purchase Intention average score for Product is the highest (.20) and for Thin is the lowest (-.35) while for Non-Thin is high but not the highest (.14). Now we have to check if these differences are statically significant or not.

<table>
<thead>
<tr>
<th>Descriptives</th>
</tr>
</thead>
<tbody>
<tr>
<td>PURCHASE INTENTION</td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Non Thin</td>
</tr>
<tr>
<td>Thin</td>
</tr>
<tr>
<td>Product</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

TABLE 4.13: Descriptive of Purchase Intention

As illustrated in table 4.14, the differences between some of the means are statistically significant (F(2;376)=12.092) which means that there is a significant effect of body size on Purchase Intention.
Because the p-value (.00) is less than the significance level (.05), we reject the null hypothesis of equal mean scores for the three groups and conclude that not all of the population means are equal.

TABLE 4.14: ANOVA of Purchase Intention

<table>
<thead>
<tr>
<th>PURCHASE_INTENTION</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>24,183</td>
<td>2</td>
<td>12,092</td>
<td>12.850</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>353,817</td>
<td>376</td>
<td>.941</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>378,000</td>
<td>376</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

POST-HOC TEST (Table 4.15)

The difference in the average score (equal to .50) of Non-Thin compared to Thin, is statistically significant at .01 (p-value<.01). Therefore, the average Purchase Intention score for Non-Thin is significantly higher than Thin.

The difference in the average score (equal to -.05) of Non-Thin compared to the Product, is not statistically significant (p-value>.05). Therefore, the average Purchase Intention score for Non-Thin and product is not significantly different.

The difference in the average score (equal to -.56) of Thin compared to the Product, is statistically significant at .01 (p-value<.01). Therefore, the average Purchase Intention score for Thin is significantly smaller than Product. Specifically, the Post-Hoc analysis found that Purchase Intention was higher in the Non-Thin condition (difference=.50 p=.000) than Thin and Purchase Intention was rated more positively in the No-Model condition (difference=-.56 p=.000) than thin.

Consequently, H6 (Exposure to a non-thin Body Size image increases Purchase Intention) is confirmed.
As observable from the Plot in figure 4.14, Purchase Intention was higher in the non-thin condition where the Model was overweight. Accordingly, there is always a big difference between underweight and overweight exposure conditions, in fact, Purchase Intention is higher in the presence of the overweight than not in the presence of the underweight. Instead, there is a not significant difference between no model and overweight exposure conditions. Moreover, Purchase Intention was even higher in the no model condition than in the presence of the underweight model, which means that the average consumer had higher intention to buy the product in the no model condition than not in the presence of the underweight.

Concluding, model’s body size influenced women’s Purchase Intention.

TABLE 4.15: Post-Hoc of Purchase Intention

<table>
<thead>
<tr>
<th>(i) Questionario</th>
<th>(j) Questionario</th>
<th>Mean Difference (i-j)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non Thin</td>
<td>Thin</td>
<td>0.0693021*</td>
<td>0.00</td>
<td>.000</td>
<td>0.2230954, 0.7907651</td>
</tr>
<tr>
<td></td>
<td>Product</td>
<td>-0.05904605</td>
<td>0.12191839</td>
<td>.079</td>
<td>-0.3459239, 0.2278318</td>
</tr>
<tr>
<td>Thin</td>
<td>Non Thin</td>
<td>0.0693021*</td>
<td>0.12062515</td>
<td>.000</td>
<td>-0.7907651, -0.2230964</td>
</tr>
<tr>
<td></td>
<td>Product</td>
<td>0.56597627*</td>
<td>0.12397462</td>
<td>.000</td>
<td>0.2742600, 0.8576925</td>
</tr>
<tr>
<td>Product</td>
<td>Non Thin</td>
<td>0.05904605</td>
<td>0.12191839</td>
<td>.079</td>
<td>-0.2278318, 0.3459239</td>
</tr>
<tr>
<td></td>
<td>Thin</td>
<td>0.56597627*</td>
<td>0.12397462</td>
<td>.000</td>
<td>0.2742600, 0.8576925</td>
</tr>
</tbody>
</table>
4.9 Correlation BMI, Self Esteem and Physical Appearance and Trait Anxiety

Correlations were found using Pearson’s correlations on SPSS. The significance level used in this study was .01.

A correlation test (table 4.16) has been conducted to understand if there was a relationship among BMI, Self Esteem, and Physical Appearance and Trait Anxiety. Consequently, the objective was to determine the intensity and sign (positive or negative) of the relationship.

The correlation between BMI and Self-Esteem is not statistically significant (p-value>.01): in this case no correlation between BMI and Self-Esteem was found.

The correlation between BMI and Physical Appearance is positive and statistically significant (p-value<.01): therefore, \textit{with the increase of BMI, the score of Physical Appearance increases}.

The correlation between Self-Esteem and Physical Appearance is negative and statistically significant (p-value<.01): therefore, \textit{the increase of Self Esteem decreases the score of Physical Appearance}. 

FIGURE 4.14: Mean Plot of Purchase Intention
In other words, the correlation between BMI and Physical Appearance State and Trait Anxiety is confirmed (positive correlation of .574) which means that people with higher BMI had lower Body Satisfaction. Correlation between Self-esteem and BMI is confirmed (negative correlation of -.326) which means that people with higher Self-esteem had higher Body Satisfaction.

TABLE 4.16: Correlations BMI, Self Esteem and Physical Appearance and Trait Anxiety

<table>
<thead>
<tr>
<th></th>
<th>BMI</th>
<th>SELF_ESTEEEM</th>
<th>PHYSICAL_APPEARANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
<td>-0.070</td>
<td>0.574***</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>1.177</td>
<td>0.00</td>
</tr>
<tr>
<td>N</td>
<td>374</td>
<td>374</td>
<td>374</td>
</tr>
<tr>
<td>SELF_ESTEEEM</td>
<td>-0.070</td>
<td></td>
<td>-0.326***</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>1.177</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>374</td>
<td>379</td>
<td>379</td>
</tr>
<tr>
<td>PHYSICAL_APPEARANCE</td>
<td>0.574**</td>
<td>-0.326**</td>
<td>1</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>374</td>
<td>379</td>
<td>379</td>
</tr>
</tbody>
</table>

4.10 Results and Analysis

*H1 is not confirmed.* The exposure to a non-thin Body Size image did not increase Self-Esteem; its level was the same in the three exposure conditions.

*H2 is not confirmed.* The exposure to a non-thin Body Size image did not decrease Physical Appearance State and Trait Anxiety; Body Satisfaction was the same in the three exposure conditions.

*H3 is confirmed.* The exposure to a non-thin Body Size image increased model evaluation, increasing Attitude to the Advertiser. Women rated more positively the overweight model than the underweight one.

*H4 is confirmed.* The exposure to a non-thin Body Size image increased product evaluation, increasing the Attitude to the Product. Women rated more positively the product when it was promoted by the overweight than not when it was promoted by the underweight.

*H5 is confirmed.* The exposure to a non-thin Body Size image increased advertisement evaluation, increasing Attitude to the Advertisement. Women preferred the
advertisement starring the overweight model than not the one with the underweight one.

*H*6 *is confirmed.* The exposure to a non-thin Body Size image increased Purchase Intention. In fact, participants had more intention to buy the product endorsed by the overweight model.
4.11 Appendix

4.11.1 Cronbach’s alpha and Factor Analysis

Self-Esteem

*Cronbach’s alpha*

Internal consistency for self-esteem was analyzed, and a Cronbach's Alpha score was 0.868 for the selected items, considered together.

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach’s Alpha</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>0.868</td>
</tr>
</tbody>
</table>

We can see that there is no significant improvement in Cronbach's alpha score by eliminating one of the items.

In general, an item excluded only when the exclusion brings a significant improvement, for example, greater than 0.01.

<table>
<thead>
<tr>
<th>Item-Total Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale Mean if Item Deleted</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>SELF_ENSTEEM_.1</td>
</tr>
<tr>
<td>SELF_ENSTEEM_.2</td>
</tr>
<tr>
<td>SELF_ENSTEEM_.3</td>
</tr>
<tr>
<td>SELF_ENSTEEM_.4</td>
</tr>
<tr>
<td>SELF_ENSTEEM_.5</td>
</tr>
<tr>
<td>SELF_ENSTEEM_.2_1</td>
</tr>
<tr>
<td>SELF_ENSTEEM_.2_2</td>
</tr>
<tr>
<td>SELF_ENSTEEM_.2_3</td>
</tr>
<tr>
<td>SELF_ENSTEEM_.2_4</td>
</tr>
<tr>
<td>SELF_ENSTEEM_.2_5</td>
</tr>
</tbody>
</table>

We can then proceed with a factor analysis, where we will set a single factor extracted and saved as a requirement.

We extract only one factor because we are interested in a single factor that summarizes all the information.
**Factor Analysis**

Communalities are the proportion of each variable's variance that can be explained by the factors. They must be as close as possible to 1, in general, a value of at least 0.4 is considered acceptable: when a communality does not reach 0.4 it is better to eliminate the item because the model does not explain it.

In our case, three items have a score of communalities too low (<0.4) and therefore a low overall variance explained by the factor (46.85%).

Therefore, the factorial analysis is repeated eliminating the three items.
Now all the communalities, or the proportion of each variable's variance that can be explained by the factors, are over 40% (>0.4), so we can assume that all the items have been sufficiently explained.

Now the variance explained by the only factor extracted from the seven items is equal to 55%. We can, therefore, be satisfied with the quality of the result.
The component matrix shows us the correlation between the factor extracted when the item changes, so positive values indicate that as the item grows, the factor increases, as we hypothesized.

We can also note how all the items are positively correlated, as was expected, with the latent factor extracted. The factor is then saved in the dataset and named SELF_ESTEEM.

Physical Appearance and Trait Anxiety

Cronbach’s alpha

Internal consistency for Physical Appearance and Trait Anxiety has been analyzed and a Cronbach’s Alpha score was 0.870 for the selected items, considered together.

We can see that there is no significant improvement in Cronbach's alpha score by eliminating one of the items.

In general, an item excluded only when the exclusion brings a significant improvement, for example, greater than 0.01
We can then proceed with a factor analysis, where we will set a single factor extracted and saved as a requirement. We extract only one factor because we are interested in a single factor that summarizes all the information.

**Factor Analysis**

Communalities are the proportion of each variable's variance that can be explained by the factors. They must be as close as possible to 1, in general, a value of at least 0.4 is considered acceptable: when a communality does not reach 0.4 it is better to eliminate the item because the model does not explain it. In this case, eight items have a score of communalities too low (<0.4) and therefore a low overall variance explained by the factor (34.47%).

<table>
<thead>
<tr>
<th>Communalities</th>
<th>Initial</th>
<th>Extraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSICAL_APPEARANCE_1</td>
<td>1.000</td>
<td>.603</td>
</tr>
<tr>
<td>PHYSICAL_APPEARANCE_2</td>
<td>1.000</td>
<td>.539</td>
</tr>
<tr>
<td>PHYSICAL_APPEARANCE_3</td>
<td>1.000</td>
<td>.510</td>
</tr>
<tr>
<td>PHYSICAL_APPEARANCE_4</td>
<td>1.000</td>
<td>.650</td>
</tr>
<tr>
<td>PHYSICAL_APPEARANCE_5</td>
<td>1.000</td>
<td>.512</td>
</tr>
<tr>
<td>PHYSICAL_APPEARANCE_6</td>
<td>1.000</td>
<td>.583</td>
</tr>
<tr>
<td>PHYSICAL_APPEARANCE_7</td>
<td>1.000</td>
<td>.572</td>
</tr>
<tr>
<td>PHYSICAL_APPEARANCE_8</td>
<td>1.000</td>
<td>.413</td>
</tr>
<tr>
<td>PHYSICAL_APPEARANCE_9</td>
<td>1.000</td>
<td>.246</td>
</tr>
<tr>
<td>PHYSICAL_APPEARANCE_10</td>
<td>1.000</td>
<td>.246</td>
</tr>
<tr>
<td>PHYSICAL_APPEARANCE_11</td>
<td>1.000</td>
<td>.211</td>
</tr>
<tr>
<td>PHYSICAL_APPEARANCE_12</td>
<td>1.000</td>
<td>.195</td>
</tr>
<tr>
<td>PHYSICAL_APPEARANCE_13</td>
<td>1.000</td>
<td>.166</td>
</tr>
<tr>
<td>PHYSICAL_APPEARANCE_14</td>
<td>1.000</td>
<td>.207</td>
</tr>
<tr>
<td>PHYSICAL_APPEARANCE_15</td>
<td>1.000</td>
<td>.246</td>
</tr>
<tr>
<td>PHYSICAL_APPEARANCE_16</td>
<td>1.000</td>
<td>.127</td>
</tr>
</tbody>
</table>

Therefore, the factorial analysis is repeated eliminating the eight items.

<table>
<thead>
<tr>
<th>Communalities</th>
<th>Initial</th>
<th>Extraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSICAL_APPEARANCE_1</td>
<td>1.000</td>
<td>.723</td>
</tr>
<tr>
<td>PHYSICAL_APPEARANCE_2</td>
<td>1.000</td>
<td>.647</td>
</tr>
<tr>
<td>PHYSICAL_APPEARANCE_3</td>
<td>1.000</td>
<td>.610</td>
</tr>
<tr>
<td>PHYSICAL_APPEARANCE_4</td>
<td>1.000</td>
<td>.751</td>
</tr>
<tr>
<td>PHYSICAL_APPEARANCE_5</td>
<td>1.000</td>
<td>.544</td>
</tr>
<tr>
<td>PHYSICAL_APPEARANCE_6</td>
<td>1.000</td>
<td>.666</td>
</tr>
<tr>
<td>PHYSICAL_APPEARANCE_7</td>
<td>1.000</td>
<td>.595</td>
</tr>
<tr>
<td>PHYSICAL_APPEARANCE_8</td>
<td>1.000</td>
<td>.415</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Now all the communalities, or the proportion of each variable's variance that can be explained by the factors, are over 40%, so we can assume that all the items have been sufficiently explained.

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total % of Variance</td>
<td>Cumulative %</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
</tr>
<tr>
<td>1</td>
<td>4,961</td>
<td>61,892</td>
</tr>
<tr>
<td>2</td>
<td>1,008</td>
<td>12,598</td>
</tr>
<tr>
<td>3</td>
<td>1,008</td>
<td>7,924</td>
</tr>
<tr>
<td>4</td>
<td>0,445</td>
<td>5,564</td>
</tr>
<tr>
<td>5</td>
<td>0,288</td>
<td>3,604</td>
</tr>
<tr>
<td>6</td>
<td>0,289</td>
<td>3,361</td>
</tr>
<tr>
<td>7</td>
<td>0,235</td>
<td>2,938</td>
</tr>
<tr>
<td>8</td>
<td>0,169</td>
<td>2,118</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

Now, the variance explained by the only factor extracted from the eight items is equal to 61%. We can, therefore, be satisfied with the quality of the result.

The component matrix shows us the correlation between the factor extracted when the item changes, so positive values indicate that as the item grows, the factor increases, as we hypothesized.

We can also note how all the items are positively correlated, as was expected, with the latent factor extracted.

The factor is then saved in the dataset and named PHYSICAL_APPEARANCE.
Attitude toward the Advertiser

Cronbach’s alpha

Internal consistency for the Attitude toward the Advertiser was analyzed, and a Cronbach’s Alpha score was 0.864 for the selected items, considered together.

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach’s Alpha</td>
</tr>
<tr>
<td>N of Items</td>
</tr>
<tr>
<td>0.864</td>
</tr>
</tbody>
</table>

We can see that by eliminating the fifth item the Cronbach's alpha score goes up by more than one point, so we proceed to remove the fifth item before proceeding to the factor analysis.

In general, an item excluded only when the exclusion brings a significant improvement, for example, greater than 0.01.

<table>
<thead>
<tr>
<th>Item-Total Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale Mean if Item Deleted</td>
</tr>
<tr>
<td>ADVERTISER_1</td>
</tr>
<tr>
<td>ADVERTISER_2</td>
</tr>
<tr>
<td>ADVERTISER_3</td>
</tr>
<tr>
<td>ADVERTISER_4</td>
</tr>
<tr>
<td>ADVERTISER_5</td>
</tr>
</tbody>
</table>

We can then proceed with a factor analysis, where we will set a single factor extracted and saved as a requirement.

We extract only one factor because we are interested in a single factor that summarizes all the information.

Factor Analysis

As said before, communalities are the proportion of each variable's variance that can be explained by the factors.

They must be as close as possible to 1, in general, a value of at least 0.4 is considered acceptable: when a communality does not reach 0.4 it is better to eliminate the item because the model does not explain it.
In our case all the communalities, or the proportion of each variable's variance that can be explained by the factors, are over 40%, so we can assume that all the items have been sufficiently explained.

<table>
<thead>
<tr>
<th>Communalities</th>
<th>Initial</th>
<th>Extraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADVERTISER_1</td>
<td>1.000</td>
<td>.743</td>
</tr>
<tr>
<td>ADVERTISER_2</td>
<td>1.000</td>
<td>.673</td>
</tr>
<tr>
<td>ADVERTISER_3</td>
<td>1.000</td>
<td>.731</td>
</tr>
<tr>
<td>ADVERTISER_4</td>
<td>1.000</td>
<td>.775</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

The variance explained by the only factor extracted from the four items is equal to 73%. We can, therefore, be satisfied with the quality of the result.

<table>
<thead>
<tr>
<th>Total Variance Explained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

We can also note that all the items are positively correlated, as was expected, with the latent factor extracted.

<table>
<thead>
<tr>
<th>Component Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component</td>
</tr>
<tr>
<td>ADVERTISER_1</td>
</tr>
<tr>
<td>ADVERTISER_2</td>
</tr>
<tr>
<td>ADVERTISER_3</td>
</tr>
<tr>
<td>ADVERTISER_4</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

The component matrix shows us the correlation between the factor extracted when the item changes, so positive values indicate that as the item grows, the factor increases, as we hypothesized.

We can also note how all the items are positively correlated, as was expected, with the latent factor extracted. The factor is then saved in the dataset and named ADVERTISER.
**Attitude toward the Product**

*Cronbach’s alpha*

Internal consistency for Attitude toward the Product was analyzed, and a Cronbach’s Alpha score was 0.939 for the selected items, considered together.

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach’s Alpha</td>
</tr>
<tr>
<td>N of Items</td>
</tr>
<tr>
<td>0.939</td>
</tr>
<tr>
<td>8</td>
</tr>
</tbody>
</table>

We can see that there is no significant improvement in Cranach’s alpha score by eliminating one of the items.

<table>
<thead>
<tr>
<th>Item-Total Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale Mean if Item Deleted</td>
</tr>
<tr>
<td>PRODUCT_1</td>
</tr>
<tr>
<td>PRODUCT_2</td>
</tr>
<tr>
<td>PRODUCT_3</td>
</tr>
<tr>
<td>PRODUCT_4</td>
</tr>
<tr>
<td>PRODUCT_5</td>
</tr>
<tr>
<td>PRODUCT_6</td>
</tr>
<tr>
<td>PRODUCT_7</td>
</tr>
<tr>
<td>PRODUCT_8</td>
</tr>
</tbody>
</table>

We can then proceed with a factor analysis, where we will set a single factor extracted and saved as a requirement.

We extract only one factor because we are interested in a single factor that summarizes all the information.
**Factor Analysis**

<table>
<thead>
<tr>
<th>Communalities</th>
<th>Initial</th>
<th>Extraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRODUCT_1</td>
<td>1,000</td>
<td>.647</td>
</tr>
<tr>
<td>PRODUCT_2</td>
<td>1,000</td>
<td>.638</td>
</tr>
<tr>
<td>PRODUCT_3</td>
<td>1,000</td>
<td>.718</td>
</tr>
<tr>
<td>PRODUCT_4</td>
<td>1,000</td>
<td>.783</td>
</tr>
<tr>
<td>PRODUCT_5</td>
<td>1,000</td>
<td>.750</td>
</tr>
<tr>
<td>PRODUCT_6</td>
<td>1,000</td>
<td>.792</td>
</tr>
<tr>
<td>PRODUCT_7</td>
<td>1,000</td>
<td>.631</td>
</tr>
<tr>
<td>PRODUCT_8</td>
<td>1,000</td>
<td>.658</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

Communalities are the proportion of each variable's variance that can be explained by the factors. They must be as close as possible to 1, in general, a value of at least 0.4 is considered acceptable: when a communality does not reach 0.4 it is better to eliminate the item because the model does not explain it.

In this case, all the communalities, or the proportion of each variable's variance that can be explained by the factors, are over 40%, so we can assume that all the items have been sufficiently explained.

<table>
<thead>
<tr>
<th>Total Variance Explained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>8</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

The variance explained by the only factor extracted from the eight items is equal to 70%. We can, therefore, be satisfied with the quality of the result.
The component matrix shows us the correlation between the factor extracted when the item changes, so positive values indicate that as the item grows, the factor increases, as we hypothesized.

We can also note how all the items are positively correlated, as was expected, with the latent factor extracted.

The factor is then saved in the dataset and named PRODUCT.

**Attitude toward the Advertisement**

**Cronbach’s alpha**

Internal consistency for Attitude toward the Advertisement has been analyzed, and a Cronbach’s Alpha score was 0.911 for the selected items, considered together.

We can see that there is no significant improvement in Cronbach's alpha score by eliminating one of the items.

In general, an item is deleted only when the exclusion brings a significant improvement, for example, greater than 0.01
We can then proceed with a factor analysis, where we will set a single factor extracted and saved as a requirement.

We extract only one factor because we are interested in a single factor that summarizes all the information.

**Factor Analysis**

<table>
<thead>
<tr>
<th>Item-Total Statistics</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADVERTISEMENT_1</td>
<td>7,96</td>
<td>15,396</td>
<td>.747</td>
<td>.898</td>
</tr>
<tr>
<td>ADVERTISEMENT_2</td>
<td>8,62</td>
<td>16,659</td>
<td>.725</td>
<td>.901</td>
</tr>
<tr>
<td>ADVERTISEMENT_3</td>
<td>8,33</td>
<td>15,164</td>
<td>.826</td>
<td>.880</td>
</tr>
<tr>
<td>ADVERTISEMENT_4</td>
<td>8,35</td>
<td>15,566</td>
<td>.798</td>
<td>.886</td>
</tr>
<tr>
<td>ADVERTISEMENT_5</td>
<td>8,55</td>
<td>16,073</td>
<td>.779</td>
<td>.890</td>
</tr>
</tbody>
</table>

Communalities are the proportion of each variable's variance that can be explained by the factors.

They must be as close as possible to 1, in general, a value of at least 0.4 is considered acceptable: when a communality does not reach 0.4, it is better to eliminate the item because the model does not explain it.

All the communalities, or the proportion of each variable's variance that can be explained by the factors, are over 40%, so we can assume that all the items have been sufficiently explained.
The variance explained by the only factor extracted from the five items is equal to 73%. We can, therefore, be satisfied with the quality of the result.

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
</tr>
<tr>
<td>1</td>
<td>3,694</td>
<td>73,887</td>
</tr>
<tr>
<td>2</td>
<td>.418</td>
<td>8,360</td>
</tr>
<tr>
<td>3</td>
<td>.362</td>
<td>7,238</td>
</tr>
<tr>
<td>4</td>
<td>.298</td>
<td>5,958</td>
</tr>
<tr>
<td>5</td>
<td>.228</td>
<td>4,566</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

The component matrix shows us the correlation between the factor extracted when the item changes, so positive values indicate that as the item grows, the factor increases, as we hypothesized.

We can also note how all the items are positively correlated, as was expected, with the latent factor extracted.

The factor is then saved in the dataset and named ADVERTISEMENT.
Purchase Intention

*Cronbach’s alpha*

Internal consistency for Self-Esteem has been analyzed, and a Cronbach’s Alpha score was 0.955 for the selected items, considered together.

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach’s Alpha</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>.955</td>
</tr>
</tbody>
</table>

We can see that there is no significant improvement in Cronbach's alpha score by eliminating one of the items.

In general, an item excluded only when the exclusion brings a significant improvement, for example, greater than 0.01

<table>
<thead>
<tr>
<th>Item-Total Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale Mean if Item Deleted</td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td>PURCHASE_INTENTION_1</td>
</tr>
<tr>
<td>PURCHASE_INTENTION_2</td>
</tr>
<tr>
<td>PURCHASE_INTENTION_3</td>
</tr>
</tbody>
</table>

We can then proceed with a factor analysis, where we will set a single factor extracted and saved as a requirement.

We extract only one factor because we are interested in a single factor that summarizes all the information.

*Factor Analysis*

<table>
<thead>
<tr>
<th>Communalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>PURCHASE_INTENTION_1</td>
</tr>
<tr>
<td>PURCHASE_INTENTION_2</td>
</tr>
<tr>
<td>PURCHASE_INTENTION_3</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

Communalities are the proportion of each variable's variance that can be explained by the factors.

They must be as close as possible to 1, in general, a value of at least 0.4 is considered acceptable: when a communality does not reach 0.4 it is better to eliminate the item because not explained.
In this case, all the communalities, or the proportion of each variable's variance that can be explained by the factors, are over 40%, so we can assume that all the items were sufficiently explained.

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
</tr>
<tr>
<td>1</td>
<td>2.763</td>
<td>91.764</td>
</tr>
<tr>
<td>2</td>
<td>.164</td>
<td>5.465</td>
</tr>
<tr>
<td>3</td>
<td>.083</td>
<td>2.771</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

The variance explained by the only factor extracted from the three items is equal to 91%. We can, therefore, be satisfied with the quality of the result.

<table>
<thead>
<tr>
<th>Component Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>PURCHASE_INTENTION_1</td>
</tr>
<tr>
<td>PURCHASE_INTENTION_2</td>
</tr>
<tr>
<td>PURCHASE_INTENTION_3</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

The component matrix shows us the correlation between the factor extracted when the item changes, so positive values indicate that as the item grows, the factor increases, as we hypothesized.

We can also note how all the items are positively correlated, as was expected, with the latent factor extracted.

The factor is then saved in the dataset and named PURCHASE_INTENTION.
4.11.2 Charts on the Distribution of Latent Factors

Distribution of each latent factor in the sample.
### 4.11.3 Correlation between every variable

<table>
<thead>
<tr>
<th></th>
<th>BMI</th>
<th>ADVERTISER</th>
<th>ADVERTISMENT</th>
<th>PRODUCT</th>
<th>SELF_ESTEEEM</th>
<th>PHYSICAL_APPREHANCE</th>
<th>PURCHASE_INTENTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BMI</strong></td>
<td>Correlazione di Pearson</td>
<td><strong>0.034</strong></td>
<td><strong>0.013</strong></td>
<td><strong>-0.023</strong></td>
<td><strong>-0.079</strong></td>
<td><strong>0.574</strong></td>
<td><strong>-0.030</strong></td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>374</td>
<td>259</td>
<td>259</td>
<td>374</td>
<td>374</td>
<td>374</td>
<td></td>
</tr>
<tr>
<td><strong>ADVERTISER</strong></td>
<td>Correlazione di Pearson</td>
<td><strong>0.693</strong></td>
<td><strong>0.690</strong></td>
<td><strong>-0.029</strong></td>
<td><strong>-0.009</strong></td>
<td><strong>-0.049</strong></td>
<td><strong>-0.502</strong></td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>259</td>
<td>259</td>
<td>259</td>
<td>259</td>
<td>259</td>
<td>259</td>
<td></td>
</tr>
<tr>
<td><strong>ADVERTISMENT</strong></td>
<td>Correlazione di Pearson</td>
<td><strong>0.693</strong></td>
<td><strong>0.690</strong></td>
<td><strong>-0.029</strong></td>
<td><strong>-0.009</strong></td>
<td><strong>-0.049</strong></td>
<td><strong>-0.502</strong></td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>259</td>
<td>259</td>
<td>259</td>
<td>259</td>
<td>259</td>
<td>259</td>
<td></td>
</tr>
<tr>
<td><strong>PRODUCT</strong></td>
<td>Correlazione di Pearson</td>
<td><strong>0.693</strong></td>
<td><strong>0.690</strong></td>
<td><strong>-0.029</strong></td>
<td><strong>-0.009</strong></td>
<td><strong>-0.049</strong></td>
<td><strong>-0.502</strong></td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>259</td>
<td>259</td>
<td>259</td>
<td>259</td>
<td>259</td>
<td>259</td>
<td></td>
</tr>
<tr>
<td><strong>SELF_ESTEEEM</strong></td>
<td>Correlazione di Pearson</td>
<td><strong>0.693</strong></td>
<td><strong>0.690</strong></td>
<td><strong>-0.029</strong></td>
<td><strong>-0.009</strong></td>
<td><strong>-0.049</strong></td>
<td><strong>-0.502</strong></td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>259</td>
<td>259</td>
<td>259</td>
<td>259</td>
<td>259</td>
<td>259</td>
<td></td>
</tr>
<tr>
<td><strong>PHYSICAL_APPREHANCE</strong></td>
<td>Correlazione di Pearson</td>
<td><strong>0.693</strong></td>
<td><strong>0.690</strong></td>
<td><strong>-0.029</strong></td>
<td><strong>-0.009</strong></td>
<td><strong>-0.049</strong></td>
<td><strong>-0.502</strong></td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>259</td>
<td>259</td>
<td>259</td>
<td>259</td>
<td>259</td>
<td>259</td>
<td></td>
</tr>
<tr>
<td><strong>PURCHASE_INTENTION</strong></td>
<td>Correlazione di Pearson</td>
<td><strong>0.693</strong></td>
<td><strong>0.690</strong></td>
<td><strong>-0.029</strong></td>
<td><strong>-0.009</strong></td>
<td><strong>-0.049</strong></td>
<td><strong>-0.502</strong></td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>259</td>
<td>259</td>
<td>259</td>
<td>259</td>
<td>259</td>
<td>259</td>
<td></td>
</tr>
</tbody>
</table>

**La correlazione è significativa al livello 0.01 (2-coda).**

**La correlazione è significativa al livello 0.05 (2-coda).**

### 4.11.4 Frequency Tables (Demographics)

#### AGE

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;18</td>
<td>9</td>
<td>2.4</td>
<td>2.4</td>
<td>2.4</td>
</tr>
<tr>
<td>18/25</td>
<td>221</td>
<td>58.3</td>
<td>58.3</td>
<td>60.7</td>
</tr>
<tr>
<td>26/35</td>
<td>76</td>
<td>20.1</td>
<td>20.1</td>
<td>80.7</td>
</tr>
<tr>
<td>36/45</td>
<td>24</td>
<td>6.3</td>
<td>6.3</td>
<td>87.1</td>
</tr>
<tr>
<td>&gt;46</td>
<td>49</td>
<td>12.9</td>
<td>12.9</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>379</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

#### TYPE OF THE CITY

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Città (più di 100mila abitanti)</td>
<td>111</td>
<td>29.3</td>
<td>29.3</td>
<td>29.3</td>
</tr>
<tr>
<td>Cittadina (tra 10mila e 50mila abitanti)</td>
<td>112</td>
<td>29.6</td>
<td>29.6</td>
<td>58.8</td>
</tr>
<tr>
<td>Paese (meno di 10mila abitanti)</td>
<td>156</td>
<td>41.2</td>
<td>41.2</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>379</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
### EMPLOYMENT STATUS

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studentessa</td>
<td>226</td>
<td>59.6</td>
<td>59.6</td>
<td>59.6</td>
</tr>
<tr>
<td>Lavoratrice autonoma</td>
<td>32</td>
<td>8.4</td>
<td>8.4</td>
<td>68.1</td>
</tr>
<tr>
<td>Lavoratrice dipendente</td>
<td>90</td>
<td>23.7</td>
<td>23.7</td>
<td>91.8</td>
</tr>
<tr>
<td>Disoccupata</td>
<td>31</td>
<td>8.2</td>
<td>8.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>379</td>
<td>100.0</td>
<td></td>
<td>100.0</td>
</tr>
</tbody>
</table>

### MARITAL STATUS

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sposata</td>
<td>68</td>
<td>17.9</td>
<td>17.9</td>
<td>17.9</td>
</tr>
<tr>
<td>Vedova</td>
<td>3</td>
<td>0.8</td>
<td>.8</td>
<td>18.7</td>
</tr>
<tr>
<td>Divorziata</td>
<td>7</td>
<td>1.8</td>
<td>1.8</td>
<td>20.6</td>
</tr>
<tr>
<td>Nubile</td>
<td>301</td>
<td>79.4</td>
<td>79.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>379</td>
<td>100.0</td>
<td></td>
<td>100.0</td>
</tr>
</tbody>
</table>

### EDUCATIONAL LEVEL

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nessuno</td>
<td>10</td>
<td>2.6</td>
<td>2.6</td>
<td>2.6</td>
</tr>
<tr>
<td>Diploma</td>
<td>198</td>
<td>52.2</td>
<td>52.2</td>
<td>54.9</td>
</tr>
<tr>
<td>Laurea triennale</td>
<td>88</td>
<td>23.2</td>
<td>23.2</td>
<td>78.1</td>
</tr>
<tr>
<td>Laurea magistrale</td>
<td>79</td>
<td>20.8</td>
<td>20.8</td>
<td>98.9</td>
</tr>
<tr>
<td>Dottorato</td>
<td>4</td>
<td>1.1</td>
<td>1.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>379</td>
<td>100.0</td>
<td></td>
<td>100.0</td>
</tr>
</tbody>
</table>
4.11.5 List of Tables

TABLE 4.1: Descriptive of Self-Esteem
TABLE 4.2: ANOVA of Self-Esteem
TABLE 4.3: Descriptive of Physical Appearance and Trait Anxiety
TABLE 4.4: ANOVA of Physical Appearance and Trait Anxiety
TABLE 4.5: Descriptive of Attitude toward the Advertiser
TABLE 4.6: ANOVA of Attitude toward the Advertiser
TABLE 4.7: Descriptive of Attitude toward the Product
TABLE 4.8: ANOVA of Attitude toward the Product
TABLE 4.9: Post-Hoc of Attitude toward the Product
TABLE 4.10: Descriptive of Attitude toward the Advertisement
TABLE 4.11: ANOVA of Attitude toward the Advertisement
TABLE 4.12: Post-Hoc of Attitude toward the Advertisement
TABLE 4.13: Descriptive of Purchase Intention
TABLE 4.14: ANOVA of Purchase Intention
TABLE 4.15: Post-Hoc of Purchase Intention
TABLE 4.16: Correlations BMI, Self Esteem and Physical Appearance and Trait Anxiety

4.11.6 List of Figures

FIGURE 4.1: Age
FIGURE 4.2: Provenience
FIGURE 4.3: Employment Status
FIGURE 4.4: Marital Status
FIGURE 4.5: Education Level
FIGURE 4.6: Distribution of Weight
FIGURE 4.7: Distribution of Height
FIGURE 4.8: Distribution of BMI
FIGURE 4.9: Mean Plot of Self-Esteem
FIGURE 4.10: Mean Plot of Physical Appearance and Trait Anxiety
FIGURE 4.11: Mean Plot of Attitude toward the Advertiser
FIGURE 4.12: Mean Plot of Attitude toward the Product
FIGURE 4.13: Mean Plot of Attitude toward the Advertisement
FIGURE 4.14: Mean Plot of Purchase Intention
Chapter 5: Findings and Recommendations

At the beginning of this research, hypotheses and ideas were developed from previous literature and new media trends, on social networking sites, such as Instagram. Surprisingly, the hypotheses about the “marketing part” (attitudes and purchase intention), which were the most unexplored areas, were confirmed; instead, the hypotheses about the “psychological part” (self-esteem and body satisfaction), which were the more explored, were not confirmed.

This chapter will illustrate and explain the results obtained and discuss their importance for the marketing world; especially the consequences they could have for advertisers in future. Each variable is reviewed and analyzed to find implication and limitations of this study.

The results seem, in part, to confirm previous literature and highlight future research efforts in this area. Another part of the results seems to open a new road for marketing, where prejudices are cut down, and women's bodies are seen from another perspective without renouncing to sales maximization.

5.1 Results

Summing up, the body size's effects on self-esteem and body satisfaction have not been confirmed; on the other hand, the effects on consumer’s attitudes and purchase intention have been confirmed.

$H1$ is not confirmed. Self-esteem did not change among the three exposure conditions, and as a consequence model's Body Size did not affect women's Self-Esteem.

$H2$ is not confirmed. Physical Appearance State and Trait Anxiety did not change among the three exposure conditions. Model’s Body Size did not affect women's Body Satisfaction.

$H3$ is confirmed. Model evaluation changed between the two exposure conditions. Model’s Body Size affected women’s Attitude toward the Model. The overweight endorser has been perceived more positively than the underweight one.

$H4$ is confirmed. The exposure to a non-thin Body Size image produced results: product evaluation changed in the three exposure conditions. Model’s Body size
affected women’s Attitude toward the Product. The overweight endorser made the product been perceived more positively than the underweight one. Notably, even the condition without a model was preferred to the underweight one, which means women preferred to see no model than an underweight one.

*H5 is confirmed.* The exposure to a non-thin body was effective; as a consequence, advertisement evaluation changed in the three exposure conditions. Model’s Body size affected women’s Attitude toward the Advertisement. The overweight endorser made the advertisement to be perceived more positively than the underweight one.

*H6 is confirmed.* The exposure to a non-thin body size image increased Purchase Intention. In fact, Purchase Intention differed in the three exposure conditions and as a consequence model’s Body Size affected women’s Purchase Intention. The overweight endorser made women wanting to buy the product more than the underweight one. More specifically, even the condition without model was preferred to the underweight one, which means women's preferred seeing no models than an underweight one.

![FIGURE 5.1: Hypotheses Framework](image)

5.2 Discussion

The “psychological part” (self-esteem and body satisfaction), which was also the most explored by the previous literature, has not been confirmed; however, the “marketing part” (attitudes and purchase intention), which was the most unexplored, has been confirmed.
5.2.1 Self-Esteem and Body Satisfaction did not change

Unlike previous researchers, self-esteem and body satisfaction were not influenced by the body size; perhaps, because both extremes (overweight and underweight) create the same body anxiety or have the same effect on self-esteem. Additionally, it could be that women were aware of the real goal of the questionnaire: looking at these two extreme models they thought it was a test to measure their self-esteem, understanding the real objective of the research.

Using non-thin or "realistic" figures in advertising does not make women more concerned with their weight; apparently, it does not make people more self-conscious about how they look, contrasting what was affirmed by Lin and Mcferran, in 2016.

BMI, Body Satisfaction and Self-Esteem

In the current study, people with high Body Mass Index (BMI) had lower body satisfaction; in other terms, among the participants, who had a more significant weight had more anxiety with its body.

On the other hand, people with high self-esteem had higher body satisfaction; said differently, participants with more self-confidence had less concern with their body.

5.2.2 Attitudes and Purchase Intention

The Body Size influenced attitudes toward the Product, Advertiser, and Advertisement together with Purchase Intention. It means that, at least, a non-thin model can be as effective as a thin model (or even more effective) in promoting a cosmetic product. Furthermore, it can improve the attitudes toward the spokesperson and the sponsored good. Otherwise speaking, it can make the product and its endorser more appealing to the average consumers without lowering advertising effectiveness and their purchase intentions of who prefers its opposite in size.

This research confirms what Antiocco (2012) proved: model evaluation is higher after exposure to non-idealized models. It goes in the same direction of Xuemei Bian and Kai-Yu Wang (2015) who proved that participants of their study rated average size models as being more attractive than size zero models, even more in a non-traditional context which could be Instagram in this case.
Considering the advertisement effectiveness, this study elaborates on and overtakes Dittmar and Howard (2004) and Yu (2014) who just proved that thin and non-thin were equally effective. On the other hand, this study contradicts Roberts (2015), who stated that model body size did not affect advertising success. While many studies state that size does not always matter regarding selling more to defend the usage of non-thin models, these research findings suggest that overweight models could sell more, at least in the cosmetic market.

Finally, the current study demonstrates that the non-thin model was rated more positively subsequently raising the intention to buy; consequently, it is perceived in a better way by the average consumer in cosmetic advertising. It shows that thinness does not always sell more, in this case, non-thin does not just have the same value, but it is even more powerful.

5.2.3 Underweight and Overweight

As already stated, the advertisement featuring an overweight model sells more than the advertisement featuring an underweight one; the larger model is generally preferred to the other two conditions.

Additionally, no model condition was preferred to the underweight one. It means that in any case the thin model was not appreciated by the viewers that preferred to see no model than an underweight one who was representing both a thin body (BMI=18) and the model of Italian beauty according to the Superdrug Online Doctor’s research. Are Italian women afraid of thin bodies, or they fear Italian beauty standards?

5.2.4 Winning the inner competition

The overweight is liked more than underweight, maybe because it makes the viewer feel better looking at it? Fatness makes people feel better than thinness?

Surely women looking at a non-thin woman, which does not make them feel threatened by its image, judge the product in its entirety without competing with the model. The competition is inherent in the human being, more specifically in women; since childhood, they are taught to compare their bodies to others, and as a result, they are always competing.
It is caused by Social Comparison and Internalization which, as explained before, influence this process and are considered moderators in previous studies and limitations in this research.

Not feeling competitive with the model or winning this competition helps women to prefer the product as if the model was not an obstacle to the advertising message. Not feeling competitive with the body showed in the advertisement makes the women’s attention who are not focusing on themselves, on their fears and weaknesses (which are recalled by the vision of the model) directly driven to the product in its message.

5.2.5 Perfection scares

Does perfection frighten?
The underweight model is rated less positively even compared to just the product itself, one of the reasons for this result could be that the "ideal of perfection" scares the viewer. Seeing the thin, that also represents the Italian beauty model, frightens the participants because it makes the dream of becoming more beautiful unrealistic or impossible to achieve.

It makes the canon of beauty unattainable, and therefore the purchase of the cream loses its sense and importance.

Does the Italian beauty model not sell to Italian women? Indeed, in this research, has been proved that it reduces attitudes and purchase intentions.

5.2.6 Reality sells more

The product and its purchase intention are rated more positively in the presence of the non-thin model.

It may be because the thin seems to give false hopes (since you will never reach certain levels of thinness, the cream does not make miracles) instead, the non-thin is more realistic.

Consequently, is reality preferred to fiction? Do people prefer seeing endorsers like them, with the same imperfections? In a world dominated by appearance, makeups, and fiction, people's perception of perfection seems to change. As a consequence,
seeing an ordinary woman with her difficulties, her imperfections being happy with herself makes all women feel comfortable.

The product seems to be more active, perhaps because using a real body stands out its functional characteristics? Therefore, perfection diminishes the model's credibility by reducing the effectiveness of the cosmetic product, while the imperfection increases the model's credibility, giving more credibility to the effectiveness of the product.

5.2.7 Admiration

The overweight model exposed in the advertisement gives the impression of not being ashamed of her imperfections.

In a landscape dominated by magazine cover women always perfect and thin, even the consumer expects to see them. Thus, women convict themselves that to show off one must be perfect. Imperfection is increasingly hidden and the growth of make-up in the cosmetic market is a proof. Subsequently, seeing a self-confident woman who shows herself with her blemishes could create admiration and courage among the viewers.

Women could feel jealous towards the thin or feel admiration towards the non-thin. Do we envy those who are better than us or do we sympathize with those who are worse than us? They could feel empathy and sympathy for non-thin; on the one hand, they could be sorry for those who are worse than them, but admire who has the courage of showing off despite its imperfections.

5.3 Implications

The media should vary the size and attractiveness of the models used; increasing the diversity of body shapes and sizes portrayed they could reduce women's obsession for thinness.

Possibilities for selling more by using non-thin spokespeople to not divert attention from the product and to encourage the purchase because women do not fear the comparison with someone “better” than them. Consumers hold all the power, furthermore in this social media era, where the users dictate what they want to see appreciating what could improve themselves.

Women are getting bigger in weight and size while becoming more powerful, and they are increasingly rejecting the notion that they must pursue what is for many an
unattainable size and shape. Promoting positive body image using successful non-thin models as spokespeople could attract their attention and consent.

Companies could obtain a more pleasant brand image with the purpose of celebrating diversity and a new idea of beauty to reduce the shame with their body that women, especially youngers’ feel.

It could be possible to improve the brand image in beauty campaigns because showing closeness to the problems of women making them feel more accepted by the society. The inclusiveness and the understanding that beauty comes in all shapes and sizes are critical factors of this strategy’s success.

This strategy has more potential in a cosmetic market, however it could also work in the fashion industry; it could enable larger women to buy fashionable clothes that fit without feeling discomfort demonstrating that size should not be a limitation to buy. Brands can gain market shares using larger models in their ads while making younger consumers feel comfortable with their selves.

5.4 Limitations and Future Research

Internalization of sociocultural attitudes toward thinness and appearance and Social Comparison could moderate the effect of the advertisement starring the non-thin woman; indeed, low internalizers and comparators could be protected by adverse effects on self-esteem and body satisfaction.

This study, like many others before, investigates the effect of short-term exposure; if this effect is demonstrated in a single exposure, it would be interesting to study the effect in the long-term where multiple exposures take place.

The current sample includes only Italian women, who may react differently than women from other countries. Future research could include different nationalities where curvy models are more accepted like Brazil or Argentina.

The current effect of a non-thin model has been studied in a body cream advertisement; consequently, the findings may not be valid for other markets and categories of products. Future research could further explore this effect in other markets.

Another possible limitation of this study was the use of a quantitative approach (questionnaire) instead of a qualitative approach (focus group or observation). Future research could continue the following study by using a more qualitative method. Similar explorations could follow up by interviewing male consumers who may react
very differently from women. Indeed, males could have different attitudes and purchase intentions toward an advertisement starring underweight and an overweight man.

### 5.5 Overall Conclusion

Even if this study failed to prove the adverse effect of body size on self-esteem and body satisfaction, the effects on attitudes and purchase intention are evident. A non-thin model could compete with a thin one, making the advertisement and the product look better; consequently, even larger spokespersons are rated more positively, with higher intention to buy the sponsored goods. In a new era where beauty standards do not work anymore, where everybody wants to feel good and be the protagonist of his or her own lives, the best solution is to make all of them feel good in every shape and size.
5.6 Appendix

5.6.1 List of Figures

FIGURE 5.1: Hypotheses Framework
References


Millard, J., 2009, Performing Beauty: Dove’s “Real Beauty”, Campaign University of Saskatchewan, Saskatoon.


Remke, 2001, “The Effects of Using “Real Women” In Advertising”. Bachelor of Arts in Communication the University of Tulsa Tulsa, Oklahoma.


Summary

Chapter 1: Introduction

In the current society, there is a tendency to follow thin ideal standard of body size which can lead to, especially in countries where thinness is idealized, eating disorders (such as anorexia and bulimia) in women, and in particular to younger girls. It happens because medias have played and still play a crucial role in the adaptation of society to aesthetic taste. The press and, explicitly, social media have promoted and encouraged the concept of surreal beauty. It is also clear from the social media's feature (above all Instagram) to modify the images uploaded to make the users look prettier and perfect, alienating them from reality.

The increase of these problems is related to media and socio-cultural forces which lead to more pressure on females that have the desire of conforming to models imposed by abstract perfection. In this direction, this desire to fit in pushes to modify their lifestyle including many behavioral changes. These behavioral changes, in many cases, have a negative impact on women's health.

The need of keeping common consent makes consumers lose individuality, which in turn, makes them more vulnerable. This vulnerability affects, above all, the personality and convictions of the most sensitive females.

Today, being able to reach the weight considered ideal is believed to be an example of willpower and determination, in fact, a woman who succeeds feels beautiful and robust, while having a few extra pounds is instead equal to loosing.

This sense of insufficiency, on the one hand, helps brands to sell a “solution” but on the other hand, damages consumer self-confidence and increases their fragility.

The positive effect of thin – thin sells?

In such manner, why are skinny models commonly used in advertising?

The positive effect of utilizing good-looking models to better influence opinions, attitudes and product's evaluation is well documented by literature (Baker and Churchill, 1977).

Baker and Churchill have been the first researchers in 1977 to prove that attractive models produced higher advertisement ratings, increasing credibility and acceptance of the advertised message.
Benoy Joseph in 1982 proved that consumers preferred physically pleasant communicators than ordinary or unappealing ones; an explanation could be that the beauty-standards are perceived more efficiently by the consumer having a positive impact on the product to which they associate.

A beautiful model that is idolized and appreciated for its aesthetic characteristics makes the good, sponsored by, look equally worthy with the result of a more appealing product. Therefore, the use of attractive models leads to increased advertising effectiveness; in other words, it seems that “thin sells”.

However, is it always true? The positive impact of the use of thin models in ads has received inconsistent support (Yu, 2014).

Past researchers showed that a skinny model size in the fashion industry has no main effect on the advertising effectiveness. Consequently, the definition "thin sells" is a simplification of how women respond to advertising (Roberts, 2015).

**Dove experience**

When we read a magazine or walk on the street, we rarely stumble on billboards that portray plus size women. In an industry like cosmetics where it seems very difficult to move away from the standards, something happened. An example is Dove, which is a personal care brand owned by Unilever.

In 2004 Unilever commissioned preliminary research to explore the global understanding of women, beauty and well-being – and the relationship between them.

The research aimed to determine if it was possible to communicate and think about female beauty in authentic, satisfying and empowering ways (StrategyOne, 2004).

The study based on the growing problem concerning the representation of women's appearance in popular culture that was contributing to a concept of beauty that wasn't reliable or obtainable.

The study’s results showed that “Only 2% of women around the world choose beautiful to describe their looks, fewer even than choose “attractive” (9%), “feminine” (8%), “good-looking” (7%) or “cute” (7%)” (StrategyOne, 2004).

Moreover "four in ten women around the world strongly agree that they do not feel comfortable describing themselves as beautiful" (StrategyOne, 2004).
The study claimed that women think that the media depicts only a limited part of what makes a woman beautiful. These results showed that, in general, women’s body satisfaction and self-esteem are low.

Following these trends, many advertisers are changing directions and realizing that this idea of women in advertising is not always adequate.

In 2004, Unilever using its brand Dove, launched a Campaign called “Dove Campaign for Real Beauty” in which it was endorsing women with an average body size instead of the usual ultra-thin model.

Although against the trend, the new advertisement campaign had great success, receiving a positive response from consumers. It aimed to increase women’s self-esteem and lower body anxiety while making women feel comfortable with their selves. Following this huge success, the question is clear: what is the ideal size for a model? Is the skinny model size standard right for the current population of females?

**Ultra-thin women decrease Self-Esteem**

The media has an unfavorable influence on how women perceive their selves, and more specifically, how teenagers comparing themselves to the "perfection ideal" feel about their body (Thompson and Heinberg, 1999).

Studies demonstrate that displaying ultra-thin models in advertising leads to body dissatisfaction a substantial proportion of women (Halliwell and Dittmar, 2004).

Furthermore, the adverse effect on self-esteem and body satisfaction raises health problems such as eating disorders (anorexia or bulimia) or psychological disorders like depression (Grabe, Ward and Hyde, 2008).

Groesz et al. in 2002 showed that body image was more negative after exposure to thin model body size than after average size, plus size models or simple objects. It means that thinness scares more than fatness or that women fear more the comparison with the skinny.

Halliwell and Dittmar in 2004 proved that attractive, average-size models do not hurt body-esteem and can be used effectively in advertising to protect women's self-esteem.

More specifically, they proved that it is the thinness of the model, instead of the attractiveness, that drives to increased body dissatisfaction.

Consequently, average size model could be used as a relief on body anxiety problems because previous researchers (Dittmar and Howard, 2004; Halliwell and Dittmar,
proven that women had less anxiety after exposure to non-thin models than thin models or no models.

Many years later, another study confirmed that average-size female models could promote positive body image and appeal to consumers (Phillippa C. Diedrichs and Christina Lee 2011). Increasing body size diversity in media imagery is an essential step towards promoting positive body image (Halliwell and Dittmar, 2004). Therefore, thinness sells, but not always more or however not without side effects on consumers. These collateral effects could be managed and eliminated by using different canons of beauty.

**Social Comparison and Internalization**

Being overloaded by many media messages, make us exposed to continuous evaluation of our person.

Since we are always subject to a conscious comparison between the self and the other, it generates an identification to a model and provokes a rejection of our image. The decrease in self-esteem and body satisfaction is the result of two distinct processes: Social comparison and Internalization.

Social comparison theory, which was first proposed by Leon Festinger in 1954, states that people compare themselves to others to figure out their own opinions and abilities. Comparison, in many cases, leads to personal improvement because usually, nobody wants to feel inferior to others. However, if the sense of inferiority sometimes pushes individuals to grow, it could also force them to insecurities.

In the current context, these comparisons come out when a woman looks at an idealized image in advertising. Considering that just a few women can accomplish the unrealistic beauty standards depicted in most advertisements, social comparisons increase body dissatisfaction (Groesz et al., 2002; Grabe, Ward and Hyde, 2008).

Internalization is defined by Thompson and Stice (2001) as “the extent to which an individual cognitively ‘buys into’ socially defined ideals of attractiveness and engages in behaviors designed to produce an approximation of these ideals”.

Not all people internalize in the same way, with the same intensity and perception; some people are more affected by identifying themselves with others, and some are less concerned going their way without looking at the rest.
The people who internalize too much can be more influenced - and consequently become victims – by negative media's messages. Internalization and Social Comparison moderates the effects of media exposure (Halliwell and Dittmar, 2004). Young women that internalize more and aim to a beauty perfection which is ultra-thin and unattainable usually suffer from body dissatisfaction, low self-esteem, and eating disorders (Groesz et al., 2002).

Many studies have used Social Comparison and Internalization as moderators of the effect that thin models have on body satisfaction. In the current study, because these two factors are not included in the framework, they will be considered as limitations.

**Research problem**

The current research investigates the impact of body size on self-esteem, body anxiety and advertising effectiveness in a large sample of females. Could the body size of the model influence consumer’s attitudes more than we think? Firstly, the usage of two extreme body sizes as underweight and overweight has the purpose of better understanding the effects of size.

Secondly, it is possible to test the pre-cultural beauty concept in Italy. Indeed, the underweight model utilized in this research, according to the Online Superdrug Doctor's study, should be the standard of the Italian beauty. The research conducted by a British pharmacy, the Superdrug Online Doctors, carried out a report of what for many countries of the world means to have a "perfect body," or at least what is their perception of perfection. The countries with the thinnest bodies were Italy and China: Italy is the second in the ideal of extreme thinness (49kg) which following the WTO standards is considered underweight.

It means that if this model provokes anxiety in Italian women's mind, it should not be disclosed as a model of beauty. Could beauty ideals make people anxious? If perfection creates anxiety in women, would it be better not to make consumers feel in competition with the models? The solution would be to use a more common woman as a remedy for this problem, implementing a strategy to make all women feel beautiful.
Until now, the strategy of destroying consumer’s self-esteem to push them to buy the product to rebuild it has not always worked. Since products do not make miracles, firms should make attainable promises.

Concluding, contributions of the present study to the previous literature include:
- The usage of remarkably different body size (underweight and overweight) coming from another study (https://onlinedoctor.superdrug.com/perceptions-of-perfection).

Indeed, previous studies have compared ultra-thin and average body size models; no one before has tested the effect of very opposite shapes;
- The further inclusion and analysis of attitudes toward the model, advertisement, and product.

All the previous researchers mainly tested the influence on self-esteem and body satisfaction, but no one analyzed the effect on product and advertisement more in-depth;
- The usage of Instagram as the media chosen to study the above relationships.

Previous researchers conveyed the message utilizing traditional channels as magazine covers.

**Chapter 2: Overview of Literature**

A general investigation of modern literature has examined earlier writings involving its effectiveness in marketing, its effects on women's self-esteem and attitudes.

Can non-thin be as successful as thin models in the current media climate? Moreover, can non-thin defend women from adverse effects caused by exposure to ultra-thin models?

Literature has proven that media images of women have become unrealistic, which can hurt female consumers (Dittmar, 2009).

In marketing, it is rare to see a ‘normal sized' model, as ads continuously show women well under their weight category (Dove, 2004).

Much of the existing literature has looked at the model size to help understand self-esteem and solve body issues (Dittmar and Howard, 2004; Halliwell et al., 2005; Groesz et al., 2002) contributing to change and to understand this trend.

The literature evolution could be summed up in four main pillars: *Self-Esteem, Body Satisfaction, Model Attractiveness and Advertising Effectiveness.*
Self-Esteem

Following Martin and Gentry (1997), self-esteem may be affected when women compare their physical attractiveness with that of advertising models. Female pre-adolescents rated their attractiveness based on the attractiveness of models they have previously viewed. They also rated themselves as less attractive after seeing beautiful bodies in advertisements.

Wilcox et al. (2000) confirmed that the exposure to skinny women made participants feel lower self-confidence and satisfaction with themselves comparing to women exposed to non-skinny models.

Body Satisfaction

Posovac et al. in 1988 proved that global exposure to ideal thin media images did raise women’s level of body dissatisfaction. Body image in women was significantly more negative after viewing thin media images than pictures of average size models, plus size models, and inanimate objects. It implied that mass media promulgates a thin ideal that elicits body dissatisfaction. (Groesz, Levine, Murnen 2002).

It seems that it is not even the size of the model to cause such adverse effect, but it is the thinness. Indeed, thinner models made consumers feel more negative about their body image. Consequently, exposure to skinny models resulted in greater body-focused anxiety among who internalizes the thin ideal, even more, than exposure to average-size models or no models (Halliwell and Dittmar 2004).

Also, Grabe, Ward, and Hyde (2008) confirmed that exposure to mass media illustrating the thin-ideal body might link to body image disturbance in women. Therefore, media images of women are defined unrealistically beautiful which leads to an adverse effect on the body image and behaviour of female consumers (Dittmar 2009).

Curvy models could be a relief of this adverse effect; in fact, females had a more positive body image when viewing average-size models opposed to thinner models or no models at all.
Model Attractiveness

The results from Peck and Locken’s research in 2004 proved that females reacted more positively to larger-sized models but only in a non-traditional context (a plus-size magazine). In fact, curvy models in ads were rated as more attractive when an instructional frame activated nontraditional beliefs (a new women's magazine that features larger-sized models) than when it activated traditional beliefs (a regular women's magazine) (Peck and Loken 2004).

These results suggest that the context is crucial to understand this phenomenon. A specific context could modify people's attitudes and actions.

Curvy models can be useful in the cosmetic advertisement were women tend to trust spokespersons with a more "realistic" body size: an accurate figure that gives the impression of being closer to the consumer's everyday problems and feelings.

Advertisement Effectiveness

For the first time, Dittmar and Howard (2004) found out that publicity showing thin, average-size and no models was perceived as equally valid; concluding that the size of the model did not affect the effectiveness of the advertisement. Consequently, the two conditions were similarly effective, regardless of the model's waist. It implies that promoters can successfully use larger, but attractive spokespersons and perhaps avoid increasing body-focused concerns in a considerable proportion of females (Halliwell and Dittmar 2004).

Regarding the fashion market, Roberts (2015) found out that model size had no main influence on its effectiveness; as a result, the dimension of the body is not always crucial for more sales.

These findings suggested that the current "thin sells" fixation is an oversimplification of how women react to advertising.
The direction of the thesis
This research wants to show how the exposure to different body size can influence the consumer’s self-concept and buying behavior.
A “curvy” body can sell even more than a slim body. Previous literature suggests that model size does not lower the effectiveness of the advertisement. Although there is not always a clear correlation between body satisfaction and advertising effectiveness, studies show that larger, but attractive models are equally persuasive in marketing.
This thesis aims to explore further and analyze the theory under which ultra-thin models can damage women’s self-esteem, and body satisfaction. On the other hand, it also aims to explore the marketing field such as the consumer buying behavior toward the advertisement.
In fact, if on the one hand, the effect on self-esteem and body satisfaction is evident on the other side, the impact on all the components of advertising is not very explored yet.

Chapter 3: Research Methodology
Research Objectives
This study sets out to determine whether the size of a model has an influence on body satisfaction and self-esteem for the spectators of an advertisement.
Successively, the objective is to find out if there is a correlation among BMI, self-esteem and body satisfaction.
Finally, the aim is to understand if the advertisement starring underweight or overweight bodies could influence women's attitudes and if these connect to purchase intention.

Hypotheses

\textbf{H1.} Exposure to a non-thin Body Size image increases Self-Esteem. \\
\textbf{H.} Exposure to a thin Body Size image decrease or not change Self-Esteem. \\
\textbf{H2.} Exposure to a non-thin Body Size image decreases Physical Appearance State and Trait Anxiety, raising Body Satisfaction. \\
\textbf{H.} Exposure to a thin Body Size image increases Physical Appearance State and Trait Anxiety, reducing or not changing Body Satisfaction.
**H3.** Exposure to a non-thin Body Size image increases model evaluation, raising Attitude to the Advertiser.

**H.** Exposure to a thin Body Size image decreases model evaluation, lowering Attitude to the Advertiser.

**H4.** Exposure to a non-thin Body Size image increases the Product evaluation, raising the Attitude to the Product.

**H.** Exposure to a thin Body Size image decreases the Product evaluation, reducing the Attitude to the Product.

**H5.** Exposure to a non-thin Body Size image increases advertisement evaluation, rising Attitude to the Advertisement.

**H.** Exposure to a thin Body Size image lowers advertisement evaluation, decreasing Attitude to the Advertisement.

**H6.** Exposure to a non-thin Body Size image increases Purchase Intentions

**H** Exposure to a thin Body Size image decreases Purchase Intentions

---

**Variables**

In this experiment the independent variable is the model's shape, and accurately, their **Body Size** which was measured toward the BMI (Body Mass Index).

The two models, used in this study, have very different body size measure: the thin model has a Body Mass Index of 18 which is considered **underweight**, and the non-thin model has a Body Mass Index of 25.5 which is deemed to be **overweight**.

There were three exposure conditions: **underweight**, **overweight** and a **control** advertisement featuring just the product itself. Each participant surveys only one of the three states. Seven main dependent variables were analyzed: **Self-Esteem, Body Satisfaction, BMI, Attitude toward the Model, Attitude toward the Advertisement, Attitude toward the Product and Purchase Intention**.

Finally, a demographic section was completed to have a description of the sample which includes height and weight collected to calculate the BMI.
Experimental Design
A total of 379 women participated in the study. Participants of the online questionnaire were exposed to a body-cream advertisement. Each participant was presented randomly to one of the three exposure conditions: thin model, non-thin model, and no model. They were first introduced to one of the three randomly assigned advertisement treatments then asked questions from the self-esteem and body trait-state anxiety scales. Successively, they completed scales measuring attitudes toward the product, advertiser, advertisement and purchase intention. In conclusion, a demographic section has been presented to have a description of the sample.

Chapter 4: Results, Analysis and Discussion
The data collected for the three questionnaires were combined into a single data set to make a joint analysis. Qualtrics automatically captured and tabulated the data, and consolidated it into a file that was exported in SPSS format; the files loaded into SPSS for statistical analysis purposes. After reducing the data and detecting the factors which are crucial for the analysis, Analysis of Variance (ANOVA) was administered to determine if there were differences among the groups. Where ANOVA was significant, a Post-Hoc test was conducted to obtain an additional exploration of the differences among means between thin and non-thin groups.

Chapter 5: Findings and Recommendations
The body size's effects on self-esteem and body satisfaction have not been confirmed; on the other hand, the effects on consumer’s attitudes and purchase intention have been confirmed.

*H1 is not confirmed.* The exposure to a non-thin Body Size image did not increase Self-Esteem; its level was the same in the three exposure conditions.

*H2 is not confirmed.* The exposure to a non-thin Body Size image did not decrease Physical Appearance State and Trait Anxiety; Body Satisfaction was the same in the three exposure conditions.
**H3 is confirmed.** The exposure to a non-thin Body Size image increased model evaluation, increasing Attitude to the Advertiser. Women rated more positively the overweight model than the underweight one.

**H4 is confirmed.** The exposure to a non-thin Body Size image increased product evaluation, increasing the Attitude to the Product. Women rated more positively the product when it was promoted by the overweight than not when it was promoted by the underweight.

**H5 is confirmed.** The exposure to a non-thin Body Size image increased advertisement evaluation, increasing Attitude to the Advertisement. Women preferred the advertisement starring the overweight model than not the one with the underweight one.

**H6 is confirmed.** The exposure to a non-thin Body Size image increased Purchase Intention. In fact, participants had more intention to buy the product endorsed by the overweight model.

The “psychological part” (self-esteem and body satisfaction), which was also the most explored by the previous literature, has not been confirmed; however, the “marketing part” (attitudes and purchase intention), which was the most unexplored, has been confirmed.

**Self-Esteem and Body Satisfaction did not change**

Unlike previous researchers, self-esteem and body satisfaction were not influenced by the body size; perhaps, because both extremes (overweight and underweight) create the same body anxiety or have the same effect on self-esteem. Additionally, it could be that women were aware of the real goal of the questionnaire: looking at these two extreme models they thought it was a test to measure their self-esteem, understanding the real objective of the research.
**BMI, Body Satisfaction and Self-Esteem**

People with high Body Mass Index (BMI) had lower body satisfaction; in other terms, among the participants, who had a more significant weight had more anxiety with its body. On the other hand, people with high self-esteem had higher body satisfaction; said differently, participants with more self-confidence had less concern with their body appearance.

**Attitudes and Purchase Intention**

The Body Size influenced attitudes toward the Product, Advertiser, and Advertisement together with Purchase Intention.

It means that, at least, a non-thin model can be as effective as a thin model (or even more effective) in promoting a cosmetic product. It can make the product and its endorser more appealing to the average consumers without lowering advertising effectiveness and their purchase intentions.

These findings suggest that overweight models could sell more, at least in the cosmetic market where it was rated more positively raising the intention to buy; consequently, it is perceived in a better way by the average consumer. These results show that thinness does not always sell more, in this case, non-thin can compete and be even more effective than thin.

**Underweight and Overweight**

The thin model was not appreciated by the viewers that preferred to see no model than an underweight one who was representing both a thin body (BMI=18) and the model of Italian beauty according to the Superdrug Online Doctor’s research.

One of the reasons could be that Italian women are afraid of thin bodies or just of Italian beauty standards; in this case they coincide. Thinness became a beauty standard but is it accepted by everyone?
Winning the inner competition

Women looking at a non-thin model, which did not make them feel threatened by its image, judged better the advertisement without competing with the model. Not feeling in competition with the model or winning this rivalry could help women to focus on the product in its entirety as if the model would not be an obstacle to the advertising effectiveness.

Perfection Scares

The underweight model is rated less positively even compared to just the product itself. One of the reasons for this result could be that the "ideal of perfection" scares the viewer. The thin body, that also represents the Italian beauty model, could frighten the participants because it makes the dream of becoming more beautiful unrealistic or impossible to achieve and raises the sense of inadequacy.

Reality sells more

The product and its purchase intention are rated more positively in the presence of the non-thin model. The reason behind could be that the thin seems to give false hopes (since you will never reach certain levels of thinness, the cream does not make miracles) instead, the non-thin gives a more realistic look. Consequently, reality could be preferred to fiction; people could prefer seeing endorsers like them, with the same imperfections. In a world dominated by appearance, makeups, and fiction, people's perception of perfection seems to change. Therefore, seeing an ordinary woman with her difficulties, her imperfections being happy with herself makes most of women feel comfortable.

Admiration

Seeing a self-confident woman who shows herself with her blemishes could create admiration and courage among the viewers. Women could feel jealous towards the thin or feel admiration towards the non-thin who is not afraid of exposing herself despite its imperfections.
Implications

The media should vary the size and attractiveness of the models they use; increasing the diversity of body shapes and sizes portrayed they could reduce women's obsession for thinness remedying to its collateral effects. Consumers hold all the power, furthermore in this social media era, where they dictate what they want to see hiding or “unfollowing” images that could make them feel inadequate.

Women are getting higher in weight and size while becoming more powerful; they are increasingly rejecting the notion that they must pursue what is for many an unattainable size and shape. Promoting positive body image using successful non-thin models as spokespeople could attract their attention and consent.

Firms could obtain a more pleasant brand image with the purpose of celebrating diversity and a new idea of beauty.

This strategy has more potential in a cosmetic sector; however, it could also work in the fashion industry. It could enable larger women to buy fashionable clothes that fit without feeling discomfort demonstrating that size should not be a limitation to buy. Brands can gain market shares while making younger consumers feel comfortable with their selves.

Conclusion

Even if this study failed to prove the adverse effect of body size on self-esteem and body satisfaction, the effects on attitudes and purchase intention are evident.

A non-thin model could compete with a thin one, making the advertisement and the product look better; consequently, even larger spokespersons are rated more positively, with higher intention to buy the sponsored goods.

In a new era where beauty standards do not work anymore, where everybody wants to feel good and be the protagonist of her own lives, the best solution is to make all of them feel good in every shape and size without renouncing to sales maximization.