

Disclaimer Labels Used in Ads: An Eye-Tracking Study Exploring Body Dissatisfaction and Physical Appearance Comparison Among University Students

Reklamlarda Kullanılan Uyarı Etiketleri: Üniversite Öğrencileri Arasında Beden Memnuniyetsizliğini ve Fiziksel Görünüm Karşılaştırmasını Araştıran Bir Göz İzleme Çalışması

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Abstract

The necessity of having a perfect beauty created with advertisements has negative impacts on young people. Advertisements usually feature very slim models and their digitally altered, airbrushed and trimmed photos. Ideal beauty is created by retouching and changing digitally existing images. People compare their bodies to the perfect bodies in advertisements. Especially young women and men compare these perfect bodies with their own bodies and experience dissatisfaction. This may lead to anxiety, depression and lack of self-confidence in people who are not ideally sized.

Since ideal beauty influences the audience, the physical attractiveness of people starring in advertisements is one of the subjects worth stressing. With an experimental design, the eye movements of young female (40) and male (40) participants were recorded using the eye-tracking method. During this process, participants saw advertisements with and without disclaimer labels. The male participants saw the print advertisement which included the male model, and the female participants saw the print advertisement which included the female model. At the end of the experiment, the Body Dissatisfaction Scale (BDS) and the Physical Appearance Comparison Scale (PACS) were applied to the participants. The relationship

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between the participants' levels of body dissatisfaction and physical appearance comparison and their focus on Areas of Interest (AOI) in stimulated and non-stimulated advertising was revealed. The findings of the study showed that body dissatisfaction is high among young people and the level of body dissatisfaction did not affect more attention to any part of the model (body and face).

Keywords: Disclaimer Label in Ads, Eye-Tracking, Body Dissatisfaction, Physical Appearance Comparison, Body Image

Öz

Reklamlarla yaratılan kusursuz bir güzelliğe sahip olma zorunluluğu, gençlerin üzerinde olumsuz etkilerde bulunmaktadır. Reklamlarda genellikle çok ince modeller ve modellerin bilgisayarla değiştirilmiş, rötuşlanmış ve inceltilmiş fotoğrafları ön plana çıkarılır. Rötuşlama ve dijital olarak mevcut beden görüntülerinin değiştirilmesiyle ideal güzellik yaratılmaktadır. İnsanlar kendi bedenlerini reklamlarda gördükleri bu kusursuz bedenlerle karşılaştırmaktadırlar. Özellikle genç kadınlar ve erkekler gördükleri bu mükemmel bedenler ile kendi bedenlerini karşılaştırmakta ve büyük memnuniyetsizlikler yaşamaktadırlar. Bu da ideal ölçülerde olmayan insanlar üzerinde anksiyeteye, depresyona, özgüven eksikliğine neden olabilmektedir.

Reklamlarda yer alan kişilerin kusursuz fiziksel çekicilikleri, insanlar üzerinde olumsuz etkilere sahip olması sebebiyle üzerinde durulması gereken konulardan biridir. Deneysel bir tasarımla, göz izleme (eye-tracking) yöntemiyle genç kadın (40) ve erkeklerin (40) göz hareketleri kaydedilmiştir. Bu süreçte katılımcılar, uyarı etiketi olan ve uyarı etiketi olmayan reklamları görmüşlerdir. Erkek katılımcılar erkek modelin yer aldığı, kadın katılımcılar ise kadın modelin bulunduğu basılı reklama maruz kalmıştır. Deney sonunda katılımcılara Beden Memnuniyetsizliği Ölçeği (BDS) ve Fiziksel Görünüm Karşılaştırma Ölçeği (PACS) uygulanmıştır. Katılımcıların beden memnuniyetsizliği ve fiziksel görünümü karşılaştırma seviyeleri ile uyarılı ve uyarısız reklamda AOI odaklanmaları arasındaki ilişki ortaya konmuştur. Araştırmanın bulguları, gençler arasında beden memnuniyetsizliğinin yüksek olduğunu göstermiştir. Beden memnuniyetsizliğinin seviyesi, reklamdaki modelin herhangi bir bölümüne (beden ve yüz) daha fazla dikkat çekmede etkili değildir.

Anahtar Kelimeler: Reklamlarda Uyarı Etiketleri, Göz İzleme, Beden Memnuniyetsizliği, Fiziksel Görünüm Karşılaştırması, Beden İmajı

Introduction

Physical beauty has been one of the determining factors in human relationships throughout the entire history. Nowadays, conceptualizing beauty in aesthetics is done with a more spiritual approach. A person starts making self-judgment based on others' perceptions of beauty. Social Comparison Theory (Festinger, 1954) suggests that there is an innate human need to compare oneself to others to make accurate self-evaluations. The media escalate this comparison. Schilder (1950) explains body image as the "mental image" formed against the individual's own body. The media offer a variety of policies for consumers to perfect their bodies. In terms of the media, it is thought that magazines, television, newspapers, movies, commercials and music videos not only affect individuals' perceptions of body image but also spread the characteristics of the ideal body (Silverstein, Perdue, Peterson, & Kelly, 1986). As stated in Dove's self-esteem project report, many people are suffering from low esteem and globally only 4% of women describe themselves as beautiful

(Dove, n.d.). Appearance comparisons with same-sex peers are associated with a high level of body dissatisfaction among young adult women and even preadolescent girls, either directly or through thin-ideal internalization (Stormer & Thompson, 1996; Vander Wal & Thelen, 2000; Halliwell & Harvey, 2006).

Today, ideal beauty is created by retouching and changing digitally existing images. These methods are completely compatible with the idea of beauty. Especially young women and men compare these perfect bodies to their bodies and experience dissatisfaction. These comparisons to their physical appearance may have a negative effect on their mood and body image. According to the Dove 2016 self-esteem project, 7 out of 10 women (69%) and 6 out of 10 girls (65%) believe that the media and advertising world has set an unrealistic standard of beauty that most women will never reach (Dove, 2020). Since it influences the audience, the physical attractiveness of people starring in advertisements is one of the subjects worth stressing. Accordingly, the purpose of this study is to interpret the effects of disclaimer labels in advertising on young male and female participants and the relationship between body dissatisfaction and level of comparison with fixation. It would provide useful data to reveal the relationship between the effect of the disclaimer label and the encounter between body dissatisfaction and physical appearance comparison. Similar studies have been conducted in Europe, the USA and Australia, but this study offers findings and aims to enrich the current literature from a completely different cultural background in Turkey as the first academic effort focusing on disclaimer labels' effect on body dissatisfaction.

Body Satisfaction and Body Image on Ads

For female beauty, being thin is mainly imposed by the mass media (Bozsik, Whisenhunt, Hudson, Bennett, & Lundgren, 2018; Spitzer, Henderson, & Zivian, 1999; Sypeck, Gray, & Ahrens, 2004), and it is charged with body dissatisfaction as well as eating disorders in women (Groesz, Levine, & Murnen, 2002). Women feel dissatisfaction with their bodies if their bodies do not fit the thinness ideal imposed by the mass media (Tiggemann & Pickering, 1996). As pointed out in the sociocultural theory, appearance-related ideals are mostly influenced, transmitted and reinforced through the images frequently used in the media (Morrison, Morrison, & Hopkins, 2003).

To comprehend the harmful effect of frequently seeing idealized bodies on women's body image, social comparison theory (Festinger, 1954) should be considered. The theory suggests that there is an innate drive in people to compare themselves to other people, most particularly under subjective measure conditions. With this comparison, people have an opinion for their abilities, attitudes, and in this case, their appearance. In general, most women feel dissatisfaction with their appearance while comparing themselves to idealized thin-media images, and this comparison is almost unavoidable, occurs automatically and very rapidly in every exposure (Botta, 1999).

The media, especially advertisements, pervasively and repeatedly promote thinness as a body norm for young women, and at an early age, a girl aspires to beauty ideals, which are not real and attainable. As explained in the cultivation theory, exposure over time and repeatedly to idealized body images via media content shape girls' and adolescents' beliefs on body image. There is a potential

link between thin-idealized media exposure and body dissatisfaction known as the negative side effect of the media. With the increasing levels of body dissatisfaction most particularly among young women, some governments and policymakers have taken remarkable steps on this issue (Krawitz, 2014). Accordingly, to ameliorate the negative effects of the mass media on body image, media literacy training has begun as a part of the education system at schools. Similarly, to support their media literacy program, some countries including Israel, Australia, the United Kingdom, France, the United States and Canada have pioneered a strategy concerning adding a disclaimer/warning label to media images (mostly used in advertisements) which have been digitally altered or air-brushed. A generic or specific disclaimer warns and informs people about digital alterations used in the images to present extremely perfect models who appear in their ads. On the other hand, a warning label informs people regarding the potential harm of comparing the model's retouched body to theirs. In 2009, the Voluntary Industry Code of Conduct providing recommendations about disclosing some form of disclaimer to digitally altered images was released by the government in Australia. In 2012, Israel then passed a law known as the "Photoshop Law", which made it mandatory to display a label for airbrushed images in ads. Recently, in 2017, according to the new rulings in France, advertisers must include the indicative "photographie retouchée" (retouched photograph) warning label on their edited images. Otherwise, they could be fined €37,500 (£33,000) or up to 30 percent of the price it took to produce the advert (Petter, 2017). More recently, Canadian politicians put forth legislation requiring disclaimer labels on advertisement images which have a digital alteration on the model's body (Breen, 2018).

Disclaimer/warning labels are regarded as promoters of a positive body image. "Labelling airbrushed media images putatively improves body image by raising consumers' awareness that the appearance of the individuals presented is not natural, and therefore, is not a realistic target with which they should compare their appearance to" (Paraskeva, Lewis-Smith, & Diedrichs, 2017, p.165). On the other hand, several experimental studies have investigated the effects of disclaimer labels on body image, and there has been contradicting empirical evidence to support this strategy. Disclaimer labels may be easily implemented. Nevertheless, their effectiveness to mitigate body dissatisfaction with thin-ideal media needs more supporting evidence.

A pioneering study by Bissell (2006) examining disclaimer labels attached to fashion photographs revealed knowledge about the increased desire for thinness as a model, body dissatisfaction and eating disorders among young women. Advertisements often feature very slim models and digitally altered, aired and trimmed photos of these models. Looking at these examples, they create the impression that the ideal body is necessarily fat-free. Since more realistic but still presumably healthy bodies rarely appear in advertisements, this impression is firmly established. Heavy and fat bodies appear only as "before" photos in "success stories." The possibility that a person may be larger and still be fit and healthy is refused (Dworkin & Wachs, 2009), which may lead to anxiety, depression and lack of self-confidence in people whose body sizes are not ideal. As Kim and Lee have stated (2019) social comparisons about appearance can lead to negative health consequences.

Some studies ask questions about the impacts of idealized bodies in advertisements not only on women but also on men. For instance, Gulas and McKeage (2000) found in their study that exposing

idealized physical attractiveness and financial success affects men's judgments on themselves negatively. The findings of the study by Grogan, Williams and Conner (1996) showed that there is a clear correlation between viewing same-gender photographic models and body-esteem. Women and men were significantly less satisfied with their bodies after seeing attractive same-gender models. Although this effect has long been assumed to occur for women, these findings have shown that it also occurs for men. In his study, Grogan (2008) showed that a significant portion of men are dissatisfied with some aspects of their body shape and weight. Men who are dissatisfied with their body shape likewise want to be thinner or heavier (unlike women who often want to be slimmer). Men prefer use exercise rather than diet to change their body shapes (Grogan, 2008).

In another study on advertisements with idealized body images to compare body image in adolescence, Hargreaves and Tiggemann (2004) suggested that only girls' body dissatisfaction was increased, exposure to idealized bodies resulted in increased negative mood and appearance comparisons for both boys and girls, but the appearance comparison was much stronger for girls. There are many studies on the influences of models in advertisements and exposure to media on target audiences. By focusing on the effects of physical attractiveness in company with idealized images in advertisements targeting young women, Richins (1991) revealed that idealized images raise comparison standards in terms of attractiveness and decrease young girls' satisfaction with their attractiveness.

In addition to studies in several countries, the ads and body image relationship was also explored in several studies in Turkey. In one of these researches, Şehidoğlu (2016) investigates the effects of positive and negative attractiveness on brain activities with the EEG method in the example of public service ads on obesity, and it was aimed to contribute to fear attractiveness research. Conducted with the EEG method, Şehidoğlu's (2016) research was carried out on the public service advertisement at 3 different attractiveness levels on the subject of obesity, and it was observed that the way the subject spoke up caused different impression index values on the brain activities of the participants. "According to the results of the study, the participants are affected by the positive incentive, but when the EEG data is examined, it is seen that the unhealthy diet and obesity public service ads with low levels of fear appeal are more effective" (p. 116).

In another study (Pınar, 2017), investigated thin and plus-sized models' effects on buying behavior of women. Two studies were designed for research. In the first study, 304 participants, aged between 17-58, replied to questions about the physical attractiveness of women with different body weights and the possibility to buy advertised brands the women were in. Participants like thin models more than plus-sized models. In addition, it was observed that the purchasing intention of the participants decreased significantly as the weight of the models increased. With the second study, 21 women's EEG scores, aged between 18-57, were recorded. Effects of different ad slogans with thin and plus-sized models on brain activity were tested. It was observed that the positive slogan emphasizing the reconciliation of women with their bodies had a negative effect on the photo of the normal-weight model (p. 52). Kim and Lee's study (2019) revealed that appearance comparisons occurring in the media in the context of a transnational media flow from a non-Western country can be directly or indirectly linked to symptoms of body dissatisfaction and eating disorders among young women

living in a non-Western community. In the study, “comparison with Korean media figures showed the strongest associations with thin-ideal internalization, body dissatisfaction, and unhealthy eating-related attitudes among female Korean-Chinese students” (Kim & Lee, 2019, p. 4376).

Disclaimer Labels on Advertisements

In the recent decade, in the light of previous knowledge, there is an increasing interest in studying disclaimer labels' impact on women's body image among academics to be a guide for policymakers and on their decisions. Despite the growing body of research knowledge from recent studies on disclaimer labels in a variety of formats, the positive effect of non-labeling has been proven by only two studies (Harmon & Rudd, 2016; Slater, Tiggemann, Firth, & Hawkins, 2012). One study concluded that, when digitally unaltered images are labeled, it has no positive or negative effect on body dissatisfaction (Tiggemann, Slater, & Smyth, 2014). Contrary to these studies, an increasing number of studies have shown that attaching disclaimers to images on body image has no positive effect (Ata, Thompson, & Small, 2013; Bury, Tiggemann, & Slater, 2016a; Bury, Tiggemann, & Slater, 2016b; Cragg, Mulgrew, & Kannis-Dymand, 2019; Frederick, Sandhu, Scott, & Akbari, 2016; Harrison & Hefner, 2014; Selimbegovic & Chatard, 2015; Tiggemann & Brown, 2018; Tiggemann, Brown, & Thomas, 2019; Tiggemann, Brown, Zaccardo, & Thomas, 2017; Tiggemann, Slater, Bury, Hawkins, & Firth, 2013). Moreover, women may still realize these digitally altered images as realistic even if they notice the alteration (Borau & Nepomuceno, 2019). Nevertheless, this consciousness creates a boomerang effect by increasing the attainability of the idealized bodies in altered images (Harrison & Hefner, 2014). In their study using eye-tracking technology, Bury, Tiggemann and Slater (2014) examined how 60 female undergraduate students' visual attention would be affected by fashion magazine advertisements with a disclaimer label alerting that the images have been digitally manipulated. The subjects' eye movements were tracked by showing four thin ideal advertisements with no disclaimer label, a generic disclaimer or a more detailed specific disclaimer label (Bury, Tiggemann, & Slater, 2014). While the presence of a disclaimer label did not affect the time of viewing the target body area, reading the disclaimer label affected the eye's direction. Moreover, in particular, worded disclaimers (explaining which of the model's body parts had been digitally altered) changed the direction of gaze to the modified parts of the body warned in these disclaimers. While it was suggested that advertisements with a disclaimer were not helpful in terms of women's body image in the short term (Ata et al., 2013; Tiggemann et al., 2013, 2014), Bury et al. (2014) confirmed that these disclaimer labels might have been overlooked by women. Moreover, these labels may increase women's negative opinions (Selimbegovic & Chatard, 2015).

Using labels warning that the image has been “retouched” to promote positive body images did not escape the attention of politics and non-governmental organizations. Although experimental studies suggest that labeling is ineffective, with the thought that consumers' perspectives have been overlooked, Paraskeva et al. (2017) revealed 1555 British consumers' (ranging in age from 11 to 78) opinions on body image and social policy approaches by using a mixed-method. Their study suggested that consumers were skeptical about the effectiveness of labels. It was also suggested that, although not adolescents, adults quantitatively stated that labeling was unlikely to improve body

image. In summary, the study reported that appearance diversity in the media and social norms on function and health (not on appearance) should be improved.

McComb and Mills (2020) contributed to the literature with a systematic review regarding media labels' impact on the body image and mood of young women. According to the 15 experimental studies which had examined media disclaimers' impact on young women's body image published before 22 February 2019, disclaimers had no effect in reducing body dissatisfaction among women, and women's body image was negatively affected in some cases. McComb and Mills' (2020) literature review underlined the ineffectiveness of disclaimers in amelioration of the thin-ideal media's negative effects.

Apart from the advertising literature, similar results showed that adding disclaimers/self-disclaimers or body-positive captions to images to improve young women's body image by attractive celebrities (Brown & Tiggemann, 2020) or idealized Instagram images (Livingston, Holland, & Fardouly, 2020) on social media might not be as effective as expected.

The purpose of this study was to reveal the participants' interests by recording eye movements with the eye-tracking method while they see an advertisement and to determine the comparison levels of the participants with body dissatisfaction and physical appearance with BDS and PACS. It was aimed to reveal the effect of the disclaimer label on advertisements on young female and male participants and the relationship between body dissatisfaction and the level of comparison with the focus.

Methodology

An experimental design was used in this study. A two-posttest only control group design was used. Using convenience sampling 40 male participants participated in the first experiment, and 40 female participants participated in the second experiment. The male participants saw the print advertisement which included the male model, and the female participants saw the print advertisement which included the female model. The participants were assigned to the control and experiment groups randomly. The control group was shown an ad without a disclaimer label. The experiment group was shown an ad with a disclaimer label.

Ad type was used as IV, and total fixation duration was used as DV. As in line with the contents of the advertisements selected, five Areas of Interest (AOI) were defined. These were the face of the model, body of the model, brand name, product and disclaimer label.

The experiment was controlled by a PC with a screen resolution of 1920x1080 pixels. Eye movements were recorded with a Tobii eye tracker X3 120 desktop device. The sampling rate was 50 Hz. Eye movement was captured by the Tobii device at the bottom of a 24" computer screen that was located at 60 cm from the participant.

40 female and 40 male undergraduate students from Anadolu University, which is located in Eskişehir, Turkey, took part in the experiment in an isolated room. Their age ranged between 19 and 32 years (mean: 23.13). The participants were invited to take part in the study and informed that their

eye movements would be recorded. The participants were exposed to the ads for 15 seconds. Before the beginning of the recording, the eye tracker system was calibrated with nine red calibration dots.

At the end of the experiment, the Body Dissatisfaction Scale (BDS) (Mutale, Dunn, Stiller, & Larkin, 2016) and the Physical Appearance Comparison Scale (PACS) (Thompson, Heinberg, & Tantleff, 1991) were administrated.

BDS was used to measure body dissatisfaction by scoring the bodies from 1 to 9 (in ascending order of size). Each size is scored as a unit. The participants were asked to choose the body they would most like to look like (ideal body) and the body they thought was closest to their perceived body shape (actual body). The difference between the actual and ideal body that the participants chose was the participant's body dissatisfaction score (Mutale et al., 2016). Developed by Thompson, Heinberg, and Tantleff-Dunn (1991), PACS was used to measure the level of appearance of social comparison. PACS assesses the extent to which individuals make body comparisons with a 5-item self-report measure. For each item, the participants indicated the extent to which the statements were true for them on a 5-point Likert-type scale ranging from 1 = never to 5 = always.

Manipulation design

Six different print advertisements were selected for the male and female groups. Each advertisement included male/female models and all models' body are visible. Six different selected ads were shown to 20 male and female students, and afterwards, a questionnaire was applied. The participants were asked to score each ad from 1 to 7 in terms of the criteria of "fascinating", "attractive", "irritating" and "has ideal body". After ranking the ads, the highest-rated ads were selected. Then, the disclaimer label was inserted in one ad (see Figure 1). In the advertisement shown in Figure 1 "*Warning: The body of the model in the advertisement is digitally modified*" was written. The advertisements without a disclaimer are shown in Figure 2.



Figure 1. Selected Ads with Disclaimer Label



Figure 2. Selected Ads without Disclaimer Label

Results

In the first section of the analysis, heat maps were created by using the Tobii Studio software v3.4.8. In the second section, a t-test was performed.

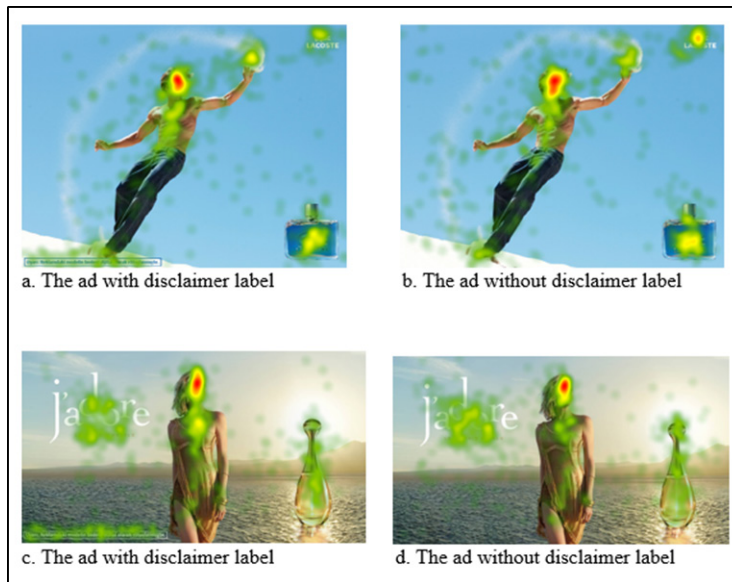


Figure 3. Heat Maps of Ads

According to the heat maps (see Figure 3), most participants focused on the face of the model. It may also be stated that the disclaimer label drew attention, and the brand name and the product drew attention, in this order.

The total fixation was calculated by using the Tobii Studio Software. The total fixation duration is the duration of all fixations within an AOI. Table 1 shows the mean and standard deviation scores of the total fixations for all AOIs.

Table 1. Descriptive Statistics of Total Fixation Duration

Sex	Ad type	AOI					
		Body	Brand	Warning label	Product	Face	
Female	With warning label	N	20	20	17	19	19
		Mean	2.92	2.30	1.74	1.88	3.34
		Std. Deviation	2.28	1.34	0.95	0.87	2.76
		Minimum	0.55	0.72	0.42	0.40	0.45
		Maximum	8.69	5.56	3.70	3.52	10.26
	Without Warning label	N	20	20	0	20	20
		Mean	2.11	3.30	-	2.59	2.54
		Std. Deviation	1.08	1.25	-	1.21	1.49
		Minimum	0.22	1.68	-	0.36	0.36
		Maximum	3.95	6.01	-	4.71	6.54
Male	With warning label	N	20	20	15	20	19
		Mean	3.45	0.71	1.42	1.68	2.36
		Std. Deviation	1.77	0.33	1.03	1.42	1.54
		Minimum	0.97	0.31	0.12	0.39	0.28
		Maximum	8.24	1.48	3.32	5.07	4.58
	Without Warning label	N	20	20	0	20	20
		Mean	3.73	1.14	-	2.34	2.83
		Std. Deviation	1.85	0.55	-	1.23	2.26
		Minimum	0.43	0.09	-	0.49	0.92
		Maximum	7.17	2.02	-	4.87	9.19

For the female group, the mean total fixation duration of the disclaimer label (1.74) was lower than those of the other AIOs. The female group was mostly fixated on the model face (3.34) in the disclaimer-labeled ad. On the other hand, the female group was mostly fixated on the brand (3.30) in the ad with no disclaimer label. In the male group, the participants were fixated mostly on the body of the model (3.45 and 3.73) in both ad types.

Table 2. t-Test Results According to AOIs (Female Group)

AOI	Ad Type	N	Mean	Std. Deviation	t	df	p
Body	With warning label	20	2.92	2.28	1.426	38	0.162
	Without Warning label	20	2.11	1.08			
Brand	With warning label	20	2.30	1.34	-2.439	38	0.019*
	Without Warning label	20	3.30	1.25			
Product	With warning label	19	1.88	0.87	-2.104	37	0.042*
	Without Warning label	20	2.59	1.21			
Face	With warning label	19	3.34	2.76	1.129	37	0.266
	Without Warning label	20	2.54	1.49			

Table 3. t-Test Results According to AOIs (Male Group)

AOI	Ad Type	N	Mean	Std. Deviation	t	df	p
Body	With warning label	20	3.45	1.77	-0.486	38	0.630
	Without Warning label	20	3.73	1.85			
Brand	With warning label	20	0.71	0.33	-2.979	38	0.005*
	Without Warning label	20	1.14	0.55			
Product	With warning label	20	1.68	1.42	-1.565	38	0.126
	Without Warning label	20	2.34	1.23			
Face	With warning label	19	2.36	1.54	-0.757	37	0.454
	Without Warning label	20	2.83	2.26			

To see whether the total fixation duration in AOIs differed or not based on ad type, an independent-samples t-test was performed. For the female group, the mean total fixation durations

of the brand and the product were significantly different based on the ad type. For the male group, the mean total fixation duration of the brand was significantly different based on the ad type.

Body Dissatisfaction and Physical Appearance Comparison

As mentioned before, Body Dissatisfaction Scale (BDS) was used to measure body dissatisfaction by scoring the bodies from 1 to 9 (in ascending order of size). The difference between the actual and ideal body that the participants chose was the participant's body dissatisfaction score (Mutale et. al, 2016).

In this study, PACS, developed by Thompson, Heinberg and Tantleff-Dunn (1991), was used to measure the level of appearance of social comparison. PACS assesses the extent to which individuals make body comparisons with a 5-item self-report measure. For each item, the participants indicated the extent to which the statements were true for them on a 5-point Likert-type scale ranging from 1 = never to 5 = always.

Table 4. Descriptive Statistics of BDS and PACS

		BDS Score	PACS Score
Female	N	40	40
	Mean	0.93	13.23
	Std. Deviation	1.53	3.83
	Minimum	-2.00	5.00
	Maximum	5.00	22.00
Male	N	40	40
	Mean	0.28	12.83
	Std. Deviation	1.50	4.02
	Minimum	-3.00	6.00
	Maximum	4.00	21.00

To see whether the PACS and BDS scores differed or not based on the male and female groups, an independent-samples t-test was performed. According to the test results, there were no significant differences.

Table 5. t-Test results of BDS and PACS

		N	Mean	Std. Deviation	t	df	p
BDS score	Female	40	0.93	1.53	1.920	78	0.058
	Male	40	0.28	1.50			
PACS Score	Female	40	13.23	3.83	0.456	78	0.650
	Male	40	12.83	4.02			

It is important to find the differences of fixation between participants who are satisfied with their body and participants who are dissatisfied with their body. According to the BDS, if a participant chooses body number 5 as their actual body and chooses body number 3 as their ideal body, their body dissatisfaction score would be 3. The higher the score difference, the greater the discrepancy between the perceived ideal body and the actual body chosen, which means greater body dissatisfaction. If a participant chooses body number 1 and body number 9, the highest body dissatisfaction score that a participant could receive would be 8. If a participant does not have body dissatisfaction, that is, they choose the same numbered body for both their perceived ideal and actual body, they would have a score of zero (Mutale et al., 2016).

BDS scores are modified into three categories: 1-lower dissatisfaction (discrepancy lower than 3) 2-higher dissatisfaction (discrepancy 4 or higher) 3-no dissatisfaction (zero discrepancy). PACS scores can vary between 5 and 25. PACS scores are modified into two categories: 1 – low comparison (lower than the score of 13), 2 – higher comparison (higher than the score of 14 and more). Then, according to these categories, the total fixation durations were analyzed.

Table 6. t-Test Results of AOI Total Fixations According to PACS Categories

AOI	PACS Categories	N	Mean	Std. Deviation	t	df	p
Body	Lower comparison	48	2.84	1.50	-1.249	78	0.215
	Higher comparison	32	3.37	2.31			
Brand	Lower comparison	48	1.89	1.22	0.210	78	0.835
	Higher comparison	32	1.82	1.65			
Warning	Lower comparison	17	1.69	1.05	0.570	30	0.573
	Higher comparison	15	1.48	0.93			
Product	Lower comparison	48	2.29	1.23	1.459	77	0.149
	Higher comparison	31	1.87	1.22			
Face	Lower comparison	47	2.58	1.84	-0.988	76	0.326
	Higher comparison	31	3.05	2.37			

As seen in Table 6, according to the t-test results, there were no significant differences in the total fixation durations based on the PACS categories.

Table 7. One-Way ANOVA Results of AOI Total Fixations According to BDS Categories

AOI	BDS Categories	N	Mean	Std. Deviation	F	df	p
Body	Lower dissatisfaction	52	2.89	1.74	0.801	2	0.453
	Higher dissatisfaction	4	3.99	3.37			
	No dissatisfaction	24	3.24	1.90			
	Total	80	3.05	1.87			
Brand	Lower dissatisfaction	52	1.98	1.50	0.773	2	0.465
	Higher dissatisfaction	4	1.21	0.74			
	No dissatisfaction	24	1.71	1.21			
	Total	80	1.86	1.40			
Warning	Lower dissatisfaction	19	1.62	1.10	0.115	2	0.891
	Higher dissatisfaction	3	1.32	0.96			
	No dissatisfaction	10	1.62	0.84			
	Total	32	1.59	0.99			
Product	Lower dissatisfaction	51	2.24	1.31	0.778	2	0.463
	Higher dissatisfaction	4	1.63	0.79			
	No dissatisfaction	24	1.96	1.12			
	Total	79	2.12	1.23			
Face	Lower dissatisfaction	50	2.77	1.97	0.421	2	0.658
	Higher dissatisfaction	4	1.88	1.45			
	No dissatisfaction	24	2.91	2.37			
	Total	78	2.77	2.07			

As seen in Table 7, the ANOVA test results showed that there were no significant differences in the total fixation durations based on the BDS categories.

Conclusion

It is commonly assumed that beauty ideals of beauty differ from culture to culture and from era to era (Cowley, 1996). However, studies in the literature have been conducted have revealed that regardless of race, class or age, people from all over the world share a sense of what is attractive. Although no one knows how our brains respond to the look of a face or a body, studies have shown that we judge each other by rules that we are not even aware of (Cowley, 1996). There is no doubt that the need for beauty is growing stronger today: body exposure is ever-increasing, and identity is gradually becoming 'physical'. Beauty, however, is inarguably deriving from progress and discomfort by getting democratized, expanding its boundaries and giving merely the promise of happiness (Vigarello, 2013).

The idealized female body has intensely widespread coverage in the mass media. In advertisements, however, we see digitally perfected faces and bodies instead of normalcy. The need to have a skinny, impeccable and beautiful body imposed by ads has a negative impact on both the physical and mental health of the young in the adolescence period. Therefore, striving for achieving beauty standards restrains an individual from enjoying life. With the digital revolution, the ability for fake bodies accidentally created on a computer screen or an app has expanded. Galioto and Crowther (2013) found in their study that one is more likely to experience body dissatisfaction when they are in a tendency of regularly making comparisons to others.

The findings of the study showed that body dissatisfaction is high among young people. Moreover, it is observed that the body dissatisfaction of the male participants is slightly higher than that of the women. Similarly, the study by Grogan et al. (1996) aimed to identify the relationship between both women's and men's body satisfaction and exposure to ideal body images, and the results showed that both women's and men's body satisfaction decreased after viewing pictures of same-gender models. This effect has long been hypothesized to occur for women, and the data of the study suggested that it may also occur for men. In popular culture, the male body is increasingly becoming more apparent, more muscular and fancier. Men, too, are on the road to share the same fate with women, and the male body has started to be commoditized. The PACS results show that both female and male participants are not satisfied with their own body, but they also have an ideal body perception they want to achieve. Men, too, are on the road to share the same fate with women, and the male body has started to be commoditized.

The level of body dissatisfaction did not affect more attention to any part of the model (body and face). However, if there is a disclaimer, women focus on the face of the model, and if there is no disclaimer, they focus on the brand. Women are more interested in beauty standards and aesthetics. So, the shift of attention from the product and brand to the model face can be seen as normal in the female group.

As it may be seen in the heat maps, the men always focus on the face of the model, with or without the disclaimer. However, if there is a disclaimer, the focus on the brand decreases. These are consequences that advertisers do not want because the advertiser wants attention to the brand and the product.

For both PACS (low or high) and BDS (low, high dissatisfaction or no dissatisfaction), there is no significant difference in focusing on the body, brand, disclaimer label, product and face. The participants' dissatisfaction level of their body may not cause more attention to any part of the model.

For the female group, the mean total fixation duration of the disclaimer label (1.74) is lower than the other AIOs. The female group is mostly fixated on the model face (3.34) in the disclaimer labeled ad. However, the female group is mostly fixated on the brand (3.30) in the ad with no disclaimer label. This shows that disclaimer labels can create a kind of awareness, and participants can pay more attention to the body of the model. This finding is similar to the study by Bury et al. (2014), concluding that the eye's direction is affected by reading disclaimer labels. Besides, all participants were in an isolated room with an eye-tracker on their faces while they were exposed to an ad on a computer screen. This unnatural setting may have obliged the participants' behaviors and scanning patterns on an ad.

Using physical attractiveness is an indispensable strategy for the advertising world. Models in many advertisements across various media are mainly picked among other physically attractive people. Moreover, the frequency of this trend is mainly irrelevant to the type of the advertised product. Nevertheless, studies show that consumers now want to see diversity in ads. This is because they know that the ideal bodies shown in ads are not real. Although they know the unreality as it is underlined in the study by Borau and Nepomuceno (2019), they are still affected. Results suggesting that these labels are not helpful in decreasing body dissatisfaction may reveal the truth that the thin ideal is overly internalized among young men and women. Taken all together, this thin ideal is embedded in our beauty standard practices too deeply, and it is not going to be sufficient to challenge it by just giving information or increasing awareness about digital alteration (MacCallum & Widdows, 2018). On the other hand, labels in retouched advertising campaigns have effects on young people in terms of attaining the shown bodies as an ideal. Similarly to Harrison and Hefner's (2014) study, labels create awareness about digital alteration, which causes a boomerang effect with increasing desirability of looking as the bodies shown in ads.

It may also have a negative impact on an individual's self-report through upward comparisons while comparing themselves to those who are better off or superior, according to Social Comparison Theory. Such negative social comparisons are detrimental to perceptions about the self. Tamplin, McLean and Paxton's studies (2018) showed that, for women, "commercial-social media literacy moderated the negative effect of exposure, independent of internalization or body comparison" (p. 8). Media literacy skills may be an important criterion for evaluating ads and comparing oneself to models out there. Consumers' acquisition of conscious media literacy ability is very important in turning the ideal body perception and pressure into positive. Especially in the education system supported by government policies, media literacy should be promoted. Instead of just showing the "ideal" body, the media can show that the "ideal body" may be in various forms. In this way, within the framework of the main idea that everyone may have flaws, it will have a great role in shaping the thoughts, actions, and bodies of young people.

Limitations and Future Studies

This study had some limitations like all studies. The results of this study cannot be generalized because the participants consisted of young and undergraduate students. With 80 participants, the experiments had relatively small sample sizes, and the stimulus materials used in the experiments were magazine ads. Above all, the participants were under pressure of being recorded while being exposed to ads.

In future studies, fixation areas (face and body) can be measured by the eye-tracking method via showing advertisements featuring the opposite sex. In addition to their body satisfaction levels, the physical characteristics they like in the opposite sex can be asked by in-depth interview method to the adults. Another comparison can be made between ads with the phrase “the body of the model in the advertisement isn’t digitally modified” and ads with the phrase “the body of the model in the advertisement is digitally modified”. In future researches, it can be looked at how much attention is paid to different product groups with the warning label. In addition, the question of whether the nudity of the model in the advertisement distracts attention from the warning label can be investigated. Therefore, images with low and high nudity can be compared.

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