

AMERICAN UNIVERSITY OF BEIRUT

TESTING THE EFFECTS OF DISCLAIMER LABELS ON
BODY DISSATISFACTION IN A SAMPLE OF YOUNG
WOMEN IN LEBANON

by
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A thesis
submitted in partial fulfillment of the requirements
for the degree of Master of Arts
to the Department of Psychology
of the Faculty of Arts and Sciences
at the American University of Beirut

Beirut, Lebanon
July 2016

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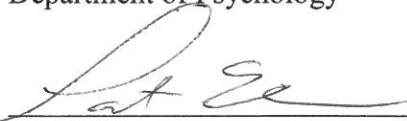
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ACKNOWLEDGMENTS

I would like to thank Dr. Nidal Daou. Without her constant support, optimism and consistent guidance, I would not have been able to graduate on time.

I would also like to thank my committee members, Dr. Alaa Hijazi and Dr. Fatima Al Jamil for holding my defense during the summer period.

I would finally like to acknowledge the support of my family. Without them I could not have accomplished anything.

AN ABSTRACT OF THE THESIS OF

Abeer Mansour for Master of Arts
Major: Clinical Psychology

Title: Testing the Effects of Disclaimer Labels on Body Dissatisfaction in a Sample of Young Women in Lebanon.

Policymakers, healthcare advocates and body image activists have recently obligated media displaying thin-ideal images to include a warning or disclaimer label on them. The labels alert consumers to the digital modifications applied to the models in the images, and aim to prevent women viewing these images from experiencing body dissatisfaction. Previous experimental investigations have yielded conflicting results with regards to the effectiveness of the labels in preventing body dissatisfaction. The present study aimed to address the limitations in these labels by creating and testing the effects of a modified label on body dissatisfaction in a sample of Lebanese women enrolled in the Introductory Psychology course at the American University of Beirut. The study was a between-participants experiment involving 85 participants across three groups (a control group; a group exposed to a traditional disclaimer label; and a group exposed to a novel, modified disclaimer label). It was hypothesized that the novel, modified disclaimer label condition would correct for the limitations of the traditional disclaimer labels in previous studies that had led to an *increase* in state body dissatisfaction, and had triggered state social comparison. This study also aimed to investigate how trait body satisfaction, trait social comparison, and thin ideal internalization moderate the effects of the labels on state body dissatisfaction, and how state social comparison mediates this effect.

Results did not support these hypotheses. Specifically, women exposed to all three experimental conditions experienced an increase in state body dissatisfaction from pretest to posttest, and this increase was statistically significant in the control and traditional label conditions. Furthermore, none of the proposed moderators or mediators were found to be significant predictors of posttest state body dissatisfaction. Finally, body mass index was found to be a significant negative predictor of trait body satisfaction. These findings strongly suggest that exposure to thin ideal advertisements can trigger experiences of body dissatisfaction in young women, and they suggest that these stimuli can be potent enough to overshadow the effect of any label attached to them. Furthermore, our findings pertaining to the proposed moderators and mediators further shed light on how little we know about how individuals process media images, especially in non-Western cultures. By contrast, our findings on the relation between BMI and trait body satisfaction add support to the Lebanese and international literature that has consistently found that this variable is a potent predictor of body dissatisfaction.

Keywords: body dissatisfaction, thin-ideal, thin-ideal internalization, social comparison, disclaimer labels, warning label

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Testing the Effects of Disclaimer Labels on Body Dissatisfaction in a Sample of
Young Women in Lebanon

CHAPTER 1

INTRODUCTION

Western mass media seems to have taken on the role of policing the existence of women. Women exposed to Western media have been the recipients of messages telling them how to act, think, dress, eat, and behave since the turn of the 20th century (Sentilles & Callahan, 2012). Ironically, these messages are often conflicting in content (Crone, 2006; Johnson & Holmes, 2009). For example, media sources supposedly promoting “women’s health” tend to be dominated by a focus on objectification and appearance (Bazzini, Pepper, Swofford, & Cochran, 2015).

Amongst the vast array of media messages targeting women, it appears that certain messages are repeated more often than others. Starting in the 1970s, prominent mass media outlets began to communicate the desirability of women with a thin body type (Garner, Garfinkel, Shwartz, & Thompson, 1980). This mass promotion and idealization of thinness has evolved into what is known today as the “thin-ideal” (Tiggemann, 2011). Societal obsession with thinness has not gone without negative consequences. Substantial empirical evidence suggests that exposure to thin-ideal media is linked to experiences of body dissatisfaction in women of various ages (e.g., Bell & Ditmar, 2011; Bessenoff, 2006; Blowers, Loxton, Grady-Flessner, Occhipinti, & Dawe, 2003; Calado, Lameiras, Sepulveda,

Rodriguez, & Carrera, 2010; Grabe, Ward, & Hyde, 2008; Groez, Levine, & Murnen, 2001).

Body dissatisfaction – in addition to being a distressing experience in and of itself – has been linked to a number of problematic outcomes such as chronic dysphoria, depression, and eating pathology (e.g., Buccinaeri & Neumark-Sztainer, 2014; Ohring, Graber, & Brooks-Gunn, 2002; Rosenstrom et al, 2013; Stice & Shaw, 2002). Given the harmful effects linked to thin-ideal media exposure and to body dissatisfaction, interventions have been developed to prevent these problematic outcomes (Levine & Piran, 2004; Neumark-Sztainer et al., 2006). Many of these interventions fail to sustain positive outcomes beyond their implementation (Levine & Piran, 2004), and many of them fail to address critical aspects of the environment –such as the thin-ideal media itself –which trigger body dissatisfaction (Neumark-Sztainer et al.).

A recent effort has been made to modify the messages that the thin-ideal media communicate to the viewer. This effort has been to place disclaimer or warning labels on the thin-ideal images, in order to alert the viewer to the unrealistic physical ideals being depicted (e.g., Slater, Tiggemann, Firth, & Hawkins, 2012). Paradoxically, research on these labels has revealed that they induce body dissatisfaction in vulnerable individuals (e.g., Ata, Thompson, & Small, 2013). Nevertheless, the present paper will argue that this line of intervention need not be abandoned. Specifically, the objective of the proposed study is to examine an alternative label that addresses the limitations that were identified in the original labels. Before introducing this proposal, a review of the major variables of interest will be offered.

CHAPTER 2

BODY DISSATISFACTION

Tiggemann (2012) has suggested that “body image” and its related concerns have become a part of our modern vocabulary, and of our shared cultural understanding.

Tiggemann (2011) has also noted that weight concerns in females have come to be conceived of as a “normative discontent” for this population. Relatedly, Buccieneri and Neumark-Sztainer (2014) have gone as far as to consider body dissatisfaction a major public health concern. Therefore, one can deduce that body dissatisfaction is a ubiquitous experience in certain cultures and contexts.

It is difficult to pinpoint the exact instance at which body dissatisfaction became a central academic and empirical concern. The literature over the past 62 years reveals a surge of efforts towards understanding the complex relationship people share with their bodies (e.g., Johnson, 1956; Jourard & Secord, 1954a; Jourard & Secord, 1954b; Secord & Jourard, 1953; Weinberg, 1960). In this section, body dissatisfaction will be introduced, and will be contextualized amongst a number of related constructs. Followed by this contextualization, an introduction to body dissatisfaction’s prevalence, demographics, major risk factors, and consequences will be presented. Given that the present study was conducted in Lebanon, a brief section on the literature available on body dissatisfaction in the Lebanese and Middle Eastern context will also be offered.

A. Definition and Contextualization of Body Dissatisfaction

1. Body Cathexis

Secord and Jourard (1953) conducted one of the earliest studies that investigated people's relationships with their bodies. Secord and Jourard were interested in the construct of "body cathexis", which they defined as the degree of satisfaction or dissatisfaction with one's body. The researchers were interested understanding the relation between the feelings one holds towards their body, and the feelings they harbor towards themselves. Specifically, Secord and Jourard hypothesized that negative feelings towards one's body would be associated with feelings of insecurity towards one's self. Results of their investigation supported their hypothesis in the women in their sample, but not in the men. Secord and Jourard postulated that this gender difference was due to the social significance placed on women's bodies. Secord and Jourard's work is significant because it encouraged researchers to take the way people feel about their bodies as a serious concern, and because it revealed that the way people relate to their bodies can have pertinent psychological ramifications. Finally, their work hinted towards the consistently replicated gender differences demonstrated across multiple studies of body image over the years.

2. Definition of Body Image

Later theoretical efforts expanded the early focus on 'body cathexis' to include a focus on a construct coined as 'body image'. Slade (1994) traced the first usage of the term "body image" to the German writer Schilder. Schilder (1935) had defined body image as "the picture of our own body which we form in our mind, that is to say the way in which

our body appears to ourselves.” (p. 11). One can note that Schilder’s definition emphasized that body image is a cognitive mapping of one’s body in one’s mind, and did he not include any emotional or attitudinal components in his conceptualization of the construct.

Slade (1988) (as cited in Slade, 1994) expanded on Schilder’s (1935) uni-dimensional definition of body image to include an emotional component. Specifically, he defined body image as “the picture we have in our minds of the size, shape and form of our bodies; and to feelings concerning these characteristics and our constituent body parts.” (p. 20). Similarly, Cash and Pruzinsky (1990) (as cited in Cash & Henry, 1995) conceptualized body image as multidimensional attitudes one holds towards their appearance. More recent conceptualizations of body image have also stressed the multidimensional nature of body image (e.g., Menzel, Krawczyk, & Thompson, 2011; Verplanken & Velsvick, 2008). For example, Menzel et al. specified three major components of body image: affective, cognitive and behavioral. According to Menzel et al., the affective component of body image includes emotions such as anxiety, distress and shame. The cognitive component includes beliefs about appearance, appearance ideals, and self-schemas about the significance of appearance. Finally, the behavioral component includes concrete actions such as body and weight checking, and avoidance of certain triggers such as mirrors and social settings.

3. Nature of Body Image

Slade and Brodie (1994) added another critical insight to the conceptualization of body image through their analysis of the construct of body image distortion. Body image distortion has been defined as a discrepancy between a person's true body size and their judgment of their body size (Gardner, 2011). Specifically, Slade and Brodie described how a number of early researchers identified body image distortion as a core component of eating disorders. Initial conceptualizations of body image distortion rendered it as stable and very resistant to change. Slade and Brodie argued against this 'frigid' conceptualization of body image, and instead proposed that it is malleable and subject to modification. As such, Slade and Brodie argued that even a distorted body image is subject to fluctuation and change. In fact, they argued that individuals with distorted body images are likely to have the most fluid body images (i.e., they perceive and react to their bodies in one way at one instance and in a different way at another instance).

Recent conceptualizations of healthy body image also stress the fact that it is more of a process rather than a discrete and unchangeable construct (Tylka, 2011). For example, research has shown that individuals with positive body image appear to reframe threatening information about their bodies in a neutral or positive manner. This reframing shifts their body image evaluation back to a positive one. One can extrapolate that a healthy body image does not include avoiding negative information, but rather, healthy body image appears to involve an active appraisal of information in a manner that is in touch with the body's best interests. As such, 'body image' is no longer conceptualized as a pre-existing construct, but rather, it is constantly being negotiated and produced.

4. Positive and Negative Body Image

Other significant aspects to keep in mind when conceptualizing body image are the higher order factors associated with the construct. Body image has been commonly associated with two higher order factors: positive body image and negative body image (Halliwell, 2015). Halliwell (2015) noted that these higher-order factors of body image are negatively correlated and independent factors. Tylka and Wood-Barcalow (2015) also stressed the fact that positive and negative body image are not on the same continuum, and that the field has fallen under the misconception that if negative body image is low, then positive body image must be high by default.

Early research on body image tended to focus on the negative factor of body image. In fact, Tylka & Wood-Barcalow (2015) explained how the field of body image research had come to be almost completely dominated by a focus on pathology. Tylka and Wood-Barcalow (2015) identified positive body image as a multifaceted construct encompassing body appreciation, body acceptance and love, broadly conceptualizing beauty, adaptive appearance investment, inner positivity and filtering information in a body-protective manner. They also described positive body image as being holistic, protective, and as a process rather than as a fixed construct (as discussed above). Additionally, Tylka (2011) indicated that being “media literate” was a characteristic of individuals with positive body image identified across various qualitative and quantitative studies. Being media literate was defined as being aware of the fabricated nature of media images, and challenging these media images.

5. Relation Between Negative Body Image and Body Dissatisfaction

Body dissatisfaction has been defined as negative evaluations of one's physical body (Shiffrar, n.d.). Body dissatisfaction can take on two forms: state and trait body dissatisfaction (Cash, 2011). State body dissatisfaction is body dissatisfaction that occurs in response to a given trigger or context, whereas trait body dissatisfaction refers to a general disposition to experiencing body dissatisfaction (Cash, 2011).

As one might have noted in the discussion above, the term 'body image' has been a central term in contextualizing 'body dissatisfaction'. The literature tends to frequently associate the terms 'negative body image' and 'body dissatisfaction' (e.g., Groesz, Levine, & Murnen, 2001) without an explicit attempt to tease apart the two constructs. This is a significant limitation in the body image literature, especially when conceptualizing body image from a more dynamic perspective: body image as a process or activity which is constantly being created, rather than a fixed product (Gleeson & Frith, 2006).

If we conceptualize body image as a process, measuring state body dissatisfaction and using it to infer whether an individual has positive or negative body image is no longer acceptable. For example, an individual might experience positive thoughts and feelings about her body in one circumstance and body-dissatisfied thoughts and feelings at another.

When we conceptualize body image as a dynamic process being constantly re-created and negotiated, it might appear that concepts such as trait body dissatisfaction or terms such as 'negative body image' and 'positive body image' are no longer relevant. Nevertheless, one cannot ignore the fact that individuals tend to present with pre-existing cognitive schemas that affect the way they process information in ways that are often

predictable (e.g., Beck, 2011). From this perspective, constructs such as negative body image or trait body dissatisfaction become highly valuable.

In this case, Verplanken and Velsvick's (2008) approach to body image appears to offer a compromise between the two perspectives. The researchers suggested that when the frequency and the automaticity of body dissatisfied thoughts render it a "mental habit" in an individual, the attitude he or she holds towards his or her body is likely to be predominantly negative (Verplanken & Velsvick, 2008). Such a definition does not equate an experience of state body dissatisfaction with negative body image, but it also does not disregard the fact that individuals tend to form 'mental habits' and predictable ways in which they interact with their environments. Based on these considerations, it would be prudent for researchers examining body dissatisfaction to assess not only for state experiences of body dissatisfaction as they emerge within the experimental sessions, but to also assess for the individual's general relationship with their body on as they experience it on a day to day basis.

In sum, a number of key points can be identified from the review above. First and foremost, the relationship one has with their body has significant psychological effects that extend behind mere physical awareness and sensation (Secord & Jourard, 1953). Body image is currently defined as a multi-dimensional as it contains affective, cognitive and behavioral dimensions (Menzel, Krawczyk & Thompson, 2011). Also of significance is the fact that body image is a multi-factored construct loading on a positive and negative dimension (Halliwell, 2015). Positive body image is associated with body appreciation, respect, love, and media literacy (Tylka & Wood-Barcalow, 2015). By contrast, negative body image is associated with a high frequency of negative thoughts concerning various

aspects of one's appearance. In other words, it is associated with high levels of state body dissatisfaction (Verplanken & Velsvick, 2008).

State body dissatisfaction refers to an isolated experiential state of body dissatisfaction triggered by a stimulus. State body dissatisfaction can be contrasted with trait body dissatisfaction which is an individual's general predisposition (trait body dissatisfaction) towards experiencing body dissatisfaction (Cash, 2011). As such, it is important for researchers to assess for both forms of body dissatisfaction in their studies. Finally, future research should focus on better conceptualizing negative body image and body dissatisfaction, and better elucidate the relation between these two constructs.

B. Prevalence and Demographics of Body Dissatisfaction

Cash and Henry (1995) found that half of the women in their sample reported negative evaluations of their appearance and a preoccupation with their weight. Similarly, Fiske et al. (2014) found that 11-72% of the women in the 7 studies they sampled experienced body dissatisfaction. Fallon et al. (2014) found that women in the U.S. had rates of body dissatisfaction ranging from 13.4% to 31.8%. The results of these studies collectively indicate that a significant proportion of individuals -specifically Western females- experience body dissatisfaction.

A gender difference in the expression and prevalence of body dissatisfaction has been documented across studies. Tiggemann (1991) found that the women in her sample tended to rate their current figures as significantly larger than attractive or ideal figures whereas the males in their sample did not. Sillberstein, Streigel-Moore, Timko and Rodin (1988) found that although both men and women experienced similar degrees of body

dissatisfaction, none of the women expressed a desire to have a larger body. Similarly, Neighbors and Sobal (2007) found that normal weight women chose a slightly lighter and thinner ideal body, whereas normal weight males showed mixed results. Macneill and Best (2015) found that their sample of females tended to endorse an ideal body type that was classified as underweight. Murnen (2011) reported that gender difference became more prominent in the 1980s. This difference in the prevalence of body dissatisfaction has been documented in girls as young as age 8 (Wood, Becker, & Thompson, 1996), and this trend appears to continue into adolescence (Bearman, Presnell, Martinez & Stice, 2006) and adulthood (Fallon et al., 2014).

It is significant to note that countries with higher socioeconomic status (SES) tend to have higher levels of body dissatisfaction (Swami, 2015). Swami et al. (2010) found that women in high SES settings (participants from urban research sites in Malaysia and South Africa) tended to experience more body dissatisfaction and drive for thinness than did women in lower SES settings (participants from rural research sites in Malaysia and South Africa). Studies have also shown that low waist-to-hip ratios are considered to be attractive in contexts with high socioeconomic status, whereas high ratios are considered to be attractive in contexts with lower socioeconomic status (Swami, 2011).

Finally, it is significant to briefly note that the influences of Westernization and modernization have been proposed in order to explain cultural differences in the expression and prevalence of body dissatisfaction amongst different communities. Research has indicated that communities exposed to Westernization and modernization tend to be at increased risk for body dissatisfaction (Swami, 2015). Swami et al. (2010) found that body dissatisfaction was prevalent in countries with exposure to Western media. Westernization

has been proposed to contribute to body dissatisfaction through its promulgation of Western media that tends to depict the thin-ideal (Nasser, 1986 as reviewed in Swami, 2015). Swami (2015) noted that it is very difficult to identify which influences on body ideals originate from Westernization, and which ones are rooted in modernization. Research on the effects of modernization on body image has focused on nutritional and lifestyle changes, materialism and individualism, resource security, and gender role changes as factors which play a role in shaping body ideals (Swami, 2015). The interested reader is directed to Swami (2015) for a more in depth discussion.

C. Risk Factors and Consequences of Body Dissatisfaction

Body mass index (BMI) appears to be one of the most potent risk factors of body dissatisfaction, as numerous studies and meta-analyses have indicated its link to body dissatisfaction in adolescent girls and in women (Bucchianeri, Arikian, Hannah, Eisenberg, & Neumark-Sztainer, 2013; Ferguson, Winegard, & Winegard, 2011; Lawler & Nixon, 2011; Presnell et al., 2003; Slevic & Tiggemann, 2011; Stice & Shaw, 2002; Wojtowicz & Ronson, 2012) Of interest, Bucchianeri et al. (2013) conducted a 10-year longitudinal study on the changes in body dissatisfaction from adolescence to young adulthood. Results revealed that as BMI increased from adolescence to young adulthood, body dissatisfaction increased as well.

A second key risk factor of body dissatisfaction has been the sociocultural influence on body image and ideals. Peer pressure to be thin (Helfert & Warschburger, 2011; Gerbasi et al., 2014; Gondoli, Corning, Salafia, Bucchianeri, Fitzsimmons, 2011; Presnell, Bearman, & Stice, 2003), peer appearance criticism (Lawler & Nixon, 2003), frequency of

peer comments on weight and diet (Forney, Holland, & Keel, 2012), parental pressure to be thin (Helfert & Warschburger, 2011), and overall perceived societal pressure to be thin (Gerbasí et al., 2014; Stice & Shaw, 2002) have all been linked to body dissatisfaction.

A major sociocultural pressure to be thin is thin-ideal media, and a number of studies have experimentally induced body dissatisfaction in participants by exposing them to thin-ideal stimuli (e.g., Homan, McHugh, Wells, Watson, & King, 2012; Tiggemann & Slater, 2004; Turner, Hamilton, Jacobs, Angood, & Dwyer, 1997). Their results implicate mass media exposure to thin-ideal imagery as potent triggers for body dissatisfaction. Although the results of these experiments did not assess the longitudinal effects of exposure to thin-ideal media imagery, the immediate effects of these images indicate that long-term exposure to these thin-ideal images is likely shaping body image in a negative direction by increasing the frequency of body dissatisfied cognitions and emotions. Major individual difference variables that mediate and moderate the relation between exposure to thin-ideal media and body dissatisfaction have been identified (Levine & Chapman, 2011). These variables include pre-existing body dissatisfaction, thin-ideal internalization, and social comparison (Levine & Chapman, 2011).

The consequences of body dissatisfaction can be serious and life threatening. In their review, Stice & Shaw (2002) found that body dissatisfaction is a risk factor for eating pathology and that dieting and negative affect mediate this relation. Ohring et al. (2001) found that recurrent body dissatisfaction in adolescence was associated with elevated depressive and eating pathology in young adulthood. The researchers also found that concurrent body dissatisfaction emerged as a correlate of eating pathology and depressive affect.

CHAPTER 3

THE SOCIOCULTURAL MODEL OF BODY DISSATISFACTION

After the review of body dissatisfaction presented above, the sociocultural model, which is a major theoretical framework that guides the current understanding of body dissatisfaction, will be presented. The sociocultural model has become one of the most widely researched models of body dissatisfaction and eating pathology. Tiggemann (2012) noted that the sociocultural model of body dissatisfaction is a general heuristic guiding how we think of the etiology of body dissatisfaction. Furthermore, she noted that the sociocultural model does not intend to negate any individual differences that might moderate the effects of the sociocultural pressures, but rather its focus is on the aspects of the sociocultural environment that foster body dissatisfaction.

The sociocultural model holds that there exists in our environment various pressures to adhere to a specific standard of beauty and that these standards are promoted by various sociocultural agents. Individuals internalize these standards and hence are prone to developing body dissatisfaction when they fall short of the internalized standards. One can fill in the “beauty standards” blank with any prevailing cultural ideal of beauty that is being promoted in a mass manner to the exclusion of other body types and ideals. Once these ideals are internalized and experienced as unattainable, body dissatisfaction is likely to develop (Tiggemann, 2012). Currently, the sociocultural model in Western countries involves the promotion of a thin beauty ideal (Blowers et al., 2003). The sociocultural

model has received empirical support in a number of investigations (Blowers et al., 2003; Cafri, Yamamiya, Brannick, & Thompson, 2005; Wertheim et al., 1997).

The general framework illustrated by the sociocultural model has been refined by researchers over the years. Specifically, researchers have identified the three major sociocultural influences on body dissatisfaction and they are peers, family and the media (Tiggemann, 2011) They have also identified thin-ideal internalization and social comparison to be mediators of the effects of these sociocultural influences on body dissatisfaction (Tiggemann, 2011). This model has been referred to as the tripartite influence model of body dissatisfaction and eating pathology and has received substantial empirical support (e.g., Keery, van den Berg, & Thompson, 2004).

A. Thin-Ideal and Media Influences

The sociocultural model of body dissatisfaction implicates the sociocultural pressures to be thin as playing a crucial role in the development of body dissatisfaction (Tiggemann, 2011). One of the major sociocultural pressures to be thin is the thin-ideal promoted by Western mass media (Levine & Chapman, 2011; Tiggemann, 2011). In this section, the history of the thin-ideal will be traced and its propagation through the mass media will be delineated.

Anderson-Fye (2012) noted how humans have always had the curiosity to try to understand other human beings based on their physical appearance. He noted how early European anthropologists were preoccupied with determining how a race differed from their own based on the similarities and differences in their physical appearances. Relatedly, Wells & Seigel (1961) discovered the notion that certain body types are associated with

certain traits in people's minds. They labeled this effect as "stereotyped somatotypes". Wells and Seigel's research shed light on how humans appear to have a general tendency to associate non-physical characteristics such as intelligence, beauty and success with the form of one's physical body. The musings of the early anthropologists and the research of Wells and Seigel are significant to keep in mind when examining the history of the thin-ideal, and in making sense of how a thin body type has come to be associated with a host of positive characteristics.

Moving on to the early 1980s, researchers began to notice the emergence of the thin-ideal and attempted to make sense of its origins. For example, Garner et al. (1980) began by noting how different cultures value different types of female beauty, with plumpness being associated with attractiveness in most non-Western cultures. Of significance to Garner et al.'s investigation, Cafri et al. (2005) noted that a period existed in the West in which the beauty ideal was also a woman who was plump and "maternal" (Fallon, 1990 as cited in Cafri et al., 2005), indicating that similar to their non-Western counterparts, Western countries had not always valued thinness.

Based on insights like those mentioned above, Garner et al. hypothesized that the thin-ideal likely originated in the West at some point in time, and they attempted to trace the point in time it seems to have emerged. Interestingly, Garner et al. cited a study conducted by Calden, Lundy and Shlafner (1959; 20 years prior to Garner et al.'s investigation), which found that Western women associated thinness with attractiveness. Other researchers have found that this shift in body ideals had arisen during the end of the 19th century (Calogero et al., 2007 as cited in Swami, 2015). The reasons for this shift are multiple and complex, yet theorists (Wolf, 1990 as reviewed in Swami, 2015) have

postulated that this shift was mainly intended to relegate women's interests and efforts towards beauty and physical appearance rather than to focus them on gender equality.

In an attempt to make sense of the emergent thin-ideal, researchers in the 1980s and 1990s directed their attention towards analyzing the changing ways in which mainstream media depicted women's bodies. These researchers used content analyses of media outlets to determine the common themes of female beauty that were promoted. Their efforts indicated how the ideal female body type was changing to become a very thin and unattainable silhouette in both adult and teen media outlets (e.g. Garner et al. 1980; Evans, Rutberg, Sather, & Turner, 1991; Guillen & Barr, 1994). A more recent review by Sypeck, Gray and Ahrens (2003) corroborated that there indeed was a drastic increase in the depiction of the thin-ideal in magazines starting in the 1980s and 1990s.

Although these researchers uncovered a general trend towards a portrayal of the thin-ideal in a host of popular media outlets, a cross-examination of their results indicated that thinness was not the only body ideal being promoted. Specifically, some authors found that thinness was the body ideal being promoted (e.g., Evans et al., 1991), others found an emphasis on fitness (e.g., Nemeroff, Stein, Diehl, & Smilack, 1993). Similarly, Ogletree, Williams, Raffeld, Mason, & Fricke (1990) noted that American media appeared to have a contradictory relation with food. On the one hand it promoted food as a sensual treat to be enjoyed and at the same time pressured women to be fit and thin. Ironically, these authors pointed out that the same companies that sold high calorie foods are the ones that promote weight loss products (e.g., "The shape-up, pig-out diet", 1988).

In sum, although there appears to have been an increase in the depiction of the desirability of thinness in mainstream media outlets, other ideals such as fitness have also

been promoted. Furthermore, women appear to be the recipients of multiple messages and ideals attempting to govern their existence, and these messages are often contradictory in nature (e.g., Bazzini et al., 2015; Ogletree et al., 1990).

We are living in an era in which contradictory ideals are being directed towards females through Western mass media outlets. Recent content displayed on Seventeen magazine's website (October 11, 2015) exemplified such contradictory messages. It featured an article criticizing a school's "hypocritical" dress code, while on the same page featuring an article on "9 super-cute ways to update your back to school..."(All the models featured in this article were tall, thin and blonde), as well as a link to a weight loss website. There seems to be a rise of critical voices encouraging women to dress, act and be without being confined to society's standards and ideals. At the same time, thousands of thin-ideal and fit-ideal advertisements, and photo-shopped images of celebrities bombard these very same women.

The thin-ideal has been widely promoted by the mass media (Levine & Chapman, 2011). Sentilles and Callahan (2012) noted how the emergence of an image-based mass media created a shift in the way women were represented. They noted how the early mass media was primarily in the form of prose, and focused on women's roles within the domestic sphere. They pointed out that women have always been depicted in images through artwork for example, but that this depiction is distinct from those promoted by the culture of consumerism and by mass marketing agendas. Sentilles and Callahan traced females' omnipresence in the mass media back to the turn of the 20th century, when products became easily accessible to the average consumer. Large corporations identified

females as prime consumers and hence directed marketing efforts aimed to sway women's loyalty towards their brands.

One cannot simply argue that the effects of the media are not prominent enough to exert any influence on the public's perceptions of themselves and others. For example, a study by Spillman and Everington (1989) found that the preferred somatotype changed from the mesomorph (athletic and muscular body type) in previous studies to the ectomorph (thin and fragile body type) in their sample. Specifically, their sample associated the ectomorphic build with having the most sexual appeal, having the most dates, exercising the most, and being the most knowledgeable about nutrition. Their study was conducted in 1989, which is during the era that saw a rise in the depiction of the thin-ideal in the mass media (e.g., Evans, Rutberg, Sather, & Turner, 1991; Guillen & Barr, 1994). This indicates that the public's body ideals fluctuate, and this fluctuation coincides with the body ideals depicted in the mass media.

Another enlightening study by Kenrick and Gutierrez (1980) found that exposing men to idealized images of female beauty resulted in lower ratings of attractiveness of a potential date for their friends. A more recent study by Bair, Steele and Mills (2014) also examined the effects of manipulating body ideals on personal standards of attractiveness. Women in different conditions were exposed to different body types which they were led to believe represented the ideal body type chosen by most of their peers, i.e., the normative body ideal. These researchers found that women in their sample tended to sway their ideal and current perceptions of their body type to match the "normative" body ideal. Finally, a host of modern experiments have found that direct exposure to airbrushed media models depicting the thin ideal, induces body dissatisfaction in female samples (e.g., Homan,

Mchugh, Wells, Watson, & King, 2012; Ditmar, Halliwell, & Sterling, 2009). These studies indicate that the body norms depicted in media outlets can exert an effect on an individual's perception of themselves and others, and one can discern a clear link between the ideals portrayed in the media and women's body satisfaction.

B. Thin-ideal Internalization

The second major component in the sociocultural model of body dissatisfaction is thin-ideal internalization. Thin-ideal internalization is defined as the extent to which an individual is cognitively and emotionally invested in the standards of thinness prevailing in society, and the extent to which that individual engages in behaviors attempted to help him or her attain that standard (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999; Thompson & Stice, 2001). Thin-ideal internalization is not the same as a mere awareness of the thin-ideal (Thompson & Stice, 2001). An internalization of, and identification with this ideal needs to occur for its effects on body image to materialize.

Thompson and Stice (2001) hypothesized that thin-ideal internalization occurs through the process of social reinforcement in which friends, family and peers (sociocultural agents) perpetuate and reinforce the prevailing ideals and standards. Thin-ideal internalization is thought to contribute to body dissatisfaction through its mediating influence between sociocultural pressures to be thin and body dissatisfaction (Thompson & Stice, 2001). This construct is also hypothesized to directly influence body dissatisfaction as the thin standards that are being aspired to are in and of themselves impossible to naturally attain (Thompson & Stice, 2001).

The above hypotheses have been supported by the empirical literature. A number of studies have demonstrated that thin-ideal internalization is directly linked to body dissatisfaction (Austin & Smith, 2008; Lawler & Nixon, 2011; Nouri, Hill, & Orelle-Valente, 2011; Sands & Wardle, 2002; Vartanian & Hopson, 2010). Other studies have found that thin-ideal internalization mediates the relation between sociocultural pressures to be thin and body dissatisfaction (e.g., Sands & Wardle, 2002). Nevertheless, researchers such as Tiggemann & McGill (2004) have proposed that thin-ideal internalization is likely a moderator rather than mediator of the thin-ideal media's effects on body dissatisfaction. This perspective regards thin-ideal internalization as a schema that involves multiple encounters with thin-ideal stimuli to consolidate. Thin-ideal internalization becomes more of a 'trait-like' factor guiding the manner in which the individual perceives and interacts with environmental stimuli, rather than a process triggered by a single exposure to a thin-ideal image.

C. Social Comparison

The third major component of the sociocultural model of body dissatisfaction and eating pathology is social comparison. Social comparison has been defined as the process by which one compares aspects of themselves with others in order to evaluate or enhance these aspects (Suls, Martin, & Wheeler, 2012). Tiggemann and Polivy (2010) have hypothesized that the process of social comparison that occurs in response to exposure to thin-ideal images, is what mediates the relation between this exposure and body dissatisfaction.

Tiggemann and McGill (2004) differentiated between two expressions of social comparison: (a) The general tendency of the individual to engage in social comparisons with others; and (b) the process of social comparison which occurs in response to exposure to thin-ideal stimuli. The researchers hypothesized that it is the latter that mediates the effect of thin-ideal media on body dissatisfaction. A number of studies have lent support to Tiggemann and McGill's hypothesis, as they have linked social comparison processing of media images to body dissatisfaction (e.g. Gulas & McKeage, 2000; Tiggemann & McGill, 2004; Tiggemann & Polivy, 2010).

Two directions of social comparison have been identified: upward and downward (Halliwel, 2012). Upward social comparisons refer to comparisons that occur with a target deemed to be better off than oneself in terms of the compared aspect. Downward social comparisons refer to comparisons that occur with someone deemed to be inferior on the aspect compared. Traditionally, it was assumed that upward social comparisons produced negative consequences whereas downward comparisons with positive consequences. The current understanding of the matter suggests that the effect of either form of comparison depends on how the information gleaned from the comparison is appraised in one's mind (Halliwel, 2012). For example, someone who is rich and unhappy might perform a downward social comparison with an individual with less money than him or her. The result of this comparison might be negative if the individual concludes that the poor person is better off because although he or she has less money than them, the poor person is happier.

One might ask why media models are common targets of social comparison. There are two possible explanations for this phenomenon. It is conceivable that this is because

many media models and celebrities tend to be of similar ages to the women viewing them, and tend to be depicted as the “girl next door”, or in relatable contexts in various media outlets. Levine (2012) postulated that women use media models as targets for social comparisons because they consider them to depict desirable and attainable ideals. These relatable attributes might render celebrities and other media models as targets of social comparison based on Festinger’s similarity hypothesis.

As reviewed in Suls et al. (2012), Festinger’s similarity hypothesis (1942) postulated that individuals judged to be similar to oneself are considered good targets for social comparison. Like Festinger, other theorists such as Goethals and Darleys (1977) postulated that it makes more sense for individuals to compare themselves with individuals who have similar related attributes (attributes related to a given ability or opinion); a comparison would produce more relevant information about the status of one’s ability or opinion (as cited in Suls et al.). In other words, a 12-year-old girl wondering whether she is “too heavy” would glean more relevant information by comparing her body to a 12-year-old celebrity or media model than she would by comparing it to a 25-year-old media figure.

Another controversial possibility is that our society sets up an environment in which it is very difficult for certain women to avoid comparing themselves with these media models (Halliwell, 2012). Specifically, Halliwell poignantly noted that “the ubiquitous display of idealized bodies in the media and advertising directs us, implicitly and explicitly, to make comparisons with these ideals. Therefore, cultural attitudes toward appearance may set up a climate where, as Wood describes, making upward comparisons is not something that we choose but something that we are forced into.”(p. 753).

CHAPTER 4

BODY DISSATISFACTION IN THE LEBANESE AND MIDDLE EASTERN CONTEXT

Scant research on body dissatisfaction exists in the Middle Eastern context. Mousa et al. (2010) found that 21.1% of their sample of Jordanian girls aged 10-16 years endorsed experiences of body image dissatisfaction, which is a percentage comparable with percentages from North American samples (e.g., Fiske et al., 2014; Fallon et al., 2014).

In terms of Lebanese participants, Yahia, El-Ghazale, Achkar, and Rizk (2011) found that of the 252 Lebanese women sampled, 19% were slightly worried, 12% were moderately worried, and 5% were extremely worried about their weight. These statistics indicate that body dissatisfaction appears to be a pertinent concern in certain Lebanese women.

A few studies conducted in the Lebanese context shed light on the factors that appear to predict body dissatisfaction in Lebanese individuals. For example, Haddadin (2010) found that the higher the participant's body mass index, the higher their levels of body dissatisfaction. Similarly, Nakhle (2012) found that BMI predicted body dissatisfaction, above and beyond the effect of the participants' degree of thin-ideal internalization. In contrast to international literature, Nakhle found that even after partialling out the effect of age and years spent in Lebanon (in order to control for the effects of how long the participant has been exposed to Western body ideals from the actual effect of internalizing them), thin-ideal internalization was still not found to moderate the effects of media exposure on body dissatisfaction.

The findings of Haddadin (2010) and Nakhle's (2012) studies both point to the possibility that body mass index appears to be an important predictor of body dissatisfaction in Lebanese individuals, and Nakhle's findings in specific pointed to the possibility that body mass index might be even more influential in predicting body dissatisfaction than sociocultural factors such as thin-ideal internalization. Nevertheless, one must note that Nakhle (2012) indicated that the unexpected findings in her study might have been due to her choice of thin-ideal stimuli. Specifically, she indicated the fact that she chose to use a video of a controversial Lebanese actress as a thin-ideal stimulus (The chosen actress is a media model who is known by many for her controversial remarks and 'bizarre' behaviors) might have overshadowed any effect of her body on the participants. Importantly, Nakhle indicated that participants on all ends of the thin-ideal internalizations spectrum (both high and low internalizers) reported that the actress' behavior was 'distasteful' and 'unappealing', and that her behavior affected how they perceived her body.

In contrast to Nakhle's (2012) findings and in line with international literature on the sociocultural origins of eating pathology and body image dissatisfaction, Tavitian found that the awareness and internalization of Western body ideals were positively correlated with negative eating attitudes and behaviors. As such, one cannot rule out the importance of assessing for sociocultural factors in addition to biological factors such as body mass index when studying the predictors of body dissatisfaction in Lebanese individuals.

Therefore, Nakhle (2012) and Tavitian's (2012) findings are significant as they point to the importance of taking body mass index, age, years spent in Lebanon, and thin-ideal internalization into consideration when assessing body dissatisfaction in a Lebanese

sample. Finally, Nakhle's results shed light on the significance of choosing thin-ideal stimuli that will not induce any unintended or confounding effects on participants.

CHAPTER 5

PREVENTION OF BODY DISSATISFACTION

After the above review of body dissatisfaction and the related variables of interest, the that have framed efforts to combat body dissatisfaction will be reviewed. After that, a comprehensive review of the research on disclaimer and warning labels on thin-ideal media images will be offered.

A. Prevention Models

Levine and Piran (2004) offered a comprehensive review of the efforts made in the field of body dissatisfaction prevention. To begin with, Levine and Piran (2004) noted that eating pathology tends to be difficult to treat and that efforts to target the risk factors of eating pathologies, such as body dissatisfaction, might prove to be fruitful. Along this line, one can argue that targeting body dissatisfaction also makes sense from a cost-effectiveness perspective. A cost-effective intervention is one that reaps health benefits that are proportionate to the material investments made (Jamison et al., 2006). Dedicating resources to the treatment of eating disorders is very costly. For example, the cost of Anorexia treatment was found to be 4.2 million pounds in the UK in 1990, and 65 million euros in Germany in 1998 (Simon, Schmidt, & Pilling, 2005). Despite these enormous costs, many individuals never make a full recovery, and they often end up relapsing (Carter et al.,

2012). Resources dedicated to *preventing* body dissatisfaction are cheaper, can reach a larger number of individuals, and can contribute to the prevention of eating pathology.

The main foci of prevention interventions were identified by Levine and Piran (2004) as follows. First, there are universal or primary prevention programs target a large number of people. Universal prevention focuses on changing public policies, communities and institutions. The second type of prevention programs are the selective programs. These programs target individuals who are at risk for developing body dissatisfaction or eating pathology, such as the children of parents with eating disorders. The third type of prevention programs are the targeted secondary prevention programs. These programs target individuals who do not yet have the full problem behavior, yet they show symptoms of it, or precursors.

The two main theoretical models which frame the prevention programs were also summarized by Levine and Piran (2004). First, there is the social cognitive theory, which implicates the various sociocultural pressures on individuals to ascribe to the thin-ideal, and the societal agents that model this ideal as central to the development of body dissatisfaction. This model postulates that individuals acquire problematic attitudes and behaviors towards their bodies and food through the process of social learning. Programs based on the social cognitive model programs encourage new social learning experiences centered on acquiring healthy attitudes and behaviors towards eating and the body. This is accomplished through lectures, role-playing, observational learning, guided discovery and discussions. The second major model is the non-specific vulnerability stress model, which proposes that stress contributes to the development of a host of mental health problems including eating disorders and body dissatisfaction. Interventions subscribing to this model

aim to reduce individuals' overall levels of stress in an effort to prevent the onset of various forms of psychopathology.

Levine and Piran (2004) noted that programs following the above models had significantly decreased the targeted outcomes after the intervention, yet most failed to sustain these effects at follow-up. They cited Levine and Smolak (2003) whom refer to this effect as the program participation effect. Levine and Piran and Neumark-Sztainer (2006) suggested that this effect highlights the need for more programs that stress on developing critical thinking towards cultural attitudes about weight and beauty, and to work with individuals on changing the risk factors for eating disorders and body dissatisfaction in their environments. To support this hypothesis, The Levine and Piran noted that the one thing that the successful interventions had in common is a focus on developing a critical awareness of the body ideals presented in the mass media.

This environmental focus has not always been a custom in the tradition of body dissatisfaction prevention. Early interventions for body dissatisfaction involved changing women's bodies through diets and workouts, rather than empowering them with a sense of appreciation and respect towards their bodies (Bergner, Remer, & Whetsell, 1985). Traditional prevention approaches of body dissatisfaction have included using cognitive behavioral (Jarry & Cash, 2011), experiential (Rabinor & Bilich, 2011) and school-based psycho-educational (O'Dea & Yager, 2011) models. These approaches share in common the interest to help the individual overcome their difficulties with their bodies, and do not necessarily focus on changing the environmental triggers of body dissatisfaction.

More recently, ecological, activism (Piran & Mafrici, 2011) and public policy (Paxton, 2011) approaches to the prevention of body dissatisfaction have emerged. An in depth discussion of these approaches is beyond the scope of this review, yet in essence, what these approaches share in common is stressing the significance of empowering individuals and the importance of fostering critical attitudes towards mainstream media messages (Levine & Piran, 2004). Specifically, ecological and activism approaches focus on making changes in the problematic aspects of the societal systems that might be triggering body dissatisfaction, rather than focusing on the shortcomings of the individuals affected. Also, public policy approaches to the prevention of body dissatisfaction stress working with governmental and legislative bodies to target harmful media messages about the body (Paxton, 2011). One can note that these two approaches to body dissatisfaction prevention are not mutually exclusive, but rather, they compliment each other.

Falling within the framework of both public policy, and ecological and activist approaches to the prevention of body dissatisfaction, Levine and Piran (2004) presented the critical social perspective model. Levine and Piran hypothesized that this model addresses the limitations of the sociocultural and the non-specific vulnerability stress approaches to body dissatisfaction prevention. According to Levine and Piran (2004), the critical social perspective aims to transform problematic social systems and structures through activism, consciousness-raising and the dissemination of critical knowledge. The ultimate goal of these programs is to foster a sense of empowerment with one's body, rather than an experience of shame. Many of the programs based on this model encourage the adoption of critical perspectives towards mass media messages, and encourage individuals to actively challenge problematic standards.

Levine and Piran (2004), and Neumark-Sztainer et al. (2006) stressed the importance of looking past the individual and into their environment in order to identify and challenge the factors that might be triggering the development of body dissatisfaction and eating pathology. These identified factors might be mass media messages, teasing and bullying, or sexual harassment (Neumark-Sztainer et al., 2006). Neumark-Sztainer et al. expanded on Levine and Piran's promotion of an environmental approach to prevention, and argued that interventions should focus on challenging mass media messages that communicate objectifying and unrealistic body ideals to both women and men. Neumark-Sztainer et al. suggest that programs might involve changing schools policies, and changing unrealistic depictions of body types in fitness center advertisements in fitness centers.

The critical social perspective model introduced by Levine and Piran (2004), and the environmental focus advocated by Neumark-Sztainer (2006) are compatible with feminist ideologies that focus on cultural, rather than individual pathology (Murnen & Seabrook, 2012). Feminist perspectives on body dissatisfaction emphasize the consumerist ideologies promoted by capitalism as essential in disrupting people's relationships with their bodies (Murnen & Seabrook). Murnen and Seabrook argued that consumerist culture encourages individuals to buy products and services aimed at helping them attain a new body. Their thesis is compatible with the whirlwind of advertisements which are plastered with images of human bodies, whether or not the product is actually related to the body. In this context, the body becomes conceptualized as a commodity, and some argue that this promotes body image instability (Orbach, 2011 as reviewed in Murnen and Seabrook).

Levine and Piran's (2004) critical social perspective model, and Neumark-Sztainer's (2006) environmental perspective also fits under the positive body image

movement. As Tylka and Wood-Barcalow (2015) noted, the eating disorders prevention movement pioneered by Michael Levine, Lori Irving, Niva Piran, Linda Smolak, Catherine Steiner-Adair, Susan Paxton, and Catherine Cook- Cottone, is one of the forces which encouraged the promotion of positive body image through interventions such as media literacy campaigns.

B. Disclaimer and Warning Labels on Thin-Ideal Images

Body image activists and lobbyists in Australia, France, and the United Kingdom have advocated for the use of disclaimer and warning labels notifying the public of the unrealistic standards depicted (Slater et al., 2012). Placing labels on thin-ideal images is extremely valuable as it arguably falls under the framework of many modern approaches to body dissatisfactions prevention. Specifically, this approach to body dissatisfaction prevention can be classified under Levine and Piran's (2004) critical social perspectives model as it aims to raise the public's consciousness and critical knowledge about the standards being depicted in the media. This approach also fits under the positive body image movement, as it not only intends to prevent body dissatisfaction, but on the long run, it has the ability to foster positive body image through creating an environment in which individuals have the right to access to critical knowledge about the nature of the media images existing in their environments. Furthermore, this approach fits Neumark-Sztainer et al.'s (2006) environmental approach, as it aims to change the actual source of the thin-ideal in the environment. Relatedly it fits within the feminist model as it aims to address the cultural pathology (i.e. the unrealistic standards depicted in the thin-ideal images) thought to be contributing to body dissatisfaction. Finally, placing labels on thin-ideal images can

also be considered a public policy and ecological activism approach, as the individuals fighting for the placement of these labels on thin-ideal mass media are negotiating with policymakers to change the regulations surrounding the ways mass media is presented to the public.

The act of placing labels on products or objects in society is not a novel concept. Labels have been placed on cigarette packets and alcohol bottles in an attempt to warn consumers about the risks associated with their use. Although some controversy as to their effect exists (Ruiter & Kok, 2005; Hammond, 2006), some evidence exists to support that people respond to these labels and that these labels influence their attitudes and behaviors towards these products (Vardavas et al., 2009). Starting in 2012, seven studies have examined whether placing warning or disclaimer labels on digitally altered images is beneficial. The results of these studies vary widely and will be reviewed next.

One of the first studies to examine the effects of warning labels on women's mood and body dissatisfaction was conducted by Slater, Tiggemann, Firth and Hawkins (2012). The researchers sought to examine the differential effects of generic versus specific warning labels on body dissatisfaction. Slater et al. defined generic warning labels as prompts indicating that a specific image had been digitally altered, and specific warning labels were defined as prompts indicating the specific aspect of the model's body that was digitally altered.

Slater et al. (2012) randomly assigned female undergraduates to one of three experimental conditions. All three groups were exposed to the same fashion spread, but the warning label attached to the images was altered amongst the conditions. The first condition consisted of exposure to a generic warning label ("Warning: these images have

been digitally altered”, p.111), the second condition consisted of exposure to a specific warning label (“Warning: these images have been digitally altered to lengthen legs and trim inner thighs”, p. 111), and the third condition was a control group with no warning label.

Results of Slater et al.’s (2012) study revealed that women in both experimental groups did not experience the increase in body dissatisfaction experienced by the control group. Also, women exposed to both types of warning labels reported perceiving the models as less real and self-relevant. Furthermore, these positive effects occurred regardless of the degree of thin-ideal internalization. No differential effect was found for generic versus specific labels, meaning that the positive effects of the labels on preventing body dissatisfaction was found for both types of labels. The researchers concluded that the inclusion of warning labels could be effective in ameliorating the effects of thin-ideal images on body dissatisfaction by rendering the images less real and self-relevant.

Slater et al. (2012) noted that their study was limited because the disclaimers were applied to fashion spreads and not celebrities. The researchers argued that this was a significant limitation because by their nature, fashion spreads are more artificial than images of celebrities with which females may identify more readily. Although this limitation is plausible and has been reported by other authors reviewed below (Tiggemann, Slater & Smith, 2014), this limitation will not be further addressed in this proposal. As will be revealed below, more salient limitations have been identified by researchers and warrant more immediate investigation.

Despite the encouraging results obtained by Slater et al. (2012), two follow up studies by Tiggemann, Slater, Bury, Hawkins and Firth (2013) did not obtain similar results. Specifically, Tiggemann et al. sought to replicate and extend the results found in

Slater et al.'s study by investigating how state and trait social comparison might be responsible for mediating the effects that labels have on body dissatisfaction.

In their first experiment, Tiggemann et al. (2013) randomly assigned female undergraduates to a control group consisting of exposure to a product advertisement, an experimental group consisting of exposure to a fashion advertisement with generic warning label, another experimental group consisting of exposure to fashion advertisement with a specific warning label, and another control group consisting of exposure to a fashion advertisement containing no label. In Tiggemann et al.'s study, the definitions of generic and specific warning labels were identical to those used in Slater et al.'s (2012) study. Following the experimental manipulation, participants completed measures of body dissatisfaction, trait and state tendency for appearance comparison and self-relevance of images.

Results of Tiggemann et al.'s (2013) first experiment revealed that women who viewed the warning labels did not differ from women who did not view the labels on body dissatisfaction. Also –paradoxically – the participants in both label conditions rated the models as more self-relevant. Furthermore, results revealed that women who viewed the labels scored higher on measures of social comparison. The researchers concluded that reading the labels might have guided attention to specific aspects of the model's body. Tiggemann et al. corroborated this conclusion by stating that participants high on trait social comparison and who viewed the specific labels scored higher on body dissatisfaction. The researchers noted that these results and conclusions contradicted those of Slater et al.'s study (2013).

Tiggemann (2013) noted that a limitation of experiment one was that it could not be determined whether or not participants actually looked at the images. Therefore, experiment 2 was designed so that participants looked at each advertisement for 45 seconds, and a masked recall task was assigned to ensure that they actually attended to the labels. Despite the modified procedures, results mirrored those of experiment one and furthermore, the masked recall task indicated that participants not noticing the labels could not account for these results.

Tiggemann et al. (2013) concluded that the inclusion of warnings on fashion advertisements did not prove beneficial and might even be detrimental to women high on trait social comparison. Tiggemann et al. suggested that the discrepancy between their results and those of Slater et al. (2012) might originate from the fact that the models used in Slater et al.'s study were more realistic and more frequently encountered in women's magazines. Tiggemann et al. suggested that the models and images used in their two experiments were obviously artificial, and hence women may not have only compared themselves to the model's body, but also, to her perceived positive qualities, which emanated from the way the images were constructed and presented. Despite this limitation, the fact that women high on trait social comparison who viewed the "specific" labels experienced more body dissatisfaction is extremely important and will be elaborated on as the review unfolds.

Of the remaining seven studies in the literature examining the effect of labels on body dissatisfaction, three produced results similar to those of Tiggemann et al.'s (2013) study: they did not find any beneficial effect of including warning or disclaimer labels. For example, Ata, Thompson and Small (2013) sought to elaborate the results obtained by

Tiggemann et al. and Slater et al. (2012), by addressing their limitations. Ata et al. noted that the sample sizes used in both previous studies were small, and they noted that the authors used the word “warning” to describe what were really disclaimers, and third, they noted that Tiggemann et al.’s inclusion of beauty products interspersed among the images may have invalidated the results.

Specifically, the Ata et al. (2013) sought to examine the effect of warning versus disclaimer labels on intent to diet, state negative affect and body dissatisfaction. They also examined the mediational effects of appearance comparison and thin-ideal internalization on the aforementioned variables. Ata et al. defined warning labels as statements describing the risks associated with attempting to attain the thin-ideal, and disclaimers as prompts that the image had been digitally altered. Female undergraduates were randomly assigned to a control condition containing a car product, a control condition containing a thin-ideal image (an advertisement containing a model), a condition containing warning labels on thin-ideal images, and a condition containing disclaimer labels on thin-ideal images.

Ata et al.’s (2013) results revealed that neither the warning nor the disclaimer produced a decrease in body dissatisfaction from pre-test to post-test and that the warning label produced a statistically insignificant *increase* in body dissatisfaction. The researchers noted that the increased body dissatisfaction corroborated the findings of Tiggemann et al.’s (2013) experiments. Furthermore, social comparison was not found to significantly mediate the relationship between label and body dissatisfaction, which in fact contradicted the results of Tiggemann et al.’s study. The authors concluded that further research is essential and they suggested that future studies focus not only on the fact that images are digitally altered -as they hypothesized that most people have this knowledge already- but

that they also focus on the extent to which the images are modified. They suggested that future research assess the extent to which demand characteristics may account for results. Nevertheless, it can be argued that Ata et al. neglected to explain why women in the warning label condition experienced *increased* body dissatisfaction. As will be further elaborated below, this finding sheds light on a significant limitation inherent in the warning labels used on thin-ideal images.

Two of the most recent studies investigating the effects of labels on body dissatisfaction sought to elucidate the mechanisms responsible for the detrimental effects observed in Tiggemann et al. (2012) and Ata et al.'s (2013) experiments. Those studies did not find any beneficial effect of labels on body dissatisfaction. Selimbegovic and Chatard (2014) noted that a limitation of Slater et al. (2012), Tiggemann et al. (2013), and Ata et al.'s (2013) studies was that only immediate effects of the labels were assessed. Selimbegovic and Chatard were interested in investigating whether exposure to disclaimer labels on thin-ideal images would induce negative thought accessibility upon subsequent exposure to these images - without the label attached- two months later. Negative thought accessibility was defined as the readiness with which negative information (e.g., negative words such as sadness) were brought to attention and consciousness. This was measured using a lexical decision task in which participants were asked to decide whether a string of letters was a word or a non-word. Half of the stimuli presented were negative words (e.g., suicide, bad, sorrow, etc.)

Specifically, Selimbegovic and Chatard (2014) randomly assigned a sample of female undergraduates to one of three conditions, each consisting of exposure to a thin-ideal image (a fashion spread), but varied according to the label attached to the image. One

condition consisted of exposure to a thin-ideal image with a disclaimer (“This image has been altered to modify a person’s bodily appearance.”), the second consisted of a thin-ideal image with a neutral statement (“This image was published in a fashion magazine in the year 2000.”), and the third condition consisted of a thin-ideal image with no label or statement. Two months later, participants filled out measures of negative thoughts upon exposure to the same thin-ideal image, but without any labels attached to it. Results revealed that women who had been in the disclaimer label condition exhibited the most negative thought accessibility than women who did not view the label.

A significant limitation noted by Selimbegovic and Chatard was that no manipulation check was conducted to ensure that participants actually recalled or attended to the disclaimer label. Selimbegovic and Chatard (2014) suggested that the disclaimer label may have served as a reminder of the thin-ideal in women high on thin-ideal internalization and hence induced negative thoughts. Selimbegovic and Chatard’s suggestion is significant because it sheds light on the limitations inherent in the disclaimer and warning labels themselves.

Bury, Tiggemann, and Slater (2014) also sought to explain why exposure to disclaimer and warning labels was found to increase body dissatisfaction in Tiggemann et al. (2012) and Ata et al.’s (2013) experiments. The researchers examined how the inclusion of a label on a thin-ideal advertisement would guide women’s attention to certain aspects of the model’s body and subsequently trigger social comparison. A sample of female undergraduates was assigned to one of four conditions: a condition in which a thin-ideal advertisement plus a generic label was viewed, one in which a thin-ideal advertisement plus specific label was viewed, and one in which a thin-ideal advertisement was viewed without

any label. In Bury et al.'s study, the definition of generic and specific disclaimer labels was identical to those used in prior studies. While participants were viewing the images, eye trackers were used to track their visual scanning patterns. Finally, participants filled out measures of social comparison. Results revealed that women directed their attention to both specific and generic disclaimers, and that the different types of disclaimers did not have a significant effect on time spent looking at various body parts, but the type of label did have an effect on direction of gaze. Specifically, women high on trait social comparison were more likely to direct their gaze to the body parts indicated by the specific disclaimer label.

The researchers concluded that their results support and extend those obtained by Tiggemann et al. (2013), in that they offered further evidence that specific disclaimers induce body dissatisfaction in women high on social comparison. Bury et al.'s results also offer empirical support for Selimbegovic and Chatard's (2014) suggestion that disclaimer labels themselves might be inducing negative thoughts and experiences in women high on variables such as thin-ideal internalization and social comparison.

Tiggemann et al. (2014) conducted the third study that found no beneficial effects of disclaimers on body dissatisfaction. Like Selimbegovic et al. (2014) and Bury et al.'s (2014) studies, they sought to explain why disclaimers were inducing body dissatisfaction. In contrast to Tiggemann et al. (2013), Ata et al. (2013), Selimbegovic et al., and Bury et al. whose studies found the inclusion of disclaimers and warnings to have a detrimental effect on body dissatisfaction, Tiggemann et al. (2014) found that labels merely had no effect. Specifically, the researchers placed a "retouch free" disclaimer on images of thin, attractive models, and the label's effect on body dissatisfaction, mood and self-relevance, and examined how social comparison mediated this effect. Tiggemann et al. (2014)

hypothesized that the label would lead to an increase in body dissatisfaction by triggering social comparison. Results revealed that the labels had no significant effect on body dissatisfaction. Like Tiggemann et al. (2013), Tiggemann et al. (2014) stated that a limitation of their study was the fact that fashion models were used and not celebrities. Tiggemann et al.'s results offer further evidence that something inherent in the labels themselves might be prompting women to compare themselves with the models rather than serving to distance them from the images.

Like Selimbegovic et al. (2014), Bury et al. (2014) and Tiggeman et al.'s (2014) studies, Veldhuis, Konijn and Seidell (2014) sought to further elucidate reasons driving the detrimental effects induced by the labels. Yet unlike the previous investigations that examined disclaimers, Veldhuis et al. examined warning labels. The researchers cited how framing a risk as a warning might backfire and make the risk desirable, and they suggested that this might explain the detrimental effects induced by warning labels observed in prior experiments.

In their experiment, Veldhuis et al. (2014) examined which of two types of labels - warnings versus information labels- would offer more protection against the detrimental effects of the thin-ideal. Results revealed that adolescent girls who viewed an informative label attached to a thin-ideal image experienced less body dissatisfaction and objectified body consciousness than girls who viewed the thin-ideal image and the warning label. Furthermore, this effect was very prominent in girls with low self-esteem. Finally, results revealed that warnings did not have a significant effect on body dissatisfaction.

Veldhuis et al. (2014) concluded that information labels might be an effective solution to the reactance young women might be experiencing when viewing a warning

label. It can be argued that the results might be explained by the fact that the participants were adolescents. It is plausible that information labels may not have a protective effect on older women in whom the media's messages are highly ingrained after many years of exposure. Also, given the nature of the information labels used in Veldhuis et al.'s experiment, it can be argued that the labels –which mentioned the specific weight status of the models – might have been less effective for girls high on social comparison, a variable that was not assessed in their study. In spite of these limitations, Veldhuis et al.'s study is significant in that they pointed out the limitations inherent in the way warning labels are worded and subsequently perceived by young women.

C. Limitations

According to Selimbegovic and Chatard (2015), the main limitations set forth against these labels is that they might be inadvertently directing vulnerable women's attention towards the model's body, and hence actively encouraging social comparison. Research has shown that individuals tend to exhibit attentional biases when confronted with anxiety-provoking stimuli (Mogg, Mathews, & Weinman, 1989). It is conceivable that the wording of these labels is directing attention towards a 'threatening stimulus' and hence increasing the cognitive 'effort' dedicated towards processing it. Researchers such as Neumark-Sztainer et al. (2006) have raised a related point, and questioned the potential of eating disorder and body dissatisfaction prevention programs to backfire and actually encourage the symptoms they attempt to target.

The second major limitation is that warnings might be igniting reactance effects in the viewers and hence making the thin-ideal more desirable (Veldhuis et al., 2014).

Bushman was an early researcher interested in examining the behavioral and psychological effects that warning and information labels had on consumers. He was specifically interested in empirically examining whether warning labels induced a forbidden fruit versus a tainted fruit effect. His results revealed evidence for reactance effects to warning labels, and shed light on the significance of disclaimer labels in circumventing this effect (Bushman, 1998; Bushman, 2006; Bushman & Stack, 1996). Ata et al. (2013) presented a third limitation of these studies, as they indicated that they were not uniform in their definition of disclaimers and warnings. Some studies described warnings as disclaimers, and disclaimers as warnings.

Frames theory from the field of communication research can help illuminate limitations in these labels that were not raised by the researchers. According to frames theory, textual information when combined with pictorial information interacts to produce pictorial interpretations that are guided by the textual information provided (Geise & Barden, 2015). A picture may carry multiple messages, yet the text accompanying the image might direct the viewer to construct a specific meaning out of the picture's elements, which corresponds to the information in the text (Geise & Barden). The stimuli used in the studies were usually advertisements (e.g., Tiggemann et al., 2013) that not only contained a depiction of a thin and airbrushed model, but also of a brand or product. The model and the ideals she was embodying, and the actual product and brand are likely two separate message streams. The labels used in the studies might be acting as a frame which guides individuals to focus on only one of the possible messages (The thin/fit/perfect/attractive/sexy/smart, etc. ideal) depicted by the image. The studies vary in their use of thin-ideal stimuli from advertisements (e.g., Tiggemann et al., 2013) to fashion

spreads (e.g., Slater et al., 2012). Although both depict the thin ideal, it is likely that they are not uniform in their effect on social comparison and body dissatisfaction as advertisements tend to be infused with other messages and values (Tiggemann & Polivy, 2010).

CHAPTER 6

A MODIFIED DISCLAIMER LABEL

In spite of the limitations described in the section above, one must note that all the identified limitations were inherent in the wording of the labels, and not in the act of placing labels on images. Therefore, placing labels on thin-ideal images need not be abandoned. A number of reasons support the use of labels on thin-ideal images as a body dissatisfaction prevention strategy. This intervention falls under many modern approaches to the prevention of body dissatisfaction such as the critical social perspectives approach, the feminist approach, and the public policy and ecological activism approaches. Furthermore, placing labels on thin-ideal images is a cost-effective intervention that has the potential to reach individuals on a mass scale, given that the labels are being placed on mass media images.

Studies on these labels differed in the type of thin-ideal image they placed the labels on (fashion spreads vs. advertisements). It makes more sense to request that advertisers place these labels on their images, as the intention of marketers and advertisers is that these images would persuade consumers to purchase their product. One can argue that individuals have the right to know that these images and the values that they portray are

indeed nothing more than marketing gimmicks. Regardless of the weight status of the model, and whether the model depicts the thin-ideal, individuals have the right to know that the entire advertisement was constructed for a very specific purpose: to ultimately increase sales.

By focusing on the fact that advertisements aim to sell a certain product or promote a brand image, a label can be devised which capitalizes on the framing effect that text can have in organizing the processing of the advertisement, and direct it towards attending to the marketing aspect of the image which usually involves a brand name, product or other text. Previously used labels were worded in a manner that mentions aspects of the model's body (e.g., Slater et al., 2012), and hence likely guides the processing of the image in a manner that places the model and her body at the forefront of this processing. By contrast, placing a label such as "This image is a marketing tactic intended to increase sales" on the advertisement is likely going to guide processing of the image in a manner that places the product and brand at the forefront, and the model's body in the background. The information presented in this disclaimer is also valuable from the perspective of promoting critical knowledge about the images promoted by the mass media. Holding critical attitudes towards mass media messages has been associated with positive body image (Tylka, 2011), and hence it can be argued that promoting such knowledge through this label is of value.

CHAPTER 7

AIMS AND HYPOTHESES

The present study compared the effects of the modified disclaimer label with those of previously used labels in terms of their relative ability to prevent body dissatisfaction in individuals exposed to thin-ideal advertisements, and a number of effects were expected to arise. Consistent with previous literature it was expected that females exposed to thin-ideal media images would experience an increase in state body dissatisfaction (e.g., Homan et al., 2012), and that this effect would be moderated by thin-ideal internalization (e.g., Slater et al., 2012), trait social comparison (e.g., Bury et al., 2014) and trait body dissatisfaction (e.g., Ata et al., 2013), and mediated by state social comparison (e.g., Tiggemann et al., 2013). Therefore, the following hypotheses were tested:

Hypothesis 1a: Female students exposed to thin-ideal advertisements without any type of disclaimer will experience an increase in state body dissatisfaction from pre-test to post-test.

Hypothesis 1b: Individuals who engage in more state social comparison processing in response to the thin-ideal advertisements will experience more state body dissatisfaction at post-test.

Hypothesis 1c: Students higher on thin-ideal internalization, trait social comparison, and trait body dissatisfaction will experience greater degrees of state body dissatisfaction post-exposure.

Also consistent with previous literature (e.g., Tiggemann et al, 2013), it was expected that female students exposed to thin-ideal advertisements with a disclaimer label

similar to the ones used in previous studies (e.g., Bury et al., 2014) would experience an increase in state body dissatisfaction, and state social comparison is expected to mediate this effect. As indicated above, it was expected that this effect would be moderated by thin-ideal internalization (e.g., Slater et al., 2012), trait social comparison (e.g., Bury et al., 2014) and trait body dissatisfaction (e.g., Ata et al., 2013). Therefore, the following hypotheses were tested:

Hypothesis 2a: Individuals exposed to thin-ideal advertisements with the traditionally used disclaimer labels will experience an increase in state body dissatisfaction from pre-test to post-test.

Hypothesis 2b: Individuals who engage in more state social comparison processing in response to the thin-ideal advertisements will experience more state body dissatisfaction at post-test.

Hypothesis 2c: Individuals higher on thin-ideal internalization, trait social comparison, and trait body dissatisfaction will experience greater degrees of state body dissatisfaction post-exposure.

In contrast to the above, the present study proposed that individuals exposed to the novel disclaimer label (e.g., “This image is a marketing tactic intended to increase sales”) would not experience the increase in state body dissatisfaction observed in the participants of previous studies. The effects of exposure to the novel label were also hypothesized to be mediated and moderated by the variables indicated in the paragraphs above. Therefore, the following hypotheses were tested:

Hypothesis 3a: Individuals exposed to the novel disclaimer labels will not experience an increase in state body dissatisfaction from pre-test to post-test.

Hypothesis 3b: Individuals who engage in more state social comparison processing in response to the thin-ideal advertisements will experience more state body dissatisfaction at post-test.

Hypothesis 3b: Individuals high on thin-ideal internalization, trait social comparison, and trait body dissatisfaction will be more likely to experience body dissatisfaction post-exposure than individuals scoring low on these moderating variables.

Finally, a number of exploratory hypotheses based on the demographic data and the brand recall questionnaire were tested. As discussed earlier, Haddadin (2010), Nakhle (2012), and Tavitian's (2012) investigations highlighted BMI (Haddadin, 2010; Nakhle, 2012), age (Nakhle, 2012), years spent in Lebanon (Nakhle, 2012), and thin-ideal internalization (Nakhle, 2012; Tavitian, 2012) as important variables to assess when studying body dissatisfaction in this region.

Specifically, it was expected that BMI would be a significant predictor of trait body dissatisfaction. In terms of age and years spent in Lebanon, Nakhle's (2012) investigation yielded the unexpected result that thin-ideal internalization did not moderate the effect of media exposure on body dissatisfaction even when partialling out the effects of age and years spent in Lebanon. It was of interest to examine whether this effect would be replicated in this study, although was not expected given that Nakhle (2012) explained her findings as being rooted in her choice of thin-ideal stimuli and given the findings of Tavitian's (2012) investigation.

Also of interest, it was expected that identification with ¹Western culture and ideals, and exposure to Western media would positively correlate with trait body dissatisfaction at pre-test. Finally, it was expected that individuals exposed to the novel disclaimer labels

would be more likely to attend to the brand-related aspects of the advertisement, and hence they will be more likely than participants in other conditions to recall the brands depicted in the advertisements. Therefore, the following exploratory hypotheses were tested:

Hypothesis 4a: Higher BMI will predict higher levels of trait body dissatisfaction.

Hypothesis 4b: Thin-ideal internalization will moderate the effect of media exposure on body dissatisfaction when partialling out for the effect of age and number of years spent in Lebanon.

Hypothesis 4c: Identification with Western culture and ideals, and exposure to Western media, will positively correlate with trait body-dissatisfaction.

Hypothesis 4d: Individuals exposed to the novel disclaimer labels will recall more brand-related aspects of the thin-ideal advertisements such as brand name, product name, etc., than will individuals exposed to the traditional disclaimer labels.

¹For the purposes of this exploratory hypothesis, ‘Western culture’ and ‘Western media’ will be defined as those originating from Europe and North America.

CHAPTER 8

METHOD

A. Participant Recruitment

Approval to conduct this study was obtained from the American University of Beirut Institutional Review Board. After approval was secured, 85 female students were recruited from the Psychology 101 and 201 pool during the Spring and Summer of the

2015-2016 academic year. The participants were offered course credit toward the Psyc 101/201 grade, consistent with the IRB-approved guidance document for the pool. Participants were informed of this experiment through informational flyers distributed to them in their classes by their course instructors and through an online version of the flyer shared with the students on Moodle by the Participant Pool Coordinator. The flyers included relevant information taken from the information sheet (see Appendix) such as a description of the study, incentives to participation (obtaining a research participation point), a description of eligible participants, and the names of the principal investigator and the collaborator the student is to contact if she is interested in participating. The information sheet handed out to participants before beginning the experimental sessions stated that this study aims to investigate the “effectiveness of fashion advertisements” so as to control for demand characteristics. Participants were informed of this ‘deception’ (i.e., they were informed that some information was being withheld from them and that they would be informed of it at a later date) in the information sheet. The information sheet also stressed that participation is voluntary and can be retracted at any point in time. On the other hand, the “informed consent form” shared with the students during the debriefing sessions that were scheduled after the data collection phase was completed disclosed that all details concerning the real purpose of the study.

B. Experimental Procedures

Due to time constraints, no pilot test was conducted. The current procedures were a systematic replication of Ata et al.’s (2013) procedures. The experiment followed a between-participants design. Data collection and participant recruitment began during the

Spring 2015-2016 semester. Participants who initially emailed the investigators about participation were randomly assigned to one of three conditions set on pre-determined dates, unless they indicated a time preference. The three conditions consisted of two experimental groups and a control group. The first experimental group viewed five thin-ideal advertisements with a traditional disclaimer label (“This image has been digitally altered to trim arms and waist.”). The second experimental group viewed five thin-ideal advertisements with the modified label (“This image is a marketing tactic intended to increase sales.”) attached to each image. Finally, a control condition consisted of viewing the five thin-ideal advertisements without any labels.

Initially, only three sessions were planned and 30 students were randomly assigned to each of the conditions. Nevertheless, not all 30 students showed up to the scheduled sessions. Furthermore, a number of students asked to participate after the first three sessions had been conducted, and many asked to reschedule, so numerous additional sessions were rescheduled for these students through March and April 2016. Given that the response rate was very low, some sessions were conducted with only one or two students per session. These remaining students were also randomly assigned to either one of the three experimental conditions. At the end of the Spring semester, the control, traditional-label, and novel-disclaimer conditions consisted of 28, 30, and 25 participants each.

After data collection was completed for the first phase (Spring 2015-2016), a number of debriefing sessions were scheduled during the month of May. Given that not all students were able to show up to the originally schedule debriefing sessions, multiple makeup sessions were scheduled. In total, 81 of the 83 participants offered their informed consent to use their data and received their participation point. We were unable to use the

data of students who did not show up for those debriefing/informed-consent sessions. Due to these circumstances, data collection continued during the Summer 2015-2016 semester. Participants were recruited in the same manner as the recruitment procedures during the Spring semester and the experimental procedures and debriefing were identical. These sessions were held in the department's psychology lab. Data from 4 participants was collected during this semester resulting in a total of 28 participants in the control group, 30 participants in the traditional label group, and 27 participants in the novel disclaimer group over the two semesters.

Given that there was active deception involved in the experiment, the Institutional Review Board at AUB required that participants be offered two types of informational sheets about the study. The first sheet was called the 'information sheet', and was presented to them during the experimental session. It was identical to the informed consent form but it had the true purpose of the experiment concealed. The 'informed consent form' was presented to participants during the debriefing sessions and it explicitly stated the true purpose of the experiment.

Each of the experimental sessions lasted 30-40 minutes. During all of the experimental sessions, students were seated in either a classroom or lab, equipped with tables, chairs, and computers. They were offered the information sheet to read while they were waiting for the rest of the participants to show up. As each participant was offered a questionnaire booklet, they were asked to record a small two digit number written at the top right of their booklet for the purposes of debriefing. This procedure was necessary in order to track which participants offered their informed consent during the debriefing sessions. Specifically, each participant would be asked to offer the two-digit number during the

debriefing sessions, and a random code would be constructed for them that contained that number. Once all students had the chance to read through the information sheet, the experimenter asked the students if they had any questions about what was written. Afterwards, the experimenter summarized the contents of the information sheet for the students, stressing on the anonymity and confidentiality of the data provided, and on their right to withdraw without penalty at any time. Participants were then briefly oriented to the format of the study (i.e., that they would be filling out pre-test measures, seeing a slideshow with advertisements, and then filling out post-test measures). Participants were asked to begin filling out the pre-test measures and to stop and wait for the rest of the participants to finish so they could observe the slideshow together.

Participants were asked to fill out a brief fashion advertisement consumption questionnaire to support the cover story, and measures of trait body dissatisfaction, trait social comparison, and thin-ideal internalization. Before proceeding to the experimental and control conditions, participants filled out a five-minute distraction task developed by Ata et al. (2013) in order to separate the trait measures from the rest of the experiment. Specifically, participants were asked to list their top 10 travel destinations. Before viewing the thin-ideal stimuli, participants filled out the measures of state body dissatisfaction.

Once all participants completed the pre-test measures, they viewed a PowerPoint slideshow consisting of the models and their corresponding labels depending on experimental condition. Before participants viewed the slideshow, it was explained to them that this was not a memory task, and hence they should not worry about taking notes or memorizing anything. Rather, they were instructed to look at the images as they would look at any magazine or web page.

Each slide was presented for 50 seconds to ensure standard administration, and to ensure that they attended to all images. After viewing the images, participants were asked to fill out measures of state body dissatisfaction and state social comparison. Next, participants were asked to fill out a consumer questionnaire about the effectiveness of each advertisement they had seen in order to support the cover story. Traditionally, experiments such as Ata et al.'s (2013) asked participants to fill out this questionnaire while participants viewed the thin-ideal images. Given that the questions in the present questionnaire encourage participants to scan various aspects of the advertisement, it would have been difficult to tease out the effect of the label from the effect of the processing primed by the questionnaire. Therefore, participants filled out this questionnaire after being exposed to the thin-ideal advertisements, and after filling out the outcome measures.

Finally, participants filled out a manipulation check to ensure that they attended to the disclaimers, a question about brand recall in order to assess whether individuals exposed to the modified disclaimer condition indeed processed the image in a manner that brought the brand and the product to the forefront, and a demographic questionnaire.

Once the participants filled out the post-test measures, they were told that they were free to leave, and they were reminded that they would be contacted soon via the email they used to contact the experimenter about the debriefing sessions.

As indicated above, during debriefing participants were given the informed consent form and debriefing sheet. As each participant finished reading their documents, they were asked if they had any questions. After their questions were answered, they were asked to provide their participation number and were asked if they recalled what session they

participated in. A completion code was given to each student in exchange for a research participation point. Debriefing sessions lasted 10-15 minutes.

C. Label Creation

The disclaimer representative of the traditional disclaimer labels used in the literature was be identical to the “specific” disclaimer used in Bury et al.’s (2014) study and read “This image has been digitally altered to trim arms and waist”. The word “warning” which preceded the “specific” disclaimer in Bury et al.’s experiment was removed in accordance with Ata et al.’s (2013) suggestion that labeling a disclaimer as a warning might be misleading. This disclaimer label was chosen because Bury et al. suggested that women directed their gaze to the body parts indicated by the label. Unlike other disclaimer labels used in the literature, empirical evidence exists to suggest that this specific disclaimer label affects how women interact with the model though directing their attention to certain aspects of her body.

Consistent with Cowburn and Stockley (2005) and Veldhuis et al. (2014), the modified disclaimer label consisted of information about the image. Unlike previous disclaimer labels used in the literature, the information presented did not refer to any aspect of the model’s body. In this study, this statement read: “This image is a marketing tactic intended to increase sales”.

D. Selection of Thin-Ideal Images

Selection of thin-ideal images and the font, size and position of the labels followed the procedure used by Ata et al. (2013). Unlike the studies in the literature that used

magazine advertisements and spreads as sources of the thin-ideal stimuli, the thin-ideal stimuli in this study were selected from a sample of advertisements from a number of websites that market products to females and which have store branches open in Lebanon. Online advertisements depicting the thin-ideal were chosen due to the exponential growth in the use of online advertising by large corporations, and the increasing number of online advertisements depicting the thin-ideal which young women are being exposed to (Slater, Tiggeman, Hawkins, & Werchon, 2012). Specifically, the websites for American Eagle, Ralph Lauren, Calvin Klein, H&M, Forever 21, Mango, Springfield, Juicy Couture, and Gap were scouted for thin-ideal advertisements and promotional materials. Four colleagues (student peers and a professor) from the Department of Psychology were asked for their opinions on which images from the pool to select as the final 5 stimuli. The final 5 advertisements were as follows: one advertisement was obtained from American Eagle, two were obtained from Forever 21, one obtained from Calvin Klein, and one from Mango.

The appropriate labels were then added to each of the identified images using Apple's photo-editing and viewing software called 'Preview'. The label was printed in Arial font size 10 and located at the top left or top right of each image (depending on the image layout) in a white box with a black border. The resulting stimuli were placed in a PowerPoint slideshow, and each advertisement was pre-programmed to be displayed for 50 seconds.

E. Instruments

1. Fashion Advertisement Consumption

Following Ata et al.'s procedure, a short questionnaire was developed to help aid the cover story. The questionnaire asked participants to rate questions such as, "How often does a product's advertisement persuade you to purchase it?" on a 5 point likert scale ranging from 1 (never) to 5 (very often). The data from this questionnaire will not be used in the data analysis.

2. Body Dissatisfaction

In accordance with Ata et al.'s (2012) study, two measures of body dissatisfaction were used, a state and a trait measure. "The Multi-dimensional Body-self Relations Questionnaire-Appearance Evaluation Subscale" (MBSRQ-AE; Cash, 2000) was used to measure trait body satisfaction/dissatisfaction. Higher scores on the MBSRQ mean that the participant has higher levels of body satisfaction and hence lower levels of body dissatisfaction. A sample item found in this instrument is "Most people would consider me good-looking" (MBSRQ-AE; Cash, 2000). Participants are asked to rate the extent to which they agree or disagree with the statements ranging from 1 (very dissatisfied) to 5 (very satisfied). In Ata et al.'s study it demonstrated very good internal consistency ($\alpha = 0.89$). In the present study, this scale was found to have excellent internal consistency, $\alpha = .86$.

The "Visual Analogue Scales" developed by Heinberg and Thompson (1995) were used in the present study. In the case of body dissatisfaction, these scales are 100 mm lines anchored at each end by the following statements: "none" at the left end, and "extreme" at

the right end. Participants are asked to rate their current degree of satisfaction or dissatisfaction with their bodies or other aspects of their appearance by making a mark along the horizontal line. Consistent with Ata et al.'s study, participants were asked to use three of these scales to rate their dissatisfaction with their body shape, their weight, and their physical appearance. The internal consistency of this scale was excellent in Ata et al.'s study ranging from $\alpha = .93$ to $\alpha = .96$. Results of the reliability analyses revealed that these scales had excellent internal consistency at both pretest, $\alpha = .89$ and posttest, $\alpha = .92$ in the present sample.

3. Social Comparison

State and trait social comparison were assessed in the manner followed by Tiggeman et al. (2013) because unlike Ata et al.'s (2013) experiment – which only assessed for trait social comparison – Tiggeman et al.'s experiment also assessed for state social comparison. The state appearance comparison scale constructed by Tiggeman and McGill (2004) will be used to assess state social comparison. It had excellent reliability in Tiggeman et al.'s study ($\alpha = .91$). Results of the reliability analysis revealed that this scale also had excellent internal consistency in the present study with Cronbach alpha = .9. This scale consisted of three items which participants ranked on a 7 point scale ranging from 1 (no thought about my appearance) to 7 (a lot of thought). See Appendix K for more information. The “physical appearance comparison scale” developed by Thompson, Heinberg and Tantleff (1991) was used to assess trait social comparison. A sample item from this questionnaire is “The best way for a person to know if they are overweight or underweight is to compare their figure to the figure of others.” Participants are asked to

rank the extent to which they feel about these items on a scale ranging from 1 (never) to 5 (always). It had acceptable reliability in Tiggeman et al.'s experiment ($\alpha = .76$). Results of the reliability analysis also indicated that this scale had adequate internal consistency in the present sample, $\alpha = .76$.

4. Consumer Questionnaire

Ata et al. (2013) developed this questionnaire to control for demand characteristics. Other studies in the literature (e.g., Tiggemann, Polivy, & Hargreaves, 2009) have used a similar questionnaire. This questionnaire was initially developed by Mills, Polivy, Herman, & Tiggemann, (2002). It consisted of 5 statements that focused on the effectiveness of the advertisement itself and not the model. A similar questionnaire was adapted for use in the present study. The results of this questionnaire were not included in the main data analysis.

5. Thin-Ideal Internalization

Following the measure used in Ata et al. (2013), thin-ideal internalization was measured using the 9-item "internalization-general subscale" of the "sociocultural attitudes towards appearance questionnaire-3". A sample item from this measure is "TV programs are an important source of information about fashion and 'being attractive.'" Participants were asked to rate these items based upon the extent to which they agree or disagree with them on a 5-point scale, with 1 indicating "definitely disagree" and 5 indicating "definitely agree". This measure had excellent reliability in Ata et al.'s study ($\alpha = .91$). Results of the reliability analysis indicated that this scale had excellent internal consistency in the present sample, $\alpha = .9$.

6. Manipulation Check

Ata et al.'s (2013) manipulation check consisted of two items assessing whether or not participants attended to the images and the labels. The two items were "Did you notice the message in the box at the top of the ads?" and "What did the message say? Please write the message you recall seeing in the space below". Ata et al.'s manipulation check was used in the present study.

7. Brand Recall

Participants in all three conditions were asked to write down the names of the brands they recall being exposed to in the advertisements.

8. Demographic Questionnaire

Finally, the demographic questionnaire consisted of questions pertaining to the participant's age, years spent in Lebanon, extent of identification with Western culture, exposure to Western media, nationality, weight, height and major.

CHAPTER 9

RESULTS

This section will outline the results of the statistical analyses conducted on the data in order to test the specified hypotheses. Before presenting the results of the main analyses, a section describing the treatment of missing values will be described followed by a section on the treatment of univariate outliers, multivariate outliers and influential cases. Then, a section describing the results of testing for the assumptions of parametric testing will be presented. Finally, a section providing descriptives will be offered. All analyses were carried out using SPSS 22.

A. Missing Values

A Missing Value Analysis was performed using SPSS's Missing Value Analysis function. Results revealed that none of the items on the variables of interest had more than 5% of their values missing, which according to Tabachnick and Fidell (2012), is an acceptable cutoff. Furthermore, Little's MCAR was also not found to be significant, $\chi^2(243, N = 85) = 248.58, p = .44$, indicating that the missing values were randomly dispersed across the items.

B. Univariate Outliers, Multivariate Outliers, and Influential Cases

Univariate outliers were screened for by calculating the standardized scores for each participant on the variables of interest. A cutoff of 3.29 in absolute value was specified. One univariate outlier was detected on the Trait Body Satisfaction Variable (Case 50). This

participant had an extremely low score on trait body satisfaction (i.e., the participant had very extreme levels of trait body dissatisfaction) on the MBSRQ with a standardized score of -3.52 and a raw score of 1. Another univariate outlier (case 54) on the Age variable was found with a standardized score of 4.77 and a raw score of 26. Finally, a univariate outlier (also case 50) was found on the BMI variable with a standardized score of 4.84 and a raw score of 38.97.

Mahalanobis distance was used to screen for multivariate outliers. The cutoff for identifying the multivariate outliers was determined at the $p = .001$ level from the guidelines in the chi square table provided by Tabachnick and Fidell (2012) as 26.13. According to these criteria, both cases 50 and 54 were found to be multivariate outliers with respective Mahalanobis distances of 27.32 and 26.77. An examination of the standardized df betas and cook's distance for case 50 indicated that this case was influential with a standardized df beta of -1.23 on the BMI variable. According to the same criteria, no other influential cases were identified in the data, including case 54 and hence it was retained in the analysis.

Given that case 50 was found to be both a multivariate outlier and an influential case, this participant's scores on the variables of interest were examined in order to better determine the best course of action in treating this case. This case had extremely high levels of trait body dissatisfaction with a raw score of 1 on the MBSRQ, had extremely high levels of pretest state body dissatisfaction and posttest state body dissatisfaction with raw scores of 9.40 and 9.33 respectively, state social comparison (a raw score of 7 out of 7 total points), thin ideal internalization (a total of 5 out of 5 points), and a total of 20 out of 20 points on trait social comparison. This case also had a very high BMI of 38.97.

Upon examining the participant's scores on these variables, it appeared that it would not be wise to exclude this case from the analysis for a number of reasons. First and foremost, the purpose of interventions such as placing labels on advertisements is aimed at individuals vulnerable to body dissatisfaction and eating pathology. Given this participant's scores on the aforementioned variables, it appears (theoretically speaking) that this participant would be vulnerable to such experiences (Stice, Angler & Aras, 2001). Although experiences like eating pathology and body dissatisfaction are relatively common in the general population, extreme levels of body dissatisfaction and eating pathology affect a limited proportion of the general population. As such, it would be expected that only one or two participants in a small sample such as the one in the present study (N = 85) would score so highly on the aforementioned variables. As such, retaining such a case in the data analysis would be meaningful from both a statistical and ethical perspective, and it could be argued that removing this case from the analysis would be illogical and harmful. Furthermore, this case's standardized d_f beta score on the BMI variable was found to be -1.23 which is not far from the recommended cutoff of 1 or 2. Finally, given the small sample size (N = 85), it would be inadvisable to remove cases from the data set without an extremely pressing reason to do so.

Assumptions of Parametric Testing

1. Assumptions for ANOVA Analyses

a. Level of Measurement of the Dependent Variable

In this study, the dependent variable was posttest state body dissatisfaction and it was measured using a continuous scale ranging from 1 to 5. As such, the requirement for a continuous dependent variable was met in this study.

b. Normality of post-test state body dissatisfaction scores (outcome) across the three conditions

The data file was split across the three label conditions (control, traditional and novel) and the standardized scores for skewness and kurtosis were calculated on the posttest visual analogue scale scores. Given that the sample size was 85, a cutoff of 3.29 was specified. For the control group, the standardized skewness score was .24 and the standardized kurtosis score was -.97, indicating normality. For the traditional label group, the standardized skewness score was .42 and the standardized kurtosis score was -1.77, also indicating normality. Finally, the standardized skewness score was -0.26 and the standardized kurtosis score was -1.59 in the novel label condition, also indicating normality of the score distribution in this group.

c. Homogeneity of variance in the post-test state body dissatisfaction scores across the three conditions

For this purpose, Levene's test was conducted. Results indicated that this assumption was met across the groups, $F(2, 80) = 3.56, p = .03$.

2. Assumptions for ANOVA and Regression Analyses

The proposed number of participants for this experiment was 90 given the guidelines set for ANOVA analyses and t tests by Cohen (1988). For the purposes of ANOVA analyses and t tests, Cohen (1988) (as cited in VanVoorhis & Morgan, 2007) suggested placing a cell size of 30 participants per cell for 80% power. In terms of the regression analyses, it was noted that many of the experimental studies in this field involving the proposed predictors have used sample sizes of 90 participants or less and were able to detect significant findings (e.g., Brown & Dittmar, 2005; Bury, Tiggemann, & Slater, 2013; Dittmar, Halliwell, & Stirling, 2009; Selimbegovic and Chatard, 2015; Tiggemann & Slater, 2003; Turner et al. 1997; Wan, Ansons, Chattopadhyay, & Leobe, 2013; Wilcox & Laird, 2000). According to the above considerations, this sample size criterion was not met in this sample. Nevertheless, each of the cells in the ANOVA analyses and t tests had a total of 28 (control group), 30 (traditional disclaimer group), and 27 (novel disclaimer group) which is very close to the recommended 30 participants per cell.

It is of significance to note that Green (1991) as cited in Tabachnick and Fidell (2012), suggests $104 + M$ (with M being the number of predictors) is an adequate sample size for the purposes of regression analyses involving individual predictors and $50 + 8M$ when involving multiple predictors. The regression analyses in this study involved a total of 7 variables as predictors (Trait body satisfaction, trait social comparison, thin ideal internalization, state social comparison, age, years spent in Lebanon, and body mass index) indicating that the ideal number of participants would be between 106 and 111. This sample consisted of 85 participants and hence Tabachnik and Fidell' guidelines were not met in

this sample. Nevertheless, as indicated above, this sample size was not aimed for given the nature of the main analyses involved (ANOVA and t tests), and the sample sizes of previous studies in the field.

3. Normality of the Dependent Variable and Predictors

The standardized skewness score for post-test state body dissatisfaction was 0.34, and the standardized kurtosis score was -2.05, indicating that the distribution of scores was normal. The main predictors were all found to be normally distributed by the same criteria. Specifically, the standardized skewness and kurtosis scores for trait body satisfaction were found to be -.001 and 2.06 respectively. For trait social comparison they were found to be 1.12 and -.40 respectively. For thin ideal internalization they were -.89 and -.8 respectively. Finally, the standardized skewness and kurtosis for state social comparison were found to be -.48 and -.8 respectively.

4. Linearity

Inspection of scatterplots depicting the relation between the dependent variable (posttest state body dissatisfaction), and each of the separate predictors indicated that they all followed a linear trend.

5. Multicollinearity

Inspection of the correlation matrix between all predictors revealed no correlations greater than .8. This coincided with the values of tolerance and inflation which were all within the normal range.

6. Independence of Errors

The Durbin-Watson statistic was found to be 1.53 which indicates that the assumption of independence of errors was met.

7. Normality of Residuals

Inspection of the P-P plot of the standardized regression residuals revealed that the points fell neatly along the diagonal line. This was corroborated by the histogram depicting the regression standardized residuals against the posttest state body dissatisfaction scores (dependent variable) as it followed a bell-shaped pattern. Furthermore, the graph of the standardized regression residuals versus the standardized predicted residuals indicated no funneling. This indicates that this assumption was met in this sample.

8. Homoscedasticity of Regression Slope

Examining the graph of regression standardized predicted value versus the standardized regression residual value revealed that most of the data points randomly clustered around the center. No funneling was evident.

D. Descriptives and Sample Characteristics

Overall, a total of 85 female undergraduate participants enrolled in either the Freshman or Sophomore Introductory Psychology course at the American University of Beirut were included in this analysis. On average, the participants were 19 years old ($SD = 1.47$). Participants reported living in Lebanon for an average of 12.15 years ($SD = 7.24$), in

another Arab country for 2.79 years (SD = 5.75), and in a non-Arab country for an average of 1.2 years (SD = 2.83). Across all three conditions, participants had average trait body satisfaction scores of 3.49 (SD = .7). According to the MBSRQ's adult norms for females on this the Appearance Evaluation subscale of this measure, this is an average score in the middle range of body dissatisfaction/satisfaction (Cash, 2000). The sample had trait social comparison scores of 15.92 (SD = 2.92) out of a total 25 possible points, which is a relatively high score. Participants were found to have average thin-ideal internalization scores of 3.00 (SD = .91) across the three groups. This score is at the midpoint of the scale and indicates moderate levels of thin ideal internalization. Participants across all conditions were found to have an average score of 4.12 (SD = 2.58) on the pretest state body dissatisfaction measure, indicating a score below the midpoint (5). This indicates that on average, the sample had moderate levels of pretest state body dissatisfaction.

In order to assess for any individual difference variables that might have differed amongst the groups prior to the experiment, the data file was split and the descriptives were examined across the three conditions. Individuals assigned to the control group were found average scores of 3.85 (SD = 2.06) on the pretest measures of state body dissatisfaction as indicated by the visual analogue scales. The participants in both the traditional disclaimer group and the novel disclaimer group appeared to have similar levels of pre-test body dissatisfaction with averages of 4.3 (SD = 3.12) and 4.2 (SD = 2.49) respectively. Results of a one-way analysis of variance on the pretest state body dissatisfaction scores indicated that there were no significant differences on this variable between participants in each of the three groups, $F(2, 81) = .23, p = .79$.

Of interest, there were also no significant pretest differences between the groups on any of the main variables of interest. Specifically, there were no significant differences between the average scores of the control ($M = 3.6$, $SD = 5.71$), traditional ($M = 3.47$, $SD = .82$), and novel ($M = 3.41$, $SD = .67$) experimental conditions on trait body satisfaction, $F(2, 78) = .52$, $p = .6$. There were no significant differences between the control ($M = 16.39$, $SD = 2.95$), traditional ($M = 15.73$, $SD = 3.18$), and novel ($M = 15.63$, $SD = 2.62$) conditions on trait social comparison, $F(2, 82) = .56$, $p = .58$. Also, there were no significant differences between the control ($M = 3.21$, $SD = .74$), traditional ($M = 3.03$, $SD = 1.02$), and novel ($M = 2.77$, $SD = .9$) conditions on thin ideal internalization, $F(2, 80) = 1.7$, $p = .19$. There were no significant pretest differences between the control ($M = 18.52$, $SD = 1.08$), traditional ($M = 19.1$, $SD = 1.63$), and novel ($M = 19.4$, $SD = 1.53$) conditions on age, $F(2, 81) = 2.74$, $p = .07$. Furthermore, there were no significant differences between the control ($M = 21.26$, $SD = 2.7$), traditional ($M = 22.9$, $SD = 4.12$), and novel ($M = 21.23$, $SD = 3.52$) disclaimer conditions on body mass index, $F(2, 68) = .6$, $p = .55$. Finally, there were no significant differences between the control ($M = 11.45$, $SD = 7.92$), traditional ($M = 13.32$, $SD = 6.79$), and novel ($M = 11.32$, $SD = 7.26$) disclaimer conditions on years spent in Lebanon, $F(2, 68) = .6$, $p = .55$.

Inspecting the correlation matrix between the predictors and the dependent variable revealed significant bivariate correlations between post-test state body dissatisfaction and each of the main predictor variables. Specifically, body mass index and posttest state body dissatisfaction were found to share a moderate positive correlation, $r(83) = .45$, $p < .001$. Trait social comparison and posttest state body dissatisfaction were also found to share a significant positive correlation of a moderate size, $r(83) = .37$, $p = .001$. Trait body

satisfaction and posttest state body dissatisfaction were found to share a strong, negative correlation, $r(79) = -.65, p < .001$. Thin ideal internalization was found to share a strong and significant positive correlation with posttest state body dissatisfaction, $r(81) = .54, p < .001$. Finally, state social comparison was also found to share a significant positive correlation of a large size with the outcome, $r(81) = .62, p < .001$. The significance and direction of the observed correlations were in line with our hypotheses.

E. Hypothesis Testing

1. Testing for the Effect of the Labels on Posttest State Body Dissatisfaction

a. Comparison of Pre- and Post-test State Body Dissatisfaction Scores Within Groups

A series of dependent samples t test indicated that state body dissatisfaction significantly increased from pre- to post-test in participants in the control and traditional label conditions but not in the novel label condition. These findings were consistent with hypotheses 1a, 2a, and 3a. Specifically, average state body dissatisfaction scores increased from 3.85 (SD = 2.06) to 4.4 (SD = 2.48) in the control condition, $t(27) = -2.47, p = .02$. They increased from 4.13 (SD = 3.04) to 4.58 (SD = 3.33) in the traditional label condition, $t(27) = -2.25, p = .03$. Finally, they increased from 4.37 (SD = 2.39) to 4.54 (SD = 2.86) in the novel disclaimer condition but this increase was not found to be significant, $t(25) = -1.03, p = .313$.

Table 1. Results of dependent samples t test in the control group.

Mean	Standard Deviation	Standard Error of the Mean	t	Degrees of Freedom	Significance
-.544	1.16	.22	-2.47	27	.02

Table 2. Results of the dependent samples t test in the traditional label group.

Mean	Standard Deviation	Standard Error of the Mean	t	Degrees of Freedom	Significance
-.45	1.06	.20	-2.25	27	.03

Table 3. Results of the dependent samples t test in the novel label group.

Mean	Standard Deviation	Standard Error of the Mean	t	Degrees of Freedom	Significance
-.17	.82	.16	-1.03	25	.31

b. Comparison of Post-Test State Body Dissatisfaction Scores Across Groups

Results of the one-way analysis of variance revealed that there were no significant differences in post-test state body dissatisfaction across the three label conditions, $F(2, 80) = .02, p = .98$). This indicates that the labels (traditional and novel) had no differential effect on post-test state body dissatisfaction scores when compared to the effect of exposure to advertisements without any labels in the control group.

Table 4. Results of the analysis of variance on posttest state body dissatisfaction scores.

	Sum of Squares	Degree of Freedom	Mean Square	F	Significance
Between Groups	.31	2	.16	.02	.98
Within Groups	673.02	80	8.41		
Total	673.34	82			

2. Mediation and Moderation Analyses

a. Mediation Analysis

Given that no main effect for the label conditions was found on state body dissatisfaction, the preconditions for conducting mediation analyses to test for the effect of state social comparison on posttest state body dissatisfaction were not met.

b. Moderation Analysis

In order to test for the moderational effects of trait body satisfaction,, trait social comparison, and thin ideal internalization on posttest state body dissatisfaction, a series of regression analyses were conducted. Following Ata et al.'s (2013) data analysis procedure, each of the hypothesized moderator variables was tested in a separate regression analysis. Prior to the analyses, each of the moderator variables was centered around its respective mean. Mean centering involves subtracting each of the participant's individual scores on a

given variable from the grand mean of that variable. This is a practice recommended by Aiken and West (1991) in order to prevent potential problems of collinearity. In addition to mean centering, the independent variable (group membership) was recoded using effect coding into two new variables. The terms -1 and 1 were used to define groups, with the control group serving as a reference group.

In block one of each regression analysis, the pretest state body dissatisfaction scores were entered in order to control for their effect on the outcome. In the second block, each of the group variables as well as the hypothesized moderator being tested were entered. In the third block, an interaction term representing the product of the mean centered scores on the moderator by group membership scores for each of the two effect coded group membership variables were entered. Posttest state body dissatisfaction was entered as a dependent variables.

Results indicated that neither trait body satisfaction, trait social comparison, nor thin ideal internalization were significant moderators of the label condition on posttest body dissatisfaction scores. Specifically, there was no significant interaction between trait body satisfaction and the traditional, $b = .04, t(79) = .19, p = .85$, nor novel label conditions, $b = -.12, t(79) = -.49, p = .62$. There was no significant interaction between trait social comparison and the traditional, $b = -.01, t(79) = -.17, p = .87$, nor the novel disclaimer conditions, $b = .05, t(79) = .89, p = .37$. Finally, there was also no significant interaction between thin ideal internalization and the traditional, $b = .01, t(79) = .04, p = .97$, nor novel disclaimer conditions, $b = -.00, t(79) = -.01, p = .99$.

3. Exploratory Hypotheses

A linear regression with BMI as a predictor and trait body satisfaction scores as the outcome was conducted in order to test hypothesis 4a. Results indicated that BMI is a significant negative predictor of trait body satisfaction scores in this sample, $b = -2.9$, $t(84) = 4.16$, $p = .00$. Hence, the findings offered support for hypothesis 4a.

As indicated in the section above, thin ideal internalization was not found to be a significant moderator of label condition on posttest body dissatisfaction scores in this sample. In order to test for hypothesis 4b (which predicted that thin ideal internalization would be a significant moderator of experimental condition on the outcome), a moderation regression analysis was run. Specifically, pretest body dissatisfaction scores, age, and years spent in Lebanon were entered in the first block of the regression model. The two effect coded condition variables and the mean centered proposed moderator (thin ideal internalization) were entered in the second block. The interaction terms between the mean centered moderator and each of the effect coded conditions were entered in the third block. Results indicated that thin ideal internalization was not a significant moderator of experimental condition on the outcome even after controlling for the effects of the participant's age and the number of years they spent in Lebanon.

A bivariate correlation between each of items 8 and 9 on the demographic survey and posttest state body dissatisfaction score was conducted in order to test hypothesis 4c. Results of the analyses indicated that neither exposure to Western media, $r(82) = -.08$, $p = .47$, nor the participant's extent of identification with Western culture, $r(82) = .04$, $p = .7$, were significantly correlated with trait body satisfaction. As such, hypothesis 4c was not supported.

F. Manipulation Check

In the traditional disclaimer label group, 28 participants indicated that they did notice the message at the top of the advertisement whereas 2 did not. In the novel disclaimer label group, 24 participants indicated that they noticed the message and 3 did not. Therefore, one can deduce that the majority of the participants exposed to the labels noticed them. Participants were awarded 1 point if they correctly recalled the label exactly as it was written on the advertisements or if they recalled the general meaning of the label. They were given a zero if they left the space blank or if they wrote something that was inaccurate or that differed from the meaning intended by the labels. In the traditional label condition, 23 participants accurately recalled the label whereas 7 participants did not. In the novel label condition, 17 correctly recalled the label whereas 10 incorrectly recalled it. These findings suggest that a significant proportion of the participants that noticed the labels were able to correctly comprehend and recall the label.

For the brand recall (hypothesis 4d), each participant was given a score out of a total of 4 points. Participants were awarded one point for each brand that they correctly recalled. There were a total of 4 brands to recall (American Eagle Outfitters, Calvin Klein, Isa jeans). In the control group, 4 participants recalled 0 brands, 15 recalled only one brand, 7 recalled 2 brands, 1 participant recalled 3 brands and only 1 participant correctly recalled the 4 brands. In the traditional disclaimer label condition, 3 participants recalled 0 brands, 22 recalled 1 brand and 5 recalled 2 brands. No participants recalled more than two brands in the traditional disclaimer condition. In the novel disclaimer condition, 3 participants recalled 0 brands, 14 recalled one brand, 9 recalled 2 brands, and 1 recalled 3 brands. Based on this data it appears that the majority of the participants in all three groups recalled only

one brand. Upon inspection of the participants' answers, it appeared that the majority of participants recalled the Calvin Klein brand (73 out of 83 participants). Based on these findings, hypothesis 4d was not confirmed.

CHAPTER 10

DISCUSSION

A. Main Findings

Although body dissatisfaction is a very common experience in our day-to-day lives, research has shown that experiencing body dissatisfaction is associated with severe consequences such as chronic dysphoria, depression, and eating pathology (e.g., Buccinaeri & Neumark-Sztainer, 2014; Ohring, Graber, & Brooks-Gunn, 2002; Rosenstrom et al, 2013; Stice & Shaw, 2002) in certain individuals. A commonplace stimulus that appears to be triggering body dissatisfaction in many vulnerable young women is thin ideal media (Stice, Spangler & Aras, 2001). Researchers and activists have tried to create interventions to combat these negative effects. One such intervention has involved placing warning and disclaimer labels on thin ideal images in order to alert the consumer that the models in the images have been digitally altered. The rationale behind this practice is that such labels might prevent women viewing these advertisements from comparing themselves with the models by rendering them less self-relevant (e.g., Slater et al., 2012) and as such, would prevent them from experiencing body dissatisfaction.

Studies have found that – paradoxically – exposure to images that included disclaimer labels induced state body dissatisfaction and state social comparison in

vulnerable individuals (i.e., individuals scoring high on trait body dissatisfaction and trait social comparison; e.g., Tiggeman et al., 2013). Given the inconclusive findings of studies investigating the effects of warning and disclaimer labels placed on thin-ideal advertisements on body dissatisfaction in women (e.g., Ata et al., 2013; Tiggeman et al., 2013; Tiggeman et al., 2014), the present study was designed and conducted in order to better understand this phenomenon. The present study aimed to further elucidate the mechanisms behind this confusing effect by designing and testing the effects a novel disclaimer label on state body dissatisfaction. The novel disclaimer label was worded in a manner that avoided offering any information about the model's body or weight status and rather directed the participant's focus towards the marketing aspects of the image.

Results of the present study indicated that participants in two of the three conditions (no label and the traditional label) experienced a significant increase in state body dissatisfaction upon exposure to the thin-ideal advertisements. Participants in the novel disclaimer condition did not experience a significant increase in state body dissatisfaction from pre-test to post-test. These results were consistent with our hypotheses. It is significant to note that although there was no statistically significant increase in state body dissatisfaction scores in the novel disclaimer condition, participants did experience an increase in state body dissatisfaction scores upon observing the thin ideal advertisements with the novel disclaimer labels.

The above findings are in line with the fact that there were no significant differences in posttest state body dissatisfaction among participants across all three conditions. This indicates that neither the traditional nor the novel disclaimer labels had an effect on posttest state body dissatisfaction above and beyond the effect of being exposed to the thin ideal

advertisements themselves. This finding cannot be attributed to the fact that participants did not notice or comprehend the labels, as the manipulation check indicated that the majority of participants correctly recalled the labels (23 of 30 participants in the traditional label group, and 17 of 27 participants in the novel label group). It is also significant to note that participants in the novel disclaimer condition did not recall more brand related aspects of the advertisements compared to individuals in the other two groups. These disclaimer labels did not appear to be successful in diverting the participants' attention away from the model and towards the advertisement.

The above results are inconsistent with our hypotheses, and are in line with previous literature testing the effects of exposure to thin-ideal stimuli on body dissatisfaction (e.g., Homan, Mchugh, Wells, Watson, & King, 2012; Ditmar, Halliwell, & Sterling, 2009).). Our findings add to the growing body of literature that shows that exposure to images of idealized models tends to trigger harmful experiences in young women. What is disconcerting about these results is that the stimuli used in this study were advertisements obtained from websites of popular clothing brands that have branches open in Lebanon, and which are readily accessible to individuals with an Internet connection or who shop at these stores.

In the context of the present investigation, these findings suggest that the thin ideal stimuli appear to be more potent than any of the labels attached to them. Although the present study did not find a significant interaction or relation between any of the proposed moderators (thin ideal internalization, trait body dissatisfaction and trait social comparison) or mediators (state social comparison) and posttest state body dissatisfaction scores, the results indicate that exposure to thin ideal advertisements is triggering experiences of body

dissatisfaction and discomfort in the consumer of these images by certain unknown mechanisms. Given that multiple studies in this field have found contradictory results with respect to the role of the four aforementioned variables in moderating and mediating body dissatisfaction (e.g., Ata Thompson, & Small, 2013; Nakhle, 2012; Tavitian, 2013; Tiggemann et al., 2013; Tiggemann et al., 2014), it appears that our knowledge of the processes involved in observing and reacting to thin ideal media images is quite limited in practice.

B. Exploratory Findings

Similar to Nakhle's (2012) investigation, results of the exploratory hypotheses indicated that BMI was a significant predictor of trait body satisfaction in this sample with higher BMIs predicting lower levels of trait body satisfaction. This finding replicates the finding in the international literature that consistently finds that BMI is one of the strongest predictors of body dissatisfaction. It also highlights BMI as a significant predictor of body dissatisfaction in Lebanon.

It is interesting to note that BMI was found to be a significant predictor of body dissatisfaction whereas cultural factors such as thin ideal internalization, identification with Western culture, and exposure to Western media were not found to be significant moderators and predictors, respectively. Although it is significant to note that the measure of cultural identification used in this study was exploratory and only consisted of two items, these findings point to the possibility that women in Lebanon with higher BMIs and who score low on trait body satisfaction are not necessarily dissatisfied with their bodies out of a desire to attain cultural ideals of thinness. Future research in the Lebanese context might

benefit from exploring culturally specific variables that might mediate and moderate body dissatisfaction.

C. Limitations, Future Directions and Recommendations

A number of limitations were present in this study. First, the nature of data collection likely introduced bias into the sample. Specifically, given that data collection spanned several sessions with some sessions only involving one or two participants, it is plausible that some variability was introduced. Nevertheless, this possibility was reduced by the fact that the procedures involved during each of the sessions was scripted, and the sessions were all conducted by the same individual (the experimenter) during similar times of the day (between 3 and 5 p.m.).

A second limitation is the small sample size. Due to the nature of the statistical analyses involved in testing the hypotheses, larger sample sizes would be desirable. Also pertaining to sample sizes, it is significant to note that the sample sizes in each of the three conditions were not equal. Specifically, the traditional label condition had the greatest number of participants (30) followed by the novel label condition (28), and finally the novel label condition with the lowest number of participants (27). Although the differences in sample size are minimal, there is the possibility that no significant increase in state body dissatisfaction was detected in the novel condition due to the fact that it had the lowest sample size. This possibility is heightened when taking into consideration the results of the manipulation check. The manipulation check revealed that only 17 out of 27 participants correctly recalled the novel disclaimer label. By contrast, 23 out of 30 participants in the traditional disclaimer condition correctly recalled the label.

A third limitation pertaining to the sample was the sample's motivation to participate. The student's response rates were very low and many students rescheduled their session appointments multiple times before finally attending the session. The students' low motivation might have hindered the results by resulting in less than ideal responses (e.g., answering randomly or carelessly). The students' apparent lack of motivation to participate might be due to the fact that there were many online surveys available for them to participate in that also allowed them to earn an extra grade point. Future research conducted with this pool should take this pool's possible preference for online experiments and surveys into consideration.

A final possible limitation pertaining to the sample are the sample's characteristics. The demographic survey revealed that most of the participants belonged to the upper socioeconomic status, with average family incomes above \$7,000 per month. Considering the fact that the average salary in Lebanon is less than \$1,000 per month ("IDAL – Doing Business – Cost of Doing Business, 2013), it appears that the socioeconomic status and background of the participants might hinder the generalizability of these results to the rest of the Lebanese population. As discussed in the literature review, higher socioeconomic status tends to be associated with higher levels of body dissatisfaction (Swami, 2015). As such, it might be expected that women from lower socioeconomic backgrounds in Lebanon would have lower levels of body dissatisfaction than the present sample. This notion is further complicated by the fact that the American University of Beirut tends to have a unique cultural atmosphere that is likely different from that of other areas in Lebanon. It is quite plausible that these sample peculiarities affected the results obtained.

A significant limitation in the choice of stimuli was discovered. Specifically, one of the images was an advertisement for Calvin Klein depicting the model ‘Kendall Jenner’ modeling a pair of shorts. Given that Kendall Jenner is quite popular among young adults, it is very plausible that the inclusion of this stimulus biased any assessment of brand recall due to the effect of familiarity on the participant’s memory. Furthermore, given that celebrities’ lives tend to be followed by young women through various media outlets, it is highly likely that images of these celebrities elicit different reactions than do images of generic models. As suggested by Slater et al. (2012), future research should aim to elucidate the different reactions triggered by using images of generic models versus using images of familiar celebrities in experiments investigating the effects of thin ideal media. This suggestion was also made by Nakhle (2012) as she indicated that using a controversial public figure as a stimulus might have overshadowed any effect of the thin ideal on participants.

It is significant to note that the majority of participants noticed and correctly recalled the labels in the traditional and novel disclaimer label conditions. Therefore, one cannot argue that the labels are not effective due to participants not noticing or comprehending them, and as such placing labels on thin ideal advertisements is still warranted as a possible line of intervention against body dissatisfaction. Nevertheless, future research should be dedicated towards not only testing whether these labels are effective in preventing body dissatisfaction, but also towards determining what it is about the labels and advertisements that is triggering the observed increases in state body dissatisfaction.

Ata et al. (2013) offered an intelligent limitation of cross-sectional studies such as the present investigation. Specifically, it is important to keep in mind that thin ideal advertisements and stimuli are commonplace stimuli which individuals encounter on a day-to-day basis. When participants are exposed to these advertisements even for brief periods of time, it is likely that many automatic reactions are triggered in these individuals due to their familiarity with these kinds of stimuli. By contrast, labels on such images are quite rare. It is quite likely that individuals exposed to advertisements with labels on them within the context of experimental sessions are being exposed to them for the first time in their lives. When this fact is added to the fact that the exposure to these advertisements and labels is very brief (50 seconds per image), it is plausible that any positive effect that the labels might have on body dissatisfaction is masked. It is likely that it would take time for participants to become familiar with these labels, and for any positive effects that they might have to consolidate. This study was hence limited by the fact that it was cross-sectional. Future research designs on labels might benefit from implementing longitudinal designs.

In light of the above, it might be useful to use unconscious outcome measures such as Stroop tests or lexical decision tasks in order to test for the associations that are made after participants view these labels. Such measures might illuminate whether reading labels such as the novel disclaimer presented in this study is triggering thoughts and reactions pertaining to media literacy or positive body image at an unconscious level. Finally, given that so little is known about the variables that mediate and moderate participants' processing of thin ideal media, it might be beneficial to conduct qualitative studies that directly ask individuals about what they think and feel when they encounter thin ideal

media, and about what they think would be helpful in combatting their experiences of body dissatisfaction upon exposure to such stimuli. Also of value would be to interview Lebanese individuals and ask them about what thinness means to them. It is likely that the value and meaning associated with thinness in the Lebanese context differs from what it means in a Western context.

The present investigation is one of the few other investigations (e.g., Haddadin, 2010; Nakhle, 2012) that found a significant association between body mass index and body dissatisfaction in Lebanon. It would be of interest to conduct qualitative interviews with Lebanese individuals of various BMIs to better understand the relation between their BMI and their experiences of body satisfaction or dissatisfaction. Furthermore, given that this is the second Lebanese investigation that did not find a role for thin ideal internalization in moderating body dissatisfaction upon exposure to thin ideal media, it is possible that other factors play a role in this relationship.

Based on the results of the present investigation and on the results of previous experimental investigations in this field (e.g., Tiggemann et al., 2012), it is not recommended that governments and policymakers continue to obligate media outlets to attach disclaimer and warning labels on thin ideal media. It is advised that future research efforts be dedicated towards better understanding how humans process images and text, and to incorporate this knowledge and understanding into how advertisers and marketers create advertising materials. Collaborations between marketing and psychology specialists are needed not only to ensure that advertisements are catchy enough to increase a brand's sales, but also to ensure that the images they are producing are not harming vulnerable individuals.

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APPENDIX A

Informed Consent Form

American University of Beirut

P.O. Box 11-0236 Riad El Solh, 1107 2020 Beirut, Lebanon

CONSENT TO SERVE AS A PARTICIPANT IN A RESEARCH PROJECT

Principal Investigator: Nidal Daou, Ph.D. Assistant Professor of Psychology, Department of Psychology American University of Beirut nn07@aub.edu.lb 01-350000 Ext. 4376

Research Collaborator: Abir May Mansour, Graduate Student of Clinical Psychology, Department of Psychology, AUB, aam60@mail.aub.edu

Nature and Purpose of the Project

The purpose of the study is to investigate the effectiveness of a disclaimer label in preventing body dissatisfaction upon exposure to fashion advertisements. You will be presented with a number of fashion advertisements, and you will then be asked to answer questions about them.

Eligible Participants

You are eligible to participate in the study if you are female and over 18 years of age.

Explanation of Procedures

You will be asked to read this informed consent form and decide whether you are interested in allowing us to use the data you supplied in this research study. Your participation is

voluntary and you can withdraw your participation at any time without any loss of the benefits you are entitled to (1 credit point).

Participants who are interested in learning about the results of the study can contact Abir May Mansour after data collection and analyses are completed.

Potential Discomfort and Risks:

As has been presented in the debriefing session, some information about the study was not revealed until after the study had been completed. We predicted that no foreseeable physical or psychological risks would be involved with participating in this study that exceed minimal risks ordinarily encountered in daily life or during performance of routine physical or psychological evaluation, although the possibility of some unforeseeable risks exists. If any discomfort has arisen due to participation in this experiment, please don't hesitate to contact Abir May Mansour.

Potential Benefits:

By taking part in this study participants may develop a new understanding about how fashion advertisements are constructed, and how they aim to influence consumers. Furthermore, participants will help develop an intervention aimed at reducing body dissatisfaction. Finally, by participating in this study, they may help in the development of advertisements that better serve the populations that their brands target. They will receive 1 credit point for their participation in up to one hour of research. You have the right to withdraw your participation at any time throughout the experiment without any loss of the benefits you are entitled to.

Costs/Reimbursements:

Students who participate in one hour of research will receive 1 credit point.

Confidentiality:

The data you provide in this study will be anonymous, and cannot be linked to you in any way. The data you provide will only be accessible by the principal investigator and the collaborator, or by members of the AUB IRB for auditing purposes. The raw data that you provided will be kept in a locked cabinet in the office of the principal investigator for a period of seven years following the termination of the study. After the seven years have passed, the raw data will be shredded.

Who to Call if You Have Any Questions

This project has been reviewed and approved for the period indicated by the American University of Beirut (AUB) Institutional Review Board for the Protection of Human Participants in Research and Research Related Activities. If you have any questions about your rights as a research participant, or to report a research related concern, you may contact: IRB, AUB: 01-350000 Ext. 5543 or 5540.

If you have any concerns or questions about this study, you may contact: Nidal Daou or Abir May Mansour (see contact info above).

APPENDIX B

Information Sheet

American University of Beirut

P.O. Box 11-0236 Riad El Solh, 1107 2020 Beirut, Lebanon

CONSENT TO SERVE AS A PARTICIPANT IN A RESEARCH PROJECT

Principal Investigator: Nidal Daou, Ph.D. Assistant Professor of Psychology, Department of Psychology American University of Beirut nn07@aub.edu.lb 01-350000 Ext. 4376

Research Collaborator: Abir May Mansour, Graduate Student of Clinical Psychology, Department of Psychology, AUB, aam60@mail.aub.edu

Nature and Purpose of the Project

The purpose of the study is to investigate the effectiveness of fashion advertisements and your perceptions about them. You will be presented with a number of fashion advertisements, and you will then be asked to answer questions about them.

Eligible Participants

You are eligible to participate in the study if you are female and over 18 years of age.

Explanation of Procedures

You will be asked to read this information sheet and decide whether you are interested in participating in this research study. Your participation is voluntary and you can withdraw your participation at any time. Participants will be asked to attend a session during which they will be

presented with a number of advertisements, and they will be asked to answer a number of questions relating to what they saw. It is expected that participation in this study will last no more than 50 minutes. You are eligible for obtaining 1 credit point in exchange for your participation in up to one hour of research. You have the right to withdraw your participation at any time during this session without any loss of the benefits you are entitled to.

After the data collection phase of this study is concluded, participants will be invited to attend a debriefing session during which the participants will get the chance to learn more about the study. Participants who are interested in learning about the results of the study can contact Abir May Mansour after data collection and analyses are completed.

Potential Discomfort and Risks:

There are no foreseeable physical or psychological risks involved with participating in this study that exceed minimal risks ordinarily encountered in daily life or during performance of routine physical or psychological evaluation, although the possibility of some unforeseeable risks exists. Some information about the study will be revealed only after the study has been completed. The information withheld poses no risk to one's comfort, safety, or wellbeing.

Potential Benefits:

By taking part in this study participants may develop a new understanding about how fashion advertisements are constructed, and how they aim to influence consumers. By participating in this study, they may help in the development of advertisements that better serve the populations that their brands target. They will receive 1 credit point for their participation in up to one hour of research. You have the right to withdraw your participation at any time

throughout the experiment without any loss of the benefits you are entitled to.

Costs/Reimbursements:

Students who participate in up to one hour of research will receive 1 credit point.

Confidentiality:

The data you provide in this study will be anonymous, and cannot be linked to you in any way. The data you provide will only be accessible by the principal investigator and the collaborator, or by members of the AUB IRB for auditing purposes. The raw data that you provided will be kept in a locked cabinet in the office of the principal investigator for a period of seven years following the termination of the study. After the seven years have passed, the raw data will be shredded.

Who to Call if You Have Any Questions

This project has been reviewed and approved for the period indicated by the American University of Beirut (AUB) Institutional Review Board for the Protection of Human Participants in Research and Research Related Activities. If you have any questions about your rights as a research participant, or to report a research related concern, you may contact: IRB, AUB: 01-350000 Ext. 5543 or 5540.

If you have any concerns or questions about this study, you may contact: Nidal Daou or Abir May Mansour (see contact info above).

APPENDIX C

Advertisement Consumption Questionnaire

Please rate how often you engage in, or are exposed to, the events indicated by the statements.

- | | | | | |
|-------|--|---|---|------------|
| 1. | How often does a product's advertisement persuade you to purchase it? | | | |
| 1 | 2 | 3 | 4 | 5 |
| Never | | | | Very Often |
| 2. | How often do you seek out information about a product by viewing its advertisements? | | | |
| 1 | 2 | 3 | 4 | 5 |
| Never | | | | Very Often |
| 3. | How often are you exposed to fashion or beauty-related advertisements in magazines? | | | |
| 1 | 2 | 3 | 4 | 5 |
| Never | | | | Very Often |
| 4. | How often are you exposed to online advertisements for fashion or beauty-related products? | | | |
| 1 | 2 | 3 | 4 | 5 |
| Never | | | | Very Often |
| 5. | How often are you exposed to fashion or beauty-related advertisements on the television? | | | |
| 1 | 2 | 3 | 4 | 5 |
| Never | | | | Very Often |

APPENDIX D

Multi-dimensional Body-Self Relations Questionnaire-Appearance Evaluation

Subscale (Cash, 2000)

The following pages contain a series of statements about how people might think, feel, or behave. You are asked to indicate the extent to which each statement pertains to you personally.

Your answers to the items in the questionnaire are anonymous, so please do not write your name on any of the materials. In order to complete the questionnaire, read each statement carefully and decide how much it pertains to you personally. Using a scale like the one below, indicate your answer by entering it to the left of the number of the statement.

EXAMPLE:

_____ I am usually in a good mood.

In the blank space, enter a **1** if you **definitely disagree** with the statement;
enter a **2** if you **mostly disagree**;
enter a **3** if you **neither agree nor disagree**;
enter a **4** if you **mostly agree**;
or enter a **5** if you **definitely agree** with the statement.

There are no right or wrong answers. Just give the answer that is most accurate for you. Remember, your responses are confidential, so please be completely honest and answer all items.

1	2	3	4	5
Definitely Disagree	Mostly Disagree	Neither Agree Nor Disagree	Mostly Agree	Definitely Agree

1. My body is sexually appealing. _____
2. I like my looks just the way they are. _____

3. Most people would consider me good-looking. _____
4. I like the way I look without my clothes on. _____
5. I like the way my clothes fit me. _____
6. I dislike my physique. _____
7. I am physically unattractive. _____

Cash has contacted the co-investigator via email and sent her this questionnaire with permission to use it for her research study.

APPENDIX E

The “Physical Appearance Comparison Scale” by Thompson, Heinberg and Tantleff (1991)

THE PHYSICAL APPEARANCE COMPARISON SCALE (PACS)

Using the following scale please select a number that comes closest to how you feel:

Never	Seldom	Sometimes	Often	Always
1	2	3	4	5

1. At parties or other social events, I compare my physical appearance to the physical appearance of others. 1 2 3 4 5
 2. The best way for a person to know if they are overweight or underweight is to compare their figure to the figure of others. 1 2 3 4 5
 3. At parties or other social events, I compare how I am dressed to how other people are dressed. 1 2 3 4 5
 - *4. Comparing your "looks" to the "looks" of others is a bad way to determine if you are attractive or unattractive. 1 2 3 4 5
 5. In social situations, I sometimes compare my figure to the figures of other people. 1 2 3 4 5
-

APPENDIX F

“Internalization-General Subscale” of the “Sociocultural Attitudes Towards Appearance Questionnaire-Third Edition (SATAQ-3) by Thompson, Van Den Berg, Roerhig, Guarda, and Heinberg, 2004. Format taken from Nakhle (2012).

	Definitely disagree	Mostly disagree	Neither agree nor disagree	Mostly agree	Definitely agree
1- I do <u>not</u> care if my body looks like the body of people who are on TV	1	2	3	4	5
2- I compare my body to the bodies of people who are on TV	1	2	3	4	5
3- I would like my body to look like the models who appear in magazines	1	2	3	4	5
4- I compare my appearance to appearance of TV and movie stars	1	2	3	4	5
5- I would like my body to look like the people who appear in movies	1	2	3	4	5
6- I do <u>not</u> compare my body to the bodies of people who appear in magazines	1	2	3	4	5
7- I wish I looked like the models in music videos	1	2	3	4	5
8- I compare my appearance to the appearance of people in magazines	1	2	3	4	5
9- I do <u>not</u> try to look like the people on TV	1	2	3	4	5

APPENDIX G

Visual Analogue Scales for State Body Dissatisfaction (Heinberg & Thompson, 1995). Format adapted from Ata et al., 2013.

1. Please indicate your current (i.e., what you are feeling **right now**) feelings of dissatisfaction with your body shape by placing a mark on the line.



A horizontal line with vertical end caps. Below the left end cap is the word "None" and below the right end cap is the word "Extreme".

2. Please indicate your current feelings of dissatisfaction with your weight by placing a mark on the line.



A horizontal line with vertical end caps. Below the left end cap is the word "None" and below the right end cap is the word "Extreme".

3. Please indicate your current feelings of dissatisfaction with your physical appearance by placing a mark on the line.



A horizontal line with vertical end caps. Below the left end cap is the word "None" and below the right end cap is the word "Extreme".

APPENDIX H

State Social Comparison Measure by Tiggeman and McGill (2004)

Please rate the following statements based upon how well they applied to you while you were viewing the advertisements.

1. To what extent did you have thoughts about your own appearance while viewing the advertisements?

1 no thought about my appearance	2	3	4	5	6	7 a lot of thought
--	---	---	---	---	---	--------------------------

2. To what extent did you compare your overall appearance to those of the models in the advertisements?

1 no comparison	2	3	4	5	6	7 a lot of comparison
-----------------------	---	---	---	---	---	--------------------------------

3. To what extent did you compare specific body parts to those of the models in the advertisements?

1 no comparison	2	3	4	5	6	7 a lot of comparison
-----------------------	---	---	---	---	---	--------------------------------

APPENDIX I

Consumer Questionnaire (Ata et al., 2012; Mills, Polivy, Herman, & Tiggemann.

2002; Tiggemann, Polivy, & Hargreaves, 2009)

Please rate the following statements about the advertisements you saw.

1. The advertisements were effective in persuading me to buy the products they were selling.

1 Definitely Disagree	2 Mostly Disagree	3 Neither Agree nor Disagree	4 Mostly Agree	5 Definitely Agree
-----------------------------	-------------------------	---------------------------------------	----------------------	--------------------------

2. To what extent do you think these advertisements would catch your eye if displayed on a website?

1 Definitely Disagree	2 Mostly Disagree	3 Neither Agree nor Disagree	4 Mostly Agree	5 Definitely Agree
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3. The advertisements were creative, innovative and original.

1 Definitely Disagree	2 Mostly Disagree	3 Neither Agree nor Disagree	4 Mostly Agree	5 Definitely Agree
-----------------------------	-------------------------	---------------------------------------	----------------------	--------------------------

4. The advertisements sparked my interest in the brands they were promoting.

1 Definitely Disagree	2 Mostly Disagree	3 Neither Agree nor Disagree	4 Mostly Agree	5 Definitely Agree
-----------------------------	-------------------------	---------------------------------------	----------------------	--------------------------

5. These advertisements were relevant to the Lebanese culture.

1 Definitely Disagree	2 Mostly Disagree	3 Neither Agree nor Disagree	4 Mostly Agree	5 Definitely Agree
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APPENDIX J

Brand Recall

1. Please indicate the names of the brand names you remember seeing in the advertisements.

2. Please indicate the products you remember being advertised in the images.

APPENDIX K

Manipulation Check taken from Ata et al. (2013)

1. Did you notice the message in the box at the top of the ads?

Yes	No
-----	----

2. What did the message say? Please write the message you recall seeing in the space below

APPENDIX L

Demographic Questionnaire

Please answer the following questions.

1. What is your age (in years)? _____
2. What is your major? _____
3. What is your height in centimeters? (If you're not sure please provide an approximation) _____
4. What is your weight in kilograms? (If you're not sure please provide an approximation) _____
5. What is your family's average monthly income?
 1. ___ Less than \$1,000
 2. ___ \$1,000-2,999
 3. ___ \$3,000-4,999
 4. ___ \$5,000-\$6,999
 5. ___ \$7,000 or more
 6. ___ Prefer not to say
 7. ___ Don't know

6. What is your nationality? (Please include all that applies)

7. Please list the countries you have resided in over the past 10 years, and how long you spent living in each country (e.g.: Brazil: 3 years, U.K.: 6 months, Lebanon: 2 years).

8. Please rate the extent to which you agree or disagree with the following statement: I identify with Western culture and ideals (i.e., Western European and/or North American culture and ideals).

1 Definitely Disagree	2 Mostly Disagree	3 Neither Agree nor Disagree	4 Mostly Agree	5 Definitely Agree
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9. Please indicate the extent to which you are exposed to Western media (i.e., Western European and/or North American media).

1 No Exposure	2 Very Little Exposure	3 Moderate Exposure	4 Frequent Exposure	5 Heavy Exposure
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