College Students’ Self-Concepts and Attitude toward Advertising; The Relationships among the Body-Esteem, Social Comparison, and the Perception about Diet Advertising

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There have been many studies dealing with the relationships between self-perceptions and the perceptions of advertising. However, research that focused specifically on diet advertising, which has recently seen a dramatic increase in our society, has been scarce. One can assume that people’s perceptions of diet advertising may be influenced by how they think about their own bodies or by the extent to which they compare their own bodies with those of others. For a more comprehensive understanding of the aforementioned relationships, this study analyzes the possible moderating role of body-esteem in predicting social comparison’s influence on the perceptions of diet advertising. The results of this study showed that people’s body-esteem level not only influences their attitude toward diet advertising, but also moderates the relationship between the attitude toward diet advertising and individuals’ social comparison orientation.

Keywords : Self-concept, Social comparison, Body-esteem, Diet advertising, Perception

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Scholars generally tend to agree with Rosenberg’s definition of self-concept as the totality of the individual’s thoughts and feelings that have reference to him/herself as an object of thought (1979; Reed II 2002). The gist of Rosenberg’s definition is that self-concept is not about an objective evaluation of the person, but rather about the “subjective thoughts and perceptions” about oneself (Mehta 1999). In other words, self-concept is an individual’s own evaluation of self conducted by him/herself, rather than by others (Awad and Voruganti 2004). To date, several related terms, such as “self-schemata” (e.g., Mehta 1999), “self-image” (e.g., Birdwell 1968), and “self-efficacy” (e.g., Madej 1999), have been used to indicate a similar meaning about the self.

The importance of self-concept, by which individuals evaluate themselves or compare themselves with others, has been particularly emphasized in the field of advertising and marketing (Ruiz and Sicilia 2004). Many studies have tried to determine the relationship between self-concept and people’s perceptions of advertising (Debevec et al. 1973), advertising effectiveness (Hong and Zinkhan 1995), product characteristics (French and Glaschner 1971), and buying behaviors (Malhotra 1988). Several studies have confirmed a direct or indirect relationship between how individuals think about themselves/others and how they form their attitudes or behaviors. The concept has been considered to be a crucial clue to understanding customers’ minds and future actions in the advertising field (Onkvisit and Shaw 1987; Heath and Scott 1998).

Despite the long-lasting interest in the influence of self-concept on consumer perceptions and behaviors, the kinds of products addressed in research have been limited to a small set of product categories such as
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apparel (Yurchisin and Johnson 2004), shoes (Belk 2003), cars (Heath and Scott 1998), and cosmetics (Mehta 1999). While stressing the need to explore more product categories, this study examines the diet product category, which has recently seen a considerable increase in consumer interest (Marketdata Enterprises 2007).

The present study proposes that self-concepts can influence individuals’ perceptions of diet advertising, along with their actual weight and other physical characteristics (Berry and Howe 2004, 2005; Forster and Jeffery 1986). This study applies two major self-concepts, social comparison (Festinger 1954) and body-esteem (Mendelson, White and Mendelson 1996), which have been widely employed in advertising/marketing studies (i.e., Landon 1974; Wagener et al. 1998). Body-esteem is one of the extended versions of self-esteem (Rosenberg 1979), which has been frequently considered an effective concept for body image-related studies (Flannery-Schroeder and Chrisler 1996; Mendelson, White and Mendelson 1996). Therefore, the main purpose of this study is to examine how the relationship between social comparison orientation and individuals’ perception about advertising are formed based on individuals’ degree of body-esteem.

This study, by providing empirical evidence for the influence of social comparison and body-esteem on advertising perceptions, will offer valuable information to both scholars and practitioners. Specifically, for marketers and advertisers, understanding the influence of self-concept on the formation of consumers’ perceptions about diet advertising will be helpful for conducting effective targeting and message development.

Self-Concept and Diet Advertising
Even though the discussions were not specifically about diet advertising or products, several researchers have indicated that people’s self-perceptions have a direct relationship with their perceptions advertising and other consumer behaviors (Mehta 1999; Feinberg et al. 1992; Schwer and Daneshvary 1995). Sub-topics vary from the relationship between self-concept and consumers’ advertising perceptions (Markus 1977; Domzal and Kernan 1993) to the linkage between self-concept and real purchase of specific products (Malhotra 1988). In other words, the self-concept of consumers has been considered to be a significant reference to predict reactions to advertising and shopping behaviors. Due to this practical usage, self-concept has been widely discussed in the field of advertising and marketing (Sirgy 1982, 1986; Reed II 2002).

Hardly any study deals with the self-concept and perceptions of diet advertising, but several researchers have tried to figure out the relationship between the individuals’ perception of self and weight management (Johnson 2002; Flannery-Schroeder et al. 1996). How people think about their own self has been considered to be an important factor affecting people’s diets (Russel and Cox 2003). Russel and Cox (2003) indicated that people’s perception of their bodies is the key factor for choosing a weight-loss activity, rather than their real weight or health issues. Wagner et al. (1998) also showed that making decisions about dieting or exercising is mainly influenced by self-image rather than an individual’s real health status or weight. Therefore, the researchers concluded that psychological differences among people might cause different behaviors of weight-loss activity.

Among several self-concepts (e.g., self-efficacy, self-reliance, self-reward, self-monitoring), self-esteem is one of the most discussed topics when it
comes to individuals’ weight-management and consumer behavior for weight-loss marketing (Berry and Howe 2005; Forster and Jeffery 1986). Generally, it has been accepted that people who are overweight have lower self-esteem than others whose weight is normal (Madej 1999). Therefore, we can assume that low self-esteem has some relationship with people’s interest in weight-loss activity, and even weight-loss advertising. According to Howe and Berry (2005), appearance appeal, which is one of the major appeals in weight-loss advertising (Yu and King 2005), influences self-concepts negatively, making consumers feel inadequate in terms of their own weight and causing them to attempt to lose weight (Howe and Berry 2005). Therefore, a flow (overweight - low self-esteem - concern about weight - stimulated by diet advertising) can be created in terms of the relationship between a person’s self-esteem and his or her attitude toward weight-loss advertising.

Also, low self-esteem has been considered to be an important reason for people to choose “non-exercise” style options for their weight-loss management. Some research shows that people with low self-esteem not only prefer a non-exercise method to lose weight, but also experience several abnormal examples of weight management, such as eating disorders or an obsession with being thin (Forster and Jeffery 1986; Flanner-Schroeder and Chrisler 1996). This unstable psychographical situation has made people with low self-esteem the major targets for weight-loss companies. Those with low self-esteem are especially vulnerable to advertising messages that demonstrate the improvement of appearance by using a particular product (Howe and Berry 2005; FTC 2002, 2003).
Social Comparison Orientation

Social comparison theory originated with Festinger (1954). The theory’s fundamental focus is on understanding human behavior. Based on the theory, people are willing to and routinely compare themselves with the models portrayed in media (Richins 1991). This theory has enabled marketers to obtain clues for understanding diverse situations in consumer behaviors (Martin and Kennedy 1994).

Social comparison has been one of the important elements in understanding how people think about themselves (Gibbons and Buunk 1999; Allan and Gilbert 1995; Stapel and Blanton 2004). In addition to the independent position and diverse usefulness of this concept itself in many cases (i.e., Morse and Gergen 1970; Michinov and Michinov 2001), core attributes of the social comparison concept have also been applied in several studies dealing with other self-concepts, including self-esteem (Stapel and Blanton 2004). The primary goal of people’s social comparison is to acquire information about the “self” (i.e., Gibbons and Buunk 1999), and the important motivations for social comparison are self-evaluation, self-improvement, or self-enhancement (Taylor et al. 1995; Wood 1989; Gibbons and Buunk 1999). As these studies indicated, social comparison orientation is the variable that distinguishes people who exhibit different degrees of uncertainty about reality and self-knowledge. Using Gibbons and Buunk’s social comparison orientation (1999), different levels of social comparison were measured among individuals (Michinov and Michinov 2001).

The reasons for social comparison orientation to be used in self-concept related studies are twofold. First, as Fujita (1996) indicated, social comparison orientation can easily categorize people based upon
characteristics, such as those who compare themselves to others and those who do not. In addition to the scale Fujita suggested, there have been several hands-on scales that quantitatively measure an individual’s social comparison orientation. Due to not only the ease with which it can be measured, social comparison’s comprehensive relationship with self-concept has made it a popular research approach. As researchers indicated (Gibbons and Buunk 1999; Festinger 1954), the ultimate motivations of individuals’ social comparison are enhancing self-esteem or self-concept. Therefore, based upon previous literature, it can be said that social comparison or moderator could provide many valuable insights in the study about self and people’s attitudes or behaviors. Social comparison is also critically related to the concept of self-esteem. According to Rosenberg, there are three main aspects of self-esteem formation (1986). Those aspects are “reflected appraisals,” “self attribution,” and “social comparison.” Reflected appraisals mean that people judge themselves by what others think about themselves. Therefore, self-esteem is regarded as a product of social interaction. Self attribution is the way in which naïve observers attribute motives, intentions, causes, and dispositions to themselves on the basis of their observation of their actions. Finally, the principle of social comparison holds that people judge themselves based upon the comparisons with others because of a lack of information about themselves (Rosenberg 1986). One study suggested a specific direction of the relationship between self-esteem and social comparison. Morse and Gergen (1970) have indicated that there exists a negative relationship between social comparison and self-esteem. They showed that the socially desirable stimulus of a desirable person produced a significant decrease in self-esteem. The undesirable stimulus, however, significantly enhanced subjects’ self esteem. Therefore, depending on the
direction of comparison (upward or downward), self-esteem could be varied.

**Individuals’ Body-Esteem Level**

Body-esteem is used as a moderating variable in this study to check how the relationship between the social comparison and the individuals’ perceptions about diet advertising changes depending on particular circumstances (Mendelson 1995, 2001, 2003). Since Rosenberg (1976) introduced the notion of self-esteem, the majority of research has dealt with “global self-esteem,” which is an individual’s positive or negative attitude toward the self as a totality (Rosenberg et al. 1995). Global self-esteem is measured by a scale consisting of 10 questions about a human’s overall self. In the last two decades, however, researchers have suggested several modified self-esteems, which are called specific self-esteems (Mendelson 1995). They were developed based on specific topics or fields, and are measured with modified scales of self-esteem. However, most questions are used or developed based on the original global self-esteem scale by Rosenberg. According to Rosenberg’s 1995 findings, general self-esteem and several specific self-esteems are not different in terms of quality, just different for specific purposes. The research has also proved that global self-esteem is more strongly related to psychological well-being, while specific self-esteem is a much better predictor of specific performance (e.g., school performance).

Regarding weight-loss related issues, Mendelson’s body-esteem scale (1995, 2001, 2003) has been popular among researchers, for its applicability to self-esteem in regards to body and weight. Body-esteem is defined as the self-evaluation of one’s body or appearance (Mendelson et al. 2001). It is
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The Body-Esteem Scale comprised of three subscales: BE-Appearance (general feelings about appearance), BE-Weight (Weight satisfaction), and BE-Attribution (evaluations attributed to others about one’s body and appearance). The scales employ questions such as “I like what I see when I look in the mirror” (BE-Appearance); “I really like what I weigh” (BE-Weight); and “People my own age like my looks” (BE-Attribution). Even though this scale is not the only way to measure self evaluation, this has generally been conceptualized as a standard construct for figuring out one’s evaluation about self in terms of body satisfaction (Harter 1985, 1988; Mendelson and White 1985; Mendelson et al. 2001). In a 2001 study (“Body-Esteem Scale for Adolescents and Adults”), Mendelson and colleagues proved the importance of the perception of people’s weight and appearance, rather than the weight itself, during weight-loss activity. Moreover, there were serious gender differences in body-esteem. Female participants had lower scores in BE-appearance and BE-weight than males. These results help explain why women purchase more weight-loss products than men.

Moderating Role of Body Esteem

The general self-esteem of individuals has been widely used as a moderator in several topics in social studies. From the psychological perspective, Orpen (1989) confirmed that self-esteem moderates the impact of performance-appraisal confidence on work attitudes. He found that general self-esteem not only affects work attitudes, but also moderates the impact of confidence on work attitudes of the workers. Other studies addressed more personality-oriented effects of self-esteem. Kernis, Grannemann, and Mathis (1991) found that stability of self-esteem
moderates the predictive relationship between level of self-esteem and depression. Their results were identical with several previous studies dealing with the diverse moderating roles of self-esteem (Brockner and Guare 1983; Tennen and Herzberger 1987). Body-esteem has also been explored as a moderator in several studies discussing physical characteristics. Hughes and Black (2006) examined body-esteem as a moderator of cardiovascular stress responses among anatomy students. It was also found that the individuals’ original level of body-esteem also affects the relationship between the importance of appearance and the perception of people’s appearance (Lawrence, Fauerbach, and Thombs 2006).

Jones and Buckingham (2005) tested self-esteem as a moderator of the effects of social comparisons of attractiveness on women’s body esteem. Examining the relationships among the three concepts, their experiment found that self-esteem significantly moderates the effects of social comparison on body esteem. High self-esteem and low self-esteem were both sensitive to social comparisons of attractiveness, but the effects were in opposite directions. In particular, participants in the low self-esteem group showed higher body esteem when they were exposed to the picture of unattractive women than after looking at an attractive female. However, people with high self-esteem showed lower body esteem level after they saw an unattractive female than after seeing an attractive woman. The results discussing the relationships among these variables have been inconsistent (Brown et al. 1992; Collins 1996).
Hypotheses and Research Question

This study’s nine hypotheses and one research question aim to pinpoint the relationship structure among individuals’ social comparison orientation, body-esteem level, perceptions about diet advertising, and some consumer behaviors of diet products. The first two hypotheses (H1-1, H1-2) will test if there is any significant relationship between people’s social comparison orientation and people’s perceptions of diet advertising. The perception of diet advertising was measured by two sub-categories suggested by Wagner et al.’s study, (“The Effect of Media Analysis on Attitudes and Behaviors Regarding Body Image among College Students,” 1998): the attitude toward messages of diet advertising and general belief of diet advertising. The diet products category from the FTC’s reports (2002, 2003) provided the weight-loss products and diet supplements that the questionnaire addresses. In addition to the relationships between social comparison and the perceptions about diet ads, hypothesis H1-3 also tests the relationship between social comparison and people’s consuming behavior for diet products. The whole questionnaire is available in the Appendix section.

The next two hypotheses (H2-1, H2-2) test the relationships between the individuals’ body-esteem levels and the perceptions of diet advertising. The following hypothesis (H2-3) examines if there is any significant relationship between body-esteem level and people’s consuming behavior for diet products.

The research question explores the possible relationship between the two self-concepts used in this study, individuals’ body-esteem level and social comparison orientation. Finally, the possible moderating roles of body-
-esteem level in terms of the relationship between social comparison orientation and people’s perceptions about diet advertising are tested by hypotheses 3-1 and 3-2. As the final step, the possible moderating effect of body-esteem in social comparison-consuming behaviors for diet products will be also examined (H3-3).

Hypothesis 1-1 and 1-2 assume that there will be positive correlations between people’s social comparison orientation and the perception of diet advertising. Since several studies supported the fact that people with high level of social comparison orientation enjoy advertising (Hogg and Fragou 2003; Richins 1991), which gives them opportunities to compare themselves with others, this study hypothesizes that the positive relationship is applicable in the case of diet advertising as well. Some researchers also reported that people’s desire to compare themselves with models in advertising has made people have some level of interests in diet advertising (Fujita 1996; Stapel 2004).

**H1-1.** There is a positive correlation between the level of social comparison orientation and the participants’ attitude toward the message from diet advertising.

**H1-2.** There is a positive correlation between the level of social comparison orientation and the participants’ general belief about diet advertising.

According to the literature, people with high social comparison orientation who enjoy comparing themselves with others in many aspects of life are generally more interested in consuming behaviors for diet products (Jones and Buckingham 2005).
H1-3. There is a positive correlation between the level of social comparison orientation and the participants’ consuming behaviors for diet products.

The next two hypotheses (H2-1, H2-2) are about the possible relationships between the individuals’ level of body-esteem and the people’s perception of diet advertising. Different from the relationships between the social comparison orientation and perceptions of diet advertising, literature has indicated that there could be negative relationships between the perception about advertising and individuals’ body esteem level (Brown, Novick, Lord, & Richards 1992; Henderson-King, Henderson-King & Hoffman 2001).

It has been known that the exposure to idealized women’s body image in advertising generally results in the people’s stronger dissatisfaction with their own bodies (Birkeland et al. 2005; Hobza, Walker, Yakushko and Peugh 2007). Advertising showing thin bodies and offering information about how to improve body shapes was known to make readers feel frustrated and even caused eating disorders (Posavac and Posavac 2002). Based upon the indications from previous literature, the next two hypotheses are formulated.

H2-1. The level of body-esteem of participants and their attitude toward the message of diet advertising are negatively correlated with each other.

H2-2. The level of body-esteem of participants and their general belief about diet advertising are negatively related to each other.

Also, research has shown that there is a high possibility that low body-
esteem will encourage people’s more frequent use of diet products and participation in weight-loss activity (Posavac and Posavac 2002). Furthermore, people with low self-esteem caused by dissatisfaction with body shape not only end up consuming weight-loss products, but also tend to develop eating disorders (Tchanturia, Troop, and Katzman 2002). Hence the following hypothesis is formulated:

H2-3. The level of body-esteem of participants and their consuming behaviors for diet products are negatively related to each other.

The research question of this study is about the relationship between people’s social comparison orientation and the moderating effect of body-esteem level. Including Trampe, Stapel, and Siero (2007), some studies have reported that there is a negative relationship between people’s social comparison orientation and body-esteem (Morse and Gergen 1970). In other words, if a person often compares him/herself with others, it is relatively more likely for that person to have a lower body-esteem.

However, some recent studies have indicated that the direction of the relationship could be opposite depending on the individual’s style of comparison. According to Jones and Buckingham (2005), even the people with high body-esteem can enjoy comparing themselves more often than the people with low body-esteem. Since they compare themselves with others of equal or less attractive body shape, this style of comparison causes them to have further higher body-esteem. On the other hand, the people with low body-esteem generally compare in an “upward” way, so that they become more dissatisfied with their own situations (Jones and Buckingham 2005).

As previous research has not established a clear direction, the relationship
between the social comparison and body-esteem will be explored by the following research question instead of hypothesis testing.

**RQ.** How are the people’s level of social comparison orientation and the participants’ degree of body-esteem related to each other?

Finally, the major focus of this study, getting information regarding the possible moderating roles of individuals’ body-esteem level in the relationship between people’s social comparison and the perceptions of diet advertising will be examined through the next three hypotheses (H3-1, H3-2, H3-3).

Research has used individuals’ body-esteem level as a moderating variable in the studies examining people’s perceptions of physical characteristics (Hughes and Black 2006; Orpen 1989; Lawrence, Fauerbach, and Thombs 2006). Generally, these studies exposed participants to advertising pictures of female models with idealized body shape. As an example, Jones and Buckingham (2005) found that individuals’ body-esteem level played a moderator role in the relationships between the participants’ response to attractive women and social comparison orientation (2005). Body-esteem and social comparison produced an interaction effect in that case. Even though no previous study specifically mentioned using pictures of idealized women from “diet” advertising, because most diet advertising contains thin models with idealized body shape (Yu and King 2005; FTC’s staff reports 2002, 2003), the following hypotheses are formulated.

**H3-1.** The relationship between people’s social comparison orientation
and participants’ attitude toward the message of diet advertising is moderated by participants’ body-esteem level.

**H3-2.** The relationship between people’s social comparison orientation and participants’ general belief about diet advertising is moderated by participants’ body-esteem level.

In addition to people’s perceptions of advertising, body-esteem level has been known to moderate the relationship between the social comparison orientation and specific actions such as consuming behaviors of diet products and participating in weight-loss activities (Hughes and Black 2006). Body-esteem has been used as an important predictor to figure out the future weight-management behaviors in social comparison studies (Hogg and Fragou 2003).

**H3-3.** The relationship between people’s social comparison orientation and participants’ consuming behaviors for diet products is moderated by participants’ body-esteem level.

**Method**

Students in an introductory Journalism class at a southeastern state university were the convenient sample for this survey. Only the title and topic were known to the participants. The survey was conducted online, using the surveymonkey data gathering service (www.surveymonkey.com). Of the 192 individuals invited by e-mail to take the survey, 166 participants completed the survey. However, seven participants were eliminated from the
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The survey was conducted for five days in April 2007. In addition to receiving extra credit from their professors, the participants were entered in a drawing to win a $50 gift card at a campus bookstore.

The questionnaire for the survey consists of two parts (see Appendix). Questions in Part 1 are about the self-concepts of social comparison and body-esteem. Two widely accepted scales were applied for measuring the differences among people regarding self-concepts: the scale of social comparison orientation suggested by Gibbons and Buunk (1999) and Mendelson’s body-esteem scale (1995, 2001, 2003). In part two of the survey, participants were asked three subcategories of questions: a) attitude toward the messages of diet advertising, b) general belief about weight-loss advertising, and c) actual consuming behaviors for weight-loss products. People’s perceptions of weight-loss advertising were measured using the scales from Wagner et al. (1998)’s study (“The Effect of Media Analysis on Attitudes and Behaviors Regarding Body Image among College Students”). People’s consuming behaviors for diet products were measured by asking participants about their experience in the last three years and intention to use diet products in the near future. As a category of diet products in the survey, the category from the FTC (2002, 2003)’s staff reports was used.

Results

To test nine hypotheses and answer one research question, three statistical methods were used. A series of correlation analyses were conducted to test the first six hypotheses, and multiple regressions revealed the main effects of

...
the independent variables (social comparison orientation and the level of body-esteem) on the perceptions of diet advertising. Another multiple regression was run to check if the body-esteem level moderated the relationship between participants’ social comparison orientation and the attitude toward diet advertising.

Social Comparison and the Perceptions about Diet ads, Diet Behaviors (H1-1, 2, 3)

The relationships between people’s social comparison orientation and the perception about diet advertising are seen in Table 1. First, there was no significant positive correlation (Pearson) between the social comparison orientation and the attitude toward the messages of diet advertising as predicted. Therefore, the hypothesis 1-1 was not supported.

### Table 1. Correlations(Social Comparison Orientations, Attitude toward the Messages in Diet Advertising, General Belief of Diet Advertising, Consuming behaviors for diet for Diet Products)

<table>
<thead>
<tr>
<th></th>
<th>Social Comparison</th>
<th>Attitude/Message</th>
<th>Belief/Advertising</th>
<th>Behavior/Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Comparison</td>
<td>1</td>
<td>-.071</td>
<td>-.220**</td>
<td>-.163*</td>
</tr>
<tr>
<td>Attitude/Message</td>
<td>-.071</td>
<td>1</td>
<td>.265**</td>
<td>.312**</td>
</tr>
<tr>
<td>Belief/Advertising</td>
<td>-.220**</td>
<td>.265**</td>
<td>1</td>
<td>.501**</td>
</tr>
<tr>
<td>Behavior/Products</td>
<td>-.163*</td>
<td>.312**</td>
<td>.501**</td>
<td>1</td>
</tr>
</tbody>
</table>

**p<.01, *p<.05

Regarding hypothesis 1-2, the social comparison orientation was found to be negatively correlated (Pearson) with the general belief about diet
advertising (p<.01). Since the hypothesis predicted a positive correlation, the results did not support the hypothesis 1-2.

As for the relationship between social comparison orientation and the people’s consuming behaviors for diet products, again, the results showed a negative correlation (p<.05). Therefore, results did not support hypothesis 1-3 either.

**Body-Esteem and Perception of Diet Ads, Diet Behaviors (H2-1, 2, 3)**

As shown in the table below, the people’s body esteem level was not significantly correlated with the attitude toward messages from diet advertising. The relationship was negative but not significant. Therefore, the hypothesis 2-1 was not supported. On the other hand, the individuals’ body-esteem had a significantly negative correlation with people’s general belief about weight-loss advertising (p < .01) as the hypothesis expected. Also, the people’s consuming behaviors for diet products were negatively correlated with the level of body-esteem (p < .01). Hence, hypotheses 2-2 and 2-3 were supported by the results.

<table>
<thead>
<tr>
<th></th>
<th>Body-Esteem</th>
<th>Attitude/Message</th>
<th>Belief/Advertising</th>
<th>Behavior/Products</th>
</tr>
</thead>
<tbody>
<tr>
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<td>-.149</td>
<td>-.286**</td>
<td>-.438**</td>
</tr>
<tr>
<td>Attitude/Message</td>
<td>-.149</td>
<td>1</td>
<td>.265**</td>
<td>.312**</td>
</tr>
<tr>
<td>Belief/Advertising</td>
<td>-.286**</td>
<td>.265**</td>
<td>1</td>
<td>.501**</td>
</tr>
<tr>
<td>Behavior/Products</td>
<td>-.438**</td>
<td>.312**</td>
<td>.501**</td>
<td>1</td>
</tr>
</tbody>
</table>

**p<.01**
Body-Esteem and Social Comparison (RQ)

Previous studies have not shown a unified result about this relationship (Jones and Buckingham 2005). Some study indicated a positive relationship (Mussweiler and Strack 2000), but others supported the opposite direction (Stapel and Koomen 2000). This study found no significant correlation between the people’s social comparison orientation and their body-esteem level, even though the results showed the two variables were positively related to each other.

Therefore, the results suggest that this study can use the two variables respectively as an independent variable (social comparison orientation) and a potential moderator (body-esteem) in the relationship between the social comparison orientation and the perceptions of diet advertising.

Moderating Role of Body-Esteem on the Relationship between Social comparison Orientation and the Perception of Diet Advertising (H3-1, H3-2, H3-3)

The first multiple regression was conducted to determine which independent variable (Social comparison orientation, Body-esteem level) could be the predictor(s) of the dependent variables (young adults’ attitude toward diet advertising, experiences of using diet products, and their intent to buy diet products). Data screening process for regression led to the elimination of 10 cases as outliers so that the total sample became 150. Evaluation of linearity led to the natural log transformation of social comparison orientation and body-esteem level. The regression results indicated that the two independent variables significantly predict the attitude toward diet advertising individually (Social comparison orientation: R²=.083,
R² adj = .077, F (1, 148) = 13.364, p < .001 / Body-esteem: R² = .132, R² adj = .126, F (1, 149) = 22.576, p < .001.

Table 3. Main Effects of the Independent Variables from Multiple Regression

<table>
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<tr>
<th>IVs</th>
<th>R</th>
<th>R²</th>
<th>R² adj</th>
<th>Fchg</th>
<th>P</th>
<th>df 1</th>
<th>df 2</th>
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<tbody>
<tr>
<td>DV: Attitude toward Diet Advertising</td>
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<tr>
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<td>.077</td>
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<td>&lt; .001</td>
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<td>148</td>
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<td>.130</td>
<td>.124</td>
<td>22.118</td>
<td>&lt; .001</td>
<td>1</td>
<td>148</td>
</tr>
<tr>
<td>DV: Experience of using Diet Products</td>
<td></td>
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<tr>
<td>SC</td>
<td>.124</td>
<td>.015</td>
<td>.009</td>
<td>2.305</td>
<td>-</td>
<td>1</td>
<td>148</td>
</tr>
<tr>
<td>BE</td>
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<td>.070</td>
<td>.064</td>
<td>11.25</td>
<td>&lt; .01</td>
<td>1</td>
<td>149</td>
</tr>
<tr>
<td>DV: Intent to Buy Diet Products</td>
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</tr>
<tr>
<td>SC</td>
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<td>.048</td>
<td>.042</td>
<td>7.452</td>
<td>&lt; .01</td>
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<td>148</td>
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<tr>
<td>BE</td>
<td>.422</td>
<td>.178</td>
<td>.173</td>
<td>32.278</td>
<td>&lt; .001</td>
<td>1</td>
<td>149</td>
</tr>
</tbody>
</table>

However, there were some different results when the experience of using diet products was used as the dependent variable. Among the two independent variables, social comparison did not significantly influence the participants’ experience of using diet products. Regarding the case in which the intent to buy diet products were employed as the dependent variable, the two independent variables (social comparison and body-esteem) significantly predicted intent to buy diet products. A summary of the regression is presented in Table 3.

In the second multiple regression, the three models which combine social comparison orientation and body-esteem level as independent variables tested the hypotheses 3-1, 3-2, and 3-3. The dependent variables were attitude toward diet advertising (model A), experiences of using diet products (model B), and intention to buy diet products (model C). The
results checked if the body-esteem level plays as a moderator in the relationship between people’s social comparison orientation and the three dependent variables. Regarding the hypothesis 3-1 “The relationship between people’s social comparison orientation and participants’ attitude toward the message of diet advertising is moderated by participants’ body-esteem level,” the results showed that the body-esteem level played as a moderator in the relationship between the social comparison orientation and the people’s attitude toward diet advertising (R²=.432, R²adj=.275, F (2, 147)=16.845, p<.001). Therefore, the hypothesis 3-1 was supported.

Table 4. Moderating Effects of the Body-esteem Level from Multiple Regression

<table>
<thead>
<tr>
<th>IVs</th>
<th>R</th>
<th>R²</th>
<th>R²adj</th>
<th>ΔR²</th>
<th>Fchg</th>
<th>P</th>
<th>df 1</th>
<th>df 2</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>DV: Attitude toward Diet Advertising</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC+BE</td>
<td>.397</td>
<td>.158</td>
<td>.152</td>
<td>.158</td>
<td>29.555</td>
<td>&lt;.001</td>
<td>1</td>
<td>158</td>
<td>.397</td>
</tr>
<tr>
<td>SC*BE</td>
<td>.386</td>
<td>.149</td>
<td>.143</td>
<td>.149</td>
<td>27.586</td>
<td>&lt;.001</td>
<td>1</td>
<td>158</td>
<td>.386</td>
</tr>
<tr>
<td>DV: Experience of using Diet Products</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC+BE</td>
<td>.282</td>
<td>.079</td>
<td>.074</td>
<td>.079</td>
<td>13.617</td>
<td>&lt;.001</td>
<td>1</td>
<td>158</td>
<td>.282</td>
</tr>
<tr>
<td>SC*BE</td>
<td>.292</td>
<td>.085</td>
<td>.085</td>
<td>.085</td>
<td>14.712</td>
<td>&lt;.001</td>
<td>1</td>
<td>158</td>
<td>.292</td>
</tr>
<tr>
<td>DV: Intent to buy Diet Products</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC+BE</td>
<td>.455</td>
<td>.207</td>
<td>.202</td>
<td>.207</td>
<td>41.158</td>
<td>&lt;.001</td>
<td>1</td>
<td>158</td>
<td>.455</td>
</tr>
<tr>
<td>SC*BE</td>
<td>.457</td>
<td>.209</td>
<td>.204</td>
<td>.209</td>
<td>41.684</td>
<td>&lt;.001</td>
<td>1</td>
<td>158</td>
<td>.457</td>
</tr>
</tbody>
</table>

The role as a moderator of the body-esteem in the relationship between the social comparison orientation and experiences of using diet products (H3-2) was also confirmed through multiple regression as seen in the table 7. In addition, the hypothesis 3-3 (“The relationship between people’s social comparison orientation and participants’ consuming behaviors for diet products is moderated by participants’ body-esteem level”) was supported.
Discussion

Social Comparison and Perception about Advertising: Is Diet Advertising an Exception?

Even though the first three hypotheses were formulated based upon several studies indicating the positive relationship between people’s social comparison orientation and the perception of advertising, the results of this study showed negative correlations. Generally, in the studies about social comparison and advertising, the self-concept of people who compare themselves to others has been related to the people’s positive perceptions about advertising (Richins 1991; O’Donnell 1996). However, the results from this study were opposite to those from many previous studies.

This unusual result can be explained by the particular characteristics of content in diet advertising. Many studies dealing with the relationships between social comparison and the attitude toward advertising have been discussing the “upward style” comparison by which people compare themselves to the idealized models in advertising mainly in terms of outward attractiveness (Grosez et al. 2002; Halliwell and Dittmar 2004). Actually, Festinger (1954) originally formulated the theory by the assumption that people gain information about themselves through personal comparisons to those they perceive as better than themselves. Therefore, it can be said that people have positive perception of advertising because they do “upward” style comparison and experience the assimilation effect (Jones and
However, this typical type of social comparison hardly takes place in diet advertising. As the content analysis of diet advertising (Yu and King 2005) and FTC’s report indicated, diet advertising contains not only idealized models with thin body, but also non-idealized models. As an example, the so-called “before and after” picture that is the most popular visual factor in diet advertising (FTC Staff Report 2003) contains non-idealized model’s pictures to get attention of dieters. Therefore, it is highly possible that the typical comparison process does not happen when people see or watch diet advertising. The results of this study provide an example of the effect of downward social comparison. The usual consequence of the social comparison, people’s assimilation effect, cannot be found in diet advertising.

Role of the Self-Concept in Building the Perceptions about Advertising

People’s body-esteem level, one of the self-concepts in this study, influences the relationship between the social comparison orientation and the two dependent variables (general belief about diet advertising, advertising influences on diet behaviors). It was found that self-concept played a moderating role in the aforementioned relationships. More specifically, the body-esteem level weakened the negative relationship in both cases. However, body-esteem did not have a huge moderating role in the case of general belief about advertising. The moderating role was found only among the people who have high body-esteem level. Therefore, this study suggests that self-concept and body-esteem play a limited moderating role.
This result revives one of the important discussions in advertising field about how much personality/self-concept matters in advertising effects on individuals. Marketers have been trying to figure out the characteristics of their target audiences because they traditionally believed that advertising which reflects the consumers’ personality or self-concept is more effective (Metha 1999; Hong and Zinkhan 1995). Actually, there have been two different perspectives about this issue. One supports the relationship between advertising and personality or self-concept (Berry and Howe 2004), and the other doubts there is a link between individual’s personality and the impact of advertising to which they are (Meeus 2004). Results differ from case to case, and diverse situations need to be considered together to come up with a definitive conclusion (Polyorat and Alden 2005). As an example, this study shows that different self-concepts such as social comparison and body-esteem cause different effects even for advertising in the same category. Also, the different usage of the self-concept, as a moderator or an independent variable, could cause different results.

To Companies: Effective Appeals in Diet Advertising
More Effective Appeals in Weight-loss Advertising

According to the results of this study, social comparison orientation is an important concept when it comes to individuals’ responses to diet advertising. Moreover, individuals with high social comparison orientation may be the major audience for diet advertising. Therefore, it is suggested that advertisers need to put forth more effort toward creating effective diet advertising using this social comparison concept. When individuals compare themselves to others in diet advertising it can be mainly done using visual
factors such as the photos of the models or pictures of diet foods (Bishop 2001; Blackburn 2002). However, according to Yu and King (2005)’s content analysis of diet advertising, there are many diet advertisements that do not even contain visual factors. There are many ads that focus more on text logically explaining the need for weight-loss from the perspective of consumers’ health instead of visual appeals (Bishop 2004). Recently, this trend has become more popular as the most major appeal of diet advertising has been changed into health and nutrition rather than outward appearance (Yu and King 2005; Bishop 2004). Many marketers for diet products have made efforts to convey scientific knowledge about health literally, rather than showing the visuals of physical changes the customers might experience after they use the products being advertised (Bishop 2004). The increase of health-related advertising appeals that mainly use text along with pictures of healthy food has been reported by other studies as well (FTC 2002, 2004). However, based upon this study’s results, marketers are encouraged to better re-focus on an easy and emotional approach of showing the visuals with the results of taking the product, such as the so-called “before-and-after picture.” It might be possible that the target audience of diet advertising wants to be exposed to more visual-oriented appeals instead of a logical approach of health and nutrition information. Providing content that satisfies the target’s desire to compare themselves in diverse aspects visually will be very important for advertisers.

**Limitation and Recommendations**

This study is not without limitations. First, recently, people’s perceptions
about weight-loss advertising were generally negative, regardless if they are real users or not. Therefore, even though the relationships between the self-concept of people and the perceptions of advertising were investigated, general perception of the people could be another explanation not tackled in this study. According to FTC’s staff report, about more than 65% of diet advertising contain fraudulent or deceptive messages in their contents. A lot of media reports have indicated that several diet companies are sued by consumer organizations for deceptive advertising (FTC Staff Report, 2002; Galloway, 2003). The number of lawsuits against diet companies for false advertising and other marketing activities has increased 10 times since 1990. Under this situation, most people might have a negative pre-perception about diet advertising, and this might have affected the answers of the participants in this study.

Another limitation in this study could be the sample’s skewed nature. Among the participants in this study, about 85 percent were female college students. Even though the female around the age of 22 will be a major target audience for diet advertising, this serious imbalance of the sample in terms of gender and age is a limitation of this present study. By using a wider sample, the quality of the following study can be improved. Since the major purpose of weight-loss is different depending on the specific groups such as young female, middle aged woman, and young male (Jean and Robert 1986), the factors causing positive attitude toward diet advertising could turn out different.
References


Women,” Journal of Communication, 54(1). 5-17.


Hankyoreh Daily (2004), Fast Food and Obesity, June 20.


329-337.


Madej, Patricia (1999), “The Impact of Female Adolescents’ Attitudes toward Advertising, Locus of Control, Self-efficacy on Body image
and Eating habits,” Dissertation Abstracts International Section A: Humanities and Social Sciences, 60(1-A), 0073.


Sociological Review, 54.


대학생들의 개인적 성향과 광고에 대한 태도 - 다이어트 광고에 대한 태도와 신체존중감, 사회적 비교 정도 간의 관계에 대한 탐구 -

유현재
(서강대학교 커뮤니케이션학부 교수)

특정 타겟이 노출되는 광고에 대해 보유하는 태도와 개인의 다양한 성향과 관련된 연구는 활발하게 진행되어온 바 있다. 하지만, 그럼에도 불구하고 최근 급속하게 증가하고 있는 다이어트 제품 혹은 서비스의 광고와 관련된 연구는 현재 다양하게 연구되고 있지 않은 상황이다. 일부 연구자들은 소비자들이 다이어트 광고에 대하여 갖게 되는 태도는 개인이 스스로의 몸에 대해 가지고 있는 개념이나 시각, 혹은 개인의 비교성향과 관련이 있을 것으로 추정하기도 하였다. 이 같은 맥락에서 본 연구는 다이어트 광고에 대해 가지게 되는 태도를 형성함에 있어 신체 존중감과 비교성향이 각각 어떠한 역할을 담당하게 되는지를 탐구해보고자 한다. 연구 결과, 사람들의 신체 존중감은 개인이 다이어트 광고에 대해 보이는 태도에 영향을 미칠 뿐만 아니라, 다이어트 광고에 대한 태도와 비교 성향 사이에서 매개 역할 또한 수행한다는 사실을 밝혀냈다.

주제어: 비교성향, 신체 존중감, 다이어트 광고, 광고태도
## APPENDIX (Questionnaire)

### Questionnaire part 1

#### (Body esteem)

**BE/Appearance**

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>I wish I looked like someone else.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There are lots of things I’d change about my looks if I could.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I wish I looked better.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>My looks upset me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I feel ashamed of how I look.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I worry about the way I look.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I like what I see when I look in the mirror.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I look as good as I’d like to.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I’m very happy about the way I look.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

**BE/Weight**

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am satisfied with my weight.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I really like what I weigh.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I feel I weigh the right amount for my height.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>My weight makes me unhappy.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I am preoccupied with trying to change my body weight.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Weighing myself depresses me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I think I have a good body.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I’m proud of my body.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I think I am over-weighted.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I think I am under-weighted.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I think I have ideal weight.</td>
<td>1</td>
<td>2</td>
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</tbody>
</table>

**BE/Attribution**

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<thead>
<tr>
<th>Statement</th>
<th>1</th>
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<tbody>
<tr>
<td>Other people consider me good looking.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>My looks help me to get dates when I am in a dating mode.</td>
<td>1</td>
<td>2</td>
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</tbody>
</table>
College Students' Self-Concepts and Attitude toward Advertising: The Relationships among the Body-Esteem, Social Comparison, and the Perception about Diet Advertising

<table>
<thead>
<tr>
<th>Item</th>
<th>1</th>
<th>2</th>
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</tr>
</thead>
<tbody>
<tr>
<td>People my own age like my looks.</td>
<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>I think my appearance would help me get a job.</td>
<td></td>
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</tr>
<tr>
<td>I’m as good looking as most people.</td>
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</table>

**[Social comparison]**

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<tbody>
<tr>
<td>I often compare how my loved ones (boy or girlfriend, family members) are doing with how others are doing.</td>
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<tr>
<td>I always pay a lot of attention to how I do things compared with how others do things.</td>
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<tr>
<td>If I want to find out how well I have done something, I compare what I have done with how others have done.</td>
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</tr>
<tr>
<td>I often compare how I am doing socially (e.g., social skills, popularity) with other people.</td>
<td></td>
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</tr>
<tr>
<td>I am not the type of person who makes comparisons often with others (reversed).</td>
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</tr>
<tr>
<td>I often like to talk with others about mutual opinions and experiences.</td>
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<tr>
<td>I often try to find out what others think who face similar problems as I do.</td>
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<tr>
<td>I always like to know what others in a similar situation would do.</td>
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<tr>
<td>If I want to learn more about something, I try to find out what others think about that.</td>
<td></td>
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<tr>
<td>I never consider my situation in life relative to that of other people (reversed).</td>
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</table>
1. The questions below are about the advertising of weight-loss products or services (i.e., Products: diet pill, exercise machine, food supplements/ Services: Atkins diet, Jenny & Craig, Weight Watchers.com). Please check the degree of your agreement or disagreement.

**Messages/Attitude**

I generally trust the messages of weight-loss advertising that uses consumer testimonials.

1 2 3 4 5

“Before and after” pictures make me understand the function of the product. It’s very helpful.

1 2 3 4 5

When I see a message about rapid weight-loss claims, I think that claim makes sense.

1 2 3 4 5

Advertisement demonstrating guaranteed results by an authoritative institution persuades me to have interest in the product.

1 2 3 4 5

Some advertisers claim that their weight-loss programs don’t need diet or exercise to lose weight. I think I can use that program if I need to manage my weight.

1 2 3 4 5

When the concept of safe and no side effects is included in the ad, I will be more satisfied with this ad.

1 2 3 4 5

They claim that their products are miraculous and there are permanent effects. That makes me more satisfied.

1 2 3 4 5

When I hear or see the fact that the products were proven clinically or doctor approved, I feel their claims are honest.

1 2 3 4 5

Natural or safe weight-loss claims make me more comfortable, therefore I think I may use the product.

1 2 3 4 5

Advertisements using the message, “No more failure” make me more relieved.

1 2 3 4 5
Belief/ Weight-loss Advertising

Adult models in advertisements have an ideal body size and shape.

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</table>

Women would be more attractive if their body size or shape looked like most of the female models in advertisements.

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Men would be more attractive if their body size or shape looked like most of the male models in advertisements.

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</table>

It would be good for my health if my body size and shape were similar to the body size and shape of female (male) fashion models.

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I would feel more satisfied with myself if my body looked more like female (male) fashion models’ bodies.

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The main impact of advertisements is to influence people to buy the product.

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Belief 2/ Weight-loss behaviors

When I shop for or buy clothing at a store, I am conscious of the influence that fashion advertisements have had on my selections.

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One reason I watch what I eat is because I feel pressured to have a body size or shape that is similar to the shapes and size of many females (males) in the fashion industry.

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One reason I exercise or work out is because I feel pressured to have a body size or shape that is similar to the shapes and sizes or many females (males) in the fashion industry.

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If I don’t make attempts to look like similar female (male) fashion models, I will be perceived as less attractive than other people.

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I make decisions about dieting or exercising based more upon how I look than on my health status.

2. The questions below are about your experiences using weight-loss products or services. Please answer the agreement and disagreement scales.

*Please indicate by checking based upon your experience if you have used any of the following weight-management practice in the past.

Dietary supplements

- Yes
- No
- Don’t remember

Meal replacements (e.g., diet shakes)

- Yes
- No
- Don’t remember

Hypnosis

- Yes
- No
- Don’t remember

Food

- Yes
- No
- Don’t remember

Diet plans/programs/Diet centers

- Yes
- No
- Don’t remember

Trans-dermal products such as Patches and creams

- Yes
- No
- Don’t remember

Wraps

- Yes
- No
- Don’t remember

Other

- Yes
- No
- Don’t remember

* Just exercise on my own (e.g., Jogging, Hitting the Gym)

- Yes
- No
- Don’t remember
3. The questions below are about possible options for your weight management or body management. Please answer the agreement and disagreement scales.

* Please indicate by checking based upon a hypothetical situation in which you are in need of weight-loss management using specific methods.

Dietary supplements

Yes_____ No_____ Don’t know_____

Meal replacements (e.g., diet shakes)

Yes_____ No_____ Don’t know_____

Hypnosis

Yes_____ No_____ Don’t know_____

Food

Yes_____ No_____ Don’t know_____

Diet plans/programs/Diet centers

Yes_____ No_____ Don’t know_____

Trans-dermal products such as Patches and creams

Yes_____ No_____ Don’t know_____

Wraps

Yes_____ No_____ Don’t know_____

Other

Yes_____ No_____ Don’t know_____

* Just exercise on my own (e.g., Jogging, Hitting the Gym)

Yes_____ No_____ Don’t remember_____

Please tell us about yourself. Any of your personal information (name, weight, height) will be strictly anonymous and confidential.

Male______ Female_____

Age______

Weight (Approximate)__________

Height (Approximate)__________

* Thank you for your help. Have a good day!