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The Effects of Thin and Heavy Media Images on Overweight and Underweight Consumers

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We examine how advertisements containing thin and/or heavy models influence the self-esteem of overweight and underweight consumers. Our findings in three studies suggest that when exposed to either thin or heavy models, underweight consumers' self-esteem shifts upward and overweight consumers' self-esteem shifts downward, due to differences in comparative processes. Our results suggest that underweight consumers exhibit higher self-esteem after exposure to any models because they feel similar to thin standards and dissimilar to heavy standards, while overweight consumers show lower self-esteem after exposure to any models because they feel similar to heavy standards and dissimilar to thin standards.

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SYMPOSIA SUMMARY

Real Consumers Have Curves: The Effects of Body Esteem and Weight on Consumer Responses to Marketing Stimuli

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SESSION OVERVIEW

This session includes three papers that seek to understand how body issues, such as consumer weight and body esteem, impact consumer responses to marketing stimuli, such as advertising, package design, and retail atmosphere, as well as consequent consumption behavior. Approximately 59% of Americans (www.census.gov) and 40% of Europeans (www.epha.org) are overweight or obese. Furthermore, self-esteem and body esteem can be important factors in determining happiness (Baumeister et al. 2003; Cheng and Furnham 2004) and subjective well-being (Paradise and Kernis 2002). In these three papers, we find that consumer weight, body esteem, and dieting behavior can interact with marketing variables in several interesting and unexpected ways. By bringing together these three papers and the discussant, we expect that this session will enhance our understanding of how body issues impact responses to marketing stimuli and consequent consumption behavior.

Each of these papers examines a different aspect of this question. The first paper examines the effects of consumer body weight on responses to media images in advertisements, focusing on the impact of media exposure on consumers' self-esteem. Furthermore, this paper investigates the impact of the resulting shift in self-esteem on consumption behavior, as well as dieting and fitness intentions. The second paper examines the effects of chronic dieting behavior on responses to packaging, focusing on how the consumption behavior of dieters and non-dieters is affected by package size. The third paper explores the effects of body esteem on shopping behavior, focusing on approach/avoidance behavior in retail stores and preferences for store décor. By understanding the role these factors play in consumers' decisions, marketers can better cater to their customers' needs. In addition, an understanding of how weight interacts with marketing stimuli (such as responses to media images and package size) can lead to important public policy recommendations and help consumers better manage their behavior, likely leading to improved body image and self-esteem.

The first paper, co-authored by Smeesters, Mussweiler, and Mandel, examines how body weight changes consumers' responses to media images. Specifically, the paper examines how advertisements containing thin and/or heavy models influence the self-esteem of overweight and underweight consumers. In three studies, the authors find that underweight consumers' self-esteem shifts upward while overweight consumers' self-esteem shifts downward when they are exposed to any models, regardless of whether the models are thin or heavy. The results are explained in terms of differences in the two groups' comparative processes. The authors find that shifts in self-esteem have implications for consumers' consumption behavior, as well as their dieting and fitness intentions.

The second paper, co-authored by Scott, Nowlis, Mandel, and Morales, examines how dieting impacts consumers' responses to packaging. Across three studies, these authors demonstrate that dieters consume more calories from diet-sized packages compared to regular-sized packages, while non-dieters consume fewer calories from diet-sized packages compared to regular-sized packages. In addition, they demonstrate that even though dieters know they

will overeat the diet food, they are unable to prevent the overconsumption without the assistance of external cues.

The third paper, by Miller, examines how body esteem affects consumers' responses to retail environments. This paper examines how consumers' preferences for different aspects of store design, such as brightness, are affected by body esteem. Results from a survey and an experiment indicate that consumers with low and high body esteem respond differently to salespeople, have different preferences for store décor, and have different motivations for shopping. Implications for better managing customer experiences are addressed.

At the end of the session, LJ Shrum will lead the discussion to integrate the individual presentations into a more general framework. LJ is an expert on the topic of media effects on consumer perceptions, as well as the cognitive processes underlying such effects. He will involve the audience members in a discussion in order to develop a more overarching understanding of how consumer body issues interact with marketing stimuli, as well as the potential managerial implications of the authors' findings.

Given the current interest in transformative consumer research topics, we expect this symposium to appeal to a significant portion of the ACR membership. In particular, we hope to draw people who are interested in research on advertising, packaging and/or retail effects, gender issues, social cognition, self control, and even public policy issues.

EXTENDED ABSTRACTS

"The Effects of Thin and Heavy Media Images on Overweight and Underweight Consumers"

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We examine how advertisements containing thin and/or heavy models influence the self-esteem levels of overweight and underweight consumers. Overweight individuals represent a significant and growing segment of consumers. If exposure to thin media images can result in low self-esteem and eating pathologies among average-sized women (Polivy and Herman 2002), it is possible that overweight women will be even more vulnerable to these effects. Furthermore, although underweight consumers comprise only 2% of the American population, they are often victims of eating disorders, and therefore might also be especially vulnerable to thin media images.

The success of Dove's Campaign for Real Beauty (which features full-figured models) suggests that viewing heavy or imperfect models will raise women's self-esteem, especially when the viewers are overweight themselves (Wasserman 2005). On the contrary, Smeesters and Mandel (2006) showed that, among average-sized women, exposure to moderately heavy models actually lowered self-esteem, rather than raising it. However, they did not examine the effects of such ads on overweight or underweight consumers. Moreover, our research contributes to the existing literature by offering a better understanding of how comparison processes occur when consumers are exposed to advertising mod-

els. In all studies, we concentrate on consumers' informational foci after exposure to an advertising model. Informational foci reflect the judgment of one's similarity or dissimilarity to a comparison other (Mussweiler, Rüter, and Epstude 2004). Shifts in foci determine which self-knowledge becomes accessible (Mussweiler 2003), thereby shifting the consumer's self-esteem, and ultimately his or her eating behavior, dieting, and workout intentions.

Our first study used a 3 (participant body mass index (BMI): low, normal, high) x 2 (size of the model: thin, heavy) x 2 (extremity of the model's size: moderate, extreme) between-subjects design. The results indicated that participants with normal BMI levels demonstrated higher self-esteem after exposure to moderately thin and extremely heavy models than after exposure to extremely thin and moderately heavy models, replicating Smeesters and Mandel's (2006) findings. For low BMI participants, exposure to all models led to a general high level of self-esteem compared to high BMI participants, for whom exposure to all models led to a general lower level of self-esteem. These results appear to be due to differences in comparative processes. Low BMI participants demonstrated a stronger similarity focus after exposure to thin models than after exposure to heavy models (regardless of extremity), while high BMI participants demonstrated a stronger similarity focus after exposure to heavy models than after exposure to thin models (regardless of extremity). These findings suggest that underweight consumers show higher self-esteem because they feel similar to thin standards and dissimilar to heavy standards, while overweight consumers show lower self-esteem because they feel similar to heavy standards and dissimilar to thin standards.

One of our most intriguing results was demonstrated in study 2. Low BMI and high BMI individuals started out with similar levels of self-esteem (as measured by a control, no-model condition), but after exposure to *any* models (thin or heavy), self-esteem increased for low BMIs and decreased for high BMIs. Importantly, the effects of one's own BMI and exposure to the models on self-esteem were statistically mediated by one's perceived (dis)similarity with the models.

The third study measured the effects of exposure to models on behavioral variables, such as cookie eating behavior, and dieting and fitness intentions. Normal BMI participants ate fewer cookies when demonstrating low self-esteem (i.e., after viewing moderately thin or extremely heavy models) compared to when demonstrating high self-esteem (i.e., after viewing moderately heavy or extremely thin models). In contrast, low BMI participants ate fewer cookies when exposed to heavy models than when exposed to thin models. Additional measures showed that this effect was mainly due to the fact that low BMI participants wanted to avoid becoming heavy in the future. High BMI participants ate fewer cookies when exposed to thin models than when exposed to heavy models. Additional measures revealed that this effect appeared because high BMI individuals felt more ashamed after being exposed to thin models, compared to heavy models. The results for dieting and fitness intentions followed the same pattern as those for cookie eating.

Our findings contradict the notion, suggested by Dove and others, that overweight individuals should have higher self-esteem after looking at heavy models than after looking at thin models. Therefore, we recommend that overweight consumers attempt to avoid looking at ads with *any* models, thin or heavy (perhaps by avoiding women's magazines). Furthermore, our research contributes to the literature by revealing which cognitive processes (i.e., informational foci) occur during social comparison in an advertising context, how these processes determine shifts in self-esteem, and behavioral responses (such as cookie eating, fitness and dieting intentions).

“Do Diet Foods Make Consumers Heavier? The Effect of Reduced Calorie Packages on the Consumption Behavior of Dieters and Non-Dieters”

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With obesity at an all-time high, many consumers are fighting this epidemic by dieting and buying diet foods to help them self-regulate (Hoch and Lowenstein 1991, Stunkard 1980). From food to cigarettes and alcohol, consumers attempt to ration their consumption quantities to exert increased control (Wertenbroch 1998). In response to consumers' demands for rationed portions, diet foods of varying sizes, calories, and packages have been introduced. For instance, in 2004, Kraft launched “100 calorie packs,” miniature versions of snacks enclosed in small packages (Horovitz 2006), which sold over \$100 million by 2005 (Thompson 2006). In this research, we investigate whether consuming smaller food morsels from such packages is an effective eating restraint strategy, particularly for consumers attempting to manage their weight. Our research questions are: 1) Do dieters consume fewer calories from a configuration of smaller food morsels in smaller packages or from a typical configuration of larger food morsels in a larger package?, and 2) How do perception and self-control influence the amount of food dieters and non-dieters consume?

Dieting is “the deliberate effort to combat the physiologically-based urge to eat in order to lose weight or maintain a reduced weight,” (Fedoroff, Polivy, and Hermann 1997, 34). Non-dieters have a balanced response to internal and external stimuli (Nisbett 1968; Schachter, Goldman, and Gordon 1968), and use physiological cues as satiety indicators (Tom and Rucker 1975). Alternatively, dieters possess eating patterns consistent with obese individuals (Herman and Polivy 1975) and may be more responsive to external cues (Fedoroff et al. 1997). Therefore, it is possible that presenting dieters with reduced-calorie packaging may backfire, resulting in overeating or even binge eating.

Existing research suggests consumers eat more calories when presented with larger sized food than smaller sized food (Wansink, Painter, and North 2005, Geier, Rozin, and Doros 2006), and more calories from larger packages relative to smaller ones (Wansink 1996, 2004; Wansink and van Ittersum 2003). However, when dieting behavior is introduced, it is not obvious how consumers will respond. Our four studies provide evidence that while non-dieters consume fewer calories from diet food configurations, dieters consume more from them, when compared to non-diet configurations.

Study 1 was a 2 (food configuration: diet, regular) x 2 (dietary restraint: dieter, non-dieter) between subjects experiment ($N=96$). We operationalized food configuration to include diet food (eight small cookies distributed across four small packages) and regular food (four large cookies in one large package), with each configuration totaling 240 calories. We found that dieters consumed more from the diet food packages than from the regular food packages, while non-dieters consumed more from the regular packages than from the diet food packages. Furthermore, when examining the percentage of people eating the entire 240 calories, we found that dieters were more likely to eat everything in the package(s) when eating the diet food compared to the regular food, while non-dieters did the opposite, supporting the idea that dieters experience self-control lapses with diet food.

Study 2 was a similar design to study 1, but with either 200 calories of mini-M&Ms evenly distributed across four small bags (diet configuration), or 200 calories of regular-M&Ms in one large bag (regular configuration). Consistent with study 1, dieters con-

sumed more M&Ms (and were also more likely to eat the entire package) from the diet configuration than from the regular configuration, while non-dieters consumed more (and were more likely to eat the entire package) from the regular configuration than from the diet configuration. In study 3, we examined the effect of providing participants with nutrition information, such as the number of calories, on the package. We found that dieters dramatically reduced their consumption when they were given nutrition information on the diet packages, while the reduction was less marked when they were given nutrition information on the regular packages.

The purpose of study 4 was to examine whether the differences in behavior between dieters and non-dieters are due to perceptual differences or self-control differences between the two groups. We presented participants with one of the two food configurations at a time and asked them to estimate the caloric content. Among both dieters and non-dieters, the diet configuration was perceived to have significantly more calories than the regular configuration. This distorted perception of higher calories in diet configurations is consistent with extant theory, and helps non-dieters consume fewer calories overall; but for dieters, it is a trigger for self-control failure, causing greater caloric intake. Study 5 is underway to examine the moderating roles of factors such as self-control depletion and hot/cold system activation on the effect of package configuration on eating behavior among dieters and non-dieters.

Many diet plans encourage configurations of smaller food morsels in small packages to help dieters reduce their overall caloric intake. Our research provides some evidence that dieters over-consume these configurations and often experience self-control lapses with them, which might explain why these products are so profitable for firms. Therefore, dieters may be better served by avoiding such diet configurations when attempting to lose weight.

“Body Esteem and Shopping Behavior”

Elizabeth Gelfand Miller, Boston College

In order to effectively build relationships with customers and to best manage customer experiences, marketers must understand the consumer characteristics that influence their responses to the store environment. While numerous researchers have highlighted the role of the physical environment in impacting relationship building (e.g., Bitner 1992) and the ability to create and maintain positive customer experiences (e.g., d’Astous 2000; Michon et al. 2000), fewer researchers have examined how individual personality traits affect reactions to the environment and shopping behavior more generally, even though such characteristics likely influence reactions to one’s surroundings (Bitner 1992). Indeed, several researchers have highlighted the need to locate consumer characteristics which influence responses to and expectations about the environment (e.g., Babin and Darden 1995; Chen-Yu and Seock 2002; Turley and Milliman 2000).

One characteristic likely to affect consumers’ responses to the environment and their shopping behavior more generally, particularly for high body-involving products (Rosa et al. 2006) such as clothing, is body esteem. Body esteem has been defined as a deeply held and generalized like or dislike of one’s body (Rosa et al. 2006). Although body esteem has been previously linked to consumer purchase decisions (e.g., Ferraro, Shiv, and Bettman 2005), such inquiries have focused on how body esteem influences assessments of how products enhance or preserve personal well-being, the types and styles of products consumers favor, and responses to digital stimuli (Rosa et al. 2006; Rosa and Malter 2003), but not in-store shopping behavior. Given that mood has been identified as an important driver of retail experience (Gardner 1985) and that consumers with varying degrees of body esteem likely feel different

ambient levels of affect and arousal when considering social products, it seems likely that body esteem may be one characteristic which may explain individual differences in reactions to environmental stimuli as well as in shopping behavior more generally. In particular, given that “cool” store interiors—those which use colors with short wavelengths (Babin et al. 2003)—have been found to soothe and relax, while dark interiors often harm one’s spirits and morale (Bellizzi et al. 1983), I expect consumers with low and high body esteem to be differentially affected by such environments. Specifically, I posit that the environment could serve as a coping mechanism for low body esteem consumers, leading low body esteem consumers to show increased approach behavior in a light environment. I expect such effects will be moderated by the presence of pictures of models on the walls, as such images may heighten body dissatisfaction (Cafri et al 2005).

To test these hypotheses, I conducted a 2 (brightness: light, dark) x 2 (wall décor: pictures of models, pictures of landmarks) x 2 (body esteem: low, high) between-subjects experiment in conjunction with a larger survey to assess shopping preferences more generally (e.g., ideal shopping environment, general shopping enjoyment). Participants were presented with colored pictures of a hypothetical clothing store along with a brief written description and asked to rate their patronage intentions, purchase intentions, salespeople perceptions, store perceptions, and other measures related to approach / avoidance behavior. Body esteem was measured using the Body Esteem Scale (Franzoi and Shields 1984).

The results indicate that body esteem does influence shopping behavior. Those with higher body esteem reported higher levels of positive affect than those with lower levels of body esteem. Those with higher levels of body esteem were also more likely to try on clothes and more likely to interact with salespeople. However, there were no differences between these groups in their purchase intentions or levels of shopping enjoyment. Consistent with expectations, I also found that body esteem influenced preferences for store design and interacted with the environment to determine behavior. Consumers with low body esteem were more uncomfortable in a dark store, while those with high body esteem seemed to prefer dark stores. However, the relative preference low body esteem consumers felt toward a light store was mitigated when pictures of models were hung on the walls; consumers with low body esteem felt the most positive affect and expected to spend the greatest amount of time in stores that had a light feel with landmarks (non-people) on the walls. Finally, I found that consumers with low and high body esteem may have different motivations for shopping.

As a whole, the findings suggest that consumers with high body esteem may perceive the environment in terms of whether it aids or deters them from achieving their shopping goals, while low body esteem consumers may evaluate the environment more in terms of its ability to soothe already high anxieties. Consequently, the use of soothing colors and quiet music may be particularly beneficial for attracting low body esteem consumers. Moreover, high body esteem consumers appear more likely to browse in a store, while low body esteem consumers may only decide to enter a store if they are already committed to buying something. These findings suggest that when targeting low body esteem consumers, managers should focus more on enticing consumers to enter the store, while when targeting high body esteem consumers, managers should focus more on enticing consumers to buy (once in the store).

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