Effect of Witnessing Fat Talk on Body Satisfaction and Psychological Well-being: A Cross-cultural Comparison of Korea and the United States

Emiko Taniguchi, *University of Texas at Austin*
Hye Eun Lee, *University of Hawai'i at Mānoa*

Abstract

We examined how witnessing fat talk on Facebook influenced the body satisfaction and psychological well-being of Koreans and U. S. young women. Korean (n = 137) and U. S. (n = 159) women completed an online questionnaire after viewing a randomly assigned mock-up Facebook page where body size of the profile owner and the messages from her peers were manipulated. Findings showed that (a) Koreans witnessing an underweight peer's fat talk reported lower body satisfaction than those witnessing an overweight peer's fat talk, but the peer's body size did not affect the U. S. women, and (b) Koreans witnessing messages discouraging weight loss reported greater psychological well-being than those witnessing messages promoting weight loss, whereas peers' comments did not influence the U. S. women.

Keywords: cross-cultural research, Facebook, fat talk, psychological well-being, body satisfaction.

Emiko Taniguchi (MA, University of Hawaii at Manoa) is a PhD student in the Department of Communication Studies, University of Texas at Austin and Hye Eun (Kate) Lee (PhD, Michigan State University) is an associate professot in theDepartment of Communicology, University of Hawai'i at Mānoa; Its original manuscript has been published in *Social Behavior and Personality*, *2013, 41*(8), 1279-1296.

Introduction

In affluent societies, it is virtually impossible to escape from sociocultural messages that emphasize the importance of thinness (Tiggemann & Pickering, 1996). As a result, more women living in this environment express dissatisfaction with their body image (Heinberg, 1996). These messages were once considered to be unique to the West (Raich et al., 1992) but are now known also to be prevalent in non-Western countries such as Korea (e.g., Ryu, Lyle, & McCabe, 2003).

What would be the consequences when an overweight individual witnesses an underweight peer complaining about her weight, and sees that peer's friends reply with comments sharing dieting techniques? This type of conversation about body satisfaction (BS) is termed *fat talk* (Nichter &

Vuckovic, 1994) and has been found to be prevalent among college women (Salk & Engeln-Maddox, 2011). As emphasis on thinness in mass and social media influences consumers' body images (see, Groesz, Levine, & Murnen, 2002), witnessing fat talk affects the observer's body image negatively through the social comparison process (Festinger, 1954).

Thus, our first purpose in the current study was to examine the effects of witnessing peers' fat talk. Although fat talk may affect young women across cultures, the extent to which they are affected may differ by culture. For example, Taniguchi and Lee (2012) found that, among a group of Japanese and American women who witnessed peers' weight-related messages, these comments impacted BS only among the Japanese women. The researchers speculated that this difference was due to the collectivistic orientation of Japanese society, in which individuals value social contexts, such as others' opinions, even when these are not directed at those individuals. Therefore, our second goal was to investigate whether or not there were any cultural differences between the US and Korea regarding the effects of witnessing fat talk.

Witnessing Fat Talk, Body Satisfaction, and Psychological Well-being

Low BS is prevalent in both the US (see e.g., Neighbors & Sobal, 2007) and Korea (Kim, 2009), particularly among young women. BS is strongly related to how women perceive themselves in general, such as their self-acceptance (McKinley, 1999) and self-esteem (van den Berg, Mond, Eisenberg, Ackard, & Neumark-Sztainer, 2010). The concept of self-acceptance is one of the main components of psychological well-being (PW), involving satisfaction with the self, acknowledgement of personal qualities, and feelings about one's past (Ryff & Keyes, 1995).

Fat talk is a significant factor influencing young women's body image. *Fat talk* is defined as *conversation with others including positive and negative comments about appearance, dieting techniques, and the need to lose weight* (Ousley, Cordero, & White, 2008). Fat talk, such as a remark like "I'm so fat," inciting the responses of "No, you're not" or "I'm fat, too!", can solicit reassurance and encouragement, as well as promote group solidarity (Gapinski, Brownell, & LaFrance, 2003) and maintenance of relationships (Nichter, 2000). Fat talk, however, can draw attention to appearance and emphasize the value of thinness, thereby decreasing BS (Stice, Maxfield, & Wells, 2003) and positive affects (Gapinski et al., 2003).

As mass and social media content affects consumers' perceptions and behavior even when the content does not directly address the consumers (Aoki, 2012), witnessing fat talk could be a factor influencing individuals' BS, and subsequently their PW. This is the case even if such messages are implicit (Stice et al., 2003), as well as when the individual is not the direct recipient of the message. Jones and Crawford (2006) argued that even when one is not the target of teasing, observing the teasing directed toward others leads to a similar learning process. Social comparison theory provides helpful explanations for how witnessing fat talk could affect individuals' body image perceptions.

Social Comparison Theory

In social comparison theory (Festinger, 1954) a description is given of how individuals have an innate motivation to evaluate themselves. This has been used to explain and predict the development of low BS (e.g., Knobloch-Westerwick & Crane, 2012). Individuals often engage in upward contrast by focusing on the difference between themselves and the ideal of beauty found in the media, and report low BS and negative mood after being exposed to images of women representing the thin ideal (Heinberg & Thompson, 1995). In contrast, downward comparison makes individuals feel better. In a study by Irving (1990), it was found that those who were exposed to images of plus-sized models had the highest level of BS, whereas those who were exposed to images of thin models had the lowest.

Witnessing a thin peer engaging in fat talk provides heavier individuals with a basis to engage in upward comparison. Because witnessing this kind of message from the thin peer implies that the heavier observers are not thin enough and, accordingly, in even greater need of losing weight than is the thin person, the heavier observers are likely to feel pressure to be thinner, feel dissatisfied with their own

bodies, and consequently to have lower self-acceptance. Conversely, witnessing an overweight peer's fat talk provides individuals who are thinner than this individual with an opportunity for downward comparison. Such observers are unlikely to feel pressured to lose weight because they are already thinner than the overweight peer. Furthermore, they may feel more satisfied with their bodies and have greater self-acceptance. Thus, the following hypothesis was generated:

Hypothesis 1a: When women witness an underweight peer expressing her desire to lose weight, this will result in lower body satisfaction than witnessing an overweight peer expressing the same desire.

Hypothesis 1b: When women witness an underweight peer expressing her desire to lose weight, this will result in lower psychological well-being than witnessing an overweight peer expressing the same desire.

In real life it is often the case that when a woman makes comments about her own body this gives rise to friends' replies such as reassurance ("No, you are not fat") or encouragement of dieting (e.g., "An awesome way to lose weight is…"). When peers provide comments that encourage dieting in the context of fat talk, this illustrates the societal value of thinness. A woman witnessing such interactions could adapt her attitude to correspond closely with the societal ideal of thinness. As a result, observers may feel dissatisfied with their bodies. On the other hand, when peers provide comments that discourage dieting, this implies that being thin is not so important, and observers may feel more satisfied with their bodies. This led to the following hypothesis:

Hypothesis 2a: When women witness peers' thin-promoting comments, this will result in lower body satisfaction than witnessing peers' thin-discouraging comments.

Hypothesis 2b: When women witness peers' thin-promoting comments, this will result in lower psychological well-being than witnessing peers' thin-discouraging comments.

Moreover, the effect of witnessing thin-promoting and thin-discouraging comments may be moderated by the body size of the peer receiving such comments. When a peer being encouraged to diet by her friends is already thin, observers might feel even more dissatisfied with their own bodies compared to when the peer is overweight. Diet-encouraging comments indicate the importance of ultrathinness because they imply that even a thin woman is in need of dieting. Diet-encouraging comments when the peer is overweight may not necessarily be based on valuing the importance of thinness, but may simply reflect the importance of maintaining a normal weight.

Because messages discouraging a thin peer from dieting do not necessarily discount the societal emphasis on thinness, when a peer being discouraged from dieting by her friends is overweight, the observers may feel even more satisfied with their own bodies than they would when comparing themselves with thin peers who had received discouragement from dieting. Friends' discouragement may be simply because the thin peer has already attained the societal ideal and does not need to take any further steps to achieve this. As for discouraging an overweight peer from dieting, this can imply that thinness is not important and even an overweight peer is to be accepted just as she is; thus, it is clear that individuals who weigh less than her have no need to lose weight, as long as thin-discouraging comments are interpreted as sincere. This led to the following hypothesis:

Hypothesis 3a: The relationship between peers' comments and women's body satisfaction will differ as a function of the body size of a fat talker.

Hypothesis 3b: The relationship between peers' comments and women's psychological well-being will differ as a function of the body size of a fat talker.

Cultural Differences in the Effects of Witnessing Fat Talk

Although the possible effects of witnessing fat talk may be universal, the extent to which women are affected might differ across cultures. First, the individualism-collectivism (IND-COL) distinction may shed some light on possible cultural differences. IND is characterized by personal autonomy, self-

fulfillment and personal uniqueness (Oyserman, Coon, & Kemmelmeier, 2002). COL emphasizes harmonious relationships among people and interpersonal concerns (Hui & Trandis, 1986).

Further, independent self-construal (IND SC) is illustrative of IND cultures, whereas interdependent self-construal (INT SC) is representative of COL cultures (Gudykunst, et al., 1996). Individuals high in IND SC organize their behavior in reference to their own feelings and thoughts (Heine, Lehman, Okugawa, & Campbell, 1992) and see the self as a bounded entity that is relatively separate from social context (Markus & Kitayama, 1991a). In contrast, those high in INT SC are generally more concerned with the thoughts and behaviors of others and, therefore, organize their behaviors in reference to others (Markus & Kitayama, 1991b). These differences in SC play a significant role when interpreting social information.

Some explanation of differences in the effect of fat talk is also provided by social comparison. In a comparison of individualism-collectivism and self-esteem in China and the United States Chung and Mallery (2000) found higher COL scores were associated with an overall increased desire to compare, an increased desire to make upward comparisons, and a decreased desire to make downward comparisons. Similarly, White and Lehman (2005) showed that Asian North Americans sought more social comparison than did European North Americans and observed that the social comparisons made by those with high INT SC were often motivated by self-improvement, which reflects a desire not to fall behind the group. Those high in INT SC were also more active than others in observing information on shared norms in order to guide their behaviors to meet social standards.

The concept of high-low context communication is useful in examining the cultural differences regarding the effects of witnessing fat talk. Individuals from IND cultures have been found to predominantly use low-context communication (Gudykunst & Ting-Toomey, 1988), which involves the use of direct and explicit messages (Hall, 1976). Therefore, individuals from low-context cultures may not consider messages exchanged by others as relevant to those individuals themselves. COL, in contrast, is often associated with high-context communication (Gudykunst & Ting-Toomey, 1988), or the use of indirect and implicit messages in which meanings are embedded in the situation or context (Hall, 1976). Individuals from high-context cultures are more sensitive to indirect and implicit social messages, such as when messages are not directly targeted toward those individuals themselves. Picking up indirect social cues from others may have adaptive values for people living in COL cultures because such social cues provide valuable information about how to fit into society.

Finally, a difference in frame of reference (Markus & Kitayama, 1991a) also contributes to an explanation for the difference in the effects of witnessing fat talk. Heine (2001) found that East Asians are likely to adopt an external frame of reference, whereas North Americans tend to seek an internal frame of reference. For instance, the behavior of East Asians is guided less by an individual's internal attributes, such as attitudes and motives, and more by cues from social contexts than is the behavior of North Americans (Kuwayama, 1992). Heine et al. (1992) found that Japanese were more likely than North Americans to report that their behaviors were guided by social norms or other people. In contrast, Heine, Lehman, and Kiyayama (1999) found in their study that the ultimate judge of self-evaluation for North Americans was the individual.

Thus, there may be some differences according to culture in how individuals are impacted by witnessing fat talk. Moreover, in cross-cultural literature on body image researchers have found that, from among young women in 22 countries, including North America, young women in Korea reported the greatest desire to lose weight (Wardle, Haase, & Steptoe, 2006). Having greater body image concern than their North American counterparts, Koreans would be more sensitive to information related to body weight. Thus, the effect of fat talk hypothesized in H1 and H2 would be more pronounced among Korean young women. Thus, the following hypotheses were generated:

Hypothesis 4a: The relationship between a fat talker's body size and women observers' body satisfaction will differ as a function of culture.

Hypothesis 4b: The relationship between a fat talker's body size and women observers' psychological well-being will differ as a function of culture.

Hypothesis 5a: The relationship between peers' comments and women observers' body satisfaction will differ as a function of culture.

Hypothesis 5b: The relationship between peers' comments and women observers' psychological well-being will differ as a function of culture.

Method

Participants and Procedure

We recruited 159 U. S. women (age M = 20.59, SD = 3.04, range = 17-34) and 137 Korean women (age M = 20.57, SD = 1.95, range = 18-28) from undergraduate communication classes at the University of Hawaii at Manoa in the US and undergraduate nursing classes at Gachon University in Korea, respectively. The students received extra credit in exchange for research participation. We informed them that this study was an online experiment about individuals' perception of the self and others. The U. S. participant group consisted of 42.8% Asians and 29% Caucasians[1]. All U. S. participants reported that they were born and raised in the US All Korean participants were ethnically Korean.

Participants were asked to visit a link to an online survey on Surveymonkey.com. Participants first gave informed consent and provided demographic information, and were then randomly assigned to one of the four stimuli screenshots of a Facebook profile mock-up. After viewing the stimulus screenshot, they filled out a questionnaire. The stimulus and questionnaire were presented in their native language. Therefore, for the stimulus we used names reflective of each culture for the mock-up Facebook profile owner and her friends (i.e., Courtney Smith and Sumi Kim). Although we used black and white pictures to minimize any possible bias related to participants' preference for certain skin or hair color, the profile owner in the study was Asian. Before we conducted the experiment bilingual speakers of English and Korean inspected the mock-up Facebook profiles for equivalence in meaning using back-translation.

Design and Stimuli

A 2 (national culture: The US and Korea) × 2 (body size of the fat talker: underweight and overweight) × 2 (peers' comments: promoting and discouraging weight loss) between subject design was employed. Consistent among all four versions was the profile owner's desire to lose weight (i.e., "I wanna lose some weight! Does anyone have any tips?") posted on her wall. Accompanying this post were her profile picture and an album consisting of three other pictures of herself. All pictures taken were of the same woman and had subsequently been digitally modified by a researcher to make her appear either underweight or overweight (See Appendix for the pictures used in the study). Everything else was consistent among the four conditions.

Each stimulus also contained posts left by the profile owner's peers as replies to the original message. Her peers in the promoting-weight-loss condition posted, "I lost weight after taking aerobics class last semester. Try it, it might work 4 u, too." Another posted, "Simple; balance both diet and exercise! You go girl!" and yet another stated "Good luck! U can do it!" Peers' posts in the discouraging-weight-loss condition were "Honey, you are adorable just as you are!" "R u crazy? U look just fine!" and "What!? You look beautiful as you are!" Abbreviated words were intentionally used to enhance the realism of Facebook language among young people.

Measures

We measured the manipulation check, BS, SE, and PW with 5-point Likert scales ranging from 1 = *strongly disagree* to 5 = *strongly agree*.

[1] Because the U. S. participants comprised more Asian Americans and fewer European Americans than the general U.S. population, BS and PW were compared between European American, Asian American and other groups. According to our results these groups did not differ in either their BS (F (2, 150) = 1.61, p = .203) or their PW (F (2, 150) = 1.79, p = .171).

Manipulation check. Participants' perception of the profile owner's body type was assessed by their response to the statement "I think [profile owner] is skinny." Americans reported that the underweight stimulus image was thinner (M = 4.03, SD = 0.66) than an overweight one *(*M = 2.58, SD = 0.88), t (151) = 11.57, p < .001, $r2$ = 0.45. Similarly, Koreans reported that the underweight stimulus image was thinner (M = 3.40, SD = 0.96) than the overweight one (M = 2.42, SD = 0.70), t (134) = 6.59, p < .001, $r2$ = 0.24.

Body satisfaction. BS was measured with 10 statements of the BS subscale of the Eating Disorder Inventory-3 (Garner, 2004). A sample item is "I feel satisfied with the shape of my body". Reliabilities (Cronbach's α) were .90 for the U.S. participant group and .84 for the Korean group. Koreans' BS (M = 2.71, SD = 0.80) was lower than that of the U. S. group (M = 2.96, SD = 0.80), t (285) = 2.96, p < .01.

Self-esteem. We used nine statements from the Rosenberg Self-Esteem Scale (Rosenberg, 1965). A sample item is "I take a positive attitude toward myself". Reliabilities (Cronbach's α) were .88 in the U.S. participant group and .87 for the Korean group. Koreans' self-esteem (M = 3.65, SD = 0.55) was similar to that of the U. S. group (M = 3.75, SD = 0.65), t (285) = 1.43, p = .154.

Psychological well-being. We used the self-acceptance dimension from Ryff's Scales of Psychological Well-being (Ryff, 1989). There were five statements (e.g., "I made some mistakes in the past, but I feel that all in all everything has worked out for the best"). Reliabilities (Cronbach's α) were .77 in the U.S. group and .73 for the Koreans. Koreans' PW (M = 3.39, SD = 0.48) was lower than that of the U. S. women (M = 3.60, SD = 1.97), t (285) = 6.27, p < .001.

Body mass index. We also measured height and weight to calculate a body mass index (BMI) for each participant. For the U. S. group the BMI statistics (M = 22.97, SD = 5.06, range = 16.21-43.85) were slightly higher than those of the Koreans (M = 19.66, SD = 1.97, range = 15.99-29.07), t (288) = 7.13, p < .001.

Results

To test the hypotheses together, we conducted two moderated regression analyses for the two criterion variables as shown in Table 1.

The correlation between BS and PW was .27 for the U. S. women and .07 for the Koreans. Therefore, we conducted a separate analysis for each criterion variable. Because the correlations between BMI and BS (r = -.46 in the U.S. group and r = -.46 in Korea) and between SE and PW (r = .70 in the U.S. group and r = .57 for the Korean group) were high, each was used as a covariate in the analyses. BMI and SE were centered before they were entered into the equation (see, Cohen, Cohen, West, & Aiken, 2003). The predictor variables (culture, body size of the fat talker, and peers' comments) were dummy coded with US, underweight and promoting as references (i.e., US = 0, Korea = 1; underweight = 0, overweight = 1; promoting = 0, discouraging = 1). For interaction effects (i.e., second-order effects), each criterion variable was regressed onto the product terms of the predictor variables. Finally, various results showed that there was minimum collinearity among the four predictors. Tolerance of the predictors ranged from .84 to .98, and the variance inflation factor ranged from 1.02 to 1.19.

Table 1. *Moderated Regression Analyses Results.*

Body satisfaction	*b*	*SE*	*t*
Culture	-0.494	0.079	-6.228***
Body size	0.274	0.073	3.734***
Comments	-0.005	0.074	-0.061
BMI	-0.091	0.011	-8.212***
Body size × Comments	0.175	0.143	1.223
Body size × Culture	0.770	0.142	5.438***
Comments × Culture	-0.002	0.142	-0.013

F (4, 278) = 24.963, $p < .001$, adjusted $R^2 = .254$
F_{change} (3, 275) = 9.942, $p < .001$, $R^2_{change} = .072$

Psychological well-being	*b*	*SE*	*t*
Culture	-0.330	0.049	-6.671***
Body size	0.047	0.049	0.966
Comments	0.126	0.052	2.403*
Self-esteem	0.557	0.043	13.043***
Body size × Comments	-0.003	0.099	-0.032
Body size × Culture	-0.058	0.099	-0.590
Comments × Culture	0.271	0.101	2.690**

F (4, 282) = 71.412, $p < .001$, adjusted $R^2 = .496$
F_{change} (3, 279) = 2.502, $p = .060$, $R^2_{change} = .013$

Note. *** $p < .001$, ** $p < .01$, * $p < .05$

Body Satisfaction

First-order effects. In hypothesis 1a we predicted that those who witnessed an underweight peer's desire to lose weight would have lower BS than those who witnessed an overweight peer's desire to lose weight. There was a significant effect for body type (β = .19, $p < .001$), which was consistent with hypothesis 1a. The effect for peers' comments was not statistically significant (β = -.00, $p = .952$). Thus, the data were not consistent with hypothesis 2a.

Second-order effects. An interaction effect of body size and peers' comments was not statistically significant (β = .11, $p = .222$). Thus, hypothesis 3a was not supported. In hypothesis 4a we predicted an interaction effect of culture and body size and the effect was statistically significant (β = .47, $p < .001$). That is, Koreans witnessing an underweight peer's fat talk ($M = 2.33$, $SD = 0.50$) reported lower BS than those witnessing an overweight peer's fat talk ($M = 3.06$, $SD = 0.38$), but for the U. S. group, the results for BS were similar when witnessing both an underweight peer ($M = 2.97$, $SD = 0.82$) and an overweight peer's fat talk ($M = 2.95$ $SD = 0.78$). As the interaction effect for culture and peers' comments was not significant (β = -.00, $p = .989$), hypothesis 5a was not supported.

Psychological well-being

First-order effects. The effect for body type was not significant (β = .04, $p = .335$). Thus, hypothesis 1b was not supported. There was a significant effect for peers' comments (β = .11, $p < .05$). Thus, the data were consistent with hypothesis 2b. That is, witnessing peers' thin-promoting comments

resulted in the women reporting lower PW than witnessing peers' thin-discouraging comments. There were significant effects for culture ($\beta = -.28$, $p < .001$) and SE ($\beta = .58$, $p < .001$).

Second-order effects. Neither the interaction between body size and peers' comments ($\beta = -.00$, $p = .975$), nor the interaction between culture and body size ($\beta = -.04$, $p = .556$), was statistically significant. Thus, neither hypothesis 3b nor hypothesis 4b was supported. Finally, the interaction effect for culture and peers' comments was significant ($\beta = .20$, $p < .01$), so hypothesis 5b was supported. That is, the Korean women reported lower PW when witnessing peers' thin-promoting comments ($M = 3.02$, $SD = 0.32$) than when witnessing thin-discouraging comments ($M = 3.62$, $SD = 0.43$), but the nature of peers' comments did not change the PW of the U. S. group ($M = 3.65$, $SD = 0.68$ for thin-promoting comments, $M = 3.75$, $SD = 0.54$ for thin-discouraging comments).

Discussion

In this study we investigated how witnessing fat talk on Facebook impacted women's BS and PW and how culture moderated these impacts. The first main finding was a cultural difference in terms of the impact of the fat talker's body size on the observer's own BS. The U. S. participants were not affected by a fat talker's body size, however, Koreans reported significantly lower BS when being exposed to a fat talker who was thin. This could be explained by a cultural difference in social comparison tendencies. Those high on COL and/or INT SC have been found to exhibit a greater tendency to engage in social comparisons compared with those high on IND and/or IND SC (White & Lehman, 2005). The Korean young women who took part in our study might have engaged in more significant social comparison with a thin woman, which positively impacted their BS and conversely, with an overweight woman there might have been a negative impact on their BS. The U. S. young women, on the contrary, might not have engaged in social comparison, thus being unaffected by exposure to the two body types.

Another major finding involves cultural difference in terms of how the content of others' messages affects PW. Koreans reported a lower level of PW after witnessing thin-promoting comments compared with witnessing thin-discouraging comments, but others' messages did not impact the PW of the U. S. participant group. This result is in line with Taniguchi and Lee's (2012) finding that thin-encouraging messages impacted the BS of Japanese women, but not of American women.

Our results suggest that Koreans are influenced more by others' appearance-related messages than are their U. S. counterparts. Because those from cultures based on COL, including Koreans, tend to use high-context communication (Gudykunst & Ting-Toomey, 1988), they may be more sensitive to indirect and implicit messages. Moreover, Koreans may evaluate themselves based on external reference (Heine, 2001); in the case of the situation presented in our study, what is implied in others' messages.

Our findings in this study also revealed cultural differences in general feelings about one's body as well as towards life. The Korean participants reported lower BS than did the U. S. group, which is consistent with findings in previous research (Jung & Forbes, 2006). The Korean group also reported lower PW than the U. S. participants. This is also consistent with previous research findings that East Asians reported lower PW and SE, and greater negative affects and a deeper level of depression than Westerners, (e.g., Chirkov, Ryan, Kim, & Kaplan, 2003).

Implications

The findings in this study have several implications. First, the results showed the impact of witnessing fat talk on Facebook, even though participants were exposed to the Facebook page for only a few minutes. One meaningful method to demonstrate important effects is to show that the most minimal manipulation of the independent variables accounts for some variance in the dependent variables (Lance & Vandenberg, 2009). It is highly likely that individuals overhear and witness fat talk in everyday life more frequently and for a longer period of time than our participants did in this experiment. This means that the effect of witnessing fat talk may be even greater in real life than was recorded in our study. Second, the Korean women who were in our study group seemed to use the information of how other people commented about the profile owner's body when evaluating how they felt about themselves, even

though the comments were not directed toward them. Taniguchi and Lee (2012) found that others' messages also influenced how observers judge the PW of the person receiving these messages. Therefore, others' messages, even when they are not directed toward oneself, seem to play an important role among Korean women in their self-evaluation. Third, in the case of traditional mass media, such as television and magazines, fat talk is most likely to be generated by media figures. In contrast, fat talk in social media often comes from observers' peers. Peers are no less influential on the individual's own body image than are the media figures (Muñoz, & Ferguson, 2012), and in the current study we showed how peers' posts can affect an indirect observer's BS and PW. Finally, although most previous researchers have reported negative impacts from fat talk (Arroyo & Harwood, 2012), we demonstrated in this study that, depending on the content and context, fat talk could have positive consequences. Korean women exposed to thin-discouraging messages experienced greater PW than those exposed to encouraging messages. This suggests that discouraging weight loss functioned to disconfirm the importance of thinness, which could lead to improvement of the observers' PW.

Limitations and Future Direction

This study has several limitations. First, we did not examine whether participants perceived discouraging messages as genuine, rather than as strategy to be polite (i.e., a white lie). It is possible that Koreans viewed the messages as a white lie because, in a collectivist culture, the importance of saving face of the self and others is emphasized (Ting-Toomey & Kurogi, 1998). Second, in the photograph the profile owner appears to be Asian. According to the social comparison theory, people compare themselves with others whom they perceive to be similar to themselves (Festinger, 1954). Therefore, Korean and U. S. participants with an Asian background might have been influenced more by the pictures than were non-Asian U. S. participants. Third, in this study we used undergraduate students, so the generalizability of the results to other populations should be practiced with caution. Some researchers have shown that women become less concerned about their appearance as they get older (Tiggemann, 2004), so our results may be less applicable when investigating the attitudes of older women about fat talk.

In the current study we dealt with messages that can be categorized as either promoting or discouraging weight loss. In real life, appearance-related messages can be ambiguous. Therefore, future researchers can examine how witnessing messages that are not so clear-cut influences observers. For instance, as a reply to a woman expressing her desire to lose weight, one might say, "I love how you look, but if you want, cut back on sweets!" It is also important to examine what are the factors that may amplify or mitigate the effects of witnessing fat talk. There has been some evidence presented that thin-ideal internalization moderates the impact of media influence on BS (e.g., Dittmar, Halliwell, & Stirling, 2009). Furthermore, those who internalize a societal ideal of thinness may be influenced negatively more than others are by witnessing fat talk. Future studies in which this aspect is investigated may be of use in developing intervention and prevention programs to reduce young women's vulnerability to the influence of the mass and social media. Last, the overweight profile owner we used in the study may have looked to North Americans to be of normal weight. In order to increase the external validity of the study, in a future study profile owners who would appear to a North American audience to be obese should be examined.

References

Aoki, T. (2012). *What is "SNS" network member's activity and attitude?* Retrieved from http://www.waseda.jp/prj-riim/paper/ISSS2007-Aoki-Paper-Revised.pdf

Arroyo, A., & Harwood, J. (2012). Exploring the causes and consequences of engaging in fat talk. *Journal of Applied Communication Research, 40,* 167-187. http://doi.org/mrb

Chirkov, V., Ryan, R. M., Kim, Y., & Kaplan, U. (2003). Differentiating autonomy from individualism and independence: A self-determination theory perspective on internalization of cultural orientations and well-being. *Journal of Personality and Social Psychology, 84,* 97-110. http://doi.org/dvnwdb

Chung, T., & Mallery, P. (2000). Social comparison, individualism-collectivism, and self-esteem in China and the United States. *Current Psychology, 18,* 340-352. http://doi.org/cm2zf2

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, NJ: LEA.

Dittmar, H., Halliwell, E., & Stirling, E. (2009). Understanding the impact of thin media models on women's body-focused affect: The roles of thin-ideal internalization and weight-related self-discrepancy activation in experimental exposure effects. *Journal of Social & Clinical Psychology, 28,* 43-72. http://doi.org/bwb6d9

Festinger, L. (1954). A theory of social comparison processes. *Human Relations, 7,* 117-140. http://doi.org/bg7388

Gapinski, K. D., Brownell, K. D., & LaFrance, M. (2003). Body objectification and "fat talk": Effects on emotion, motivation, and cognitive performance. *Sex Roles, 48,* 377-388. http://doi.org/dbj4n3

Garner, D. M. (2004). *Eating Disorders Inventory-3*. Lutz, FL: Psychological Assessment Resources.

Groesz, L. M., Levine, M. P., & Murnen, S. K. (2002). The effect of experimental presentation of thin media images on body satisfaction: A meta-analytic review. *International Journal of Eating Disorders, 31*, 1-16. http://doi.org/bkf6bc

Gudykunst, W. B., Matsumoto, Y., Ting-Toomey, S., Nishida, T., Kim, K., & Heyman, S. (1996). The influence of cultural individualism-collectivism, self construals, and individual values on communication style across cultures. *Human Communication Research, 22,* 510-543. http://doi.org/c3czdw

Gudykunst, W. B., & Ting-Toomey, S. (1988). *Culture and interpersonal communication*. Newbury Park, CA: Sage.

Hall, E. T. (1976). *Beyond culture.* New York: Doubleday.

Heine, S. J. (2001). An exploration of cultural variation in self-enhancing and self-improving motivation. In V. Murphy-Berman & J. Berman (Eds.), *Cross-cultural differences in perspectives on the self* (pp. 101-128). Lincoln, NE: University of Nebraska Press.

Heine, S. J., Lehman, D. R., Markus, H. R., & Kitayama, S. (1999). Is there a universal need for positive self-regard? *Psychological Review, 106,* 766-794.

Heine, S. J., Lehman, D. R., Okugawa, O., & Campbell, J. D. (1992). The effects of culture on self-implicated processes: A comparison of Canadians and Japanese. *Ritsumeikan Social Sciences Review, 28,* 29-38.

Heinberg, L. J. (1996). Theories of body image disturbance: Perceptual, developmental, and sociocultural factors. In J. K. Thompson (Ed.), *Body image, eating disorders, and obesity: An integrative guide to assessment and treatment* (pp. 27-48). Washington, DC: American Psychological Association.

Heinberg, L. J., & Thompson, J. K. (1995). Body image and televised images of thinness and attractiveness: A controlled laboratory investigation. *Journal of Social & Clinical Psychology, 14,* 325-338. http://doi.org/bq9343

Hui, C. H., & Triandis, H. C. (1986). Individualism-collectivism: A study of cross-cultural researchers. *Journal of Cross-Cultural Psychology, 17,* 225-248. http://doi.org/c36hsz

Irving, L. M. (1990). Mirror images: Effects of the standard of beauty on the self- and body-esteem of

women exhibiting varying levels of bulimic symptoms. *Journal of Social & Clinical Psychology, 9,* 230-242. http://doi.org/dtn9jk

Jones, D. C., & Crawford, J. K. (2006). The peer appearance culture during adolescence: Gender and body mass variations. *Journal of Youth and Adolescence, 2,* 243-255. http://doi.org/fhqnrb

Jung, J., & Forbes, G. B. (2006). Multidimensional assessment of body dissatisfaction and disordered eating in Korean and U.S. college women: A comparative study. *Sex Roles, 55,* 39-50. http://doi.org/c9c7xn

Kim, D.-S. (2009). Body image dissatisfaction as an important contributor to suicidal ideation in Korean adolescents: Gender difference and mediation of parent and peer relationships. *Journal of Psychosomatic Research, 66,* 297-303. http://doi.org/f8k

Knobloch-Westerwick, S., & Crane, J. (2012). A losing battle: Effects of prolonged exposure to thin ideal images on dieting and body satisfaction. *Communication Research, 39,* 79-102. http://doi.org/cpp395

Kuwayama, T. (1992). The reference other orientation. In N. R. Rosenberger (Ed.), *Japanese sense of self* (pp. 121-149). Cambridge, UK: Cambridge University Press.

Lance, C. E., & Vandenberg, R. J. (Eds.) (2009). *Statistical and methodological myths and urban legends: Doctrine, verity, and fable in organizational and social research.* New York: Routledge.

Markus, H. R., & Kitayama, S. (1991a). Cultural variation in the self-concept. In G.R. Goethals & J. Strauss (Eds.), *Multidisciplinary perspectives on the self* (pp. 18-48). New York: Springer-Verlag.

Markus, H., R., & Kitayama, S. (1991b). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98,* 224-253. http://doi.org/cmzw28

McKinley, N. M. (1999). Women and objectified body consciousness: Mothers' and daughters' body experience in cultural, developmental, and familial context. *Developmental Psychology, 35,* 760-769.

Muñoz, M. E. & Ferguson, C. J. (2012). Body dissatisfaction correlates with inter-peer competitiveness, not media exposure: A brief report. *Journal of Social & Clinical Psychology, 31,* 383-392. http://doi.org/mrc

Neighbors, L. A., & Sobal, J. (2007). Prevalence and magnitude of body weight and shape dissatisfaction among university students. *Eating Behaviors, 8,* 429-439. http://doi.org/ft69cd

Nichter, M. (2000). *Fat talk: What girls and their parents say about dieting.* Cambridge, MA: Harvard University Press.

Nichter, M., & Vuckovic, N. (1994). Fat talk: Body image among adolescent girls. In N. Sault (Ed.), *Many mirrors: Body image and social relations* (pp. 109-131). New Brunswick, NJ: Rutgers University Press.

Ousley, L. Cordero, E. D., & White, S. (2008). Fat talk among college students: How undergraduates communicate regarding food and body weight, shape & appearance. *Eating Disorders: The Journal of Treatment & Prevention, 16,* 73-84. http://doi.org/bxsd7j

Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analysis. *Psychological Bulletin, 128,* 3-72. http://doi.org/cszb9t

Raich, R. M., Rosen, J. C., Deus, J., Pèrez, O., Requena, A., & Gross, J. (1992). Eating disorder symptom among adolescents in the United States and Spain: A comparative study. *International Journal of Eating Disorders, 11,* 63-72. http://doi.org/dh46r7

Rosenberg, M. (1965). *Society and the adolescent self–image.* Princeton, NJ: Princeton University Press.

Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology, 57*, 1069-1081.

Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology, 69,* 719-727.

Ryu, H. R., Lyle, R. M., & McCabe, G. P. (2003). Factors associated with weight concerns and unhealthy

eating patterns among young Korean females. *Eating Disorders: The Journal of Treatment & Prevention, 11,* 129-141. http://doi.org/d44xqr

Salk, R. H., & Engeln-Maddox, R. (2011). "If you're fat, then I'm humongous!" Frequency, content, and impact of fat talk among college women. *Psychology of Women Quarterly, 35,* 18–28. http://doi.org/bnp4jg

Stice, E., Maxfield, J., & Wells, T. (2003). Adverse effects of social pressure to be thin on young women: An experimental investigation of the effects of "fat talk." *International Journal of Eating Disorders, 34,* 108-117. http://doi.org/b5z4n7

Taniguchi, E., & Lee, H. E. (2012). Cross-cultural differences between Japanese and American female college students in the effects of witnessing fat talk on Facebook. *Journal of Intercultural Communication Research, 41,* 260-278. http://doi.org/mrd

Tiggemann, M. (2004). Body image across the adult life span: Stability and change. *Body Image, 1,* 29-41. http://doi.org/b79jb6

Tiggemann, M., & Pickering, A. S., (1996). Role of television in adolescent women's body dissatisfaction and drive for thinness. *International Journal of Eating Disorders, 20,* 199-203. http://doi.org/cxdzdx

Ting-Toomey, S., & Kurogi, A. (1998). Facework competence in intercultural conflict: An updated face-negotiation theory. *International Journal of Intercultural Relations, 22,* 187-225. http://doi.org/fswnbw

van den Berg, P. A., Mond, J., Eisenberg, M., Ackard, D., & Neumark-Sztainer, D. (2010). The link between body dissatisfaction and self-esteem in adolescents: Similarities across gender, age, weight status, race/ethnicity, and socioeconomic status. *Journal of Adolescent Health, 47,* 290-296. http://doi.org/bh7nvw

Wardle, J., Haase, A. M., & Steptoe, A. (2006). Body image and weight control in young adults: International comparisons in university students from 22 countries. *International Journal of Obesity, 30,* 644-651. http://doi.org/cc7gpj

White, K., & Lehman, D. R. (2005). Culture and social comparison seeking: The role of self-motives. *Personality and Social Psychology Bulletin, 31,* 232-242. http://doi.org/d2ncv2

Appendix
Pictures used in stimulus materials

Underweight profile owner	*Overweight profile owner*