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## Reports

## Self-esteem depends on the beholder: Effects of a subtle social value cue

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## ABSTRACT

The idea that self-esteem functions as a gauge or “sociometer” of social value [Leary, M. R., Baumeister, R. F. (2000). The nature and function of self-esteem: Sociometer theory. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 32, pp. 1–62). San Diego: Academic Press] is supported by research on direct social feedback. To examine if the sociometer model is relevant to more subtle social value cues, the implicit self-esteem of women was assessed a week after an interaction with an experimenter. Consistent with the sociometer model, Week 2 self-esteem depended on a subtle social value cue encountered during Week 1. When the Week 1 experimenter wore a t-shirt celebrating larger bodies (i.e., “everyBODY is beautiful”), heavier women had higher self-esteem than lighter women in Week 2. As hypothesized, this effect was relationship-specific, occurring only when the same experimenter administered Week 1 and 2 sessions.

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## Introduction

According to the sociometer model (Leary & Baumeister, 2000), self-esteem is a gauge of perceived social value that fluctuates as a function of the degree to which one feels valued by those around him or her. Building upon this idea, we examine the extent to which self-esteem is sensitive to even subtle indications of one's likely value to others. We expect the influence of subtle social value cues to be relationship-specific, such that it is limited to the relational context in which it was initiated. The degree to which such relationship-specific effects are maintained over time is also explored. In pursuing these questions we demonstrate a novel means of enhancing the self-esteem of heavy-weight women, a group subject to substantial interpersonal stigma (for a review, see Brownell, Puhl, Schwartz, & Rudd, 2005).

## Self-esteem and social value

For over a century, scholars have suggested that feelings about the self reflect beliefs about how one is evaluated by others (e.g., Cooley, 1902; Hardin & Higgins, 1996; James, 1890; Maslow, 1970; Mead, 1934; Pyszczynski, Greenberg, Solomon, Arndt, & Schimel, 2004; for a review, see Tice & Wallace, 2003). A classic example is the notion of the “looking-glass self” in which Cooley (1902) contends that people take the attitude toward the self that is assumed to be held by others. Cooley writes, “the character and

weight of that other, in whose mind we see ourselves, makes all the difference with our feeling. . . We always imagine and in imagining share the judgments of the other mind” (p. 184).

One can trace recent theoretical frameworks emphasizing the interpersonal basis of attitudes about the self back to Cooley's (1902) insight. A prime example of modern efforts to articulate the social basis of self-understanding is the sociometer model (e.g., Leary & Baumeister, 2000; Leary & Downs, 1995). According to this model, self-esteem is best conceptualized as a gauge that indexes one's apparent value to others; self-esteem is high to the extent that individuals feel accepted and appreciated but low to the extent that they feel disapproved of and rejected.

Substantial evidence that self-esteem is responsive to direct social feedback has been marshaled in support of the sociometer model. In controlled experiments, self-esteem is diminished by real or imagined negative feedback (Leary, Haupt, Strausser, & Chokel, 1998), and rejection or ostracism (Leary, Cottrell, & Phillips, 2001; Zadro, Williams, & Richardson, 2004). Correspondingly, self-esteem appears to increase in a step-by-step manner with increasingly positive direct social feedback (beginning at and up to a certain point; Leary et al., 1998). In naturalistic studies, negative self-relevant feelings arise from everyday social feedback such as explicit criticism, betrayal, or the silent treatment (Leary, Springer, Negel, Ansell, & Evans, 1998; Williams, Shore, & Grahe, 1998).

In the present research, we sought to extend this work in several important ways. In particular, we examined whether the sociometer model has implications that extend beyond direct social feedback. Indeed, the kind of direct social feedback examined in

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extant sociometer research may be relatively rare (DePaulo, Kashy, & Kirkendol, 1996; Kenny & DePaulo, 1993). People often refrain from directing explicit feedback at others, particularly when the feedback would be negative (Blumberg, 1972; DePaulo & Bell, 1996; Swann, Stein-Seroussi, & McNulty, 1992). For this reason, it is important to understand the extent to which self-esteem is sensitive to subtle or indirect information about one's likely valuation. Although research has not addressed the topic, the sociometer model suggests that self-esteem should be sensitive to subtle cues about whether personal attributes confer likely acceptance or rejection (Leary & Baumeister, 2000). The self-esteem of smokers, political conservatives, and heavy-weight individuals, for example, should be sensitive to subtle information regarding the social value of smoking, specific political beliefs, and body type, respectively.

Moreover, the sociometer model implies that information about the social value of personal attributes should lead to *relationship specific* changes in self-esteem. That is, the analogy of self-esteem as a gauge implies that the sociometer should be sensitive to and accurately reflect current environmental conditions. Individuals with a functioning sociometer should experience positive self-esteem when in the presence of someone thought to value them or their social category; this increase in self-esteem should not be indefinite and unconstrained but instead limited to that relational context. For example, the self-esteem of a heavy-weight woman should be higher when accompanied by someone known to value heavier women, but not when accompanied only by someone assumed to value slim women. The relational specificity of the sociometer was examined here with regard to subtle information about social value.

Examining the relational specificity of sociometer effects also allows an initial investigation into the temporal pattern of influence, especially as related to the subtle communication of social value. One possibility is that subtle social value cues have an immediate impact that perseveres in perceivers' subsequent interactions with relevant individuals. A second possibility is that subtle social cues produce a delayed influence, commensurate with relational development. Perhaps subtle forms of social valuing only become self-relevant and impactful once the relationship is developed further and the ramifications of such valuing are fully processed (see also Shoda, LeeTiernan, & Mischel, 2002). Finally, it is possible that the effect of subtle social value cues is limited to the time of initial presentation. As interactions continue, the impact of the cue may fade as estimations of likely social value are based on different, perhaps more tangible, sources of information.

#### *The sociometer and heavy-weight women*

The prediction that subtle social value cues can have a relationship-specific effect on self-esteem was examined in the form of an intervention of potential benefit to heavy-weight women, a group widely devalued in American society (Brownell et al., 2005). Heavy-weight women are particularly interesting with respect to questions about the interpersonal basis of self-esteem because they are likely to have individuals in their close interpersonal network who view them negatively. Even the doctors, friends and parents of heavy-weight individuals have been shown to subscribe to negative evaluations of, or discriminate against, this group (e.g., Crandall, 1995; Hebl & Xu, 2001). As frequent targets of negative social evaluations, the self-esteem of heavy-weight women may be especially likely to benefit from positive social value cues that contradict the prevailing cultural norm.

Consistent with the sociometer model, we expected the self-esteem of heavy-weight women to be sensitive to social value cues—even those operating subtly. A social cue emphasizing the positive value of larger female bodies was expected to positively influence

self-esteem in a relationship-specific manner (in the presence of the affirming person but not beyond). We also explored how these effects developed over time. Because self-presentational concerns might have otherwise obscured heavy women's reports of self-esteem we tested the predictions using an implicit self-esteem measure (i.e., the implicit association test; IAT; Greenwald, McGhee, & Schwartz, 1998). In addition to being less subject to strategic manipulation than self-report measures (e.g., Fazio, Jackson, Dunton, & Williams, 1995), implicit measures have been shown to be valid (Fazio & Olson, 2003; Poehlman, Uhlmann, Greenwald, & Banaji, 2007) and sensitive to fluctuations in the social context (for a review, see Blair, 2002). Hence, such a measure is ideally suited to our purpose.

## **Method**

### *Overview*

Women varying in weight completed self-esteem measures as part of an interaction with an experimenter who wore a plain white t-shirt or a t-shirt indicating that she valued larger bodies. A week later, these same participants completed self-esteem measures in the presence of the same experimenter or a different experimenter. There were three experimental conditions: (1) The *body-shirt-consistent* condition, in which the experimenter wore a t-shirt expressing positive valuation of larger bodies in Session 1 and returned to conduct Session 2; (2) the *control-consistent* condition, in which the experimenter wore a plain white t-shirt in Session 1 and returned to conduct Session 2; (3) the *body-shirt-inconsistent* condition, in which the experimenter wore a t-shirt expressing the valuation of larger bodies in Session 1 but was replaced by a different experimenter in Session 2. In all three conditions, the experimenter wore a plain white t-shirt in Session 2. This design allowed us 1) to disentangle the effects of relational aspects of the situation from other aspects and 2) to examine the effect of a subtle social value cue on self-esteem over time.

### *Participants and setting*

Forty-six female undergraduates in an undergraduate psychology class at a large university on the east coast received partial course credit for participating in both sessions of the experiment. African-American women were excluded from data collection because a more lenient norm with regard to body size exists among African-Americans (e.g., Jackson & McGill, 1996; Molloy & Herzberger, 1998). One of five normal weight female experimenters conducted experimental sessions with participant groups of two to six seated at a large table.

### *Materials*

#### *Experimenter t-shirt*

Perceptions of the experimenter's values with regard to female bodies were manipulated via the experimenter's t-shirt in Session 1. An experimenter either wore a t-shirt depicting relatively heavy women holding hands, with the statement "everyBODY is beautiful," beneath the picture or wore a plain white t-shirt. In paradigms similar to this one, researchers have adopted the practice of explicitly drawing attention to the experimenter's t-shirt (Lun, Sinclair, Whitchurch, & Glenn, 2007; Sinclair, Lowery, Hardin, & Colangelo, 2005) because people are otherwise surprisingly unaware of the images on others' clothing (e.g., Gilovich, Medvec, & Savitsky, 2000). Our goal here, however, was to maintain the subtlety of the manipulation. As such, we did not specifically draw attention to the shirt. In the second session, the experimenter always wore a plain t-shirt, regardless of initial treatment.

To confirm that the “everyBODY is beautiful” t-shirt favored heavy women, 22 separate undergraduate participants were shown a picture of the t-shirt and asked, “if you saw a female undergraduate wearing this shirt, what would you say is her attitude toward heavy women?” They were also asked the same question with regard to slim women. For both questions, participants responded on a 1 (strongly dislike) to 6 (strongly like) scale. As expected, participants indicated that a female wearing this t-shirt would be expected to like heavy women ( $M = 5.50$ ) more than slim women ( $M = 3.45$ ),  $t(21) = 7.44$ ,  $p < .0001$ ,  $r = .85$ .

#### Assessment of perceived body weight

Perceived body weight was assessed in a prescreening session via self-report.<sup>1</sup> Participants were simply asked to list their body weight in pounds ( $M = 126.1$ ;  $SD = 16.02$ ). The three randomly assigned experimental groups did not differ with regard to perceived weight,  $F(2,43) = .26$ ,  $p > .7$ .

#### Measure of implicit self-esteem

A pencil and paper implicit association test (IAT; Greenwald et al., 1998) served as our main measure self-esteem. Because it was plausible that participants would believe the “body” t-shirt was intended to make them feel better about themselves, it was desirable to use a measure that was less vulnerable to experimental demand than traditional self-report. We selected the IAT as our implicit measure because IAT measures of self-esteem may be more reliable indexes of self-esteem than other implicit measures (Bosson, Swann, & Pennebaker, 2000). Though the computer-based format is used more extensively, the pencil and paper IAT has been used widely with success (e.g., Lane, Mitchell, & Banaji, 2005; Lowery, Hardin, & Sinclair, 2001; Sinclair et al., 2005; Teachman & Brownell, 2001; Teachman, Gapinski, Brownell, Rawlins, & Jeyaram, 2003; for a review, see Lemm, Lane, Sattler, Khan, & Nosek, 2008). Moreover, results obtained from pencil and paper IATs are highly correlated with those of computer-based IATs, have an identical factor structure and have similar or identical test-retest reliability (Lemm et al., 2008). The paper and pencil version of this measure allowed for data collection in a small group setting that was more akin to a social interaction than the typical computer-based format. Rather than shuttling participants off to separate computer cubicles, we had them complete the measure seated at a small conference table. The experimenter read the instructions aloud from the head of this table.

The self-esteem IAT utilized here assessed the extent to which the self was paired with positive versus negative associations by having participants categorize “pleasant” or “unpleasant” words and “me” (e.g., “me,” “mine,” “self”) or “not me” (e.g., “them,” “theirs,” “others”) words by checking off a circle either to the right or the left of the word. As is typical, there were three columns on each page. The middle column contained 30 words to be categorized, listed vertically. Participants indicated their categorization of these words by checking circles in either the left or right column. They were given 20 seconds per page to categorize words as either “pleasant/unpleasant” or “me/not me” as quickly and accurately as they could.

As with other IATs (e.g., Nosek, Greenwald, & Banaji, 2005), participants were first given practice trials in which they only catego-

rized one concept at a time. On the first page, participants categorized words simply as “me” (left column) or “not me” (right column). On the second page, participants categorized words as “unpleasant” (left column) or “pleasant” (right column). On the third page, participants were shown a sample of what would occur on the fourth page and were given a chance to ask questions. On the fourth page, participants began to simultaneously categorize “pleasant/unpleasant” words and “me/not me” words. “Me” and “unpleasant” were paired in the left column and “not me” and “pleasant” were paired in the right column. On the fifth page participants only had to categorize “me/not me” words but this time “not me” was the left column and “me” the right. Page six only required the categorization of unpleasant (left column) and pleasant (right column) words. The seventh page was a sample of what would occur on the eighth page (switched simultaneous categorizations). On the eighth and final page, “not me” and “unpleasant” were paired in the left column and “me” and “pleasant” were paired in the right column.

To compute IAT self-esteem, number incorrect was subtracted from number correct separately for the fourth and final pages. The fourth page score was then subtracted from the final page score such that higher scores indicate more positive associations with “me” than lower scores. This score served as the IAT self-esteem score for each participant. Implicit self-esteem scores for Session 1 ranged from  $-3$  to  $24$  ( $M = 10.5$ ,  $SD = 5.15$ ) and those for Session 2 ranged from  $-1$  to  $27$  ( $M = 9.8$ ,  $SD = 6.71$ ).

#### Procedure

A female experimenter wearing either an “everyBODY is beautiful” t-shirt or a plain white t-shirt greeted participants as they arrived at the lab.<sup>2</sup> To maintain the subtlety of the manipulation, we made no special efforts to draw participants’ attention to the message on the experimenter’s shirt. Rather, participants were allowed to interact naturally with the experimenter, who was instructed to stand at the head of the conference table during the experiment in order to be visible. When all participants were present, the experimenter provided informed consent forms for the participants to read over and sign. The forms described the experiment as a two-part study with the second session exactly one week in the future. Upon completion of the consent form, participants were told the experiment was about personality and cognitive responses over time and thus they would complete some tasks in the current session and then return to complete additional tasks. The experimenter then led participants through the IAT, reading the instructions for each page aloud, telling participants when to begin each page and when the allotted 20 seconds for each page had expired. After participants completed the IAT, the experimenter discussed the procedure for returning the following week.

One week later, all participants returned to the same lab, were greeted by an experimenter wearing a plain white t-shirt and were administered the IAT again. Thus, for participants in the *body-shirt-consistent* condition the experimenter who wore the “body” t-shirt in Session 1 returned for Session 2 wearing a white t-shirt. Partic-

<sup>1</sup> Because we were particularly interested in the self-esteem of individuals who felt stigmatized we chose to focus on participants’ perceptions of their own weight rather than a more health-oriented measure, such as body mass index (BMI). Beyond the idea of “weight adjusted for height” most college students probably do not have an intuitive feel for the complex BMI calculation. Given our focus on perceptions of body size, such a measure seemed unnecessary here. However, given that perceived height was also available via the prescreening mechanism, we also conducted the analyses reported herein controlling for perceived height. Doing so did not alter the pattern of findings, either with regard to significance or predicted values.

<sup>2</sup> We took several steps to reduce experimenter bias. First, the participants and the undergraduate experimenters were told that the study was about cognitive responses over time. Experimenters were not aware that participants’ perceived body weight had been previously measured, nor were they aware that the “cognitive response” measure was actually an IAT or a self-esteem measure. Moreover, experimenters were randomly assigned a t-shirt to wear for each session and were under the impression that we simply needed them to wear standard expressive t-shirts typically used in research. Experimenters were surprised to learn the true purpose of the study when it was eventually revealed to them. Finally, several experimenters were used and there were no differential effects of experimenter. In sum, we took extra steps—even misleading the experimenters—to ensure that experimenter bias was not a factor in this study.

Participants in the *control-consistent* condition had the same experimenter in Sessions 1 and 2—wearing a plain white t-shirt both times. Participants in the *body-shirt-inconsistent* condition were exposed to an experimenter wearing the “body” t-shirt in Session 1, but had a different experimenter in Session 2 (who wore a white t-shirt). Hence, only *body-shirt-consistent* participants had a Session 2 experimenter who was previously associated with positive valuation of heavier bodies. After completing the IAT, participants were debriefed and dismissed.

## Results

Prior to testing our hypotheses, we used the Shapiro–Wilk *W* test (Shapiro & Wilk, 1965) to insure that perceived weight, Session 1 implicit self-esteem and Session 2 implicit self-esteem were normally distributed overall and that each variable was normally distributed within each condition. All three variables were normally distributed in the overall dataset ( $W_s > .96$ ,  $p_s > .12$ ) and within each condition ( $W_s > .91$ ,  $p_s > .22$ ). Table 1 displays the zero-order correlations among these three variables, none of which were statistically significant. Given a normal distribution for each variable and the lack of any multivariate outliers, we proceeded to answer our main questions.

Our methodological strategy for isolating relational influences allowed us to explore the temporal development of self-esteem fluctuations as a function of exposure to a social value cue. To this end we first examined whether incidental exposure to the cue had an immediate (i.e., Session 1) effect on heavy women’s implicit self-esteem. We conducted a multiple regression analysis that effectively combined the *body-shirt-consistent* and *body-shirt-inconsistent* conditions—these two conditions were identical during Session 1.<sup>3</sup> A contrast-coded variable compared the *control-consistent* condition (coded as  $-1$ ) with the two *body-shirt* conditions (each coded as  $.5$ ; see West, Aiken, & Krull, 1996). Session 1 implicit self-esteem was regressed onto perceived weight (centered), the contrast-coded variable, and the contrast-code by weight interaction term. Main effects were entered and interpreted at Step 1 and interaction terms were entered and interpreted at Step 2 (see Aiken & West, 1991). No significant effects emerged from this analysis (all  $p_s > .11$ ). In other words, there was no immediate effect of exposure to the subtle social value cue on implicit self-esteem.

We then sought to examine whether there were delayed effects of the social value cue and to test the prediction that sociometer effects should be relationship specific. Because the manipulations did not affect implicit self-esteem in Session 1, we were able to use it as a baseline measure in subsequent analyses. Controlling for initial self-esteem, a relationship-specific response would be evidenced if only the *body-shirt-consistent* condition elicited higher Session 2 implicit self-esteem among heavier as compared to slimmer women.

We tested this hypothesis using multiple regression analyses. Two dummy-coded variables were created with *body-shirt-control* condition as the reference group. Dummy Code 1 compared the *body-shirt-consistent* condition to the *control-consistent* condition whereas Dummy Code 2 compared the *body-shirt-consistent* condition to the *body-shirt-inconsistent* condition. Session 2 implicit self-esteem was regressed onto Session 1 self-esteem, perceived weight (centered), Dummy Code 1, Dummy Code 2, and the two Dummy Code by weight interaction terms.<sup>4</sup> Main effects were en-

**Table 1**

Descriptive statistics for perceived weight and implicit self-esteem (Session 1 and Session 2)

	Perceived weight	Implicit self-esteem, Session 1	Implicit self-esteem, Session 2
Perceived weight	×		
Session 1 implicit self-esteem	−.004	×	
Session 2 implicit self-esteem	.03	.28*	×

Note.  $p < .05^*$ .

tered and interpreted at Step 1 whereas interaction terms were entered and interpreted at Step 2 (see Aiken & West, 1991). Table 2 lists the  $\beta$  and  $p$  values for each possible effect. The only simple main effect to reach significance was a positive relationship between Session 1 implicit self-esteem and Session 2 implicit self-esteem,  $\beta = .32$ ,  $p = .046$ . However, as expected, there were significant interactions between perceived weight and Dummy Code 1 (*body-shirt-consistent* vs. *control-consistent*),  $\beta = -.43$ ,  $p = .02$ , and perceived weight and Dummy Code 2 (*body-shirt-consistent* vs. *body-shirt-inconsistent*),  $\beta = -.41$ ,  $p = .02$ .

To explore these interactions, simple effects tests were conducted (also see Fig. 1). As expected, there was a positive relationship between perceived weight and implicit self-esteem in the *body-shirt-consistent* condition ( $\beta = .46$ ,  $p = .03$ ), but not in the *control-consistent* ( $\beta = -.32$ ,  $p > .15$ ) or *body-shirt-inconsistent* ( $\beta = -.35$ ,  $p > .15$ ) conditions. Thus, heavier women enjoyed a self-esteem advantage over their slimmer counterparts, but only in the presence of an individual who had displayed—one week earlier—a social cue suggesting that she valued larger bodies.

To confirm that these findings did indeed occur because heavier women benefitted from the social valuation of their group, we tested the hypothesis that heavier women would have higher self-esteem in the *body-shirt-consistent* condition than in the other conditions. First, perceived weight was re-centered at one standard deviation above the mean (i.e., at a relatively large perceived weight). A contrast term comparing the *body-shirt-consistent* condition to the other two conditions was then created by coding the *body-shirt-consistent* condition as “1” and each of the other two conditions as “−.5” (see West et al., 1996). Session 2 implicit self-esteem was then regressed onto Session 1 implicit self-esteem, the contrast term, the heavy-weight variable, and the contrast by heavy-weight interaction. In the presence of the interaction term (in Step 2 of the model) the contrast  $\beta$ -weight refers to the extent to which implicit self-esteem was higher among heavy women in the *body shirt* condition as compared to heavy women in the *control* conditions. Indeed, among heavy women, implicit self-esteem was higher in the *body shirt-consistent* condition than in the other conditions,  $\beta = .47$ ,  $p = .02$ . In an analysis focused on slim women (i.e., 1 SD below the mean) but using identical contrast weights, implicit self-esteem was not significantly different

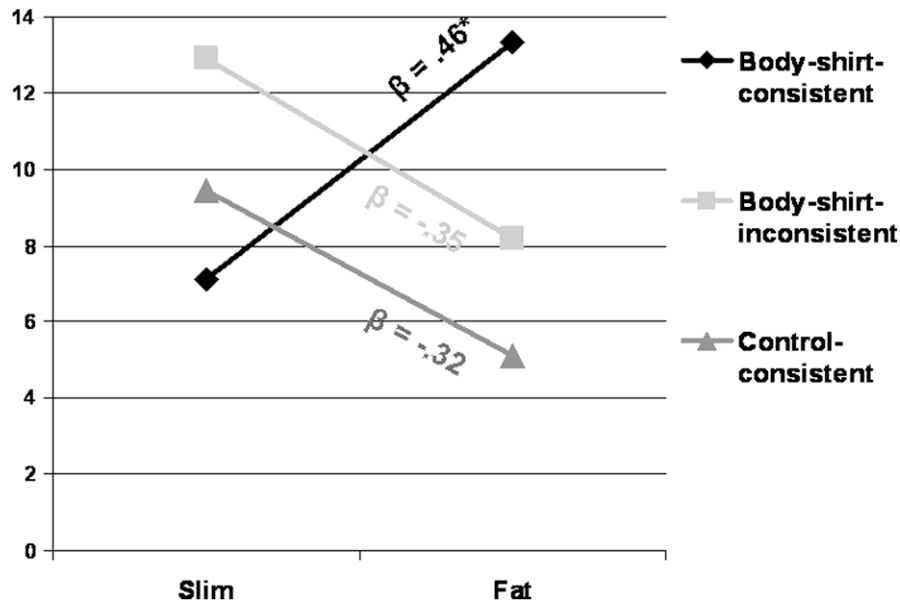
**Table 2**

Prediction of Session 2 implicit self-esteem: standardized regression weights and significance

Variable	$\beta$	$p$ -value
<i>Step 1</i>		
Session 1 implicit self-esteem	.32	.046
Perceived weight (centered)	.01	.93
Body-shirt vs. Control-shirt (DC1)	−.18	.27
Body-shirt vs. Control experimenter (DC2)	−.01	.94
<i>Step 2</i>		
DC1 $\times$ Perceived weight interaction	−.43	.02
DC2 $\times$ Perceived weight interaction	−.41	.02

<sup>3</sup> The pattern of significance for Session 1 self-esteem was identical regardless of whether the two *body-shirt* conditions were collectively or independently compared to the *control-consistent* condition.

<sup>4</sup> Nearly identical patterns of predicted values and significance were obtained whether or not we controlled for Session 1 implicit self-esteem. Because controlling for Session 1 implicit self-esteem enabled inferences about improvements in implicit self-esteem and reduced measurement error, we retained it as a covariate in analyses.



**Fig. 1.** Session 2 implicit self-esteem as a function of experimental condition and perceived weight, controlling for Session 1 implicit self-esteem. “Heavy” and “slim” were computed as one standard deviation above and below the centered perceived weight mean, respectively (see Aiken and West, 1991). The \* denotes  $p < .05$ .

between the body-shirt-consistent and control conditions,  $\beta = -.29$ ,  $p = .15$ .

## Discussion

Previous experimental research in support of the sociometer model largely focused on the impact of varying levels of overt social inclusion (or praise) and social exclusion (or derogation; e.g., Leary et al., 1998). The current experiment demonstrated that self-esteem is also sensitive to expressions of social value that occur indirectly—that is, self-esteem was sensitive to expressions of social value not directed specifically at the self but rather obliquely at one’s social category. Although the effects were driven by a subtle cue (an image on a shirt), they were relationship specific and did not emerge until a full week after exposure to the cue. These findings therefore extend the known limits of a functioning sociometer. They illustrate that fluctuations in self-esteem corresponding to the sociometer model (1) can stem from subtle cues as well as overt ones, (2) are limited to a specific relational context and (3) can extend beyond the moment in which the cue is initially encountered.

Though the subtle social value cue had a delayed effect on the self-esteem of heavy-weight women, we did not find evidence of an immediate effect. Because existing research inspired by the sociometer model typically finds immediate effects, this is an intriguing finding. Although several interpretations are possible, our favored interpretation is that likely valuation by the experimenter was only self-relevant after extended interaction. Direct social feedback has qualities that are likely to activate the self-concept in memory or to promote self-reflective processes. For example, direct feedback provides an explicit evaluation aimed specifically at the self and this evaluation is consciously known both by the communicator and the recipient—qualities likely to harbor self-relevant processing and immediate effects on self-esteem. Conversely, subtly communicated social values are not aimed directly at the self and may not be consciously processed (e.g., Gilovich et al., 2000). Hence, it may be the case that subtle social value cues do not impact self-esteem until the person associated with the cue has some self-relevant meaning for individuals, as might

occur when a relationship is temporally extended or otherwise developed (e.g., Andersen & Chen, 2002; Sinclair & Lun, 2006).

Regardless, the relational specificity of the demonstrated fluctuation in self-esteem has important implications regarding the stability of the self. Just as attitude stability may stem from the tendency to be in the same kinds of situations (Mischel & Shoda, 1995), people may experience the self as stable to the extent that they tend to interact with similar types of people, holding similar values (Andersen, Reznik, & Manzella, 1996). It may be the case that the bulk of individuals’ interactions are with relational partners assumed to have certain social values, and it is this consistency that causes corresponding consistency in affect and traits associated with the self (see also, Swann, Rentfrow, & Guinn, 2003). Just as people seek out relational partners that verify the self (e.g., Swann & Read, 1981) the subtly-communicated beliefs of these frequent relational partners may help people to maintain a stable sense of self. In other words, stability of the (implicit) self may be a function of stability of one’s relational environment rather than an inherent property of the self.

Because this experiment focused on the valuation of women based on weight, there are additional implications for heavy-weight stigma. Several scholars have noted that anti-fat prejudice is an unusually socially acceptable and virulent form of prejudice (e.g., Puhl & Brownell, 2003). Research on the enhancement of self-esteem among heavy-weight women has revealed that cognitive-behavior therapy is helpful (Rosen, Orosan, & Reiter, 1995). Here, however, the self-esteem of heavy-weight women was enhanced through the use of a method that is relatively inexpensive and requires few resources. The one-time expression of an egalitarian attitude about weight on the t-shirt of an experimenter improved the self-esteem of heavy-weight women. The current results highlight the potential efficacy of social interventions to enhance the self-esteem of heavy-weight women and calls for additional research along these lines.

## Conclusion

Consistent with the sociometer model of self-esteem, we showed that self-esteem is sensitive to cues to others’ values—subtle exposure to social value cues led to relationship-specific

changes in self-esteem that emerged after one week. Finally, we provided preliminary evidence for an inexpensive and practical technique for enhancing the situated self-esteem of heavier women.

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