

# Not hating what you see: Self-compassion may protect against negative mental health variables connected to self-objectification in college women



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## ABSTRACT

Self-objectification is related to maladaptive mental health variables, but little is known about what could ameliorate these associations. Self-compassion, a construct associated with mindfulness, involves taking a non-judgmental attitude toward the self. In this study, 306 college-aged women were recruited; those who were highest ( $n = 106$ ) and lowest ( $n = 104$ ) in self-compassion were retained for analyses. Levels of body surveillance, body shame, depression, and negative eating attitudes were lower in the high self-compassion group. Furthermore, the fit of a path model wherein body surveillance related to body shame, which, in turn, related to negative eating attitudes and depressive symptomatology was compared for each group, controlling for body mass index. The model fit significantly differently such that the connections between self-objectification and negative body and eating attitudes were weaker in the high self-compassion group. Treatment implications of self-compassion as a potential means to interrupt the self-objectification process are discussed.

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## Introduction

Young women in Western society live in a world where their bodies are consistently examined and evaluated by others, and women are given the message that their bodies are a primary source of their value and worth (Fredrickson & Roberts, 1997; Moradi & Huang, 2008). One proposed consequence of this culture of objectification is that women learn to think about their bodies as objects rather than as active agents and start to view their bodies from an observer's perspective (Fredrickson & Roberts, 1997; McKinley & Hyde, 1996; Noll & Fredrickson, 1998). This process is known as self-objectification, and one of the most common manifestations of self-objectification is body surveillance wherein women view themselves from a third-person perspective and habitually monitor their bodies (Fredrickson & Roberts, 1997; McKinley & Hyde, 1996; Moradi & Huang, 2008; Vandenbosch & Eggermont, 2012). When women survey their bodies from an outsider's perspective, they frequently discover that their bodies fail to meet social standards

of beauty and thinness and are likely to experience body shame (McKinley & Hyde, 1996; Moradi & Huang, 2008).

Theoretically, self-objectification has been linked to a number of negative clinical variables, most notably eating disorders and depression (Fredrickson & Roberts, 1997; Moradi & Huang, 2008). Habitual body monitoring, or body surveillance, has been linked to higher depression (Muehlenkamp & Saris-Baglama, 2002; Peat & Muehlenkamp, 2011; Szymanski & Henning, 2007) and negative attitudes about eating or symptoms of eating disorders (Muehlenkamp & Saris-Baglama, 2002; Noll & Fredrickson, 1998; Peat & Muehlenkamp, 2011; Tylka & Hill, 2004). Most studies have found that the relationships between body surveillance and depressive and disordered eating symptomatology are mediated by the experience of body shame (Moradi, Dirks, & Matteson, 2005; Szymanski & Henning, 2007; Tiggemann & Kuring, 2004; Tiggemann & Williams, 2012; Tylka & Hill, 2004). However, research has also suggested that habitually monitoring the body is directly related to negative eating attitudes (Miles-McLean, Liss, & Erchull, 2014; Tolaymat & Moradi, 2011).

Women, especially those who live in Western cultures, live in an environment in which objectification is rampant, and consequently, the experience of body surveillance, or habitual body monitoring, is extremely common (Moradi & Huang, 2008; Szymanski, Moffitt, & Carr, 2011; Tiggemann & Lynch, 2001). Although there has been considerable research investigating

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variables related to self-objectification, particularly when operationalized as body surveillance, there is less understood about variables that may interrupt, or moderate, the self-objectification process. Given the clinical symptomatology associated with engaging in body surveillance, it is important to understand personality variables that may serve as protective factors that would mitigate the clinical symptomatology related to engaging in it.

To date, attempts to find variables that moderate the clinical symptomatology related to the objectification process have been largely unsuccessful. One study attempted to determine whether coping strategies such as appearance-fixing or rational acceptance coping would moderate any links in the chain from being appearance-focused to experiencing body shame to clinical symptomatology (Choma, Shove, Busseri, Sadava, & Hosker, 2009). However, this study failed to find evidence of moderation. Nevertheless, a characteristic that could attenuate maladaptive symptomatology linked to self-objectification would be useful in a clinical context, especially if it is a characteristic that could be shifted in response to an intervention. Since the clinical symptomatology associated with objectification and self-objectification are proposed to stem from a sense that one is not living up to an external standard, and thus, that one is not good enough, a promising variable that may ameliorate the clinical symptomatology associated with self-objectification is self-compassion. Indeed, patients with eating disorders who had greater increases in self-compassion early in treatment had faster decreases in eating disorder-related outcomes over the 12-week study period (Kelly, Carter, & Borairi, 2014). Furthermore, self-compassion is particularly promising as a moderator for investigation as increases in self-compassion and decreases in body shame and dissatisfaction have been found in response to compassion-based meditation interventions (e.g., Albertson, Neff, & Dill-Shackleford, 2014).

Self-compassion is related to mindfulness, a construct that stems from a Buddhist philosophy that emphasizes a nonjudgmental attitude toward the self (Bishop et al., 2004; Coffey, Hartman, & Fredrickson, 2010; Neff, 2011). Compassion soothes the self in times of stress and shame (Gilbert, 2009). Self-compassion has been found to be distinguishable from self-esteem in that it does not involve a need to compare oneself to others in order to feel good about the self (Neff, Kirkpatrick, & Rude, 2007; Neff, Rude, & Kirkpatrick, 2007) and, unlike self-esteem, is not related to narcissism (Neff & Vonk, 2009). Thus, while self-esteem may be contingent on feeling as though one meets external standards, such as appearance standards (Crocker, Luhtanen, Cooper, & Bouvette, 2003), self-compassion involves kindness and love for oneself in a non-contingent and unconditional way (Neff & Vonk, 2009). Thus, self-compassion may interrupt the process through which body surveillance translates into body shame, negative eating attitudes, and depression. Even if a woman monitors and notices how her body looks, if she has an attitude of self-compassion, she is probably less likely to negatively judge and evaluate what she sees and be more likely to respect and appreciate her body for what it is and what it does (Stewart, 2004).

Much research has linked self-compassion to positive mental health outcomes. Self-compassion has been linked to lower depression, stress, and anxiety (Hall, Row, Wuensch, & Godley, 2013; MacBeth & Gumley, 2012; Neff, 2003) as well variables associated with positive psychology such as optimism and well-being (Neff, Rude, et al., 2007). A central protective feature of self-compassion is that it equips one to treat oneself with kindness versus self-criticism in a situation that may induce shame. One study took people prone to experiencing shame, asked them to write about a shameful memory, and instructed them to either take a self-compassionate attitude or simply to write about their deepest feelings (Johnson & O'Brien, 2013). Those instructed to take a self-compassionate attitude toward the event reported less depression,

shame, and rumination on a follow-up assessment than did those in the control group who were writing about their deepest feelings.

Given that the body is a central part of the self that is often the subject of negative thoughts and evaluation, particularly for women (Fredrickson & Roberts, 1997), research has begun to focus on the role of self-compassion in ameliorating body image disturbance and eating pathology. In a study of undergraduates, self-compassion was related to greater body image acceptance as well as to lower levels of weight concern and fewer dysfunctional attitudes about eating (Prowse, Bore, & Dyer, 2013). Self-compassion has also been found to be related to lower binge eating severity (Webb & Forman, 2013) as well as to a greater likelihood of engaging in intuitive eating, which is the ability to give oneself permission to eat when hungry and to eat in response to physical, as opposed to emotional, cues (Schoenfeld & Webb, 2013). Self-compassion has been linked to lower levels of body surveillance and body shame (Daye, Webb, & Jafari, 2014; Mosewich, Kowalski, Sabiston, Sedgwick, & Tracy, 2011) indicating that it may interfere with the process of self-objectification.

Self-compassion may interrupt the process wherein negative thoughts about the body lead to negative consequences. In one study, self-compassion was found to mediate the relationship between a sense of shame and the drive for thinness in both a sample of women with eating disorders and a sample from the general population (Ferreira, Pinto-Gouveia, & Duarte, 2013). Self-compassion has also been found to partially mediate the relationship between body dissatisfaction and depression (Wasylikiw, MacKinnon, & MacLellan, 2012). However, self-compassion may be better understood as a moderator, lessening the relationship between mental health risks or unhealthy attitudes and clinical symptomatology. The moderating role of self-compassion has been investigated, and one study that found that self-compassion moderated the relationship between rumination and stress (Samaie & Farahani, 2011). Another study found that self-compassion moderated the relationship between personality variables known to be precursors of depression (e.g., self-criticism) and the experience of depression (Wong & Mak, 2013).

Self-compassion has, in fact, recently been identified a moderator in the context of body image disturbance and the experience of self-objectification. One study found that self-compassion moderated the relationship between body mass index (BMI) and eating disorder pathology such that women with both high BMI and high self-compassion had lower levels of eating disorder pathology as compared to women with high BMI and low self-compassion (Kelly, Vimalakanthan & Miller, 2014). Furthermore, another study found that self-compassion moderated the relationship between recalling critical or restrictive comments about eating from one's parents and the experience of body surveillance and body shame (Daye et al., 2014).

We aimed to expand on this research with the current study by identifying whether self-compassion would act as moderator working to attenuate the relationships between self-objectification and its theorized negative outcomes (i.e., body shame, disordered eating attitudes, and depressive symptoms). In order to investigate these potential relationships, we felt it was important to work with two distinct samples of young adult women: one who scored distinctly high in self-compassion and another who scored distinctly low in self-compassion. Given this, after data collection was completed, we performed a tertiary split on self-compassion scores so that we could isolate distinct samples of women high and low on this construct. Subsequently, all analyses were performed on these sub-samples of participants so that differences could clearly be seen.

We had a number of specific hypotheses. First, we anticipated that women with higher levels of self-compassion would have lower levels of body surveillance, body shame, negative

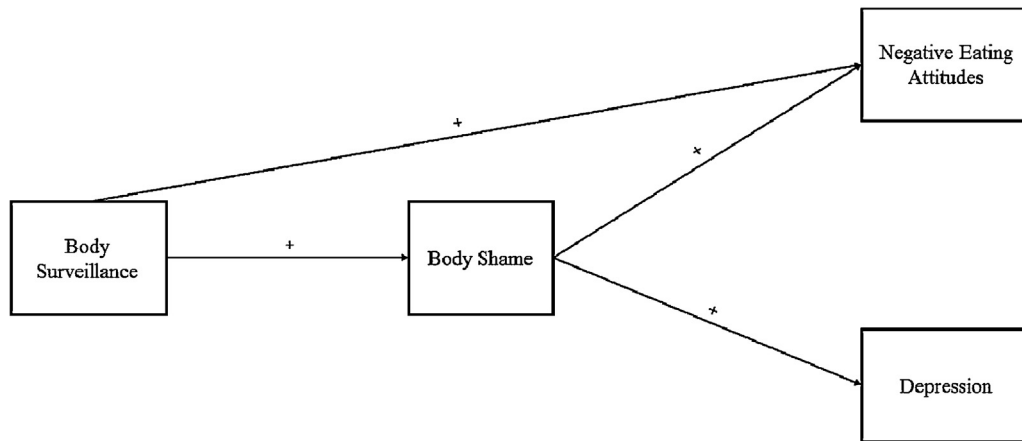


Fig. 1. Hypothesized model.

eating attitudes, and depression when compared to women with lower levels of self-compassion. Second, we anticipated that self-compassion would moderate the relationship between body surveillance and its theorized negative sequelae (i.e., body shame, negative eating attitudes, and depression). Thus, we created a model in which body surveillance was related to body shame which was, in turn, related to negative eating attitudes and depression – relationships that have been consistently demonstrated in previous research (Moradi et al., 2005; Szymanski & Henning, 2007; Tiggemann & Kuring, 2004; Tiggemann & Williams, 2012; Tylka & Hill, 2004). Given that some research has also shown that body surveillance is directly related to negative eating attitudes in young adult women, we also modeled a direct pathway between these variables (Miles-McLean et al., 2014; Tolaymat & Moradi, 2011). Our hypothesized model is depicted in Fig. 1. Third, we hypothesized that the fit of the model would be significantly different for women scoring low and high in self-compassion. Specifically, we predicted that the strength of the pathways would be attenuated in the model for the women with high levels of self-compassion. Given that BMI has been found to be related to objectification variables and negative eating attitudes (e.g., Calogero, 2004; Daubenmier, 2005; Moradi et al., 2005), we controlled for BMI in our analyses.

**Method**

**Participants**

We recruited 306 female participants. As noted above, a tertiary split was performed on participants' self-compassion scores so that we could isolate groups distinctly high and low in self-compassion. Of the remaining 210 participants who comprised our working sample, 106 (50.5%) were in the high self-compassion group (scores of 3.11 through 5.00), and 104 (49.5%) were in the low self-compassion group (scores of 1.00 through 2.50). A MANOVA was run to test for group differences on the continuous demographic variables of age, class year, and self-reported socioeconomic status, and no significant group differences were found,  $F(3, 205) = 0.10, p = .96, \eta^2_{\text{partial}} = .001$ . Specific details about the demographic characteristics of the two groups are provided in Table 1.

**Procedure**

Participants were recruited from a general psychology participant pool at a liberal arts university in the southeastern United States and participated in this study in exchange for partial class

**Table 1**  
Demographic characteristics by group.

	High self-compassion n = 106	Low self-compassion n = 104
Age	M = 19.23; SD = 1.82	M = 19.28; SD = 1.85
Range	18–25	18–25
Class Year	M = 1.28; SD = 0.81 n; %	M = 1.34; SD = 0.94 n; %
1 = first year	66; 62.3%	70; 67.3%
2 = second year	17; 16.0%	12; 11.5%
3 = third year	10; 9.4%	7; 6.7%
4 = fourth year	1; 0.9%	6; 5.8%
Not disclosed	12; 13.3%	9; 8.7%
SES	M = 3.27; SD = 0.74 n; %	M = 3.28; SD = 0.70 n; %
1 = poverty	–	1; 1.0%
2 = working class	14; 13.2%	9; 8.7%
3 = middle class	53; 50.0%	57; 54.8%
4 = upper-middle class	34; 32.1%	34; 32.7%
5 = wealthy	4; 3.8%	3; 2.9%
Race/Ethnicity	n; %	n; %
White/Caucasian	93; 87.7%	92; 88.5%
Black/African American	4; 3.8%	2; 1.9%
Asian/Pacific Islander	3; 2.8%	3; 2.9%
Latina	4; 3.8%	1; 1.0%
Multiracial	–	5; 4.8%
Other	1; 0.9%	1; 1.0%
Not disclosed	1; 0.9%	–
Sexual Orientation	n; %	n; %
Heterosexual/Straight	100; 94.3%	88; 84.6%
Homosexual/Lesbian	1; 0.9%	4; 3.8%
Bisexual	3; 2.8%	8; 7.7%
Other	1; 0.9%	4; 3.8%
Not disclosed	1; 0.9%	–

credit toward a research requirement. They completed the anonymous survey with measures presented in the same order as they are listed below. The survey was hosted through SurveyGizmo.com, and participants completed the study at computers in a group setting in an on-campus computer lab during designated time slots.

**Measures**

**Objectified Body Consciousness Scale (OBCS).** The eight-item Body Surveillance (e.g., “During the day, I think about how I look many times”) and eight-item Body Shame (e.g., “When I can’t control my weight, I feel like something must be wrong with me”) subscales of the Objectified Body Consciousness Scale (McKinley &

Hyde, 1996) were used to assess these constructs associated with self-objectification. The third subscale, Appearance Control Beliefs, was not used as the construct of control is not typically considered a core component of the experience of self-objectification (Moradi & Huang, 2008). Participants responded to items using a 6-point scale ranging from 0 (*strongly disagree*) to 5 (*strongly agree*), and responses were averaged to form scale scores with higher levels indicating greater body surveillance and shame. Validity was assessed as part of the original investigation (McKinley & Hyde, 1996); both body surveillance and shame were related to lower body-esteem and greater personal acceptance of cultural standards of beauty. In the original investigation, Cronbach's alphas were .79 for Body Surveillance and .84 for Body Shame. In the present study, Cronbach's alphas were .87 for both Body Surveillance and Body Shame.

**Self-Compassion Scale – Short Form.** The 12-item short form (Raes, Pomier, Neff, & Van Gucht, 2011) of the Self-Compassion Scale (Neff, 2003) was used to assess this construct as the total score of the long- and short-forms were found to correlate at .97 (Raes et al., 2011). As we were interested in the total score rather than individual subscales, the more parsimonious measure was selected. This version of the measure uses a 5-point scale ranging from 1 (*Almost Never*) to 5 (*Almost Always*), and a sample item is “When I’m going through a very hard time, I give myself the caring and tenderness I need.” Responses to items were averaged to form a scale score with higher scores indicating higher levels of self-compassion. The validity of the long-form of the Self-Compassion Scale was established in the original investigation through negative relationships to measures of self-criticism and positive relationships with social connectedness (Neff, 2003). It also was found to be positively related to, but distinct from self-esteem and to have predictive utility in relation to mental health variables including anxiety, depression, and life satisfaction. The short-form of this measure was found to have good internal consistency in the initial investigation ( $\alpha = .86$ ; Raes et al., 2011), and Cronbach's alpha was .92 in the present study.

**Eating Attitudes Test-26 (EAT-26).** Negative eating attitudes of participants were assessed using the 26-item version of the Eating Attitudes Test (Garner, Olmsted, Bohr, & Garfinkel, 1982). A 6-point scale ranging from 0 (*always*) to 5 (*never*) was used for all items, and the measure includes items such as, “I feel uncomfortable after eating sweets.” Sum scores were calculated using continuous scoring, and higher scores indicated greater endorsement of negative eating attitudes. This measure has been found to be valid for use with non-clinical samples, and it has been found to be related to measures of body image and diet as well as weight (Koslowsky et al., 1992). Cronbach's alphas for the original and present study were .90 and .88, respectively.

**Patient Health Questionnaire (PHQ-8).** The experience of depressive symptoms over the two weeks prior to completing the survey was assessed using the eight-item Patient Health Questionnaire (Kroenke et al., 2009). The eight-item measure has been found to be comparable to the full nine-item measure and more appropriate for use in a general population, as it does not include an item assessing suicidal ideation (Kroenke & Spitzer, 2002). The PHQ-8 includes items such as “Feeling down, depressed, or hopeless,” and items are responded to using a 4-point scale ranging from 0 (*not at all*) to 3 (*nearly every day*), and sum scores were calculated. The PHQ is widely used in medical and public health settings and has been found to be a valid measure of depressive symptomatology given its relationship to both clinical diagnoses of depression and scores on other self-report measures of depression such as the Beck Depression Inventory (Martin, Rief, Klaiber,

& Braehler, 2006; Spitzer, Kroenke, Williams, & the Patient Health Questionnaire Primary Care Study Group, 1999). Internal consistency reliability has been shown to be high in previous research (Cronbach's  $\alpha = .87$ ; Hwang, Fleischmann, Howie-Esquivel, Stotts, & Dracup, 2011), and Cronbach's alpha was .88 in the present study.

**Body mass index (BMI).** Self-reported height and weight were assessed in order to calculate BMI. The equation (weight in pounds/height in inches<sup>2</sup>) $\times$  703 ([http://www.cdc.gov/healthyweight/assessing/bmi/adult\\_bmi/index.html](http://www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/index.html)) was used for the calculation of BMI.

## Results

We had little missing data. There were no missing data at the scale level of either the EAT-26 or the PHQ-8, as their items were summed; at the item level, .002% and .003% of individual responses, respectively, were missing. For the body surveillance, body shame, and self-compassion measures, mean scores were calculated allowing for up to a single missing item per scale score. Using this procedure, both body surveillance and shame each had one participant with missing data at the scale level. Missing data at the item level was .004% for both. As the self-compassion measure was used to identify the two groups used for analyses, there were no missing data at the scale level for this variable; however, there was .002% missing data at the item level. We also had a total of five participants who did not provide enough information to allow for the calculation of BMI. Participants with missing data for the measures of surveillance, shame and BMI were excluded from MANOVA and correlational analyses but were included in path analysis as a full information maximum likelihood estimation procedure was used. Data for all scale variables and for BMI were normally distributed. Skew scores ranged from 0.21 for self-compassion to 1.10 for BMI. Kurtosis scores ranged from 0.05 for EAT scores to 1.80 for BMI.

We began our analyses by testing for group differences on the variables included in our model. The MANOVA was significant,  $F(5, 197) = 31.53, p < .001, \eta^2_{\text{partial}} = .45$ , indicating that there were differences between women high and low in self-compassion. Examination of the univariate ANOVAs indicated that the groups were significantly different on all variables except for BMI (see Table 2 for means, standard deviations, and univariate  $F$ -test results). Women who scored low on the measure of self-compassion reported greater body surveillance, body shame, negative eating attitudes, and depression.

Table 3 shows the correlations among the measured variables separately for women scoring high and low on self-compassion. Body surveillance was positively correlated with body shame and negative eating attitudes for women in both groups. Body shame was also positively correlated with negative eating attitudes, depression, and BMI for women scoring both high and low on self-compassion. Negative eating attitudes were positively correlated with BMI for both groups of women, but they were only significantly positively correlated with depression for those low in self-compassion.

We next used M-plus version 6.12 in order to test our hypothesized model (see Fig. 1) using path analysis with maximum likelihood estimation (Muthén & Muthén, 1998–2010). As indicated above, participants with missing data at the scale level were included in analyses as the full information maximum likelihood estimation procedure was used. We controlled for BMI on body surveillance, body shame, and negative eating attitudes in all analyses. We hypothesized that body surveillance would relate to body shame which would, in turn, relate to negative eating attitudes and depression. We also hypothesized that there would be a direct path from body surveillance to negative eating attitudes.



**Table 2**  
Descriptive statistics and univariate analysis of variance (ANOVA) results.

Variable	Low self-compassion M (SD)	High self-compassion M (SD)	Actual range	Possible range	Univariate ANOVA
Body Surveillance	3.56 (0.80)	2.81 (0.97)	0–5	0–5	$F(1, 201) = 36.38, p < .001, \eta^2 = .15$
Body Shame	2.64 (0.97)	1.49 (0.86)	0–5	0–5	$F(1, 201) = 80.55, p < .001, \eta^2 = .29$
Negative Eating Attitudes	43.70 (18.27)	29.63 (12.87)	0–86	0–130	$F(1, 201) = 40.31, p < .001, \eta^2 = .17$
Depression	10.03 (5.61)	3.53 (3.13)	0–24	0–24	$F(1, 201) = 104.25, p < .001, \eta^2 = .34$
BMI	23.73 (4.74)	22.94 (3.55)	14.56–38.10	–	$F(1, 201) = 1.83, p = .18, \eta^2 = .009$

Note: Low self-compassion  $n = 104$ . High self-compassion  $n = 106$ . Higher scores represent greater endorsement of the construct or higher BMI. All  $\eta^2$  reported are partial  $\eta^2$ .

**Table 3**  
Bivariate correlations for women scoring high ( $n = 102$ ) and low ( $n = 101$ ) on self-compassion.

	1	2	3	4	5
1. Body Surveillance	–	.36***	.46***	.01	.12
2. Body Shame	.47***	–	.57***	.20*	.26**
3. Negative Eating Attitudes	.50***	.62***	–	.16	.28**
4. Depression	.07	.35***	.43***	–	.16
5. BMI	.07	.37***	.24*	.13	–

Note: Correlations for women high in self-compassion are above the diagonal; correlations for women low in self-compassion are below the diagonal.

\*  $p < .05$ .  
\*\*  $p < .01$ .  
\*\*\*  $p < .001$ .

We first tested the model with data from women scoring low in self-compassion. The model had good fit,  $\chi^2(2) = 0.99, p = .61$ ; CFI = 1.00, RMSEA < .001, SRMR = .02. The model also had good fit to the data from the high self-compassion sample,  $\chi^2(2) = 2.64, p = .27$ ; CFI = .99, RMSEA = .06, SRMR = .03. Standardized path loadings for both models are provided in Fig. 2.

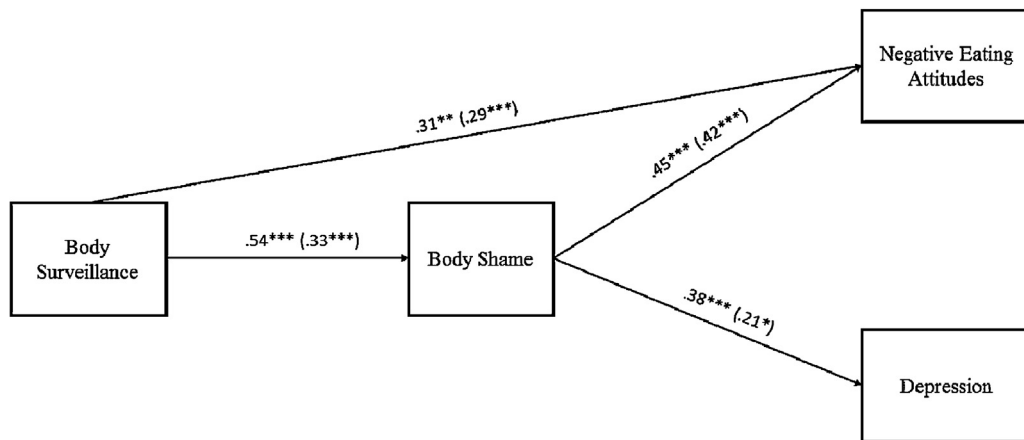
We then used multiple group analyses using equality constraints to compare the fit of the models for those reporting high and low levels of self-compassion. In order to do this, we compared the fit of the models when path values were free to vary between groups to a model in which the path values were constrained to be invariant across groups. There was a significant difference in the fit of the constrained and unconstrained models,  $\chi^2\Delta(7) = 14.86, p = .04$ , which suggests that at least one path differed in strength between the groups.

To better understand this difference in fit, we next undertook analyses where we freed one path at a time from constraint to isolate where differences in fit were occurring at the path level. The paths from body surveillance to body shame,  $\chi^2\Delta(1) = 4.16, p = .04$ , and body surveillance to negative eating attitudes,  $\chi^2\Delta(1) = 4.16, p = .04$ , had significantly different fit between the high and low

self-compassion groups. Both paths were stronger for women reporting low levels of self-compassion. A third path, from body shame to depression, showed the same pattern, but the difference in fit did not meet traditional standards for statistical significance,  $\chi^2\Delta(1) = 3.20, p = .07$ .

**Discussion**

Our hypotheses were largely supported. First, we anticipated that participants reporting high levels of self-compassion would have lower levels of body surveillance, body shame, negative eating attitudes, and depression as compared to the participants reporting low levels of self-compassion. Given that our high and low self-compassion groups did not differ in BMI, any differences in our objectification and mental health variables cannot be attributed to differences in body mass. Our finding that women with higher levels of self-compassion had lower body surveillance and shame and healthier attitudes toward food is consistent with previous research (e.g., Daye et al., 2014; Kelly, Carter, et al., 2014; Kelly, Vimalakanthan, et al., 2014; Mosewich et al., 2011; Prowse et al., 2013; Schoenefeld & Webb, 2013; Webb & Forman, 2013).



**Fig. 2.** Final path model of the relationships among the variables of interest. Standardized path coefficients are reported with those for the low self-compassion sample presented first and those for the high self-compassion sample presented in parentheses. The effects of BMI on body surveillance, body shame, and negative eating attitudes were controlled for in the models but are not pictured. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

Our finding that women with high levels of self-compassion had lower levels of depression is also consistent with previous research pointing to the positive mental health effects of an attitude of self-compassion (MacBeth & Gumley, 2012).

The central goal of this paper was to investigate whether self-compassion would moderate the well-established chain of events wherein body surveillance positively relates to body shame which, in turn, relates to higher levels of depression and negative eating attitudes, connections which have been upheld in research (e.g., Moradi et al., 2005; Szymanski & Henning, 2007; Tiggemann & Kuring, 2004; Tiggemann & Williams, 2012; Tylka & Hill, 2004). Similar to other researchers, we also included a direct link between body surveillance and negative eating attitudes (Miles-McLean et al., 2014; Tolaymat & Moradi, 2011). The current study expands on this important body of research by indicating that, once a woman engages in body surveillance, she is less likely to experience the negative mental health variables related to self-objectification if she also has an attitude of self-compassion. Specifically, the pathways from body surveillance to body shame and from body surveillance to negative eating attitudes were found to be significantly different between the high and low self-compassion groups. In both cases, body surveillance was more strongly linked to negative consequences among women who were low in self-compassion. Additionally, while the difference between the groups on the pathway between body shame and depression did not meet accepted levels of statistical significance, the pattern of the data remained consistent with the idea of increased negative consequences for women reporting low levels of self-compassion. Interestingly, although not statistically significant, the attenuation of the link between body shame and depression indicates that, even if women feel a sense of shame about their body, self-compassion may allow them to localize that sense of shame and not have it translate into more general feelings of depression. This is consistent with research finding that when recalling a shameful memory with a self-compassionate attitude, participants were less likely to experience depression (Johnson & O'Brien, 2013).

Thus, our results suggest that self-compassion acts a moderator, decreasing the potential negative mental health variables related to engaging in body surveillance. Women who are high in self-compassion may observe and monitor their bodies, but when they do so, they are less likely to experience shame about their bodies and negative attitudes toward eating. This is because self-compassion encourages accepting the self, even when the self is imperfect (Neff, 2011). The role of self-compassion as a moderator is starting to be understood. For example, although unrelated to body image concerns, one study found that self-compassion moderated the relationship between rumination and stress (Samaie & Farahani, 2011). Self-compassion may attenuate the negative effects of body surveillance because it helps individuals tolerate distress and regulate their emotions (Chambers, Gullone, & Allen, 2009). It has been suggested that, unlike traditional methods of emotion regulation that aim to change the content of people's thoughts, mindfulness-based interventions, which would include those focusing on self-compassion, can help regulate emotions through changing one's attitudes toward one's thoughts (Keng, Smoski, & Robins, 2011). Thus, one can observe one's body, and even notice that it does not measure up to societal standards of beauty and thinness, but have an attitude of acceptance and compassion toward that realization rather than experiencing shame, negative eating attitudes, or depression.

Having a self-compassionate attitude toward the body is similar to the construct of body image flexibility (Sandoz, Wilson, Merwin, & Kellum, 2013), which is the ability to experience negative attitudes about one's body fully and openly without being defensive or judgmental toward the self. Body image flexibility has been found to partially mediate the associations between disordered

cognitions about eating (e.g., fear of weight gain) and actual disordered eating (Wendell, Masuda, & Le, 2012). Body image flexibility has also been found to moderate the relationship between body dissatisfaction and both drive for thinness (Ferreira, Pinto-Gouveia, & Duarte, 2011) and negative eating attitudes (Sandoz et al., 2013). Our results add to this growing body of research by demonstrating that a more general attitude of self-compassion can buffer body surveillance's connection to body shame and negative eating attitudes. Body image flexibility and self-compassion are similar, and researchers have begun to examine their connection. For example, body image flexibility was found to mediate the relationship between self-compassion and intuitive eating (e.g., eating because one is hungry rather than for emotional reasons; Schoenefeld & Webb, 2013), and self-compassion was found to moderate the relationship between BMI and body image flexibility (Kelly, Vimalakanthan, et al., 2014). Whether body image flexibility would work in a similar way as self-compassion in attenuating the negative effects of self-objectification remains to be explored in future research.

The potential clinical applications of cultivating a self-compassionate attitude are promising. Compassion-focused therapy encourages therapists to express compassion toward clients and to help their clients treat themselves with compassion and empathy (Gilbert, 2009). However, research has demonstrated that, even in the absence of a formal therapeutic relationship, self-compassion can be improved through meditation inductions that encourage kindness, compassion, and affection toward the self. One study randomized women into a meditation group and a waiting list control; those who were given meditation podcasts focusing on self-compassion had reduced body dissatisfaction and body shame compared to the control group (Albertson et al., 2014). Another study found that highly restrictive eaters who were given a self-compassion induction felt less guilt after being instructed to eat unhealthy foods (Adams & Leary, 2007). Effective self-compassion interventions are not difficult to implement. The Adams and Leary (2007) study simply instructed participants to be kind to themselves, and the Albertson et al.'s study (2014) used podcasts that were emailed to participants. Thus, self-compassion is relatively easy to improve in a short time period. Our data demonstrate that the negative correlates of self-objectification are less strongly linked in women high in self-compassion, and our findings suggest that self-compassion may be protective against some of the pervasive negative mental health consequences of living in a culture that objectifies women. Thus, interventions that target self-compassion may be able to help women minimize their experience of body shame and disordered eating when they view their body from an observer's perspective and focus on their appearance.

Intervention research has targeted women with body image concerns, but women in Western culture are surrounded by images of objectified women (Fredrickson & Roberts, 1997), so a great many women have the possibility of benefitting from a compassionate attitude toward the self. Given that women have been found to have lower levels of self-compassion than men (Neff, 2011), it seems that women could especially benefit from self-compassion focused interventions.

It should be noted that the sociodemographic characteristics of our participants were restricted as they were undergraduate women who were predominately Caucasian and identified as middle to upper-middle class. The way in which self-compassion would ameliorate the negative effects of self-objectification in other sociodemographic groups needs further investigation. Furthermore, this study was correlational and did not show that self-compassion caused any of the differences in the relationships between the variables that we studied. Fortunately, intervention research (e.g., Albertson et al., 2014; Johnson & O'Brien, 2013) suggests that changing self-compassion would likely cause improvements in

objectification variables as well as attitudes toward eating and other mental health outcomes.

There are a number of measurement issues that should be noted. First, we presented the materials in a fixed order and did not control for order effects. We also did not include items to assess the attentiveness of participants. Additionally, we used the short form of the Self-Compassion Scale (Raes et al., 2011) and conceptualized self-compassion as a unified variable. Although the majority of studies on self-compassion have analyzed self-compassion as a total score (MacBeth & Gumley, 2012), most have used the longer form of the Self-Compassion Scale that contains six subscales: self-kindness, self-judgment, common humanity, isolation, over identification, and mindfulness. It may be that one particular component of self-compassion is more central in ameliorating the effects of self-objectification than others, and researchers may wish to explore this in the future. It should also be noted that women not only evaluate and judge their own bodies; they judge and evaluate the bodies of other women (Strelan & Hargreaves, 2005). The component of self-compassion that focuses on our common humanity may decrease the tendency that women have to be judgmental and critical toward other women's bodies. Future research may benefit from the exploration of this idea.

In sum, one can consider Western culture in which women's bodies are consistently displayed, sexualized, and objectified to be a toxic environment that has the potential to have pernicious mental health effects for many women. Cultivating an attitude of self-compassion has the potential to inoculate women against the negative effects of living in such a harmful environment and of engaging in self-objectification. Given that many women are at risk to experience self-objectification. Thus, the protective possibilities of cultivating self-compassion are potentially quite widespread.

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