



Self-objectification, feminist activism and conformity to feminine norms among female vegetarians, semi-vegetarians, and non-vegetarians



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ABSTRACT

Recent research has suggested that vegetarians may be at an increased risk for developing disordered eating or body image issues when compared to non-vegetarians. However, the results of such studies are mixed, and no research has explored potential connections between vegetarianism and self-objectification. In the current study, the authors examine factors that predicted body surveillance, body shame, and appearance control beliefs; three aspects of self-objectification. Surveys were completed by 386 women from the United States who were categorized as vegetarian, semi-vegetarian, or non-vegetarian. The three groups differed regarding dietary motivations, levels of feminist activism, and body shame, but did not differ on their conformity to feminine norms. While conformity to feminine norms predicted body surveillance and body shame levels among all three groups of women, feminist activism predicted appearance control beliefs among non-vegetarians only. These findings suggest that it is important for researchers and clinicians to distinguish among these three groups when examining the relationship between vegetarianism and self-objectification.

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1. Introduction

Some scholars propose that women engage in vegetarianism as an extension of feminist activism (Donovan, 2006) while others suggest that women may utilize vegetarianism as a way to “hide” disordered eating (Klopp, Heiss, & Smith, 2003). Although there is a growing body of literature about connections between vegetarianism and eating disorders, research regarding how vegetarianism relates to self-objectification (the internalization of a viewer's perspective of one's body) is limited. We examine three constructs related to self-objectification; body surveillance, body shame, and appearance control beliefs (Fredrickson & Roberts, 1997) and how they differ among vegetarian, semi-vegetarian, and non-vegetarian women. Timko, Hormes, and Chubski (2012) found that vegetarians were considered the most balanced in terms of their eating behaviors and weight, while semi-vegetarians had the highest levels of eating-related pathology. Women's dietary motivations may influence whether their choices are related to self-objectification thus we examine the distinction between ethical vegetarians (those who avoid meat because of a moral imperative to not harm animals) and weight motivated vegetarians (those who avoid meat in order to lose weight) (Fox & Ward, 2008).

Tiggemann's (2001) work on person-by-environment interactions suggests that other factors can play a role in the relationship between self-objectification and vegetarianism. We examine the impact of

feminist activism and conformity to feminine norms. One meta-analysis suggested that feminist attitudes protect against internalizing objectifying media messages (Murnen & Smolak, 2009). Other studies have not found any significant relationship between feminist beliefs and self-objectification (Fingeret & Gleaves, 2004) suggesting that feminism may at times serve as a protective factor, but not under all conditions. We also examined conformity to two specific norms related to femininity: investment in appearance and conformity to thinness norms. Women who are high in their investment in appearance may be more likely to develop self-objectification (Tiggemann & Kuring, 2004). Conforming to societal pressures to be thin is linked to body surveillance and body shame (Calogero, Davis, & Thompson, 2005; Forbes, Jobe, & Revak, 2006).

The current study seeks to deepen our understanding of vegetarianism in women and extend the literature on self-objectification. While an extensive body of research has examined self-objectification, to our knowledge no research has explored self-objectification among vegetarian and/or semi-vegetarian women.

2. Method

2.1. Participants and procedure

Data for this study were acquired from college students and other adults in the USA. This study was approved by the Institutional Review Board of a university in the Western United States. College students were recruited through a research pool and received course credit. Other adults were recruited through flyers that were distributed to

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local food stores and restaurants. All participants were directed to an online survey (that took approximately 30–45 min to complete) including a cover page with information about the study.

The total group of respondents consisted of 386 women, 108 men, and 3 individuals who identified as transgender. Given the low numbers of men who identified as vegetarian or semi-vegetarian ($N = 5$, $N = 6$) as well as the theoretical differences between women and men regarding self-objectification, we included only the women in the analyses of the study.

The included participants self-reported their ethnicity being White non-Hispanic ($n = 329$, 86%), Hispanic/Latino/a ($n = 17$, 4%), Asian American ($n = 8$, 2%), African American ($n = 6$, 2%), Native American ($n = 4$, 1%), multi-ethnic ($n = 12$, 3%) or other ($n = 8$, 2%). Forty-two participants were vegetarian/vegan (11%), 41 were semi-vegetarian (11%), and 302 were non-vegetarian (78%). Ninety-six percent (371) of participants identified as heterosexual, 1% (4) identified as bisexual, and 1% (4) identified as lesbian. The participants mostly identified as being college students ($n = 378$, 98%) and had a mean age of 19.3 years with a range of 18 to 64 years old.

2.2. Materials

2.2.1. Demographic questionnaire

Participants were asked to indicate their age, gender, sexual orientation, and ethnicity.

2.2.2. Dietary choices

Participants were asked to indicate their current dietary choices by selecting one of the options: Non-vegetarian (eat all foods); semi-vegetarian (do not eat red meat, but occasionally eat chicken and/or fish); pescovegetarian (do not eat red meat or chicken, but occasionally eat fish); lacto-ovo-vegetarian (do not eat red meat, chicken, or fish, but eat dairy products and eggs); ovo-vegetarian (do not eat red meat, chicken, fish or dairy but eat eggs) or vegan (do not eat any animal flesh or other animal byproducts). Participants were categorized into one of three groups: 1) vegetarians (including lacto-ovo vegetarian, ovo-vegetarian, and vegans); 2) semi-vegetarian (including semi-vegetarians and pescovegetarians); and 3) non-vegetarians.

2.2.3. Dietary choice motivation

All participants were asked to rank order (from most to least important) all motivations for food choice including the options: ethical/political motives, religion, health concerns, weight control, and taste. All participants were then given a score for the variables “ethically motivated” and “weight motivated.” Participants who indicated ethical reasons as one of their top two motivations for food choice were given a score of 1 (yes) on the variable “ethically motivated.” Participants who did not list ethical reasons in their top two choices were given a score of 0 (no) for the variable “ethically motivated.” Participants who indicated weight control in their top two reasons for food choice were given a score of 1 (yes) on the variable “weight motivated.” Participants who did not list weight control in their top two choices were given a score of 0 (no) for the variable “weight control.” As such, it was possible for participants to have weight motivations, ethical motivations, both weight and ethical motivations, or neither weight nor ethical motivations.

2.2.4. Personal–Professional Activism Scale (PPAS)

The personal and professional activism scale is a subscale of the Gender Role Journey Measure (O’Neil, Egan, Owen, & Murry, 1993). The scale consists of 13 items assessing the extent to which one engages in activism activities to fight sexism. Participants were asked to rate the extent to which they agree with statements on a 5-point Likert scale where 1 = *strongly disagree* to 5 = *strongly agree*. Higher scores on this scale indicate a higher level of activist orientation. The Cronbach’s alpha for this sample was found to be .76.

2.2.5. Gender norm conformity

Level of gender norm conformity was assessed through the Conformity to Feminine Norms Inventory (CFNI) (Mahalik et al., 2005). The CFNI consists of 84 questions assessing the conformity of an individual to feminine gender roles. Participants were asked to rate the extent to which they agree or disagree with statements on a 5-point Likert scale where 1 = *strongly disagree* to 5 = *strongly agree*. For this study, we were interested in the Thinness and Investment in Appearance subscales. The Thinness subscale (Cronbach alpha = .85) consists of items that assess the extent to which a woman internalizes expectations that women should be thin. The Investment in Appearance subscale (Cronbach alpha = .83) consists of items that assess the extent to which women conform to expectations to focus on their appearance.

2.2.6. Objectified Body Consciousness Scale (OBCS)

The OBCS consists of 24 questions measuring the extent to which a person self-objectifies (McKinley & Hyde, 1996). It consists of three subscales, including 1) surveillance, 2) body shame, and 3) appearance control beliefs. Participants were asked to rate the extent to which they agree with statements about their body consciousness on a 5-point Likert scale where 1 = *strongly disagree* to 5 = *strongly agree*. Higher scores indicate higher levels of self-objectification. The Cronbach’s alphas for the subscales for this sample were: .71 for surveillance, .82 for body shame, and .71 for control beliefs.

3. Results

Chi-square analyses revealed that vegetarians ($n = 30$, 71%) were significantly more likely to endorse ethical motivations than semi-vegetarians ($n = 11$, 27%) or non-vegetarians ($n = 10$, 3%) $\chi^2(2, 380) = 153.8, p < .001$, Cramer’s $V = .64$. Vegetarians ($n = 8$, 19%) were also significantly less likely to endorse weight control motivations than semi-vegetarians ($n = 19$, 46%) or non-vegetarians ($n = 147$, 49%) $\chi^2(2, 385) = 13.09, p < .001$, Cramer’s $V = .18$.

Means and standard deviations for all variables are displayed in Table 1. Semi-vegetarians ($m = 3.01$) endorsed higher levels of body shame than vegetarians ($m = 2.54$) or non-vegetarians ($m = 2.54$) ($F(2, 380) = 7.12, p < .01$, partial $\eta^2 = .04$). There were no significant differences among the groups on surveillance or appearance control beliefs. Vegetarians ($m = 3.66$) endorsed higher levels of feminist activism than semi-vegetarians ($m = 3.33$) or non-vegetarians ($m = 3.28$) ($F(2, 367) = 5.52, p < .01$, partial $\eta^2 = .03$). There were no significant differences among the groups in their conformity to thinness or appearance norms.

A series of stepwise regressions were utilized to determine what factors predicted levels of self-objectification among vegetarians, semi-vegetarians, and non-vegetarians (see Table 2 for regression

Table 1
Descriptive statistics for primary study variables with group comparisons.

	Vegetarian ($n = 42$)		Semi-vegetarian ($n = 41$)		Non-vegetarian ($n = 302$)	
	Mean	SD	Mean	SD	Mean	SD
Surveillance	3.24 _a	.64	3.26 _a	.60	3.31 _a	.58
Body shame	2.54 _a	.88	3.01 _b	.91	2.54 _a	.72
Control	3.58 _a	.66	3.63 _a	.54	3.53 _a	.59
Thinness	18.75 _a	6.23	22.09 _a	5.9	19.54 _a	6.9
Appearance	11.44 _a	3.02	11.48 _a	2.9	12.08 _a	2.9
Activism	3.66 _a	.48	3.33 _b	.59	3.28 _b	.63

Note.: Within each row, means with different subscripts are significantly different from one another at the $p < .01$ level. For all scales, higher scores are indicative of more extreme responding in the direction of the construct being assessed. Control = appearance control beliefs. Thinness = conformity to thinness norms. Appearance = investment in appearance. Activism = feminist activism.

Table 2
Stepwise regression analysis for all variables predicting objectified body consciousness.

	Vegetarian			Semi-vegetarian			Non-vegetarian		
	β	ΔR^2	p	β	ΔR^2	p	β	ΔR^2	p
<i>Surveillance</i>									
Thinness	.47	.41	.00*	.52	.38	.00*	.42	.23	.00*
Appearance	.35	.09	.03*	.28	.07	.04*	.20	.03	.00*
Feminist	-.03	-	.98	.04	-	.78	-.10	-	.05
Weight	.02	-	.88	.11	-	.39	-.03	-	.62
Ethical	-.19	-	.26	.10	-	.45	-.04	-	.46
<i>Body shame</i>									
Thinness	.71	.50	.00*	.77	.59	.00*	.57	.33	.00*
Appearance	.23	-	.12	.15	-	.18	.09	-	.06
Feminist	-.04	-	.78	-.20	-	.05	-.00	-	.92
Weight	-.09	-	.57	.02	-	.88	-.01	-	.78
Ethical	-.10	-	.56	-.15	-	.19	-.02	-	.66
<i>Control</i>									
Thinness							-.02	-	.78
Appearance							-.17	-	.43
Feminist							-.15	.02	.01*
Weight							-.04	-	.45
Ethical							.02	-	.80

Note: * indicates statistical significance at the $p < .05$ level. ΔR^2 values are only provided for variables included in the statistically significant models. No values are included for the models predicting appearance control beliefs for vegetarian or semi-vegetarian women, as no variables were significant and no model was produced. Thinness = conformity to thinness norms; Appearance = investment in appearance; Weight = weight motivation; Ethical = ethical motivation. Ethical and weight motivation are dichotomous variables with being weight motivated and being ethically motivated serving as the reference groups, respectively.

analyses). For all three groups, conformity to thinness norms and investment in appearance significantly predicted levels of surveillance (vegetarians = $F(1, 29) = 14.78, p < .001, R^2 = .51$; semi-vegetarians = $F(1, 37) = 15.1, p < .001, R^2 = .45$; non-vegetarians = $F(1, 293) = 7.97, p < .001, R^2 = .10$). Similarly, for all three groups, conformity to thinness norms significantly predicted levels of body shame (vegetarians = $F(1, 30) = 30.12, p < .001, R^2 = .50$; semi-vegetarians = $F(1, 38) = 53.65, p < .001, R^2 = .59$; non-vegetarians = $F(1, 293) = 143.59, p < .001, R^2 = .33$). For vegetarians and semi-vegetarians, none of the variables were significant in predicting appearance control beliefs. However, for non-vegetarians, feminist activism ($B = -.15; p < .01$) was the only significant predictor of appearance control beliefs, $F(1, 293) = 6.7, p < .01, R^2 = .02$.

4. Discussion

Our results suggest that there are significant differences among the three groups regarding their motivations for dietary choices, experiences of body shame, and levels of feminist activism. In addition to differences between vegetarian and non-vegetarian women, there are differences between vegetarians and semi-vegetarians. Taken together, these findings shed light on some of the complexities of these differences. Similar to previous research (Perry, McGuire, Neumark-Sztainer, & Story, 2001), most vegetarians (71%) in our study indicated ethical motivations for their food choice. They also endorsed higher levels of feminist activism and did not experience increased self-objectification. Based on our findings, semi-vegetarians, rather than full vegetarians, may be at most risk for increased self-objectification. They experienced the highest levels of body shame, were more likely to endorse weight control than ethical motivations for dietary restrictions, and were no more likely to endorse feminist activism than non-vegetarians. It may be that women who experience body shame engage in restricted eating in order to control their weight. These women may find that restricting some meat from their diet serves their purpose of

limiting their calories, while also being able to easily defend their restriction to others by saying they do not eat meat.

Our findings are consistent with other research (Myers & Crowther, 2007) which suggests that higher endorsement of traditional gender roles is correlated with self-objectification. We found that conformity to thinness norms and investment in appearance significantly predicted body surveillance among all three groups of women and conformity to thinness norms that predicted body shame in all three groups of women. The lack of differences among the three groups of women suggests that the pressure to conform to these societal norms may be more impactful than decisions about what types of food to eat in determining how one views her body. Although feminist activism did appear to be a protective factor for non-vegetarian women regarding appearance control beliefs, this variable was not significant in predicting other aspects of self-objectification. Additional research is needed to better understand the impact of feminism on women's self-objectification.

Our sample consisted predominantly of a homogenous group of women (mostly White non-Hispanic and heterosexual). These demographic variables should be taken into consideration when applying the findings of this study to various populations. In addition, despite many efforts to target and recruit male vegetarians for participation, the final sample size of these groups were too low to include them in the study.

Our research suggests that there are important differences among women vegetarians, semi-vegetarians, and non-vegetarians regarding motivations for dietary choices, engagement in feminist activism, and body shame. Clinicians and researchers are encouraged to keep these differences in mind when exploring potential relationships between vegetarianism and eating/body image pathology.

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Contributors

Authors Brinkman and Rosén designed and wrote the protocol. Authors Khan and Edner conducted literature searches, provided summaries of previous studies, and drafted sections of the manuscript. Author Brinkman conducted data analysis and wrote the first draft of the manuscript. All authors contributed to and have approved the final manuscript.

Conflict of interest

All authors declare they have no conflict of interest.

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