

Investing in the ideal: Does objectified body consciousness mediate the association between appearance contingent self-worth and appearance self-esteem in women?



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ARTICLE INFO

Article history:

Received 28 June 2013

Received in revised form

12 November 2013

Accepted 16 November 2013

Keywords:

Body image

Self-esteem

Contingent

Objectified

Appearance

ABSTRACT

Appearance contingent self-worth has been shown to be associated with low appearance self-esteem but little is known about the role that objectified body consciousness may play in this relationship. The purpose of the present study with 465 female undergraduates was to examine whether objectified body consciousness mediates the association between appearance contingent self-worth and low levels of appearance self-esteem. This was accomplished using a multiple mediation model to examine whether components of objectified body consciousness (i.e., body surveillance, body shame, and control beliefs) play unique roles in the connection between appearance contingent self-worth and appearance self-esteem. Results showed that body surveillance and body shame were significant mediators of the connection between appearance contingent self-worth and low levels of appearance self-esteem. Discussion focuses on the implications of these results for the ways in which appearance contingent self-worth may promote heightened body consciousness and possibly contribute to low levels of appearance self-esteem.

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Introduction

The feminine body has been socially constructed as an object to be admired in Western culture which often leads women and girls to measure their worth primarily by evaluating their physical appearance (Fredrickson & Roberts, 1997). Socially constructed standards of attractiveness are believed to develop as a result of external pressures (e.g., media) such that women accept these standards of attractiveness as normative and incorporate them into their daily social experiences (Birch & Fisher, 1998; Levine, Smolak, & Hayden, 1994). In turn, women often personally identify with these social values which they then use to construct their self-concepts (Costanzo, 1992). That is, women and girls who are constantly exposed to societal standards of beauty (e.g., magazine ads depicting extremely attractive women) may develop a preoccupation with their appearance and their perceived attractiveness may become a primary means for these women and girls to determine how they feel about themselves. The tremendous emphasis that women and girls place on their appearance is not irrational given that physical attractiveness has been linked with a variety of

important life outcomes for women including dating and marriage opportunities (Buunk, Dijkstra, Fetchenhauer, & Kenrick, 2002), higher educational and economic attainments (Judge, Hurst, & Simon, 2009), and better physical health (see Langlois, Kalakanis, Rubenstein, Larson, Hallam, & Smoot, 2000 for a review). These findings are consistent with the idea that physical appearance plays an important role in determining the social and economic status of women which may provide at least a partial explanation for why many women are so highly concerned about their attractiveness.

Emphasizing physical appearance is accompanied by a variety of costs. Women who rely on meeting external standards of physical attractiveness to maintain their feelings of worth are believed to possess appearance contingent self-worth (i.e., basing feelings of self-worth on appearance) which often leads them to adopt an outsider's perspective of their own body which is referred to as *objectified body consciousness* (e.g., Breines, Crocker, & Garcia, 2008; McKinley, 1999; McKinley & Hyde, 1996). In turn, this heightened body consciousness is associated with negative outcomes such as low self-esteem and negative self-perceptions of attractiveness (Overstreet & Quinn, 2012; Patrick, Neighbors, & Knee, 2004). This suggests the possibility that women with appearance contingent self-worth may experience lower appearance self-esteem due, at least in part, to heightened body consciousness. It is important to note that appearance self-esteem is focused on satisfaction with physical appearance unlike global self-esteem which reflects overall feelings of self-worth. A recent study by Overstreet and Quinn

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(2012) has begun to explore these relationships by considering the role that body surveillance may play in the association between a variety of self-worth contingencies (e.g., appearance, approval from others) and appearance satisfaction. The purpose of the present study was to expand the existing literature by gaining a more nuanced understanding of the relationship between appearance contingent self-worth and appearance self-esteem by examining the full objectified body consciousness construct (i.e., body surveillance, body shame, and control beliefs). This was accomplished using a multiple mediation model to examine the possible mediating roles that different components of objectified body consciousness may play in the connection between appearance contingent self-worth and appearance self-esteem after controlling for a number of factors (i.e., global self-esteem, body mass index, and age) that are known to influence concerns regarding appearance (e.g., Mendelson, Mendelson, & Andrews, 2000). This is important because it allows us to capture the unique role that objectified body consciousness plays in the association of appearance contingent self-esteem and appearance self-esteem.

Self-esteem refers to an evaluation of the self that reflects the extent to which individuals like themselves (see Zeigler-Hill, 2013 for a review). Self-esteem is an important part of daily experiences that reflects interactions and feedback from others such that feelings of acceptance often lead to feelings of value and worth (Leary & Downs, 1995). Individuals differ in the extent to which they view this acceptance as conditional or unconditional. Contingent self-worth reflects feelings of self-worth that are conditional on meeting some self-prescribed or external standard that may influence motivation, behavior, cognition, and affect (Crocker & Wolfe, 2001; Deci & Ryan, 1995). That is, contingent self-worth refers to what individuals believe they must do or be in order to have value and worth as a person. In contrast, non-contingent self-worth reflects feelings of self-worth that are secure and do not depend on external reinforcement. For example, feelings of self-worth that are contingent on physical appearance reflect a concern for meeting or exceeding standards of attractiveness that the individual believes is necessary in order to feel good about oneself. Individuals who possess appearance contingent self-worth tend to experience higher levels of self-esteem when they believe they are attractive, whereas the association between self-esteem and perceptions of attractiveness is much weaker for those who do not base their feelings of self-worth on their appearance (e.g., Crocker, Luhtanen, Cooper, & Bouvrette, 2003). It is important to clarify that *appearance contingent self-worth* refers to the extent to which individuals base their feelings of self-worth on their physical appearance, whereas *appearance self-esteem* reflects the extent to which individuals are satisfied with their physical appearance.

Western cultures place unrealistic standards on beauty (Stice & Shaw, 2002). Women who possess appearance contingent self-worth may be more likely to internalize these unrealistic standards for their appearance which may, in turn, lead to objectified body consciousness. Objectified body consciousness includes three components: *body surveillance* or the continual self-monitoring of the body to ensure conformity to cultural standards of beauty (e.g., McKinley & Hyde, 1996; Moradi, 2010), *body shame* which refers to negative attitudes about the body that extend to the self as a whole and may develop due to feelings of being exposed as someone who does not meet cultural standards (McKinley, 1999), and *control beliefs* which reflect beliefs that one has the ability to control the appearance of their body (e.g., McKinley & Hyde, 1996). Individuals with appearance contingent self-worth may be more likely to attempt to achieve unattainable standards of beauty which may foster a preoccupation with their appearance that is expressed through enhanced body surveillance and body shame (John & Ebbeck, 2008; Overstreet & Quinn, 2012). This is problematic because increased body surveillance and body

shame have been found to be associated with a variety of negative outcomes such as diminished performance on demanding tasks (Fredrickson, Roberts, Noll, Quinn, & Twenge, 1998), body dissatisfaction (Smolak & Murnen, 2008), disordered eating (e.g., Fitzsimmons-Craft, Bardone-Cone, & Kelly, 2011), and lower psychological well-being (Sinclair & Myers, 2004). In contrast, women who believe they have some degree of control over their appearance generally report less body monitoring and fewer feelings of shame toward their bodies (Taylor, 1989). However, it is important to note that the associations that control beliefs have with various outcomes appear to be mixed (e.g., McKinley & Hyde, 1996; Sinclair & Myers, 2004; Taylor, 1989). For example, studies have found that women who believe they are capable of controlling their weight have higher rates of body dissatisfaction and eating disorder symptoms (e.g., Furnham & Atkins, 1997), whereas other research has found no connection between control beliefs and body dissatisfaction (e.g., McKinley, 1999).

Diminished feelings of global self-worth are consistently found among individuals who have a heightened awareness of their own bodies (e.g., Lowery et al., 2005). For example, women who closely monitor their bodies and are aware of external standards of beauty are likely to try and reduce any discrepancies between themselves and these standards but this is extremely difficult given the unrealistic standards of beauty that women often internalize. The failure of women to meet their standards of beauty may lead them to experience feelings of body shame which may, in turn, diminish their feelings of worth (Fredrickson & Roberts, 1997; McKinley & Hyde, 1996). Previous research concerning the association between objectified body consciousness and low self-esteem has generally focused on global self-esteem without considering domain-specific self-esteem (i.e., self-evaluations within a particular area of life such as attractiveness). Consideration of domain-specific self-esteem may be important when considering the consequences of objectified body consciousness because global feelings of self-worth may not represent all domains of the self equally (Gentile, Grabe, Dolan-Pascoe, Twenge, Wells, & Maitino, 2009). Previous studies have suggested that measuring domain-specific self-esteem provides a more accurate understanding of the connection between performance in a particular domain (e.g., academic success) and attitudes about the self in that same domain (e.g., academic self-esteem; Marsh & Craven, 2006; Valentine & DuBois, 2005). This suggests the possibility that women who have a heightened awareness of their bodies may be especially at risk for low levels of appearance self-esteem.

Overview and Predictions

The purpose of the present study was to examine the degree to which the components of objectified body consciousness mediated the association between appearance contingent self-worth and appearance self-esteem. We predicted that appearance contingent self-worth would be negatively associated with appearance self-esteem (e.g., Overstreet & Quinn, 2012). That is, we believed that women who possessed appearance contingent self-worth would report feeling less positively about their appearance. This prediction is consistent with findings suggesting that women with appearance contingent self-worth experience negative self-perceptions of attractiveness which puts these women at a greater risk for dysphoric symptoms and eating disorders (Gentile et al., 2009; Harter, 1997).

We expected that the connection between appearance contingent self-worth and appearance self-esteem would be mediated by components of objectified body consciousness. That is, we believed that the connection between appearance contingent self-worth and appearance self-esteem would be largely due to women with appearance contingent self-worth becoming preoccupied with

their physical appearance which, in turn, would be associated with lower appearance self-esteem. Consistent with previous research (e.g., Patrick et al., 2004), we expected appearance contingent self-worth to be positively associated with body surveillance and body shame but negatively associated with control beliefs. We believe this connection is due, at least in part, to women with appearance contingent self-worth being so preoccupied with their appearance that they will begin monitoring their bodies very closely, experience higher levels of body shame when they fail to meet their appearance standards, and believe that they have less control over their appearance. In turn, we expected that greater body surveillance and body shame as well as fewer control beliefs would be associated with lower levels of appearance self-esteem. The rationale for this prediction was that women who are highly aware of their physical appearance would be more likely to feel poorly about themselves in domains of their lives connected to their appearance.

Method

Participants and Procedure

Participants were 465 female undergraduates at a university in the Midwestern region of the United States who were enrolled in psychology courses and participated in return for partial fulfillment of a research participation requirement. Participants completed measures concerning appearance contingent self-worth, objectified body consciousness, appearance self-esteem, and self-esteem – along with other measures that are not directly relevant to self-esteem or objectified body consciousness (e.g., Big five dimensions of personality, psychological adjustment) and were never intended to be part of the present study – via a secure website. The mean age of the participants was 19.81 years ($SD = 3.94$) and their racial/ethnic composition was 80% White, 8% Black, 3% Hispanic, 3% Asian and 6% other.

Measures

Appearance contingent self-worth. Appearance contingent self-worth was measured with the Physical Appearance subscale of the Contingencies of Self-Worth Scale (Crocker et al., 2003; Crocker & Wolfe, 2001). The Physical Appearance subscale of the Contingencies of Self-Worth Scale consists of five items (e.g., “When I think I look attractive, I feel good about myself”) to which participants provide ratings of agreement on scales ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Breines et al. (2008) reported a Cronbach’s alpha of .81 for this measure. The Cronbach’s alpha was .72 for the present sample. Previous studies have provided support for the validity of this scale by showing that it is positively associated with constructs such as negative affect and self-esteem instability (e.g., Breines et al., 2008; Vonk & Smit, 2012).

Body surveillance. The Surveillance subscale of the Objectified Body Consciousness scale (McKinley & Hyde, 1996) was used to measure body surveillance. This subscale consists of 8 items (e.g., “I rarely think about how I look”) to which participants rated items using scales that ranged from 1 (*strongly disagree*) to 6 (*strongly agree*) with higher scores indicating higher levels of body surveillance.¹ McKinley and Hyde (1996) reported a Cronbach’s alpha of .89 and the Cronbach’s alpha was .80 for the present study. This subscale has been found to have a positive correlation with

public self-consciousness and a non-significant relationship with private self-consciousness (McKinley & Hyde, 1996).

Body shame. The Body Shame subscale of the Objectified Body Consciousness scale (McKinley & Hyde, 1996) was used to measure body shame. This subscale consists of 8 items (e.g., “I feel ashamed of myself when I haven’t made the effort to look my best”) which are rated in the same manner as the Surveillance subscale described above such that higher scores indicate higher levels of body shame. McKinley and Hyde (1996) reported a Cronbach’s alpha of .75 and the Cronbach’s alpha was .82 for the present study. Body shame has been found to have a negative correlation with body esteem in past research (e.g., McKinley & Hyde, 1996).

Control beliefs. The Control Beliefs subscale of the Objectified Body Consciousness scale (McKinley & Hyde, 1996) was used to measure beliefs about having control over one’s body. This subscale consists of 8 items (e.g., “I think a person can look pretty much how they want to if they are willing to work at it”) which are rated in the same manner as the Surveillance subscale described above such that higher scores indicate belief that the body can be controlled with enough effort. McKinley and Hyde (1996) reported a Cronbach’s alpha of .72 and the Cronbach’s alpha was .71 for the present study. This subscale has been found to be positively associated with dieting behavior (McKinley & Hyde, 1996).

Appearance self-esteem. Appearance self-esteem was measured using the Appearance subscale of the State Self-Esteem Scale (Heatherton & Polivy, 1991). This subscale consists of six items (e.g., “I feel satisfied with the way my body looks right now”) that participants rated using scales that ranged from 1 (*not at all*) to 5 (*extremely*). Bessenoff (2006) reported a Cronbach’s alpha of .85 and the Cronbach’s alpha was .86 for the present study. Previous research has found appearance self-esteem to be positively associated with satisfaction with body size and negatively associated with dieting behavior (Heatherton & Polivy, 1991).

Body mass index. Participants reported their height (in feet and inches) and weight (in pounds). The body mass index (BMI) of participants was calculated using the formula $BMI = kg/m^2$. Previous research has shown that self-reported height and weight are a reliable means for calculating BMI (e.g., Rosenblum & Lewis, 1999). The mean BMI for our participants was 22.89 ($SD = 4.07$).

Global self-esteem. The Rosenberg Self-Esteem Scale (Rosenberg, 1965) is a 10-item measure of global self-esteem (e.g., “On the whole, I am satisfied with myself”). Participants were instructed to complete the instrument according to how they typically or generally feel about themselves. Responses were made on scales ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). This instrument is regarded as a well-validated and reliable measure of global self-regard (e.g., Blascovich & Tomaka, 1991). For example, this instrument has been shown to be internally consistent (e.g., $\alpha = .88$; Zeigler-Hill et al., 2013) and to be negatively correlated with outcomes such as depression and anxiety (Zeigler-Hill & Wallace, 2012). The internal consistency of this measure for the present study was $\alpha = .87$.

Data Analytic Approach

Our hypotheses were consistent with an indirect effects model such that the association between appearance contingent self-worth and appearance self-esteem was believed to be due, at least in part, to objectified body consciousness. Mediation hypotheses such as these are often tested using the causal steps approach that was proposed by Baron and Kenny (1986). This causal steps approach has been criticized for having a number of potential problems (e.g., low statistical power; Preacher & Hayes, 2004) which has led to the development of other methods to test indirect effects such as a bootstrapping technique (e.g., Hayes, 2009; MacKinnon, Lockwood, & Williams, 2004; Preacher & Hayes, 2004,

¹ Responses to the Objectified Body Consciousness Scale were provided using a 6-point scale rather than the 7-point scale that is typically used. This prevented participants from selecting a “neutral” response (see Tiggemann & Slater, 2001 for a similar approach). Also, we allowed participants to skip any items that were not applicable to them rather than providing them with a “not applicable” response for each item.

Table 1
Intercorrelations and descriptive statistics.

	1	2	3	4	5	6	7	8
1. Appearance contingent self-worth	–							
2. Body surveillance	.54***	–						
3. Body shame	.31***	.44***	–					
4. Control beliefs	–.08	–.15**	–.24***	–				
5. Appearance self-esteem	–.30***	–.40***	–.61***	.17**	–			
6. Global self-esteem	–.29***	–.31***	–.49***	.27***	.52***	–		
7. Body mass index	–.06	.13**	.38***	–.06	–.39***	–.06	–	
8. Age	–.11*	–.06	.01	.04	–.01	.08	.21***	–
<i>M</i>	4.85	3.97	2.70	4.44	3.31	3.96	22.86	19.81
<i>SD</i>	1.02	0.82	0.95	0.74	0.85	0.67	4.03	3.94

* $p < .05$.

** $p < .01$.

*** $p < .001$.

2008; Williams & MacKinnon, 2008). This bootstrapping technique involves creating an empirical representation of the population by continuously resampling from the empirical sample in order to mimic the original sampling process. For the current analysis, this resampling process was repeated 5000 times and the path coefficients were recorded for each of these resamples. The 5000 sample estimates of the indirect association were used to generate a 95% bias corrected confidence interval for the relative indirect effects that is considered significant if it excludes zero. We tested our multiple mediational hypotheses using an SPSS macro (Preacher & Hayes, 2008) that facilitates estimation of the indirect effect using a bootstrap technique to obtain confidence intervals. This approach allows us to assess the extent to which each of these three components of objectified body consciousness mediated the association between appearance contingent self-worth and appearance self-esteem in the presence of the other potential mediators (Preacher & Hayes, 2008). Body surveillance and body shame were positively correlated with each other and shared similar associations with appearance contingent self-worth and appearance self-esteem so using a multiple mediator model to simultaneously analyze the variables allowed us to distinguish the unique mediational capacities of these variables which may otherwise have been attributed to their overlap (Preacher & Hayes, 2008).

Results

The means, standard deviations, and intercorrelations for the measures employed in the present study are displayed in Table 1. The correlation matrix reveals that appearance contingent self-worth was positively correlated with body surveillance and body shame but it was negatively correlated with appearance self-esteem. Body surveillance was positively correlated with body shame but it was negatively correlated with control beliefs and appearance self-esteem. Body shame was negatively correlated with control beliefs and appearance self-esteem. Control beliefs were positively correlated with appearance self-esteem.

A multiple mediation analysis was conducted to determine whether body surveillance, body shame, and control beliefs mediated the association between appearance contingent self-worth and appearance self-esteem after accounting for a number of covariates that have been shown to be associated with appearance concerns including global self-esteem, body mass index, and age (e.g., Mendelson et al., 2000). The path coefficients are presented in Fig. 1 and summary statistics for the model are presented in Table 2. The R^2 for the model was .50 indicating that 50% of the variance in appearance self-esteem is explained by present model.²

² The R^2 for the model without the covariates (i.e., global self-esteem, body mass index, and age) was .39.

This approach revealed that the total direct effect of appearance contingent self-worth on appearance self-esteem was significant such that those with high levels of appearance contingent self-worth reported lower scores for their appearance self-esteem. The paths from appearance contingent self-worth to body surveillance and body shame were significant such that women who possessed high levels of appearance contingent self-worth reported greater body surveillance and body shame. In turn, both body surveillance and body shame were negatively associated with appearance self-esteem such that women who engaged in more body surveillance and experienced more body shame reported lower levels of appearance self-esteem. It is important to note that because this model considers these mediators simultaneously the significant indirect effects through body surveillance and body shame indicates that both of these mediators account for unique variance in the association between appearance contingent self-worth and appearance self-esteem (Preacher & Hayes, 2008). The path from appearance contingent self-worth to control beliefs was non-significant as was the path from control beliefs to appearance self-esteem. The association between appearance contingent self-worth and appearance self-esteem (i.e., the direct effect) was reduced to non-significant levels when body surveillance, body shame, and control beliefs were included in the model as potential mediators. The specific indirect effects of body surveillance and body shame revealed that both of these aspects of objectified body consciousness mediated the association between appearance contingent self-worth and appearance self-esteem as indicated by their bootstrapped 95% confidence intervals not containing zero. The indirect effect of control beliefs did not suggest mediation. It is important to note that two of the covariates we included in the model (i.e., global self-esteem and body mass index) were also associated with appearance self-esteem. However, similar mediational results emerged regardless of whether the covariates were included in the model or not.

Pairwise contrasts between the individual mediators were conducted to assess whether any of the mediators had a significantly stronger association with appearance self-esteem than the other potential mediators. The pairwise contrasts showed that the magnitude of the indirect effects for body surveillance and body shame was equal. That is, there was not a statistically significant difference in the strength of the association that body surveillance and body shame had with appearance self-esteem. However, pairwise contrasts comparing the indirect effects of body surveillance and body shame with control beliefs were significant suggesting that both body surveillance and body shame had significantly stronger associations with appearance self-esteem than was observed for control beliefs. These results show that women who base their feelings of self-worth on being physically attractive are more likely to engage in bodily surveillance and experience more body shame. This heightened body consciousness was, in turn, associated with experiencing lower levels of appearance self-esteem.

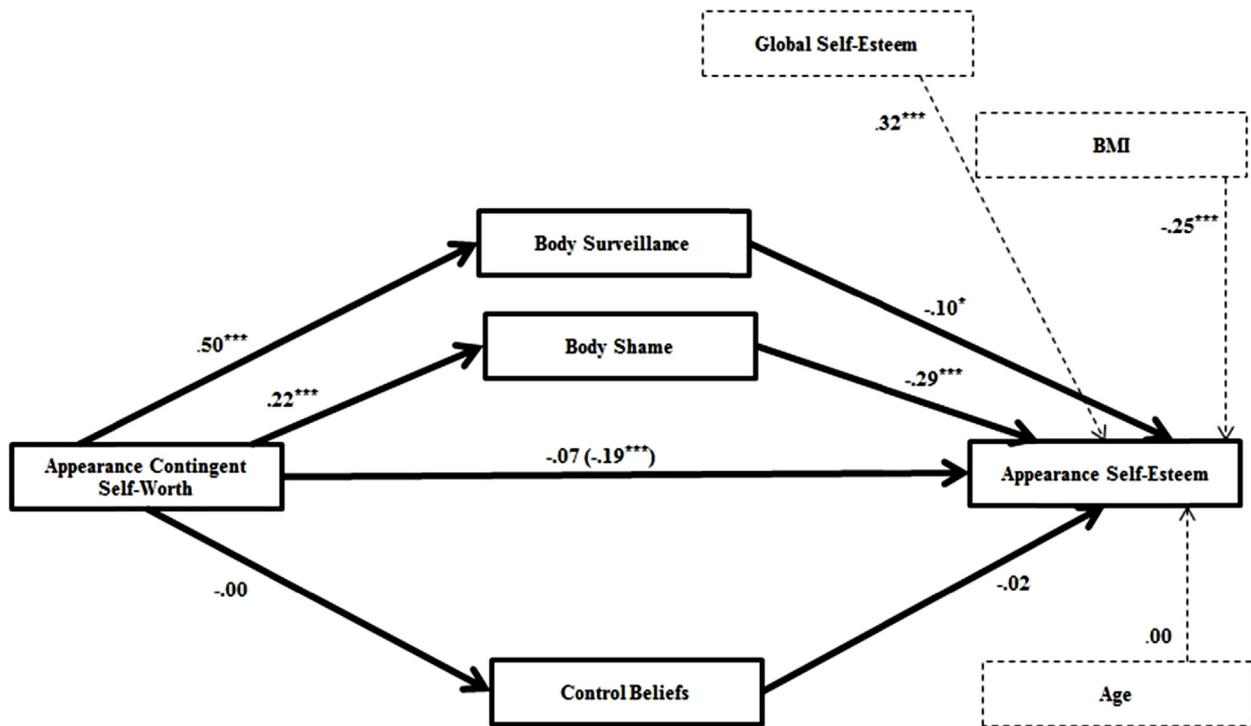


Fig. 1. Path coefficients for the multiple mediation model in which the association between appearance contingent self-worth and appearance self-esteem was mediated by body surveillance and body shame components of objectified body consciousness. The path coefficients are included for the direct effect (i.e., coefficient inside the parenthesis) and indirect effects (i.e., coefficient outside the parenthesis). The dashed lines and boxes represent the covariates that were included in the model. **p* < .05; ***p* < .01; ****p* < .001.

Table 2
Summary of multiple mediator model analysis of appearance contingent self-worth on appearance self-esteem through body surveillance, body shame, and control beliefs.

Independent variable (IV)	Mediators (M)	Effect of IV on M (a)	Effect on DV (b)	Direct effect (c')	Indirect effect (bootstrap 95% CI)		Total effect (c)
					Lower	Upper	
Appearance contingent self-esteem	Body surveillance	.50***	-.10*	-.07	-.17	-.07	-.19***
	Body shame	.22***	-.29***		-.10	-.01	
	Control beliefs	.00	-.02		-.10	-.04	
					.00	.01	
Global self-esteem ^a				-.25***			
Body mass index ^a				.32***			
Age ^a				.00			
<i>Contrasts</i>							
Body surveillance vs. body shame				-.05		.07	
Body surveillance vs. control beliefs				-.10		-.01	
Body shame vs. control beliefs				-.10		-.04	

Note: 95% bootstrap CI (confidence intervals) that do not include zero indicated significant mediation.

^a Covariates included in the model.

* *p* < .05.

*** *p* < .001.

Discussion

The present study examined the possibility that components of objectified body consciousness may mediate the association between appearance contingent self-worth and appearance self-esteem. Consistent with previous research (e.g., Patrick et al., 2004), we found that the association between appearance contingent self-worth and appearance self-esteem was mediated by body surveillance and body shame components of objectified body consciousness. This suggests that the association between appearance contingent self-worth and low appearance self-esteem may be explained, at least in part, by the tendency of women who base their feelings of self-worth on their appearance to monitor their bodies more closely and experience shame about their physical appearance. That is, women who believe that their value and worth as

a person is contingent on their physical beauty are more likely to be preoccupied with their appearance which is often manifested in them closely monitoring their bodies and experiencing shame when they fail to meet their standards of attractiveness. These surveillance processes and associated feelings of shame contribute to the low levels of appearance self-esteem that are reported by these women.

In contrast to the observed effects for body surveillance and body shame, control beliefs did not appear to play a significant mediational role in the relationship between appearance contingent self-worth and appearance self-esteem. That is, women who base their feelings of self-worth on their appearance did not differ from other women in terms of their beliefs about the control they have over their appearance. It is also important to note that control beliefs did not have a unique association with appearance

self-esteem. These findings are consistent with those of Patrick et al. (2004) which revealed that appearance contingent self-worth predicted greater increases in some (i.e., body surveillance, body shame) but not all (i.e., control beliefs) components of objectified body consciousness after viewing advertisements that included attractive models. That is, although women engaged in more body monitoring and experienced greater feelings of shame following this exposure, they did not report differences in their control beliefs. The findings from the present study along with previous research suggest that control beliefs concerning physical appearance are not closely tied to appearance self-esteem. We believe this may be explained by the mixed findings regarding this subscale and its relation to a variety of appearance-related outcomes including body image and internalization of social standards of attractiveness (e.g., Sinclair, 2006; Sinclair & Myers, 2004).

Identifying potential predictors of poor appearance self-esteem may inform the development of interventions designed to improve low levels of appearance self-esteem along with its associated negative consequences (e.g., negative affect, eating disorders; Gentile et al., 2009; Patrick et al., 2004). This is important because many interventions designed to improve appearance self-esteem actually target global self-esteem (e.g., O'Dea & Abraham, 2000) but research suggests this may not be the most effective approach because raising overall self-esteem does not necessarily lead to increases in domain-specific self-esteem (Baumeister, Campbell, Krueger, & Vohs, 2003). For example, interventions designed to boost overall self-esteem often fail to consider the important social context of women such that efforts geared toward simply teaching them that “everyone is different” may not be particularly useful if they base their self-esteem on meeting or exceeding societal standards of beauty (O'Dea & Abraham, 2000). Rather, interventions that directly target appearance self-esteem may be more effective particularly for young women because they experience high levels of social pressure concerning their appearance (Heinberg, Thompson, & Stormer, 1995). One possible intervention may be to focus on altering the extent to which feelings of self-worth are contingent on appearance by directly addressing unrealistic standards of beauty and the maladaptive behaviors in which women engage in an effort to meet these standards. For example, these interventions could be designed such that women learn to become more aware of their own behaviors (e.g., increasing body monitoring) and feelings (e.g., shame) when placed in vulnerable situations (e.g., attending social gatherings, looking at magazine advertisements).

The present study provides a more complete understanding of the relationship between appearance contingent self-worth and appearance self-esteem by considering various components of objectified body consciousness. These findings contribute additional evidence for the mediating role of body surveillance while also revealing the importance of considering body shame when considering the connection between appearance contingent self-worth and appearance self-esteem. However, there are several limitations that should be considered. The first limitation is that we cannot determine the causal relationship between appearance contingent self-worth, components of objectified body consciousness, and appearance self-esteem given the correlational nature of the data. Our underlying process model was that basing self-worth on appearance would lead to objectified body consciousness which, in turn, would influence appearance self-esteem. However, this causal sequence cannot be definitively established using the present data and alternative pathways or directionality between these variables may exist. For example, a study by Patrick et al. (2004) considered appearance self-esteem as a possible moderator in the association between appearance contingent self-worth and components of objectified body consciousness. Future research should employ experimental and longitudinal studies to gain a better understanding of the causal sequencing of these processes.

The second limitation is that the generalizability of the findings from the present study may be limited to White female undergraduate students living in the Midwestern region of the United States. Despite our limited ability to generalize these findings, it may be especially important to study this particular group because of the tremendous emphasis that women living in Western societies place on their physical appearance. Future research should extend the present findings to consider more diverse samples in terms of racial-ethnic background, age, sex, socioeconomic status, and nationality. The third limitation is that the present study relied exclusively on self-report measures. This limits our findings because it is possible that the results may have been influenced by distorted responses such as socially desirable responding or poor recall. This is especially important because self-report measures concerning objectified body consciousness only capture the perception of the participants which may differ from their actual experiences. For example, concerns about physical appearance are considered normative for women living in Western societies so these women may not be aware of the extent to which they are preoccupied with their bodies (Rodin, Silberstein, & Striegel-Moore, 1984). A related limitation is our use of the State Self-Esteem Scale which was originally developed to detect short-term changes in self-esteem following laboratory manipulations. We used this measure because of its domain-specific nature and the fact that measures of trait and state self-esteem are highly correlated in neutral settings such as those experienced by participants in the present study.

The findings of the present study suggest that body surveillance and body shame components of objectified body consciousness mediate the association between appearance contingent self-worth and appearance self-esteem. That is, body surveillance and body shame may help explain why women who base their feelings of self-worth on their appearance report relatively low levels of appearance self-esteem. These findings map onto previous findings that appearance contingent self-worth predicts negative body experiences such as heightened body consciousness and body image concerns (e.g., Breines et al., 2008; Zeigler-Hill & Noser, 2013) and that these negative body experiences, in turn, are associated with low levels of psychological well-being (Sinclair & Myers, 2004). These results extend our understanding of the connection between appearance contingent self-worth and appearance self-esteem by providing support for the body surveillance and body shame components of objectified body consciousness serving as possible mechanisms for this link.

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