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Self-Objectification as a Dissociative Experience: Making the Connection between Media Internalization and Self-Harm

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SELF-OBJECTIFICATION AS A DISSOCIATIVE EXPERIENCE: MAKING THE CONNECTION BETWEEN MEDIA INTERNALIZATION AND SELF-HARM

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Abstract

Society and the media put great emphasis on the female body as women are continuously objectified and reduced to mere objects to be looked at. Objectification may lead to the internalization of an outsider's perspective, known as self-objectification, which may have serious consequences for women's mental and physical health including eating disorders, low self-esteem, and depression. We anticipated that greater belief in sociocultural attitudes regarding the media would predict greater body surveillance and body shame which would then predict increased dissociation and subsequent feelings of depression and engagement in self-harm behaviors. A survey of 169 women was conducted. Results indicated that surveillance mediated the relationship between media variables and body shame. Additionally, dissociation mediated the relationship between surveillance and both depression and self-harm. Our research serves as the first indication that dissociation is inherently part of self-objectification and has important implications about the etiology of self-harming behaviors.

Self-Objectification as a Dissociative Experience: Making the Connection between Media Internalization and Self-Harm

In a society that is largely based on appearance, women are taught that how their bodies look may be more important than their emotional state or physical capabilities (McKinley, 2006). A major component of Fredrickson & Roberts' objectification theory (1997) suggests that women are socialized to evaluate themselves based on their bodies and/or their outer appearance. Objectification is literally defined as "separating out a person's body parts or sexual functions from the rest of her identity and reducing them to the status of mere instruments or regarding them as if they were capable of representing her" (Bartky, 1990, p. 26). This socially constructed view of the female body has belittled the value of a woman to that of an object (Fredrickson & Roberts, 1997). As a result, it is not uncommon for girls and women living in a sociocultural context of sexual objectification to experience objectification experiences ranging from subtle forms of sexual gaze and visual inspection from men to more serious incidents involving sexual harassment and violence (Sinclair & Myers, 2004).

In addition to one's personal experiences, the media also play a large role in socializing women to think and feel a certain way and is "undoubtedly the most powerful transmitter of societal beauty ideals" (Slater & Tiggemann, 2006, pg. 555). As one of the major methods in which objectifying culture spreads, the media portray women's bodies and their appearance in such a way that may cause women to self-objectify (Aubrey, 2006a, 2006b). Self-objectification is the tendency to value appearance-related characteristics over and above any other individual abilities or attributes (Fredrickson & Roberts, 1997). Self-objectification involves taking an outsider's view of oneself, also known as a third-person perspective (Fredrickson & Roberts, 1997). Eventually, an individual's self-worth and identity may be defined by physical

characteristics causing one's self-perception to be temporarily or permanently altered (Noll & Fredrickson, 1998).

Sexually objectifying media is a broad class of media exposure whose link to self-objectification has received limited empirical support; however, exposure to sexually objectifying television was shown to increase viewer's physical definitions of themselves which stressed external characteristics, such as their appearance, instead of the functions of their bodies (Aubrey, 2006b). Additionally, previous research has pointed to television and magazines as particular forms of media having a significant influence in promoting an unrealistic standard for women (Thompson & Heinberg, 1999).

Much of primetime television portrays women being judged for their physical attractiveness and sexual modesty (Tolman, Kim, Schooler, & Sorsoli, 2007), and according to the APA Task Force on the Sexualization of Girls (2007), nearly every form of media they studied showed significant evidence of the sexualization of women. This kind of media exposure which sexualizes female bodies is thought to be nearly unavoidable and is a major contributor to a person's objectified self-perception (Fredrickson & Roberts, 1997). For example, it has been shown that women who read appearance-based magazines are more likely to objectify themselves and their bodies while also being more prone to accepting the media's messages regarding the female body (Kim & Ward, 2004).

Consistent with the tenets of objectification theory, the sociocultural theory of body-image evaluation states that women's dissatisfaction with their bodies and physical appearance results from their tendency to adopt a "body as object" rather than "body as process" attitude (Morrison, Kalin, & Morrison, 2004). With such a significant amount of objectification in the media and such a large emphasis being paid to women's appearance, a number of sociocultural

constructs have been cited as potential risk factors for body image dissatisfaction among women including media internalization, media awareness, and perceived media pressures (Cafri, Yamamiya, Brannick, & Thompson, 2005). These constructs comprise the primary subscales of the Sociocultural Attitudes Towards Appearance Questionnaire-3 (SATAQ-3) which is used to measure a person's endorsement of societal appearance ideals and societal influences on body image (Thompson, van den Berg, Roehrig, Guarda, & Heinberg, 2004). Internalization is considered the incorporation and/or acceptance of a particular value which ultimately affects one's attitude (Cafri et al., 2005). Internalization of cultural standards of beauty is said to be an important component of sexual objectification experiences (Moradi & Huang, 2008). Calogero, Davis, and Thompson (2005) found that internalization of media ideals was a significant predictor of self-objectification, and they concluded that sexually objectifying images of women in the media may be integrated into one's self-perception. Thus, internalization is a likely factor involved in the constant viewing of oneself as a sexual object.

In contrast to internalization, awareness of media information is a construct which involves the simple knowledge that a specific standard exists but is not thought to affect a person's beliefs toward a subject (Cafri et al., 2005), in this case body image. A third construct is the pressure experienced from a society that expects individuals to look a certain way. Perhaps just the pressure of having to conform to a societal standard and the inability to do so is enough to activate feelings of self-objectification. The perceived pressure from both society and the media has been linked to body dissatisfaction, and Stice & Whitenton (2002) found it to be a greater predictor of dissatisfaction in adolescent girls than was internalization.

Studies have found that appearance pressure was linked indirectly with body shame through body surveillance (Lindberg, Grabe, & Hyde, 2007). As an inherent part of self-

objectification, body surveillance is a form of evaluation which involves continuous self-monitoring and has been suggested as a potentially adaptive strategy for women in order to avoid negative judgments by society (McKinley & Hyde, 1996). Shame, on the other hand, is not only negative feelings toward the body but also negative feelings regarding the self (McKinley & Hyde, 2006).

Originally developed as separate but similar ideas, body surveillance and body shame were more or less meant to measure an individual's reaction to cultural standards and as McKinley and Hyde (1996) suggest, "call attention to specific behaviors and beliefs that are related to dissatisfaction and emphasize the social constructions that encourage these behaviors and beliefs" (pg. 210). More recently, these two constructs have been considered specific dimensions or manifestations of self-objectification (Moradi, Dirks, & Matteson, 2005) and are viewed as having a causal relationship in that body shame is considered an outcome of body surveillance (Tiggemann & Lynch, 2001). In a number of studies, surveillance has been linked to body shame (Chen & Russo, 2010; McKinley & Hyde, 1996; Tiggemann & Kuring, 2004), and body shame has been found to be a significant mediator between body surveillance and eating disorders (Tiggemann & Slater, 2001). As part of a path analysis, Tiggemann & Kuring (2004) found that body shame mediated the relationship between self-objectification and clinically relevant outcome variables including greater disordered eating and more depressed mood. These findings have led researchers to believe that objectification theory may also be a way to understand how experiences of sexual objectification affect women's mental health, both as an immediate reaction and a long term consequence, as proposed in the original theoretical paper, (Fredrickson & Roberts, 1997). The consequences of objectification and ultimately self-

objectification can be broad and do not necessarily affect individuals in the same way or to the same extent (Monro & Huon, 2005).

Just as self-objectification is considered to be a psychological distancing from one's body (Calogero et al., 2005), it can be argued that women may also experience a level of detachment from their normal stream of consciousness. Therefore, one potential mental consequence of this disconnection between oneself and one's body is the development of dissociative tendencies (Murray & Fox, 2005). Dissociation is the lack of normal incorporation of thoughts, feelings, and experiences into one's memory and everyday stream of consciousness (Bernstein & Putnam, 1986). There are typically two types of dissociation, referred to as normal and pathological dissociation, that are thought to exist along a continuum. Normal dissociation includes acts of daydreaming and déjà vu while dissociation becomes pathologically classified when failure to integrate one's thoughts and feelings results in depersonalization and derealization (Mulder, Beatrais, Joyce, & Ferguson, 1998). Depersonalization is considered the non-delusional belief that one's physical self is no longer intact while derealization is the non-delusional belief that one's surroundings are no longer intact (Fleiss, Gurland, & Goldberg, 1975).

Despite the fact that dissociation is often used as an initial adaptive survival strategy for individuals under stress, long-term dissociation as a means of coping may lead to serious problems that may require clinical diagnosis (Banyard, Williams, & Siegel, 2001). In addition to being a general coping mechanism, dissociation may be the result of a particularly traumatizing experience. For example, Sanders and Giolas (1991) found that scores on the Dissociative Experiences Scale were significantly correlated with self-reported accounts of physical abuse or punishment, sexual abuse, psychological abuse, neglect, and negative home atmosphere. There was also a link between childhood stress and later dissociation among non-clinical populations of

college students (Sanders & Giolas, 1991). Among these precursors, the most common is sexual abuse (Chu & Dill, 1990), although there is also a strong association between dissociation and childhood trauma and self-injury (van der Kolk, Perry, & Herman, 1991). Despite the importance of trauma in the development of dissociation, it does not seem to be necessary for dissociation to occur (Briere, 2006).

Although research has examined dissociation's role in the development of eating disorders (Waller, Ohanian, Meyer, Everill, & Rouse, 2001), often caused by issues related to body image, no studies known to this author have explored or found a link between increased self-objectification (surveillance and shame) and increased dissociation. However, we believe the mere act of seeing oneself from an outsider's perspective can be conceptualized as a dissociative experience. Dissociation may share a commonality with self-objectification in that women who self-objectify tend to have a decreased awareness of their internal bodily states (Tiggemann & Kuring, 2004). Similar findings were reported by Tylka & Hill (2004) who found that both body surveillance and body shame were related to lower awareness of internal bodily states. Women may experience less body awareness, or less flow as it is often called, as a result of the persistent attention they are giving to their outer appearance (Fredrickson & Roberts, 1997) and the related lack of attention that is given to internal states. They may also be prone to dissociate as a way of escaping their body, a disconnection that has been referred to as body alienation or an out-of-body experience (Moradi & Huang, 2008).

A similar concept which has been looked at in relation to self-objectification is interoceptive awareness. In contrast to dissociation, interoceptive awareness is the awareness of one's physical and emotional states (Myers & Crowther, 2008). While interoceptive awareness is the conscious awareness of oneself and one's body, dissociation is a depersonalization toward

oneself (Waller et al., 2001). Based on Myers & Crowther's (2008) findings that interoceptive awareness partially mediated the relationship between self-objectification and disordered eating, it would be logical to assume that a potentially opposing construct to this awareness would be dissociation. Although low interoceptive awareness is thought to include a lack of awareness of sensations, such as hunger and satiation, it is also considered to involve a lack of awareness of one's emotional states (Myers & Crowther, 2008). This information combined with research done by Muehlenkamp and Saris-Baglama (2002) which found that internal awareness mediated the relationship between self-objectification and disordered eating led us to speculate that there may also be an underlying connection between dissociation and self-objectification, which is the primary focus of this study.

Whether a result of dissociation or the earlier mentioned objectification experiences, individuals have an increased chance of experiencing depressive symptoms. Depression is one of the most common mental consequences of self-objectification (Grabe, Hyde, & Lindberg, 2007; Szymanski & Henning, 2007; Tiggemann & Kuring, 2004) and is related to one's inability to overcome feelings such as body shame (Tiggemann & Kuring, 2004). Tiggemann & Kuring (2004) found that self-objectification led to surveillance which then increased body shame and ultimately led to increased depression. Similarly, Grabe and colleagues (2007) found that body surveillance was the common factor involved in the experience of body shame and subsequent depression. According to objectification theory, the act of self-objectification may increase one's risk for depression due to the negative emotions and body dissatisfaction that often arise when comparing one's body to idealized images (Muehlenkamp, Swanson, & Brausch, 2005). Thus, it is not surprising that simply having negative attitudes and feelings toward the body has been linked to increased depression in adolescents and adults (Orbach & Mikulincer, 1998).

Both depression (Briere & Gil, 1998) and dissociation (Gratz, Conrad, & Roemer, 2002) have been linked to an increased susceptibility of engaging in self-harm behaviors, with body alienation suggested as the most important predictor of such (Darche, 1990). Although there is extreme heterogeneity in the conceptualization of self-harm, researchers seem to agree that self-harm is a response to symptoms of psychological stress and a way of managing dissociation, feelings of helplessness, and anxiety (Shaw, 2002). Gratz (2006) defines self-harm as "the deliberate, direct destruction or alteration of body tissue without conscious suicidal intent, but resulting in injury severe enough for tissue damage to occur" (pg. 238). Although most often recognized in clinical populations, recent studies indicate that self-harm may be greater among non-clinical populations than originally thought. Not only is there an increasing incidence of self-harm among young adults (Kerr, Muehlenkamp, & Turner, 2010), there is a higher risk for self-harm among college students, with as many as 35% having had at least one instance of self-harm (Gratz, 2001).

Much like dissociation, self-harm is often discussed as a result of traumatic and abusive events in one's past (Klonsky, Oltmanns, & Turkheimer, 2003). However, self-harm is also considered to be an expression and a consequence of self-objectification. Shaw (2002) goes as far as suggesting that self-harm is a physical replication of the cultural objectification that women encounter. Furthermore, he believes self-harm is a woman's way of objectifying her own body as a way of replicating what has been done to her by society (Shaw, 2002). Muehlenkamp et al. (2005) found that self-objectification had an indirect effect on self-harm through its relationship with negative body regard and depressive symptoms, but no other studies have made this same connection. Based on these observations, it stands to reason that dissatisfaction with

one's appearance and the adoption of the concept of "body as object" may make it easier to harm oneself (Brausch & Muehlenkamp, 2007).

Just as self-objectification is a way of looking at oneself from the third person perspective (Morry & Staska, 2001), dissociation as a suggested precursor to self-harm (Gratz et al., 2002), can also be seen as a way of looking at oneself from an outsider's perspective. Thus, the action of self-harm may be the way individuals make their physical appearance coincide with their internal feelings of not meeting the standards set by society. Suyemoto (1998) contends that individuals who self-harm may need to have physical evidence of their emotional injury in order to tolerate and potentially justify their emotions. If women feel shame and disgust toward their bodies and begin to dissociate, harming themselves may also be a coping mechanism which allows for the management of their dissociation. Additionally, self-harm may be a way to relieve symptoms of dissociation (Shearer, 1994) and allow self-injurers to feel more "real" and alive (Liss & Polk, 2009). The current study was meant to assess the relationships among these constructs in hopes of gaining a better understanding of the possible consequences of women's media attitudes as they relate to their self-objectification, dissociative experiences, and psychological outcomes.

Beginning with the three media variables (media internalization, media pressures, or media information), a conceptual model was constructed (see Figure 1) to demonstrate the anticipated relationship among media and self-objectification variables leading to clinical outcomes including dissociation, depression, and self-harm. Relationships between variables in this model were tested through a series of mediation analyses. The current research aimed to replicate previous research in regard to the relationships between the media and self-objectification variables (i.e., the idea that objectifying media leads to body surveillance and

consequently body shame). We also aimed to advance self-objectification research by adding in dissociation as a new variable to better understand its role in the physical and mental health of women.

According to Calogero et al. (2005), media internalization predicted self-objectification. In order to replicate this finding as well as test whether media awareness and media pressures also predicted dimensions of self-objectification, mediation analyses were carried out. Based on related research which has found that body surveillance typically precedes shame (Moradi et al., 2005; Tiggemann & Kuring, 2004; Tylka & Hill, 2004), we hypothesized that the relationship between media internalization and body shame would be mediated by body surveillance. We also hypothesized that body surveillance would mediate the relationship between media pressures and body shame. Since media information, in the context of the SATAQ-3 measure, is considered an awareness of media ideals as opposed to an integration of beliefs as reflected in one's attitudes (Cafri et al., 2005), we believed that body surveillance would not significantly mediate the relationship between media information and body shame.

Ultimately, we believed that the experiences of self-objectification set in motion a number of mental and physical consequences. Since it is believed that self-objectification and dissociation, as separate entities, may be risk factors for depressive symptoms (Schumaker, Warren, Carr, Schreiber, & Jackson, 1995; Szymanski & Henning, 2007) and based on our conceptualized of self-objectification as a form of dissociation, we hypothesized that the relationship between body surveillance and depression would be mediated by dissociation. Although body shame and body surveillance are both constructs related to self-objectification, they are assessed separately, and shame is much less conceptually related to dissociation as

compared to surveillance. Therefore, we had no specific hypothesis about whether the relationship between body shame and depression would be mediated by dissociation.

Next, based on the known association between increased self-objectification and subsequent engagement in self-harm behaviors (Muehlenkamp et al., 2005), we hypothesized that the relationship between body surveillance and self-harm would be mediated by dissociation. As was true with depression, we had no specific hypothesis about whether the relationship between body shame and self-harm would be mediated by dissociation as well.

Method

Participants

One hundred and sixty nine women participated in the study. Participants ranged in age from 18 to 56 (M = 24.25, SD = 6.20). Eleven percent of participants were high school graduates, 37% had some college or an Associate's degree, 25% were college graduates, 14% had some graduate schooling, 10% had a master's level degree, and 3% possessed a doctoral degree. Participants were primarily Caucasian (93%) with an additional 1% identifying themselves as African American, 1% Asian, 1% Latina, 2% multiracial, and 2% other. The breakdown of their self-identified socioeconomic status was as follows: 3% poverty, 13% working class, 53% middle class, 25% upper-middle class, 1% wealthy, and 5% chose not to respond. Additionally, the majority of the sample identified as heterosexual (94%), although 3% identified as bisexual, 2% as homosexual, and 1% considered themselves "non-labeled." All participants were treated in accordance with APA ethical guidelines.

Measures

Background information. Women were asked to provide information regarding their age, education level, ethnicity, sexual orientation, and socioeconomic status.

Media attitudes. The general internalization (e.g., "I compare my body to the bodies of people who are on TV"), information (e.g., "TV commercials are an important source of information about fashion and 'being attractive"), and pressures (e.g., "I've felt pressure from TV or magazines to have a perfect body") subscales of the Sociocultural Attitudes Towards Appearance Scale-3 (SATAQ-3; Thompson et al., 2004) were used to assess participants' attitudes towards their bodies and acceptance of body ideals based on media (TV, magazines, movies) messages. Because the focus of this study was not related to the portrayal of athletes in the media, the athlete internalization subscale of the SATAQ-3 was not included. Participants responded to items on a scale ranging from 1 (*definitely disagree*) to 5 (*definitely agree*). Cronbach's alphas in the original study were .93 for general internalization and .94 for both the information and pressures subscales. In the present study, Cronbach's alphas were .94 for general internalization, .90 for information, and .94 for pressures.

Self-objectification. The surveillance (e.g., "During the day, I think about how I look many times") and body shame (e.g., "I feel ashamed of myself when I haven't made the effort to look my best") subscales of the Objectified Body Consciousness Scale (OBCS; McKinley & Hyde, 1996) were used to assess the extent to which participants viewed their bodies as an outsider and the level of shame they experienced when their bodies do not conform to society's standards. The control subscale of the OBCS was not included as it is traditionally used in relation to eating attitudes (Mazzeo, Trace, Mitchell, & Gow, 2006), a topic that this study did not assess. Participants indicated their level of agreement with each statement on a scale from 1 (*disagree strongly*) to 6 (*agree strongly*). Cronbach's alpha in the original study was .79 for both the surveillance and body shame scales. The present study revealed Cronbach's alphas of .88 for surveillance and .85 for shame.

Dissociative tendencies. Degree of dissociation was measured using the Dissociative Experiences Scale (DES; Carlson & Putnam, 1986) which describes 28 situations that may happen in life and asks individuals to assign a percentage (*0-100% on a 10-point scale*) for the frequency with which they experience each situation while they are not under the influence of drugs or alcohol (e.g., "Some people have the experience of driving a car and suddenly realizing that they don't remember what has happened during all or part of the trip"). Mean scores from 15 and above (Foote, Smolin, Kaplan, Legatt, & Lipschitz, 2006) to 30 or above (Carlson & Putnam, 1993) have been cited as high dissociation scores, and both cut-offs were used in this study. Cronbach's alpha was .84 in the original study and .91 in the present study.

Depressive symptoms. Designed to measure depressive symptoms in the general population, the 20-item Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977) was used to assess the frequency of depressive symptoms that participants experienced in the previous week on a scale ranging from 1 (*rarely or none of the time*) to 4 (*most or all of the time*; e.g., "I felt hopeless about the future."). Scores over 16 are interpreted as clinically significant (Breslau, 1985). Cronbach's alpha was .80 in the original study and .94 in the present study.

Deliberate self-harm. To assess a variety of self-harm behaviors, the Deliberate Self-Harm Inventory was used (DSHI; Gratz, 2001). Only intentional self-harm behaviors were examined. These were defined as "deliberate, direct destruction or alteration of body tissue without suicidal intent, but resulting in injury severe enough for tissue damage (e.g., scarring) to occur" (p. 255). Participants were given statements to which they responded yes or no (e.g., "Have you ever intentionally cut your wrist, arms, or other area(s) of your body (without intending to kill yourself?)"). A sum was calculated for the total number of ways a person had

harmed themselves during their lifetime. Cronbach's alpha was .82 in the original study and .77 in the present study.

Procedure

All participants completed an anonymous survey through the SurveyGizmo website after being recruited via the social networking site Facebook. If participants indicated that they were under 18 years of age, they automatically skipped to the debriefing portion of the survey and their session ended. Participants were allowed to skip questions and/or terminate their session at any time. The survey took approximately 20 to 30 minutes to complete.

Results

The means, standard deviations, and ranges for participants' scores are found in Table 1. On average, participants had moderate levels of dissociation and depression. Thirty one percent of individuals scored in the clinical range for depression. Thirty-five percent scored in the range for high dissociation using 15 as a cutoff while 2% had scores of 30 or above. Self-harm was assessed as a dichotomous variable, and the mean score of .75 suggests that individuals, on average, engaged in less than one type of self-harm activity during their lifetime.

Table 2 shows the correlations among the measured variables. As expected, shame and surveillance were both positively correlated with all three media variables. Shame and surveillance were also positively correlated with dissociation, but surveillance had a slightly stronger correlation. Shame and surveillance were also positively correlated with depression although, as expected, there was a stronger correlation between shame and depression. Consistent with our hypotheses, dissociation was positively correlated with both depression and self-harm.

Following the procedures outlined by Baron and Kenny (1986), hypothesized mediation effects were tested using a 4-step procedure: In step 1, regression was used to test whether the independent variable was correlated with the dependent variable. In step 2, regression was used to test whether the independent variable was correlated with the mediator. Step 3 involved using regression to determine whether the independent variable and the mediator were predictors of the dependent variable. In order to establish full mediation in step 4, the effect of the independent variable on the dependent variable controlling for the mediator had to be non-significant. This required entering the potential mediator in block one and the independent variable in block two of the regression analysis. If the effect of the independent variable on the dependent variable decreased but remained a significant predictor, then the relationship between the variables was indicative of partial mediation. Full or partial mediation was confirmed only if the Sobel follow-up test was significant.

The first set of analyses aimed to determine if surveillance mediated the relationship between internalization and body shame. Internalization significantly predicted both body shame, $R^2 = .33$, $F(1, 167) = 81.41$, $p < .001$, and surveillance, $R^2 = .48$, $F(1, 167) = 154.45$, $p < .001$. A third regression analysis was computed using both internalization and body surveillance to predict body shame. Surveillance was entered in the first block and significantly predicted body shame, $R^2 = .33$, $F(1, 167) = 82.05$, $p < .001$. In the second block, internalization was entered, and it remained a significant predictor of body shame above and beyond the effects of surveillance, $R^2 = .39$, $F(2, 166) = 52.65$, $p < .001$. A Sobel test indicated that the decrease in prediction for internalization was significant, demonstrating that there was, in fact, partial mediation, Sobel $z = 3.84$, $p < .001$. Figure 2 displays the results for the series of regression equations used to test the model.

The next set of analyses used media pressures in place of media internalization to determine if surveillance mediated the relationship between pressures and body shame. Pressures significantly predicted both body shame, $R^2 = .30$, $F(1, 167) = 72.05$, $p < .001$, and surveillance, $R^2 = .33$, $F(1, 167) = 83.16$, $p < .001$. A third regression analysis was computed using both pressures and surveillance to predict body shame. When surveillance was entered in the first block, it significantly predicted body shame, $R^2 = .33$, $F(1, 167) = 82.05$. In the second block, pressures was entered, and it remained a significant predictor of body shame above and beyond the effects of surveillance, $R^2 = .40$, $F(2, 166) = 55.49$, $p < .001$. A Sobel test indicated that the decrease in prediction for media pressures was significant, Sobel $z = 4.55$, $p < .001$, confirming the partial mediation. Figure 3 shows the results for this series of regression analyses.

A third media variable, media information, was tested as described above to determine if surveillance mediated the relationship between media information and body shame. Media information significantly predicted both body shame, $R^2 = .16$, $F(1, 166) = 32.08$, $p < .001$, and surveillance, $R^2 = .28$, $F(1, 166) = 64.15$, $p < .001$. In the third and fourth steps, a regression analysis was carried out using media information and body surveillance to predict body shame. Surveillance was entered in the first block and significantly predicted body shame, $R^2 = .34$, $F(1, 166) = 84.89$, $p < .001$. Media information was entered in block 2, and it became a non-significant predictor of body shame above and beyond the effects of surveillance, $R^2 = .35$, $F(2, 165) = 44.61$, $p < .001$, indicating full mediation. A Sobel test confirmed a significant decrease in prediction for media information once the effects of surveillance were controlled for, Sobel $z = 5.23$, $p < .001$. Figure 4 shows the relationships among the three variables.

The remaining analyses looked at dissociation as a potential mediator. The first goal was to determine if dissociation mediated the relationship between body surveillance and depression.

Body surveillance significantly predicted both depression, $R^2 = .06$, $F(1, 167) = 11.23$, $p = .001$, and dissociation, $R^2 = .05$, $F(1, 167) = 7.96$, $p = .005$. An additional regression analysis was carried out using body surveillance and dissociation to predict depression. Dissociation was entered in the first block and significantly predicted depression, $R^2 = .06$, $F(1, 167) = 11.37$, $p = .001$. Surveillance was entered in the second block, and it remained a significant predictor of depression above and beyond the effects of dissociation, $R^2 = .10$, $F(2, 166) = 9.68$, $p = .007$, indicating partial mediation among the variables. A Sobel test indicated that partial mediation was actually present, Sobel $z = 1.97$, $p = .05$. See Figure 5 for interrelationships among these variables.

The next set of analyses was run to determine if dissociation mediated the relationship between body shame and depression. Regression analyses showed that body shame significantly predicted both depression, $R^2 = .15$, $F(1, 167) = 29.81$, $p < .001$, and dissociation, $R^2 = .05$, $F(1, 167) = 7.78$, $p = .006$. The third analysis using dissociation as a predictor of depression (in block one) was also significant, $R^2 = .06$, $F(1, 167) = 11.37$, $p = .001$, and in step 4, body shame was entered in block two and remained a significant predictor of depression, $R^2 = .18$, $F(2, 166) = 18.45$, $p < .001$. The Sobel test did not meet traditional levels for statistical significance, Sobel $z = 1.85$, $p = .06$, so dissociation was not supported as a mediator for the relationship between body shame and depression. Results of these analyses can be seen in Figure 6.

Next, dissociation was tested as a mediator between surveillance and self-harm. Body surveillance significantly predicted both self-harm, $R^2 = .02$, $F(1, 167) = 4.16$, $p = .04$, and dissociation, $R^2 = .05$, $F(1, 167) = 7.96$, $p = .005$. Additionally, in step 3, dissociation (entered in block one) was a significant predictor of self-harm, $R^2 = .05$, $F(1, 167) = 8.64$, $p = .004$. However, in step 4, body surveillance (entered in block two) was no longer a significant

predictor of self-harm, $R^2 = .06$, $F(2, 166) = 5.44$, $p = .005$, suggesting full mediation. However, the Sobel test did not meet traditional levels for statistical significance, Sobel $z = 1.89$, $p = .06$. Results for this series of regression analyses can be seen in Figure 7.

The last set of analyses aimed to determine if dissociation mediated the relationship between body shame and self-harm. Body shame significantly predicted both self-harm, $R^2 = .11$, $F(1, 167) = 20.49$, $p < .001$, and dissociation, $R^2 = .05$, $F(1, 167) = 7.78$, $p = .006$. A third regression analysis was computed using both body shame and dissociation to predict self-harm. Dissociation was entered in the first block and significantly predicted self-harm, $R^2 = .05$, $F(1, 167) = 8.64$, $p = .004$. In the second block, body shame was entered, and it remained a significant predictor of self-harm above and beyond the effects of dissociation, $R^2 = .13$, $F(2, 166) = 12.78$, $p < .001$. The follow-up Sobel test to determine if there was significant partial mediation did not meet traditional levels for statistical significance, Sobel $z = 1.70$, $p = .09$. Figure 8 shows the results from this series of analyses.

Discussion

Similar to what has been found in previous research, surveillance served as a mediator between media internalization and body shame (Calogero et al. 2005; Tiggemann & Lynch, 2001). The significant partial mediation shows that increased media internalization leads to increased body shame partially through the act of surveying one's body which is similar to research by Moradi et al. (2005) which showed that internalization of media ideals explained a significant portion of the variance in both body surveillance and body shame. Surveillance appears to be both a consequence of media internalization and a precursor to body shame, mediating the relationship between the two. This supports our hypothesis that media

internalization is an important component involved in the increased body surveillance and body shame of women.

Surveillance was also found to be a significant partial mediator between media pressures and body shame, which supported our original hypothesis. The increased pressure of being expected to conform to media ideals predicted both increased body surveillance and body shame. This indicates that pressure to conform, like media internalization, leads to body shame partially through constant monitoring of one's body. It may be that media internalization is sufficient but not necessary for surveillance and shame to occur and simply the pressure of feeling the need to change or alter one's body is enough to activate consistent body monitoring and shame.

Stice and Bearman (2001) found that perceived pressure predicted internalization and both predicted body dissatisfaction, which would suggest that pressure comes before internalization. Although Tylka and Hill (2004) suggested that body shame can arise as a result of perceived pressure without engaging in body surveillance, our results point to body surveillance as being involved, at least to some extent, in order to cause feelings of body shame. In the future, research should use more complex analyses to better understand the causal pathways between these variables.

Our results also indicated that body surveillance was a significant mediator between media information and body shame, which does not support our hypothesis. We believed that there would not be a mediating effect of body surveillance on media information and body shame because we felt media internalization, or at the very least pressure from the media, was necessary to provoke feelings of body surveillance and body shame based on the greater emphasis of internalization and pressure in recent studies, especially related to the internalization of the "thin-ideal" as it relates to body dissatisfaction and eating disorders (Morry & Staska,

2001; Thompson & Stice, 2001). However, our finding is closely related to what was found in a 2-year panel study assessing the role of body surveillance as a mediator between media exposure and body shame; Aubrey (2007) found that body surveillance partially mediated the relationship between exposure to sexually objectifying media, including television and magazines, and body shame. The fact that this hypothesis was not supported in our study suggests that simply being exposed to sexually objectifying media is enough to cause individuals to engage in self-objectifying behaviors such as monitoring their bodies and eventually feeling shame. The significant full mediation was not expected, but this finding seems to suggest that a greater belief in media information leads to increased body shame entirely through body surveillance.

The importance of mere awareness as opposed to the more complex internalization and pressure variables may be explained by research related to individual's implicit attitudes. Implicit attitudes are unintentional and unconscious feelings that are under the control of an automatic process (Greenwald, McGhee, & Schwartz, 1998) which are thought to reflect one's exposure to cultural and societal images and messages in the environment (Vartanian, Herman, & Polivy, 2005). Therefore, individuals who are merely exposed to and are aware of sexually objectifying media may express explicit body attitudes as a result of their implicit attitudes toward this media.

One explanation for our findings may have to do with the sociocultural constructs themselves and the definitions that are given to them. Although distinctions are typically made between internalization of media and media pressures (Yamamiya, Cash, Melnyk, Posavac, & Posavac, 2005), some studies still refer to internalization as "the internalization of societal pressures," which suggests that internalization and pressures may be the same construct (Heinberg, Thompson, & Stormer, 1995). This may be why participants' mean scores for the

media internalization and media pressures subscales were so similar while their average media information score was smaller. Future research should make a clear distinction between the two concepts in order to accurately evaluate each component's influence on the manifestations of self-objectification.

The primary goal of the first three mediation analyses was to replicate the relationships between media and self-objectification variables found in prior research. These were necessary to lay the foundation for our research before proceeding with the remainder of the analyses needed to provide support for our conceptual model. The next overarching goal was to look at whether dissociation mediated the relationship between self-objectification variables and both clinical outcome variables. We predicted that dissociation would mediate the relationship between body surveillance and depression, however, we also looked at dissociation mediating the relationship between body shame and depression as an exploratory analysis. A significant partial mediation was found for the relationship between surveillance and depression indicating that our hypothesis was supported. This not only supports previous findings that increased levels of dissociation lead to increased depression (Banyard et al., 2001), it suggests that body surveillance, as a manifestation of self-objectification, and dissociation have similar qualities. Banyard et al. (2001) found that dissociation was a non-significant mediator between trauma exposure and depression. In comparing our results with these, it is interesting to see that dissociation was a significant mediator when looking at self-objectification and depression but was not a significant mediator between trauma and depression. More research in this area is needed to better understand our findings and why they may not match that of previous studies. Our exploratory analysis testing dissociation mediating the relationship between body shame and depression was non-significant.

The final set of analyses kept dissociation as the mediator but looked at the relationship between self-objectification variables and self-harm. Consistent with our hypothesis, surveillance led to increased dissociation which then led to higher self harm scores. However, the Sobel test was not significant, which indicated non-significant mediation. This may be a result of the extremely conservative nature of the Sobel test (MacKinnon, 2006). Additionally, the method of bootstrapping as an alternate way to follow-up results has been suggested as a better test because it makes no distributional assumptions (Preacher & Hayes, 2004); however, this method was out of the range of our statistical capabilities. Similarly, in our exploratory analysis, dissociation was a non-significant mediator in the relationship between shame and self-harm. The failure to find significant results in the final three analyses does not discredit the fact that self-objectification, dissociation, depression, and self-harm are interrelated, but future research using more sophisticated statistical analyses is necessary to determine the exact nature and extent of these relationships.

Based on our findings of non-significant mediation in regard to body shame, it is apparent that body surveillance is more strongly related to the act of dissociation as compared to body shame as both dissociation and surveillance involve being outside of one's body. This may also suggest that a person can feel bad about their body without taking an outsider's perspective, implying that although shame and surveillance are similar in that they are inherently part of self-objectification, they may operate differently with regard to dissociation such that shame is somehow bypassed. Noll and Fredrickson (1998) suggested that, in regard to eating disorders, actual shame may lead to dieting and abnormal eating but so might the anticipation of body shame or the threat of experiencing body shame. Perhaps surveillance is a necessary component in our model and the threat of feeling shame triggers dissociation as a precautionary strategy to

avoid shame. However, it seems that avoiding this shame may lead to worse consequences as a result.

The overall findings of our study have real implications for future self-objectification research. The idea that self-objectification, as a construct, is inherently a dissociative experience would suggest that self-objectification, itself, is a more complex process than some might believe. Self-objectification is clearly more than just looking at your body and feeling bad about what you see. It involves the much more complicated idea of both physically and mentally being outside of oneself. The mental consequences associated with dissociation such as depression and the physical consequences including self-harm are only two of the numerous outcomes that may stem from initial media beliefs.

The connection between objectification and the media is certainly not a new phenomenon, however, researchers have yet to look at the role the media plays in socializing women to self-objectify over long periods of time (Aubrey, 2006a). If consequences such as dissociation and depression can be predicted from experiences of self-objectification as found in this study, it would be beneficial to know whether consequences result over time or whether they are more of an immediate reaction to objectifying media. This would aid in the development of potential intervention techniques. It has been shown that, in an experimental setting, mere exposure to objectifying media can elicit the self-objectified state of an individual (Roberts & Gettman, 2004). Negative attitudes and psychological consequences may then follow.

While media is a form of entertainment, it appears that entertainment is coming at the expense of women's mental and physical health. Following the suggested pattern in Figure 1, internalization of media ideals may lead women to be overly concerned with their outer appearance and, when their appearance does not match up to what they see in the media, this

may lead to feelings of inadequacy, in other words, shame about oneself and one's body. Similarly, Fredrickson and Roberts (1997) have suggested that body surveillance may lead to body shame by emphasizing the discrepancy between one's own body and an internalized body ideal as shame is activated when individuals realize this discrepancy.

If the difference between one's actual body and that which they see in the media is great enough, women may begin to dissociate as a way of managing their feelings of inadequacy, or they may use dissociation as a "getaway" from the reality of having to deal with their own insecurities. While a potential coping technique in the short term (Banyard et al., 2001), long term dissociation, as suggested by surveying oneself as an outsider, may create a sense of permanent depersonalization in individuals, and they can become so far removed from themselves and their bodies that they begin to harm themselves as a way of managing their dissociation (Shaw, 2002). There seems to be a chain reaction among these variables which, if caught at an early stage, could prevent latter maladaptive behaviors. It is important to know the risk factors for these behaviors so that effective intervention, as mentioned earlier, can be implemented. Internalization of media images and messages is the only aspect of media which has been found to meet the criteria for a causal risk factor (Thompson & Stice, 2001). Therefore, preventing internalization by better educating women on the unrealistic standards set by the media has the potential to be a means of prevention.

From our findings, we are not suggesting that media inevitably causes self-objectification and self-objectification inevitably causes any particular set of outcomes. However, we are suggesting that objectifying media is a likely risk factor for experiences of self-objectification, and this self-objectification, manifested as body surveillance and body shame, likely increases the risk of dissociation, depression, and/or self-harm behaviors. Individuals may be at an even

greater risk of these negative consequences of self-objectification and dissociation if they have had prior trauma experiences or have been sexually or physically abused. Sexual abuse and sexual victimization are seen by some as risk factors for body shame and negative body image (Wenninger & Heiman, 1998). Kearney-Cooke and Striegel-Moore (1994) suggest that abuse victims see their bodies as a source of vulnerability and shame and may view their bodies as deficient. This seems to parallel the experiences of women who feel they do not live up to cultural standards and begin to self-objectify which leads us to believe that trauma survivors may be at an increased risk of self-objectifying, dissociating, and developing maladaptive behaviors as a result.

This study adds to the current literature by including dissociation as a new variable which is shown to significantly mediate the relationship between body surveillance and depression (Figure 5). This study provides a promising foundation for a study of these constructs using structural equation modeling, which would allow for the testing of multiple pathways among the media variables and the subsequent self-objectification and clinical outcomes simultaneously rather than over a series of independent mediation analyses. Additionally, this method would eliminate the necessary use of the Sobel test.

Aside from being unable to analyze the data using structural equation modeling, it is important to note that there were limitations to this study. Our sample was mostly Caucasian, making it difficult to generalize to other groups. Secondly, although this study was limited to women's experiences, studies have found that media internalization, in particular, predicts self-objectification in men as well (Morry & Staska, 2001). It would be interesting to study the relationships among these variables in men to see if the same patterns hold true.

Having established, in previous research, that trauma results in dissociation, future research on dissociative experiences should aim to better classify normal dissociation versus pathological dissociation while also looking at additional variables related to body image, body dissatisfaction, and even emotional investment in the body, as assessed by body investment, to better understand the role of dissociation in clinical as well as nonclinical populations. Additionally, due to the strong association between trauma experiences and dissociation (Briere, 2006; Chu & Dill, 1990), it would also be beneficial in future research to assess prior child abuse and sexual abuse to determine if dissociation works differently in women who have experienced trauma or neglect as a child compared to those who have not. Age is also an important factor as Cashel, Cunningham, Landeros, Cokley, and Muhammad (2003) found that older individuals are less influenced by the mass media. In the future, it would be useful to include age as a variable to determine whether young women have significantly different attitudes and behaviors regarding media ideals as well as differences in regards to mental and physical health consequences as compared to older women who may be more removed from current media standards or may simply not care as much as young adults. Additionally, Tiggemann & Lynch (2001) found that while body dissatisfaction remained relatively stable over time, self-objectification, body surveillance, appearance anxiety, and disordered eating decreased significantly with age.

Although eating behaviors were not a focus in this study, the significant positive relationship between media endorsement, based on SATAQ-3 scores, and eating disorders among patients found in prior research (Calogero, Davis, & Thompson, 2004) suggests that including a measure such as the Eating Attitudes Test (Garner & Garfinkel, 1979) might be a useful addition to future studies. Additionally, since dissociation is also related to eating attitudes

in a number of previous studies (Schumaker et al., 1995; Waller et al., 2001), assessing eating disorder symptomatology using this measure could aid in the extension of these findings.

Self-harm is probably the most difficult outcome variable to test among those used in this study. This is due to the absence of a common definition among researchers for what deliberate self-harm actually is (Gratz, 2001) and the inconsistent word choice that is used including, but not limited to, self-injury and self-mutilation. Another problematic issue in the assessment of self-harm is the lack of an empirically validated measure (Zlotnick, Shea, Pearlstein, Simpson, Costello, & Begin, 1996) which makes it difficult to compare studies in the area. We used the Deliberate Self-Harm Inventory (Gratz, 2001) based on its operational definition of self-harm and its high internal consistency, adequate test-retest reliability, and adequate construct, convergent, and discriminant validity. Although the measure has both a frequency and a dichotomous yes/no component, we focused on the presence or absence of each self-harm behavior as opposed to the frequency of self-harm which could have different clinical implications. Comparing this self-harm measure to others is not possible, at this point, because this measure was developed in response to the lack of an empirical measure for self-harm. Gratz (2001) suggests that future research use clinical interviews or specific examinations of psychological records to assess construct validity of the DSHI.

Overall, what we have found in this study is evidence that dissociation is not just an outcome of traumatic experiences and does not only exist in mentally unstable individuals. On the contrary, it is a potentially common occurrence among otherwise healthy women as is related to the objectification of their bodies. However, it should be noted that the moderate levels of depression in our sample may also be a contributing factor in regard to this finding as might a number of health-related variables which were not assessed. As this is the first study to report a

connection between self-objectification, as measured by body surveillance and shame, and dissociation, it not only adds to the literature, but it points out that a great many women are potentially at risk for experiencing dissociation due to the everyday, normative experience of self-objectification. These findings have the potential to aid in the development of new intervention techniques in hopes of decreasing women's likelihood of experiencing depressive symptoms and engaging in self-harm behaviors. For this to happen, the view of self-objectification as a serious consequence of exposure to and internalization of media images and messages must be acknowledged and partly attributed to cultural socialization of the idealized body image, which is unnecessarily rampant in our society. The fact that self-objectification is ultimately a dissociative experience suggests that there are components of this well-studied topic of objectification that are not well understood and other aspects which remain to be discovered.

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Table 1

Means, Standard Deviations, and Ranges for Measured Variables

	M	*SD*	Actual Range	Possible Range
SATAQ-3 Internalization	3.16	1.02	1 – 5	1 - 5
SATAQ-3 Pressures	3.24	1.09	1 – 5	1 - 5
SATAQ-3 Information	2.91	.88	1 - 4.78	1 - 5
OBCS Shame	3.04	1.03	1 – 6	1 - 6
OBCS Surveillance	3.97	.94	1.13 – 6	1 - 6
DES	10.42	8.15	0 - 38.21	0 - 100
CES-D	13.84	11.10	0 – 58	0 - 60
DSHI	.75	1.56	0 – 11	0 - 17

Note. SATAQ = Sociocultural Attitudes Towards Appearance Questionnaire; OBCS = Objectified Body Consciousness Scale; DES = Dissociative Experiences Scale; CES-D = Center for Epidemiological Studies Depression Scale; DSHI = Deliberate Self-Harm Inventory.

Table 2

Summary of Bivariate Correlations for Measured Variables

	1	2	3	4	5	6	7	8
1. SATAQ-3 Internalization	---							
2. SATAQ-3 Pressures	.73***	---						
3. SATAQ-3 Information	.63***	.59***	---					
4. OBCS Shame	.58***	.55***	.40***	---				
5. OBCS Surveillance	.69***	.58***	.53***	.58***	---			
6. DES	.16*	.27***	.18*	.20**	.22**	---		
7. CES-D	.29***	.25***	.27***	.39***	.25***	.25***	---	
8. DSHI	.21**	.21**	.18*	.33***	.16*	.32***	.22**	---

Note. n = 168. SATAQ = Sociocultural Attitudes Towards Appearance Questionnaire; OBCS = Objectified Body Consciousness Scale; DES = Dissociative Experiences Scale; CES-D = Center for Epidemiological Studies Depression Scale; DSHI = Deliberate Self-Harm Inventory; *p < .05; **p < .01; ***p < .001.

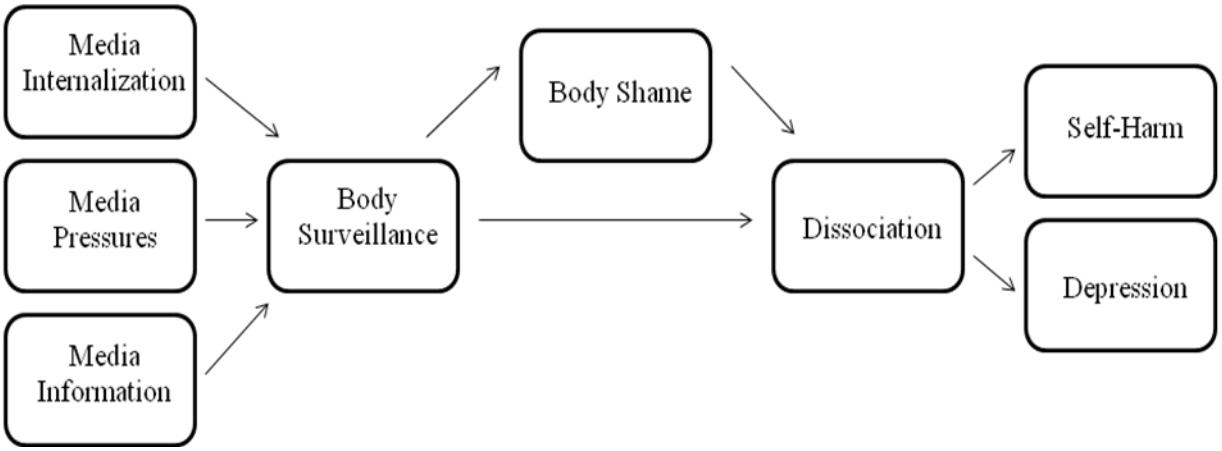

Figure 1. Conceptual model including media, self-objectification, and clinically relevant variables. The model was tested as a series of mediation analyses to understand the interrelationships among variables.

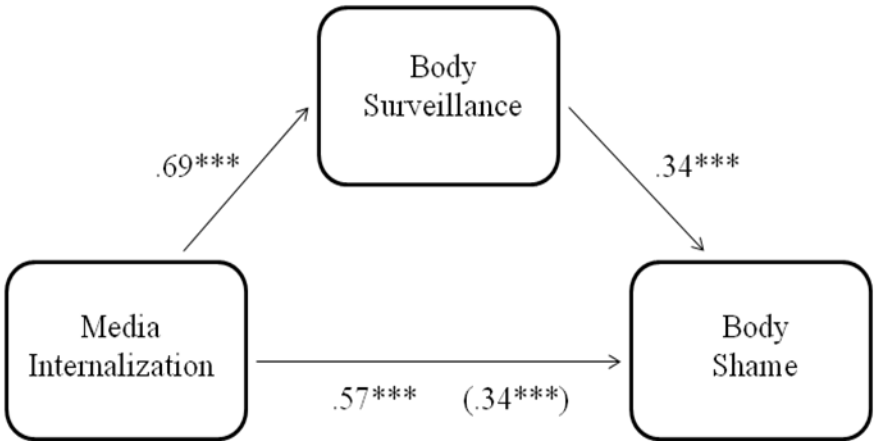

Figure 2. Standardized regression coefficients from the tests of significant partial mediation by surveillance of the relationship between media internalization and body shame. The standardized regression coefficient between internalization and shame controlling for surveillance is in parentheses; ***$p < .001$.

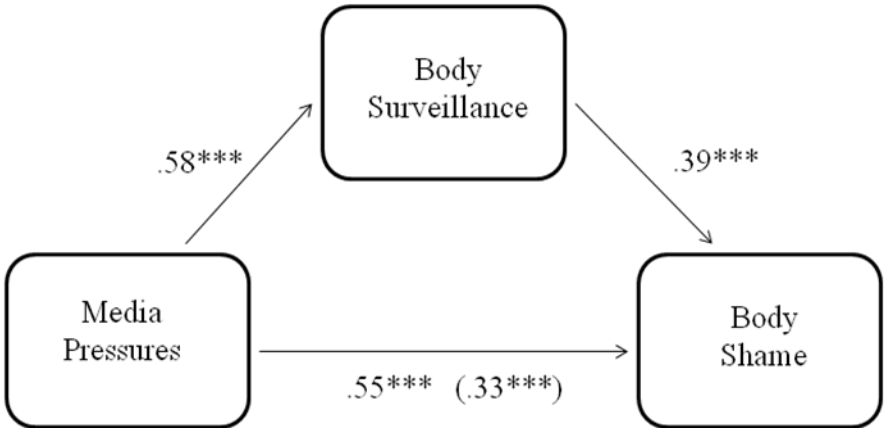

Figure 3. Standardized regression coefficients from the tests of significant partial mediation by surveillance of the relationship between media pressures and body shame. The standardized regression coefficient between pressures and shame controlling for surveillance is in parentheses; ***$p < .001$.

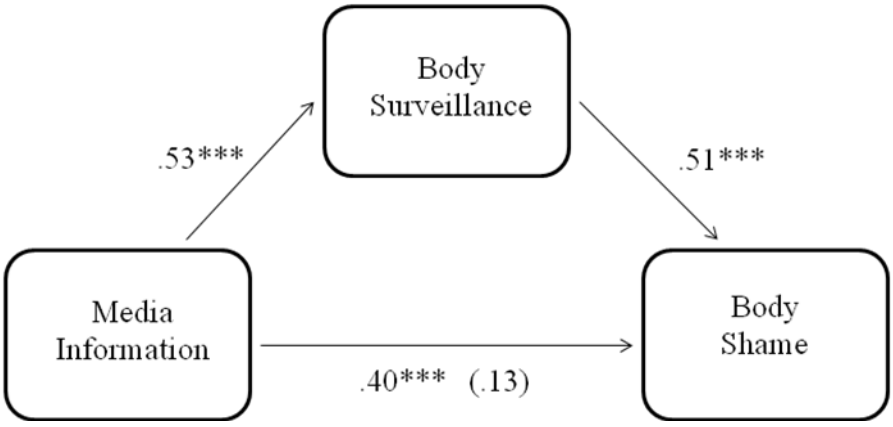

Figure 4. Standardized regression coefficients from the tests of significant full mediation by surveillance of the relationship between media information and body shame. The standardized regression coefficient between information and shame controlling for surveillance is in parentheses; ***$p < .001$.

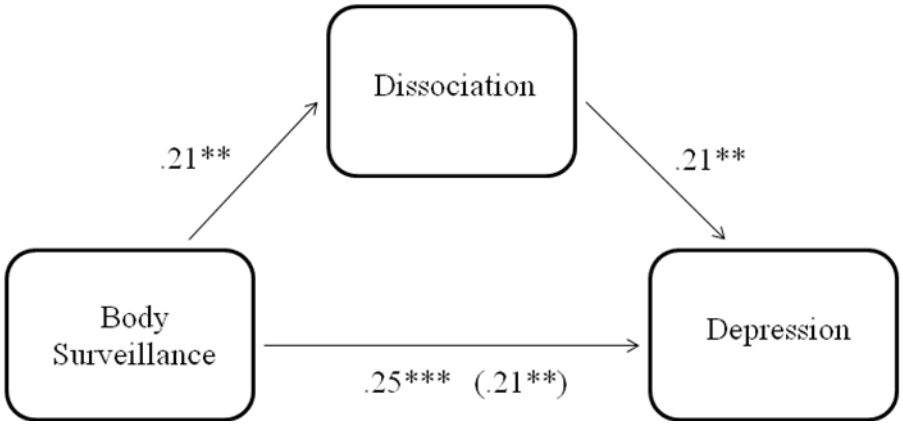

Figure 5. Standardized regression coefficients from the tests of significant partial mediation by dissociation of the relationship between body surveillance and depression. The standardized regression coefficient between surveillance and depression controlling for dissociation is in parentheses; $^{**}p < .01$; $^{***}p < .001$.

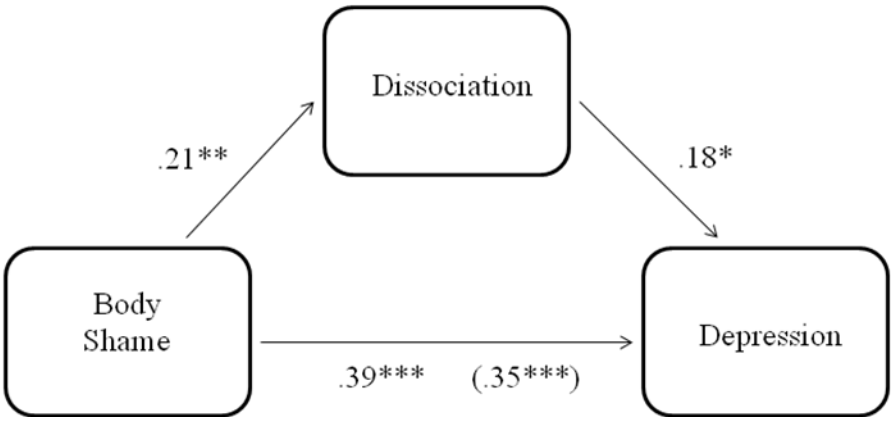

Figure 6. Standardized regression coefficients from the tests of non-significant partial mediation by dissociation of the relationship between body shame and depression. The standardized regression coefficient between shame and depression controlling for dissociation is in parentheses; *$p < .05$; **$p < .01$; ***$p < .001$.

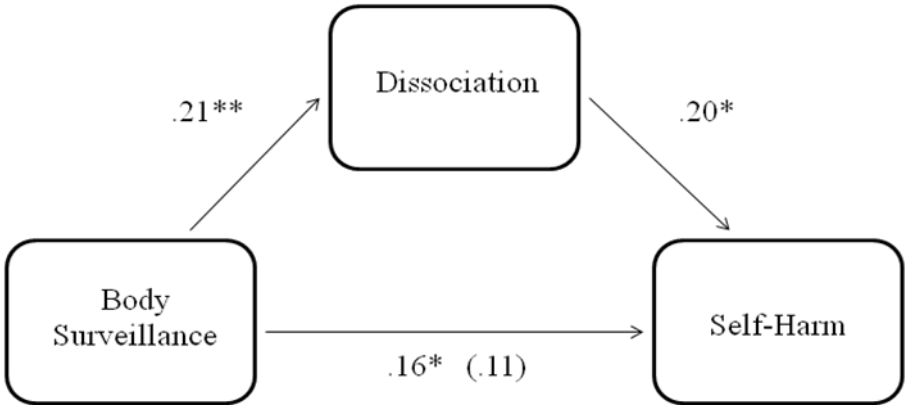

Figure 7. Standardized regression coefficients from the tests of non-significant mediation by dissociation of the relationship between body surveillance and self-harm. The standardized regression coefficient between surveillance and self-harm controlling for dissociation is in parentheses; *$p < .05$; **$p < .01$.

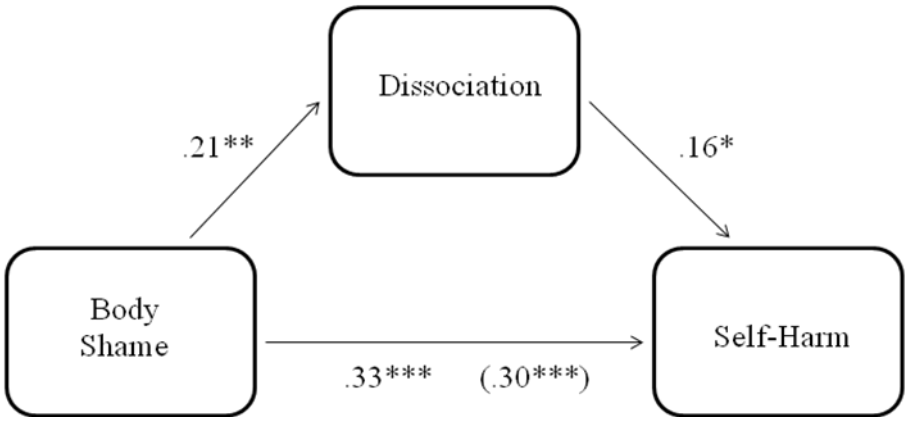

Figure 8. Standardized regression coefficients from the tests of non-significant mediation by dissociation of the relationship between body shame and self-harm. The standardized regression coefficient between shame and self-harm controlling for dissociation is in parentheses; *$p < .05$; **$p < .01$; ***$p < .001$.