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Examining social physique anxiety and disordered eating in college women. The roles of social comparison and body surveillance

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ABSTRACT

Social physique anxiety has been found to be associated with disordered eating. However, what is not yet known is what behaviors college women may engage in that strengthen this relation. In the current study, we examined two possible moderating factors, social comparison and body surveillance. We examined whether these moderators might also generalize to trait anxiety, as well. Participants were 265 women attending a Southeastern university. Social comparison (both general and appearance-related) and body surveillance were tested as moderators of the relation between social physique anxiety and disordered eating. Results indicated that general social comparison, appearance-related social comparison, and body surveillance significantly moderated this relation. Individuals who were high in social physique anxiety and who reported high levels of general or appearance-related social comparison or body surveillance reported much higher levels of disordered eating than those with high social physique anxiety and low levels of these behaviors. Results indicated that only the trait anxiety × body surveillance interaction was significant in identifying elevated disordered eating. Results provide information regarding who may experience high levels of disordered eating in association with social physique anxiety, which has clinical implications including the conceptualization of social comparison and body surveillance as safety behaviors.

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Introduction

College women are a group at risk for disordered eating, as between 4% and 9% of college women have diagnosable eating disorders (Hesse-Biber, Marino, & Watts-Roy, 1999; Keel, Heatherton, Dorer, Joiner, & Zalta, 2006; Pyle, Neuman, Halvorson, & Mitchell, 1991) and 34% to 67% experience disordered eating at subthreshold levels (e.g., Berg, Frazier, & Sherr, 2009; Franko & Omori, 1999; Hoerr, Bokram, Lugo, Bivins, & Keast, 2002; Krahn, Kurth, Gomberg, & Drewnowski, 2005; Mintz & Betz, 1988; Mintz, O'Halloran, Mulholland, & Schneider, 1997). One construct associated with disordered eating is social physique anxiety, a type of anxiety that occurs as the result or prospect of others negatively evaluating one's body (Hart, Leary, & Rejeski, 1989). For example, an individual may experience social physique anxiety when in a bathing suit at the beach, as she may perceive that this situation will possibly prompt others to evaluate her body in a negative way. Because of its focus on interpersonal evaluation and self-presentational concerns (Brunet, Sabiston, Dorsch, & McCreary, 2010; Hart et al., 1989), social physique anxiety may be a particularly relevant construct for college women given that both social interactions and weight and shape become increasingly important and salient in

the college setting (Bosari & Carey, 2001; Cash & Green, 1986; Cook-Cottone & Phelps, 2003; Fallon & Rozin, 1985; Fitzsimmons-Craft, 2011; Martin & Hoffman, 1993). Indeed, research has indicated that social physique anxiety is associated with disordered eating among undergraduate women (Cox, Lantz, & Mayhew, 1997; Diehl, Johnson, Rogers, & Petrie, 1998; Frederick & Morrison, 1998). Hayes and Ross (1987) purported that such anxiety and concerns about one's social image may lead women to engage in disordered eating in an attempt to embody society's ideal of beauty, the thin ideal. However, what is not yet known is what factors might exacerbate this relation. What behaviors might college women engage in that strengthen the relation between social physique anxiety and disordered eating, heightening risk for eating pathology? In this study, we examine how two potential moderators, social comparison and body surveillance, interact with social physique anxiety to identify elevated levels of disordered eating in a sample of college women.

Individuals likely manage social physique anxiety in various ways (Hart et al., 1989). Indeed, Kowalski, Mack, Crocker, Niefer, and Fleming (2006) found that females reported using various coping strategies to manage social physique anxiety, including behavioral avoidance (e.g., physically keep away from a stressor), short-term appearance management strategies (e.g., selectively display or monitor one's appearance), social support, cognitive avoidance (e.g., ignore the situation, try to forget about it), and acceptance.

Similar results were obtained by Sabiston, Sedgwick, Crocker, Kowalski, and Mack (2007). As put forth by these researchers, it may be that most of these strategies are effective in the short-term but rather ineffective in the longer term (Kowalski et al., 2006).

In fact, it may be that many of the strategies individuals use to cope with social physique anxiety can be conceptualized as safety behaviors, or actions that are intended to detect, avoid, escape, or endure a negative or feared outcome (Abramowitz, Deacon, & Whiteside, 2011; Salkovskis, Clark, & Gelder, 1996). Such behaviors have been found to be quite common in response to anxiety among those with anxiety disorders (Powers, Smits, & Telch, 2004; Sloan & Telch, 2002). For example, many individuals with obsessive–compulsive disorder (OCD) experience unwanted intrusive thoughts (e.g., doubt whether important paperwork was completed properly), and in response, may engage in checking as a type of safety behavior (i.e., engage in checking as a means to detect whether their feared outcome has occurred; Abramowitz et al., 2011). Such safety behaviors may momentarily reduce anxiety, but in general, tend to enhance anxiety in the long run given that they prevent disconfirmation of maladaptive thoughts and beliefs (Salkovskis, 1991; Thwaites & Freeston, 2005). By engaging in safety behaviors, individuals can diminish or eliminate their anxiety in the moment and seemingly prevent the occurrence of feared outcomes (e.g., completing important paperwork incorrectly); however, safety behaviors have the "paradoxical effect" of maintaining and/or strengthening the maladaptive thoughts that originally led to the anxiety (e.g., checking important paperwork many times is necessary; Abramowitz et al., 2011, p. 47). Thus, overall, safety behaviors help maintain anxiety since they prevent individuals from learning that a particular threat is non-existent or manageable.

Similarly, individuals may engage in various safety-type behaviors in an effort to manage social physique anxiety. For instance, Haase, Mountford, and Waller (2007) found that one way that individuals cope with social physique anxiety may be via engagement in body checking behavior. This refers to the repeated checking of one's body shape and/or weight and may involve behaviors such as repeatedly weighing oneself, touching one's collar bone to determine the protrusion of the bone, pinching excess skin, and measuring the circumference of one's thighs or forearms (Fairburn, Cooper, & Shafran, 2003; Shafran, Fairburn, Robinson, & Lask, 2004). Haase et al. (2007) purported that such behaviors could be construed as a safety behaviors in that they likely initially reduce anxiety but actually enhance it and are associated with negative outcomes more generally. Additional behaviors that individuals may use to cope with social physique anxiety and that may be construed as safety and checking behaviors include social comparison and body surveillance.

Social comparison

Social comparison theory (Festinger, 1954) forwards that humans engage in social comparison with others in order to understand how and where they fit into the world when objective standards are not available. Research has indicated that women frequently make appearance-related social comparisons (Leahey, Crowther, & Mickelson, 2007) and that such comparisons are generally in the upward direction (i.e., the individual compares themselves to someone they deem as more attractive or "better off" in some area; Morrison, Kalin, & Morrison, 2004). For instance, Leahey and colleagues (2007) found that more than 80% of comparisons made by women in their natural environment (i.e., in a naturalistic/ecological momentary assessment study) with others, including peers and models, are in the upward direction. These upward appearance comparisons generally result in negative outcomes, such as body dissatisfaction (Thompson, Heinberg, Altabe,

& Tantleff-Dunn, 1999), because of the gap that is typically created between the individual's actual and ideal selves (Cash & Szymanski, 1995).

Further, frequent engagement in appearance comparisons with peers has been found to be associated with disordered eating (e.g., Bamford & Halliwell, 2009; Stormer & Thompson, 1996; Thompson, Heinberg, & Tantleff, 1991). Research has indicated that general social comparison tendencies are associated with negative outcomes, as well (e.g., Gilbert & Meyer, 2003; Morrison et al., 2004). For instance, the general tendency to compare one's performance with others has been found to be significantly correlated with drive for thinness, body dissatisfaction, and bulimic attitudes (Gilbert & Meyer, 2003). Further, research has indicated that general social comparison tendencies are heightened among college women with eating disorder symptoms compared to their asymptomatic peers (Corning, Krumm, & Smitham, 2006). Given that prior research has found associations between both general and appearance-related social comparison tendencies and disordered eating, we chose to examine social comparison in these two ways (i.e., generally and specific to appearance) in this study. Of particular interest in the context of the current study is the fact that college campuses provide environments that lend themselves to engaging in social comparisons. That is, women are surrounded by many other women of approximately the same age with whom they interact with both directly (e.g., in class) and indirectly (e.g., passing another woman on campus) on a near constant basis (Lindner, Hughes, & Fahy, 2008).

Body surveillance

Objectification theory holds that within dominant American culture, the feminine body has been construed as an object to be looked at and gazed upon; thus, girls and women learn to view themselves from the perspective of the observer and to treat themselves as objects to be looked at (Fredrickson & Roberts, 1997; McKinley & Hyde, 1996). In addition to being made to feel like objects, women are given the message that they have the ability to control their bodies and that given the appropriate amount of effort, it is possible to comply with cultural standards of beauty (i.e., the thin ideal; McKinley & Hyde, 1996). The internalization of the "objectifying observer's" (Fredrickson, Roberts, Noll, Quinn, & Twenge, 1998) perspective of one's own body is known as self-objectification, which manifests itself in the act of body surveillance (Moradi & Huang, 2008) – a behavior that many women feel they must engage in constantly in order to ensure their compliance with the thin ideal (Gilbert & Thompson, 1996; McKinley, 2004; Thompson & Stice, 2001). The aforementioned behavior of body checking can be considered one specific example of the broader construct of body surveillance. It is via body surveillance that many women perceive there to be a discrepancy between their actual and ideal selves, and thus, such surveillance often results in various negative outcomes, including body dissatisfaction, low body esteem, and disordered eating (McKinley & Hyde, 1996).

Social comparison and body surveillance as moderators of the relation between social physique anxiety and disordered eating

We purport that individuals may use social comparison and body surveillance to cope with social physique anxiety, that these constructs may be conceptualized as safety behaviors, and that these comparison and surveillance behaviors strengthen the relation between social physique anxiety and disordered eating. In line with conceptualizations of the nature and function of safety behaviors (e.g., Abramowitz et al., 2011), we speculate that these