Body image inflexibility mediates the relationship between body image evaluation and maladaptive body image coping strategies

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Abstract

Body image inflexibility, the unwillingness to experience negative appearance-related thoughts and emotions, is associated with negative body image and eating disorder symptoms. The present study investigated whether body image inflexibility mediated the relationship between body image evaluation and maladaptive body image coping strategies (appearance-fixing and experiential avoidance) in a college and community sample comprising 156 females aged 18–51 years (M = 22.76, SD = 6.96). Controlling for recruitment source (college vs. community), body image inflexibility fully mediated the relationship between body image evaluation and maladaptive body image coping strategies. Results indicated that an unwillingness to experience negative appearance-related thoughts and emotions is likely responsible for negative body image evaluation’s relationship to appearance-fixing behaviours and experiential avoidance. Findings support extant evidence that interventions that explicitly target body image inflexibility, such as Acceptance and Commitment Therapy, may have utility in treating body dissatisfaction in nonclinical populations.

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Introduction

Body image is a multidimensional construct reflecting the cognitive, behavioural, and emotional aspects of physical appearance (Cash, 2011). The construct comprises two core facets: evaluation and investment (Cash, Melnyk, & Hrabosky, 2004b). Body image evaluation refers to a person’s evaluative thoughts and beliefs about their physical appearance (e.g., the degree of satisfaction or dissatisfaction with their body). Body image investment denotes the cognitive and behavioural importance that an individual places on their appearance and their motivation to manage or enhance their appearance.

The cognitive-behavioural model of body image (Cash, 2011) proposes that specific situational cues or contextual events (e.g., looking at oneself in the mirror) activate the processing of appearance-related cognitions and emotions. When body image thoughts and feelings are experienced as unwanted or distressing, individuals tend to engage in three coping strategies: (a) experiential avoidance, which refers to attempts to avoid situations, cognitions, or emotions that are construed as threatening; (b) appearance-fixing, which comprises efforts to alter or correct the aspects of an individual’s appearance perceived as flawed; and (c) positive rational acceptance, which consists of mental and behavioural activities that emphasise the use of positive self-care or rational self-talk and the acceptance of one’s experiences (Cash, Santos, & Williams, 2005). Whereas positive rational acceptance is an adaptive coping strategy, experiential avoidance and appearance-fixing are maladaptive coping strategies that temporarily reduce aversive appearance-related cognitions and emotions (Cash et al., 2005). Maladaptive coping strategies negatively reinforce body image dissatisfaction and perpetuate body image distress (Cash, 2011).

The performance of maladaptive behaviours in response to distressing body image-related thoughts or emotions described in the cognitive-behavioural model of body image (Cash, 2011) is similar to the body image inflexibility construct (Sandoz, Wilson, Merwin, & Kellum, 2013) in Acceptance and Commitment Therapy (ACT; Hayes, Strosahl, & Wilson, 1999). Body image inflexibility occurs when an individual is unwilling to experience unwanted appearance-related private events (i.e., thoughts, emotions, and bodily sensations) and attempts to alter the form or frequency of these experiences (Sandoz et al., 2013). It has found to be elevated amongst individuals with eating disorders (Manlick, Cochran, & Koon, 2013).

Body image inflexibility and body image coping strategies are conceptually different constructs. In particular, body image inflexibility reflects the extent a person attempts to change the
form, frequency, or situational sensitivity of unwanted appearance-related private events (Sandoz et al., 2013). In contrast, coping strategies are a measure of how often a person engages in certain content-specific behavioural strategies to cope with distressing appearance-related situations. Body image inflexibility therefore focuses on the function and context of behaviour, whereas maladaptive body image coping strategies focus on the frequency and content of behaviour (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996). As a result, the ACT model considers the potential consequences of body image inflexibility strategies, including experiential avoidance and appearance-fixing behaviours, problematic rather than the form or frequency of appearance-related thoughts, emotions, and bodily sensations per se (Hayes et al., 1999; Sandoz et al., 2013).

In the ACT literature, an inability or unwillingness to experience unwanted private events (labelled psychological inflexibility) has been shown to mediate the relationship between dysfunctional cognitions and negative behavioural and affective outcomes (Kashdan, Barrios, Forsyth, & Steger, 2006). This is consistent with recent research demonstrating that body image inflexibility partially mediates the relationship between disordered eating cognitions and eating disorder behaviours in nonclinical samples (Ferreira, Trindade, & Martinho, 2015; Timko, Juarascio, Martin, Faherty, & Kalodner, 2014; Wendell, Masuda, & Le, 2012). These findings suggest that the relation of disordered eating cognitions to disordered eating behaviours may be established in part through inflexible and avoidant cognitive and behavioural patterns specific to perceived body image.

The above research taken together suggests that the relationship between negative body image cognitions and negative behavioural outcomes may be mediated by body image inflexibility. Therefore, the aim of the present study was to examine whether body image inflexibility mediated the relationship between body image evaluation and maladaptive body image coping strategies (i.e., appearance-fixing and experiential avoidance) in a nonclinical college and community sample of women.

**Method**

**Participants**

Participants were 156 females, ranging in age from 18 to 51 years ($M = 22.76, SD = 6.96$, interquartile range = 20–25). Of the participants, 131 resided in Australia (84.0%), nine in North America (5.8%), 11 in Europe (7.1%), five in Asia (3.2%), and one in Africa (0.5%). For relationship status, 119 (76.3%) reported being single, 26 (16.7%) were dating or cohabitating, seven (4.5%) were married, and four (2.6%) were separated or divorced. For employment status, 87 (55.8%) were students, 41 (26.3%) were employed part-time, 23 (14.7%) were employed full-time, and five (3.2%) were unemployed or disabled. For highest educational attainment, 82 (52.6%) reported having completed high school, 47 (30.1%) reported having an undergraduate degree, 15 (9.6%) reported having a postgraduate qualification, and 12 (7.7%) reported having a vocational training qualification.

**Procedure**

The Human Research Ethics Committee at Swinburne University, Melbourne, Australia approved all recruitment and study procedures. Most participants ($n = 115, 73.8\%$) were first year undergraduate psychology students at Swinburne University in Melbourne, Australia, who were participating in exchange for course credit. The remainder of the data was collected from participants recruited through advertisements posted on online body image forums and Facebook pages ($n = 41, 26.3\%$). All measures were completed through an online survey supported by Opinio. Participants entered the survey through a web address that was posted in study advertisements. All individuals participated in the study on a voluntary basis and their anonymity was assured. As detailed in the study information, a mandatory response was required for the self-report measures and informed consent of participants was implicit upon the submission of completed questionnaires. To prevent duplicate responses, only one survey could be submitted from a single IP address.

**Measures**

**Body image evaluation.** The present study used the 7-item Appearance Evaluation subscale from the Multidimensional Body-Self Relations Questionnaire (Brown, Cash, & Mikulka, 1990; Cash, 2000) to assess participants’ self-appraisal of their physical appearance. Respondents indicate the extent to which they agree with each item on a 5-point scale, ranging from 1 (definitely disagree) to 5 (definitely agree). A sample item is “I like my looks the way they are.” Lower scores indicate more negative evaluative body image. Scores on the AE subscale have demonstrated high internal consistency, and strong convergent, discriminant, and construct validity amongst college students (Brown et al., 1990). Cronbach’s alpha was .91 in the present study.

**Maladaptive body image coping strategies.** The Appearance Fixing (AF) and Experiential Avoidance (EA) subscales of the Body Image Coping Strategies Inventory (Cash et al., 2005) were used to assess maladaptive body image coping strategies after perceived body image threats. The 10-item AF subscale measures coping strategies directed at altering appearance by covering, camouflaging, or correcting the perceived defect and also contains items pertaining to reassurance seeking, imaginal strategies, and appearance comparisons. A sample item is “I do something to try to look more attractive.” The 8-item EA subscale assesses coping strategies directed at avoiding or escaping distressing body image situations or experiences. It contains items pertaining to cognitive avoidance, behavioural avoidance, and comfort eating. A sample item is “I try to tune out my thoughts and feelings.” Respondents indicate the extent to which they engage in the particular coping strategy on a 4-point scale, ranging from 0 (definitely not like me) to 3 (definitely like me), and subscale items are averaged. Higher scores indicate greater use of the respective coping strategy. Scores on the AF and EA subscales have evidenced good internal consistency, and construct and convergent validity amongst college student samples (Cash & Grasso, 2005; Cash et al., 2005). In the present study, Cronbach’s alpha was .91 for the AF subscale and .69 for the EA subscale.

**Body image inflexibility.** Body image inflexibility was assessed using the Body Image-Acceptance and Action Questionnaire (BI-AAQ; Sandoz et al., 2013), which is a 12-item measure of the extent to which an individual actively contacts perceptions, thoughts, beliefs, and feelings about his or her body without directly attempting to change their intensity, frequency, or form. A sample item is “To control my life, I need to control my appearance.” Respondents rate the truth of each statement as it applies to them on a 7-point scale, ranging from 1 (Never True) to 7 (Always True). The BI-AAQ yields one composite score, calculated by the sum of its 12 items. Higher scores indicate a greater reluctance to experience, and more efforts to modify, cognitive processes related to one’s body image. Scores on the BI-AAQ have demonstrated good internal consistency and construct validity amongst college student samples (Sandoz et al., 2013). Cronbach’s alpha was .91 in the present study.