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Relationship between self-discrepancy and worries about penis size in men with body dysmorphic disorder

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ABSTRACT

We explored self-discrepancy in men with body dysmorphic disorder (BDD) concerned about penis size, men without BDD but anxious about penis size, and controls. Men with BDD ($n = 26$) were compared to those with small penis anxiety (SPA; $n = 31$) and controls ($n = 33$), objectively (by measuring) and investigating self-discrepancy: actual size, ideal size, and size they felt they should be according to self and other. Most men under-estimated their penis size, with the BDD group showing the greatest discrepancy between perceived and ideal size. The SPA group showed a larger discrepancy than controls. This was replicated for the perceptions of others, suggesting the BDD group internalised the belief that they should have a larger penis size. There was a significant correlation between symptoms of BDD and this discrepancy. This self-actual and self-ideal/self-should discrepancy and the role of comparing could be targeted in therapy.

Introduction

There has been limited research interest concerning penis size despite it being of significant concern to many men. Surveys have focused on men's desire for a larger penis size but have not related it to actual size (Grov, Parsons, & Bimbi, 2010; Johnston, McLellan, & McKinlay, 2014; Son, Lee, Huh, Kim, & Paick, 2003). Men are more concerned with penis size than women are with the size of their partner's penis (Lever, Frederick, & Peplau, 2006). In an internet survey of 52,031 heterosexual men and women, 85% of women were satisfied with their partner's penis size, but only 55% of men were satisfied with their own penis size – 45% wanted to be larger, while only 0.2% wanted to be smaller (Lever et al., 2006). In three smaller studies, 15–21% of women reported that penis length was important, but that penile girth was considered more important functionally during intercourse (Eisenman, 2001; Francken, van de Wiel, van Driel, & Weijmar Schultz, 2002; Stulhofer, 2006). There are no similar studies on the importance of the aesthetics of penis size (whether flaccid or erect). In gay men, Grov et al. (2010) found that about a third expressed a desire for a larger penis.

Some men with body dysmorphic disorder (BDD) are extremely self-conscious, distressed, and preoccupied with the size of their penis and as a result experience significant interference in their life as a consequence of avoiding relationships and intimacy, private leisure activities (such as exercising or swimming), or experience comorbid depression (Veale, Miles, Read, Troglia, Carmona, et al., 2015c). There also exists a group of men with "small penis anxiety" (SPA), a condition that consists of dissatisfaction or worry about penis size without fulfilling the criteria for BDD (Veale, Miles, Read, Troglia, Carmona, et al., 2015c; Wylie & Eardley, 2007). For example, they may not fulfil the criteria for preoccupation or the degree of distress and interference in their life and are more akin to people who do not have BDD, but are dissatisfied with some aspect of their bodily appearance. Men with BDD and SPA are likely to seek penis enlargement "solutions" from Internet sites that promote non-evidence based lotions, pills, exercises, or penile extenders (Veale, Miles, Read, Troglia, Wylie, et al., 2015). These men may also seek help from private urologists or plastic surgeons, and may be offered fat injections or surgical procedures to try to increase the length or girth of their penis. However, cosmetic phalloplasty is still regarded as experimental without any adequate outcome

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measures or evidence of safety (Ghanem, Glina, Assalian, & Buvat, 2013). Equally, there are no evidence-based studies that evaluate any psychological intervention for penis size anxiety, although one study reported a case series of counselling and reassurance to avoid penile surgery (Ghanem et al., 2007). However, there is evidence for the benefit of cognitive behaviour therapy for BDD in general, where individuals are asked to test out their fears (Veale, Anson, et al., 2014; Veale et al., 1996; Wilhelm et al., 2014).

Mondaini et al. (2002) reported that men with SPA tended to over-estimate the average penis size in *other* men. A case series of fifty-seven men with SPA estimated the length of a flaccid penis in other men to range from 10 cm to 17 cm (median 12 cm). In a meta-analysis of 15,521 men from 20 studies worldwide, the mean flaccid penile length was found, however, to be approximately 9 cm (Veale, Miles, Bramley, Muir, & Hodsoll, 2015). The study by Mondaini et al. (2002) did not focus on relative size, there was no control group, and the men were not differentiated between those with SPA and those with BDD. Lee (1996) surveyed a group of 112 young (mainly heterosexual) male students. They tended to underestimate the size of their own penis compared to other men and 26% felt that it was smaller or much smaller than that of other men.

The present authors decided that self-discrepancy theory (Higgins, 1987) might be a useful tool to explore the male psychology of penis size and that it in turn could contribute to the development of a psychological intervention. In self-discrepancy theory, there are two perspectives: self and other. The self-perspective is the viewpoint of one's self and the other perspective is what the person believes to be the viewpoint of their self from a significant other. The theory proposes three basic domains of self-belief that are important for understanding emotional experience: (a) The 'actual' self: the individual's representation of the attributes that someone (self or significant other) believes the individual actually possesses; (b) The 'ideal' self: the individual's representation of the attributes that someone (self or significant other) would ideally hope the individual to possess; and (c) The 'should' or 'ought' self: the individual's representation of the attributes that someone (self or significant other) believes the individual should as a sense of duty possess (rather than intrinsically desire). This is usually related to a strong inner critic about how one should be in order to be, such as to be worthy or loved.

The ideal and should selves are referred to as 'self-guides'. It is assumed that any discrepancy between the actual self and the self-guides determines the individual's vulnerability to negative emotional states (Higgins, 1987). For example, in a self-actual/self-ideal discrepancy, the individual is vulnerable to dejection-related emotions (e.g., depression, hurt), resulting from the appraisal that one's hopes and aspirations are unfulfilled (and is associated with the absence of positive reinforcement). In a self-actual/other-should discrepancy, the individual is vulnerable to anxiety and shame resulting from the appraisal that one has been unable to achieve one's sense of duty. Here, one is anticipating "punishment" by rejection or humiliation by others. Patients with social phobias have a discrepancy between how they perceive themselves and how they think they should appear to others (self-actual/other-should; Strauman, 1989). Paranoid patients appear to have discrepancies between their own self-actual beliefs and those of their parents (parent-actual/parent-ideal or parent-ought discrepancy; Kinderman & Bentall, 1996).

Self-discrepancy theory has also been explored in body image disorders with some inconsistent results, perhaps because the research has not always been on clinical samples or because they have not included a measure of the importance of their body image ideal (Cash & Szymanski, 1995). Body shape dissatisfaction and bulimic behaviours in a sample of female undergraduate students were found to be associated with self-actual/self-ideal discrepancy (Strauman, Vookles, Berenstein, Chaiken, & Higgins, 1991). In contrast, self-actual/self-ought discrepancy was associated with anorexic-related attitudes. In a subsequent study, only the self-actual/other-ought standpoint significantly predicted bulimic behaviour (Forston & Stanton, 1992). Self-ideal body shape perceptual discrepancy has been used as an indicator of body image dissatisfaction and binge eating (Anton, Perri, & Riley, 2000; Cafri & Thompson, 2004; Munoz et al., 2010; Price, Gregory, & Twells, 2014). Lastly people with BDD were found to have significant discrepancies between their self-actual, and both their self-ideal and self-should beliefs compared to a control group (Veale, Kinderman, Riley, & Lambrou, 2003).

There is some data available from previous studies on the discrepancy between people's *objective* attributes and their self-actual (objective-self/self-actual discrepancy), such as whether people have "rose tinted glasses" and rate themselves and their partner as more attractive than they objectively are (Swami & Furnham, 2008; Swami, Waters, & Furnham, 2010). One hypothesis is that people with BDD or body image disorders have lost their "rose tinted glasses" or under-estimate the attractiveness of their self (Jansen, Smeets, Martijn, & Nederkoorn, 2006; Lambrou, Veale, & Wilson, 2011). Buhlmann, Etcoff, and Wilhelm (2006) found that people with BDD rated their own attractiveness as significantly lower than did an independent evaluator and they rated photographs of attractive people as significantly more attractive than did a control group.

We therefore hypothesised that: (1) Men with no concerns about their penis size will have a greater discrepancy between objective-self/actual-self compared to men with BDD and SPA; that is they are more likely to over-estimate their penis size compared to their objective size; (2) Men with BDD and SPA will have a greater self-actual/self-ideal and self-actual/other-ideal discrepancy compared with men without concerns; (3) Men with BDD and SPA will have a greater self-actual/self-should and self-actual/other-should discrepancy compared with men without concerns; and (4) Increasing negative discrepancy on self-actual/self-ideal and self-actual/self-should will be associated with symptoms of BDD (increasing preoccupation, distress, and interference in life).

Method

Participants

The study consisted of a cohort group design comparing self-discrepancy measures in (a) men who fulfilled diagnostic criteria for BDD in whom penis size was their main if not exclusive preoccupation (BDD group); (b) men who expressed dissatisfaction or worry about their penis size but did not fulfil diagnostic criteria for BDD (SPA group); and (c) controls who did not express any anxiety about their penis size and did not fulfil criteria for BDD.

Of note is that we have published previously on this sample and subsamples. Each of the previous manuscripts had specific aims and findings. Veale, Miles, Read, Troglia, Carmona, et al. (2015c) explored the phenomenology and characteristics of men with BDD concerning penis size compared to men anxious about their penis size, and to controls. This sample was also analysed in Veale, Miles, Read, Troglia, Wylie, et al. (2015) to understand the sexual functioning in such men, and Veale, Miles, Read, Troglia, Carmona, et al. (2015a) explored the risk factors in men that lead to BDD concerning penis size. Lastly, Veale, Miles, Read, Troglia, Carmona, et al. (2015b) analysed a subsample to validate a scale for men with BDD concerned about penis size, and Veale, Eshkevari, et al. (2014) analysed an earlier subsample to develop a scale to measure beliefs about penis size. The variables presented here that have already been reported in prior papers (Veale, Miles, Read, Troglia, Carmona, et al., 2015a, 2015c) are the demographics and size of the penis (which has been converted into a percentile on a nomogram to obtain the objective size for self-discrepancy).