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Cognitive-Behavioral Therapy for Adolescent Body Dysmorphic Disorder: A Pilot Study

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Body dysmorphic disorder (BDD) is a relatively common and severe disorder that typically onsets in adolescence, but often goes unrecognized. Despite BDD's severity and early onset, treatment outcome research on adolescent BDD is scarce. Cognitive-behavioral therapy is the gold-standard psychosocial treatment for BDD in adults and has shown promise in adolescents. The current study examined the development and testing of a new CBT for adolescents with BDD. We tested feasibility, acceptability, and treatment outcome in a sample of 13 adolescents (mean age 15.23 years, range: 13–17) with primary BDD. Treatment was delivered in 12–22 weekly individual sessions. Standardized clinician ratings and self-report measures were used to assess BDD and related symptoms pre- and posttreatment and at 3- and 6-months follow-up. At posttreatment, BDD and related symptoms (e.g., insight, mood) were significantly improved. Scores on the Yale–Brown Obsessive Compulsive Scale for BDD indicated a 50% (intent-to-treat) and 68% (completer) improvement in BDD symptoms. Seventy-five percent of adolescents who started treatment and 100% of completers were considered treatment responders. Treatment gains were maintained at follow-up. High patient satisfaction ratings and patient feedback indicated that treatment was acceptable. This represents the largest study of a psychosocial treatment for adolescent BDD.

Keywords: body dysmorphic disorder; cognitive-behavioral therapy; adolescent; BDD; youth

BODY DYSMORPHIC DISORDER (BDD) is a severe disorder defined by preoccupation with perceived imperfections in appearance and resulting repetitive behaviors (e.g., excessive mirror checking), which cause clinically significant distress or functional impairment (American Psychiatric Association, 2013). Any body part can be the focus of preoccupation, but concerns most commonly involve the skin (e.g., blemishes), hair (e.g., texture), and nose (e.g., crooked, large; Phillips, Didie, et al., 2006). Preoccupations are time consuming (e.g., 3–8 hours a day) and difficult to resist or control (Albertini & Phillips, 1999; Phillips, Gunderson, Mallya, McElroy, & Carter, 1998). Large epidemiologic studies in adults have indicated a point prevalence of BDD of 1.7–2.4%, suggesting that BDD is relatively common (Buhlmann et al., 2010; Koran, Abujaoude, Large, & Serpe, 2008; Rief, Buhlmann, Wilhelm, Borkenhagen, & Brähler, 2006). The disorder typically onsets during early adolescence (mean age of onset 16, modal age 13) and has a chronic course if untreated (Phillips & Diaz, 1997; Phillips, Didie, et al., 2006; Phillips, Menard, Fay, & Weisberg, 2005; Phillips, Pagano, Menard, & Stout, 2006).

Early-onset BDD can have a deleterious effect on appropriate developmental processes. Functioning and quality of life are very poor for youth with BDD compared with community norms (Phillips, Didie, et al., 2006). Indeed, BDD often causes severe

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distress, which leads to rituals such as excessive mirror checking, grooming, surgery seeking, or skin picking (Phillips et al., 2005). Patients with BDD who present with an early onset may avoid usual activities, drop out of high school or college, and commonly avoid dating and other types of interactions with peers (Bjornsson et al., 2013; Phillips, McElroy, Keck, Pope, & Hudson, 1993; Phillips et al., 2005). In one study, 18% had dropped out of school primarily due to BDD (Albertini & Phillips, 1999) and in another study, 22% had dropped out of school due to BDD (Phillips, Didie, et al., 2006). In severe cases, patients can become housebound (Phillips & Diaz, 1997; Phillips et al., 2005). Compared to adults with BDD, youth with BDD have poorer insight and are more likely to have delusional BDD beliefs; 79% have had ideas or delusions of reference, believing that others take special notice of the perceived defect (e.g., laugh or stare at it; Albertini & Phillips, 1999; Phillips, Didie, et al., 2006). BDD can trigger aggressive behavior in adolescents (e.g., verbal or physical rage attacks), which may be fueled in part by BDD-related delusions of reference (Albertini & Phillips, 1999; Phillips, Didie, et al., 2006). Research also indicates a high rate of psychiatric hospitalization, suicidal ideation, and suicide attempts (Perugi et al., 1997; Phillips, 1991, 2000, 2007; Phillips & Diaz, 1997; Phillips, McElroy, Keck, Hudson, & Pope, 1994; Phillips & Menard, 2006; Veale, Boocock, et al., 1996). Rates of lifetime suicidal ideation in adolescents with BDD (67–81%) are markedly higher than community rates (15–27%), and suicide attempts are more common than in the community (2–20%) or in adults with BDD (44% vs. 24%, $p = .01$; Albertini & Phillips, 1999; Phillips, Didie, et al., 2006). Moreover, BDD patients have many suicide risk factors, including body image dissatisfaction, which is generally associated with higher suicide risk among adolescents (Crow, Eisenberg, Story, & Neumark-Sztainer, 2008).

Once symptoms begin, they tend to be continuous, possibly for decades without remission, persisting into adulthood (e.g., Phillips, 2000; Phillips, Didie, et al., 2006). Thus, as individuals suffering with BDD get older they are more likely to face challenges in all aspects of their lives, and for this reason childhood-onset BDD appears to have a more malignant course than adult-onset BDD. This disorder's early onset, severity, and chronicity underscore the need for effective treatment, especially treatment designed to target early-onset BDD.

Several randomized controlled trials have found cognitive-behavioral therapy (CBT) to successfully reduce BDD severity and related symptoms such as depression in adults (Rabiei, Mulkens, Kalantari, Molavi, & Bahrami, 2012; Rosen, Reiter, & Orosan, 1995; Veale, Gournay, et al., 1996; Veale et al., 2014; Wilhelm et al., 2014). Serotonin reuptake inhibitors (SRIs) are also efficacious for adults with BDD (Ipser, Sander, & Stein, 2009; Phillips, Albertini, & Rasmussen, 2002), but many adolescents and parents are not interested in medication and not all patients benefit from SRIs (Phillips & Hollander, 2008). Thus, effective psychosocial treatment is needed for adolescents with BDD.

CBT models of BDD (e.g., Veale, 2004; Wilhelm, Phillips, & Steketee, 2013) incorporate biological, psychological, and sociocultural factors in the etiology and maintenance of BDD. The CBT model proposes that individuals with BDD selectively attend to specific and/or minor aspects of appearance. This is informed by clinical observations and findings from neuropsychological (Deckersbach et al., 2000), neuroimaging (e.g., Feusner, Moller, et al., 2010; Feusner, Moody, et al., 2010; Feusner, Townsend, Bystritsky, & Bookheimer, 2007), and eye-tracking studies (Greenberg, Reuman, Hartmann, Kasarskis, & Wilhelm, 2014; Grocholewski, Kliem, & Heinrichs, 2012), which suggest that patients overfocus on detail rather than holistic (global) elements of visual stimuli. Individuals with BDD overestimate the meaning and importance of perceived imperfections and misinterpret them as major personal flaws (e.g., "Unless I have perfect skin, no one will love me"; Buhlmann, Teachman, Naumann, Fehlinger, & Rief, 2009; Veale, 2004). Perceived imperfections and related maladaptive interpretations engender negative emotions (e.g., anxiety, shame, sadness) that further increase selective attention to perceived flaws. To try to neutralize distressing feelings, patients engage in rituals (e.g., excessive grooming, surgery seeking) and avoidance of trigger situations (e.g., social situations, school). Because rituals and avoidance behaviors can temporarily reduce negative emotions, they are negatively reinforced, and, in this way, are hypothesized to maintain dysfunctional BDD-related beliefs. CBT for BDD targets these cognitive, emotional, and behavioral factors and generally includes psychoeducation, cognitive interventions (e.g., to address maladaptive appearance-related beliefs, the importance of appearance), exposure to avoided situations and prevention of rituals, and mindfulness/perceptual retraining (e.g., to reduce selective attention to details such as appearance flaws).

Reports of CBT for BDD in adolescents are limited to a small number of single-case reports and one small case series, which provide preliminary support for the use of CBT alone (Aldea, Storch, Geffken, & Murphy, 2009; Greenberg et al., 2010; Krebs, Tumer, Heyman, & Mataix-Cols, 2012) and in combination with SRI pharmacotherapy (Sobanski & Schmidt, 2000). However, CBT focused primarily