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Shame in the obsessive compulsive related disorders: A conceptual review

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Abstract

Background—Theoretical and anecdotal support for the role of shame in obsessive compulsive related disorders (OCRDs) is prominent. Developing our understanding of shame's role in OCRDs is important to building knowledge about this new diagnostic category. This review aims to consolidate our understanding of shame in each OCRD, through summarizing existing clinical, conceptual, and empirical work.

Methods—We provide an overview of shame, its measurement considerations, and a full review of 110 articles addressing shame in OCRDs.

Results—General shame and shame about having a mental illness are the broadest types of shame relevant to OCRDs; symptom-based shame and body shame may be more specific to OCRDs. In OCD, violent, sexual, or blasphemous obsessions may trigger symptom-based shame. In trichotillomania (TTM) and skin picking (SP), symptom-based shame may be related to pulling, picking, and post-pulling/picking behaviors. In hoarding disorder, symptom-based shame may accompany beliefs about being defective due to living with clutter. Body shame appears inherent to body dysmorphic disorder, while in TTM and SP it may arise as a secondary response to damage resulting from body focused repetitive behaviors.

Limitations—Much of the current knowledge on shame in OCRDs comes from anecdotal, case, and conceptual work. Empirical studies do not always assess specific types of shame, instead assessing shame as a general construct.

Conclusions—Shame is closely related to OCRDs. Clinical and research recommendations drawing from the literature are provided.

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Keywords

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Introduction

The Diagnostic and Statistical Manual – Fifth Edition (DSM-5; American Psychiatric Association, 2013) recognizes Obsessive Compulsive and Related Disorders (OCRDs) as a new diagnostic category. The category includes obsessive compulsive disorder (OCD), body dysmorphic disorder (BDD), trichotillomania (TTM; hair pulling disorder), excoriation disorder (skin picking; SP), and hoarding disorder (HD). OCD involves the experience of obsessions (recurrent, distressing intrusive thoughts, images, or urges) and compulsions (ritualized behaviors completed to reduce distress from obsessions) (APA, 2013). BDD involves an excessive, distressing, and time-consuming preoccupation with an imagined appearance flaw and repetitive rituals performed in response to preoccupations (APA, 2013). TTM is characterized by recurrent hair pulling, resulting in hair loss (APA, 2013). SP involves recurrent skin picking, resulting in lesions (APA, 2013). Finally, HD involves persistent difficulty parting with possessions and a perception that items must be saved, resulting in clutter in one's active living space that reduces the space's usability (APA, 2013).

Following reclassification of these disorders to a new diagnostic category, there is still much we do not know about how the OCRDs are alike versus distinct. For instance, because OCD, the most widely researched OCRD, was formerly classified as an anxiety disorder, most of our research on emotions in OCRDs has focused narrowly on anxiety. Relatively less literature has attempted to synthesize the role of other emotions across the OCRDs. Therefore, this review focuses on one emotion that may be key across the OCRDs: shame. We begin with an overview of shame, after which we broadly describe how shame may be important within OCRDs and review issues relevant to shame's measurement. Next, we review all identified articles addressing shame in OCRDs. We conclude with research and clinical recommendations.

Shame: An Overview

Shame is a deeply painful self-conscious emotion, experienced when a person judges him- or herself as wholly negative (e.g., defective, bad) (Lewis, 1971; Tangney and Dearing, 2002). Such judgments lead a person to feel "small," "worthless," and "exposed" (Tangney and Dearing, 2002, pg. 18). Shame motivates avoidance and withdrawal (Tangney and Dearing, 2002), which can lead to a deterioration of functioning.

Although shame overlaps with other emotions, it also has key distinctions. Shame differs from guilt, in that guilt is felt when a person judges a *behavior* negatively, whereas shame is felt when a person judges *oneself* negatively (Tangney and Dearing, 2002). It also differs from embarrassment, which is a more fleeting emotion rooted in public situations (Tangney et al., 1996). Lastly, shame differs from disgust, which is a basic emotion involving

revulsion and nausea that promotes avoidance of stimuli that can cause disease (Davey, 2011). When compared to guilt and embarrassment, shame appears to be more painful, more consistently correlated with psychopathology, and more predictive of damaging outcomes (Tangney and Dearing, 2002; Tangney et al., 1996). We could not identify research comparing shame with disgust (for reviews on disgust in psychopathology, as well as disgust in OCD, see Berle and Phillips, 2006; Cisler et al., 2009; Davey, 2011; Olatunji and McKay, 2007).

Research across broad contexts demonstrates shame's destructive outcomes. Shame is damaging in interpersonal relationships and motivates social withdrawal; it is linked with depression and suicide, and it acts as a treatment barrier (e.g., Hastings et al., 2000; Leenaars et al., 1993; Tangney, 1993; Tangney and Dearing, 2002). As each of these outcomes is elevated in OCRDs, shame may be key to understanding and treating these disorders. Additionally, there is prominent theoretical and anecdotal support for shame's role in OCRDs (e.g., Clerkin et al., 2014; du Toit et al., 2001; Fergus et al., 2010; McDermott, 2006; Veale, 2002). Therefore, developing our understanding of shame's involvement in each OCRD is an important next step in building knowledge about this new diagnostic category. To this end, this review aims to consolidate our understanding of shame's role in each of the OCRDs, by summarizing existing empirical, clinical, and conceptual work on shame across diagnoses.

Types of shame in the OCRDs

Shame is a complex emotion that can vary in terms of its focus. Beyond general shame, described above, people feel shame from more specific sources (Gilbert, 2002). Types of shame that appear especially relevant to OCRDs include shame about having a mental illness, shame about symptoms (hereafter referred to as symptom-based shame), and body shame. Shame about having a mental illness is not specific to OCRDs, but rather can be felt by anyone suffering from mental illness. Somewhat more specific to OCRDs is symptom-based shame. This is the evaluation of oneself as bad due to the experience of specific symptoms of one's mental illness. Lastly, body shame is the evaluation of oneself as unworthy due to the perception of bodily defects.

Measuring shame

Methods for measuring shame vary widely. The simplest and most common approach in OCRD literature is via direct requests to rate "shame." This method, however, may have poor validity, as Tangney and Dearing (2002) note that people are inaccurate in distinguishing shame from related emotions. In addition, some studies combine shame with other emotions (e.g., asking participants to rate "shame and embarrassment" within a single item), diluting the measure's discriminant validity. Other studies use validated self-report measures to assess state or trait shame (the latter is also referred to as shame-proneness). These measures tend to have published psychometric data and use multiple items. Thus, they are likely to be stronger tools than a direct, single item assessing shame. Lastly, scenario-based measures of shame (e.g., Test of Self-Conscious Affect; TOSCA) (Tangney et al., 1989) provide scenarios expected to evoke shame and ask for ratings of one's likelihood of responding in shame-driven ways. Such measures do not refer to "shame" directly and are

thus considered to be a stronger method. (For a critical summary of shame measures, see Tangney and Dearing, 2002.)

Methods

We conducted searches for the terms “shame” and each disorder (i.e., body dysmorphic disorder, obsessive compulsive disorder, hair pulling, trichotillomania, skin picking, excoriation disorder, psychogenic excoriation, neurotic excoriation, self-inflicted dermatosis, hoarding, clutter) on PsycINFO and Medline, through January 15, 2014. Searches were conducted for these terms within titles, keywords, abstracts, and any field. Reference lists of relevant articles were checked for missing pertinent articles. Of the slightly more than 200 articles or books identified, 110 directly studied or discussed shame in OCRDs and were included in this review.

Results

Shame in OCD

General shame in OCD—The broadest research on shame in OCD consists of descriptive and comparison studies of general shame. Tangney and Dearing (2002) describe a series of studies in non-clinical undergraduates that consistently found significant positive correlations between shame-proneness on the TOSCA and the OC subscale of the Symptom Checklist-90 (SCL-90; Derogatis et al., 1973), with small to medium effects (*r*s ranging from .20–.33). Of note, the SCL-90 measures both OCD symptoms and OC personality disorder symptoms, limiting its validity as a measure of OCD (Woody et al., 1995). Relatedly, Weingarden and Renshaw (2014) found that shame-proneness on the TOSCA-3 (Tangney et al., 2000) partially mediated the relationship of OC beliefs (but not OC symptom severity) with depression, suggesting that shame-proneness may be related to distorted cognitive interpretations of one’s symptoms.

Similar results are found in clinical samples. Fergus et al. (2010) found a medium-sized correlation ($r = .27$) between shame-proneness and OCD symptoms in 124 patients with a variety of anxiety disorders, 53 of whom had primary OCD. (The correlation was nonsignificant using a Bonferonni-corrected alpha of .001). Furthermore, post-treatment changes in OCD symptoms were significantly correlated with changes in shame-proneness, with a large effect ($r = .51$) (Fergus et al., 2010). This suggests that general shame changes alongside OCD severity, even when it is not directly targeted in treatment. Another study found that 70% of 219 members of the Danish OCD Association endorsed experiencing “shame, low self-esteem, fear of future” (Sorensen et al., 2004), indicating a high rate of general shame in OCD. As three constructs were measured together on a self-report item, however, it is not possible to infer how frequently the response was endorsed specifically in regard to shame.

Moreover, comparison studies note higher levels of general shame among OCD vs. healthy control (HC) groups. In an experimental study of 24 participants with OCD and 24 HCs, participants rated their shame after receiving positive, negative, or ambiguous performance feedback on a task (Becker et al., 2013). The OCD group reported higher shame after both

ambiguous and negative feedback, with medium to large effects (*r*s = −.39 and −.45, respectively). In another study, Kim et al. (2013) found that 57 South Koreans with OCD endorsed significantly higher scores on the defectiveness/shame subscale of the Young Schema Questionnaire (YSQ; Young et al., 2003) than 70 South Korean HCs, with a large effect (*d* = 1.69). Results remained significant after controlling for depression. These results were consistent with those from an earlier, similar study in a Korean journal (Lee et al., 2010, as cited in Kim et al., 2013), also with a large effect (*d* = 1.58). Further, Noie et al. (2010) reported similar results comparing scores on the YSQ handicap/shame subscale in 15 individuals with OCD and 15 HCs (effect sizes not calculated as the full-text article was not available in English). Together, results of these studies suggest that general shame is elevated in OCD compared to HC.

Finally, two studies compared general shame in an OCD group and a clinical comparison group. Lochner and colleagues (2005) found a higher mean score on the YSQ defectiveness/shame subscale in 59 individuals with OCD compared to 26 individuals with TTM, with a medium effect (*r* = −.33). On the contrary, in the study by Noie and colleagues (2010), above, no difference in shame was found between the OCD group and an OC personality disorder group (*n* = 15). Further research comparing shame across OCD and clinical comparison groups would contribute to our understanding of whether shame is especially elevated in OCD.

Shame about having a mental illness—Another broad source of shame that may be present in OCD is shame about having a mental illness. Within OCD, anecdotal literature suggests that shame of having a mental illness is particularly linked with publicly visible compulsions (Kim et al., 2013; O'Connor, 2001; Vythilingum and Stein, 2005). Individuals may fear that others will equate compulsions with being "crazy." Therefore, private compulsions (e.g., counting) may trigger less shame compared to compulsions performed in public (e.g., washing). Additionally, this type of shame may vary based on the sufferer's insight. Someone with more insight may be more aware that compulsions are excessive and would be perceived as excessive by others. However, such a hypothesis has never been tested.

Symptom-based shame in OCD—Symptom-based shame in OCD relates to the content of obsessions or the specific behaviors performed as compulsions. For example, McDermott (2006) presents a case of a middle-aged man with obsessions about harming his children. The patient felt shame "about what the images meant about him as a person and a father," as he interpreted that having such images meant that he was evil (McDermott, 2006, p. 28). A handful of additional anecdotal descriptions refer to symptom-based shame felt in response to obsessions and interpretations of what an obsession means about oneself (e.g., "I am bad,") (Abbey et al., 2007; Berle and Phillips, 2006; Bram and Bjorgvinsson, 2004; Cougle et al., 2008; Hyman and Pedrick, 2010; Koblenzer, 1993; Marsanic et al., 2011; Monti et al., 1998; Newth and Rachman, 2001; Pallanti, 2008; Torres et al., 2001).

One empirical study has tested differences in implicit, symptom-based shame across four groups: OCD (*n* = 30), BDD (*n* = 30), social anxiety disorder (SAD; *n* = 29), and HC (*n* = 33) (Clerkin et al., 2014). On an implicit association task (IAT) that taps into symptom-

based shame related to obsessions, the OCD group had greater implicit obsession-related shame associations compared to the other groups (partial eta^2 = .06). This finding provides evidence that symptom-based shame related to obsessions may be especially relevant in OCD, even compared to other OCRD groups.

An additional consideration is that the degree of symptom-based shame may vary depending on the obsessional content. A number of conceptual and case descriptions suggest that shame is especially likely in response to violent or sexual obsessions (Berle and Phillips, 2006; Cougle et al., 2008; Herbst et al., 2012; Marsanic et al., 2011; Stewart et al., 2012; Torres et al., 2001). The only empirical study of this issue in a clinical sample (Kim et al., 2013) revealed no significant correlations of specific OCD symptoms with shame (partial *r*s all non-significant and ranging from −.08 to .24). However, analyses were likely underpowered.

Finally, two empirical studies suggest that non-clinical individuals view sexual, violent, and religious obsessions as more shame-worthy than other types of obsessions. Undergraduates (*N* = 113) gave greater negative social evaluation scores to an OCD vignette with harming obsessions compared to vignettes with checking or washing obsessions, with medium to large effects (*r*s = −.38, −.53) (Simonds and Thorpe, 2003). Participants also indicated that the person in the harming vignette should feel the most shame, and that they would feel the most shame if they had the problems described in the harming vignette, again with medium to large effects (*r*s = −.44, −.40). In a similar study of 376 healthy adults, more participants indicated that they would feel shame about aggressive and religious obsessions compared to contamination and symmetry obsessions (Beşiroğlu et al., 2010). Together, there is some evidence that symptom-based shame varies depending on obsessional content. More research among clinical samples is needed.

Shame as a treatment barrier—Finally, shame in OCD may be maintained, and even exacerbated, by the treatment avoidance and social withdrawal that shame promotes. Numerous observations in the clinical OCD literature note that shame leads to avoidance of disclosing symptoms to treatment providers or loved ones (Abbey et al., 2007; Bram and Bjorgvinsson, 2004; Canavera et al., 2009; Chavira et al., 2008; Herbst et al., 2012; Kim et al., 2013; Marsanic et al., 2011; Monti et al., 1998; Moritz, 2008; Moritz and Jelinek, 2008; Moritz et al., 2011; Newth and Rachman, 2001; Rothenberg, 1998; Salkovskis, 1990; School, 2005; Simonds and Thorpe, 2003; Stewart et al., 2012; Sulkowski et al., 2011; Vythilingum and Stein, 2005; Williams et al., 1998; Zohar et al., 2007). Moreover, some authors anecdotally observe that such avoidance likely impedes social functioning and support (Abbey et al., 2007; Nymberg and Van Noppen, 1994; Sorensen et al., 2004).

A small research base also supports the assertion that shame leads people with OCD to avoid disclosing symptoms. In an Internet study of 175 participants meeting self-report OCD criteria, 58.2% indicated that feeling “ashamed of needing help for my problem” acted as a treatment barrier, and 53.2% indicated that feeling “ashamed of my problems” acted as a treatment barrier (Marques et al., 2010). Further, in the study of 376 healthy individuals who rated OCD vignettes described above, more participants indicated that they would hide religious or aggressive symptoms (i.e., those that may be most shame-laden) from family

and co-workers (Beşiroğlu et al., 2010). Thus, shame in OCD may promote social withdrawal, in addition to acting as a treatment barrier. Studies of long-term effects of this avoidance (e.g., maintenance or exacerbation of shame over time) are needed.

Shame within a cognitive behavioral model of OCD—According to traditional cognitive-behavioral (CB) models of OCD, obsessions trigger an anxiety response, and compulsions are performed to avoid or neutralize that anxiety. The literature reviewed above, however, highlights a potential role for *shame* within this model, as well. Individuals with OCD may feel symptom-based shame in response to certain obsessions. Subsequently, compulsions may be performed to neutralize shame. In fact, behavioral responses to shame, such as withdrawing or hiding, may outwardly appear quite similar to behavioral responses to anxiety.

Rachman (1994) coined the term *mental pollution* to refer to obsessions such as these, which produce a feeling of moral "dirtiness" (p. 311). In response to mental pollution, Rachman (1994) describes that individuals complete cleaning compulsions to neutralize the experience, lending conceptual evidence that individuals may perform compulsions in response to *shame*, in addition to anxiety.

To study mental pollution, Cougle et al. (2008) developed a Mental Pollution Questionnaire (MPQ), which contains items such as "For me, feeling dirty inside and feeling shame go together." Across two non-clinical samples, MPQ scores were significantly, positively correlated with obsession severity and contamination symptom severity, with medium to large effects (*r*s ranging from .27 to .51). Furthermore, MPQ scores predicted 7.8% of the variance in obsessing symptoms and 25.4% of the variance in washing symptoms (Cougle et al., 2008). Results provide non-clinical evidence that the shame-laden concept of mental pollution correlates with obsessionality and washing severity. To extend this literature, research exploring the role of compulsions in neutralizing shame-based, in addition to anxiety-based, obsessions in OCD is warranted.

Furthermore, from a cognitive perspective, one's interpretation of an obsession, more so than the obsession itself, leads to distress and use of compulsions to reduce distress (Rachman, 1998; Salkovskis, 1985). Thus, thought-action fusion (TAF) may be related to symptom-based shame. TAF is the belief that having a thought (e.g., about a violent act) is morally equivalent to acting on that thought (e.g, committing the violent act). Rachman (1993) suggested that TAF amplifies one's sense of moral responsibility over thoughts, leading to guilt. Although Rachman (1993) connected TAF to guilt, which would stem from believing that "the *act of having that thought* is morally bad," TAF may also enhance shame, when an individual believes that "having immoral thoughts means that *I am a bad person.*"

One study found support for a three-way interaction among TAF, obsessions, and shame-proneness in predicting severity of compulsions. In 690 non-clinical undergraduates, stronger TAF morality beliefs strengthened the association between obsessions and compulsions, particularly in more shame-prone participants (Valentiner and Smith, 2008). Interestingly, results did not support a three-way interaction of obsessions, TAF, and *guilt* in predicting compulsions (Valentiner and Smith, 2008). Although the effect associated with

the interaction was small (ΔR^2 = .01), this finding provides preliminary evidence that TAF and shame may interact to predict slightly more severe OCD symptoms. Going forward, it would be interesting to test the hypothesis that TAF may interact with violent, sexual, and religious obsessions to predict greater symptom-based shame in OCD.

Taken together, it may be important for clinicians to clarify what emotions clients feel in response to OCD symptoms, and to incorporate shame into current anxiety-based CB conceptualizations. Relatedly, while much research supports the effectiveness of exposure and response prevention (ERP) in reducing anxiety, empirical investigation is necessary to determine whether ERP reduces shame. Additional cognitive work (e.g., challenging beliefs such as "experiencing violent thoughts *means that I am a bad person*") may be warranted when the primary emotional response to an obsession is shame.

Shame in BDD

General shame and body shame in BDD—Shame has been considered central to BDD since its earliest clinical descriptions, which labeled it "obsession de la honte du corps," or obsession with shame of the body (Janet, 1903). Since then, clinical descriptions continue to reference a prominent role of shame in BDD (de Ridder, 1997; Koran et al., 2008; McWilliams et al., 2005; Nachshoni and Kotler, 2007; Parker, 2003; Phillips, 1998, 1999; Rosen, 1995; Schmoll, 2011; Shapiro and Gavin, 2006; Velasco, 2011). Authors have posited that shame may be elevated in BDD compared to OCD, and in males with muscle dysmorphia compared to healthy male weightlifters (Olivardia et al., 2000; Phillips, 2000). Such anecdotal descriptions do not typically distinguish between general shame and body shame. As most descriptions appear to describe body shame, and empirical literature on either form of shame is sparse, we present the descriptive research on general and body shame together.

Despite early recognition of shame as central to BDD, few studies have empirically evaluated the degree of shame in BDD vs. other groups. Kollei and colleagues (2012) compared general shame and body shame on two versions of the Differential Emotions Scale (DES; Izard, 1977) across 33 HCs, 31 individuals with BDD, 32 individuals with anorexia nervosa, and 34 individuals with bulimia nervosa. The BDD group reported greater general and body shame than HCs, with large effects (d = 1.64 and 1.74, respectively), and similar levels of general and body shame to the eating disorders groups (Kollei et al., 2012). Further, Clerkin et al. (2014) found that 30 participants with BDD had greater implicit body shame associations (partial eta^2= .04) compared to 30 individuals in an OCD group, 29 individuals in an SAD group, and 33 HCs. These results (for details, see *Symptom-Based Shame in OCD*) provide additional evidence that body shame may be especially prominent in BDD compared to other groups.

The overall lack of empirical research on the degree of general or body shame in BDD may be due, in part, to the seemingly inherent role of shame in BDD. Given that shame has been connected to impairment, depression, and distress in the broader literature, each of which is also elevated in BDD, more empirical work clarifying the importance of general and body shame in BDD compared to other disorders is merited.

Internally based vs. externally based body shame—BDD conceptualizations suggest that body shame may be further understood as stemming from either internal or external sources (Cororve and Gleaves, 2001; Veale, 2002). Internal body shame arises in response to internal repugnance of one's appearance (Cororve and Gleaves, 2001) and may be closely related to self-disgust. External body shame arises from anticipation of social evaluation and rejection of one's appearance (Buhlmann and Wilhelm, 2004; Castle and Phillips, 2006; Cororve and Gleaves, 2001; Kollei et al., 2012; Rosen, 1995; Schmoll, 2011; Veale, 2002), and it appears related to social anxiety. These two sources of body shame need not be mutually exclusive.

Of these two sources of body shame, internal body shame has been addressed less in the literature. Veale (2002) described BDD cases in which internal body shame (particularly related to body parts that are not publically visible, such as genitals) appears especially central. He notes that treating internal body shame may be more difficult than treating external body shame (Veale, 2002). Empirical work would boost our understanding of the importance of internal body shame in BDD.

A greater number of anecdotal reports discuss external body shame in the BDD literature. Several note that external body shame in BDD appears to drive social isolation (Buhlmann et al., 2011a; Frare et al., 2004; Gilbert, 1997). Moreover, one empirical study linked social isolation in BDD to shame, reporting that 94% of a sample of 33 youth with BDD described experiencing social interference that stemmed from "embarrassment and shame over appearance" (Albertini and Phillips, 1999). Social isolation is a profound problem in BDD, where housebound rates reach 31% (Phillips, 1999) and social withdrawal is typically worse than that found in OCD (Frare et al., 2004). Thus, external body shame may be particularly salient to BDD. As seen in the OCD literature, anecdotal reports describe social withdrawal in BDD as a contributor to worse impairment (Parker, 2003; Schmoll, 2011). Despite attention to how external body shame may drive isolation in BDD, empirical work in this area is notably lacking. Given the possible variations in interventions that might be needed for internal (e.g., potential need for greater focus on cognitive interventions) vs. external body shame (e.g., involving social-anxiety-type exposures), research in this area may improve our understanding of treatment needs.

Shame as a treatment barrier—Clinical and anecdotal descriptions widely report that shame leads to avoidance of disclosing appearance concerns and BDD symptoms to healthcare providers (Buhlmann et al., 2010; Buhlmann et al., 2011a; Dingemans et al., 2012; Harth, 2008; Holt et al., 2003; Kollei et al., 2013; Koran et al., 2008; Mancuso et al., 2010; Phillips, 1998, 1999; Phillips and Crino, 2004; Phillips et al., 1993). This observation has also been documented through empirical work. In a psychiatric inpatient sample, 16 of 122 patients met diagnostic criteria for BDD symptoms in a structured interview, even though none had been diagnosed with BDD (Grant et al., 2001). The authors interpreted findings to suggest that, even when seeking help for other mental health problems, individuals may hide BDD symptoms from mental health providers. Also, in an online sample of 172 individuals meeting criteria for BDD, 50% reported "I am too ashamed to talk about my appearance concerns" (Buhlmann, 2011). Similarly, in 401 Internet-recruited participants meeting clinical cutoffs for BDD, 55.6% endorsed "I felt ashamed of my

problem" as a treatment barrier (Marques et al., 2011). Although limited by use of online recruitment, self-report, and a single item assessing shame, results of these two latter studies suggest that approximately half of those with BDD avoid treatment due to shame.

As in OCD, treatment avoidance likely maintains and worsens shame. First, failure to obtain treatment may hinder acquisition of accurate information about BDD that could normalize one's experience. Further, without treatment, individuals are unlikely to address cognitive distortions or the cycle of rituals and avoidance that may maintain shame. Last, treatment avoidance likely contributes to feeling isolated and different (Nymberg and Van Noppen, 1994), and may in turn maintain or promote additional shame.

Shame within a cognitive behavioral model of BDD—Some conceptual literature elucidates shame's potential role within CB models of BDD. CB conceptualizations posit that individuals with BDD process information in a biased manner. Biased information processing is hypothesized to lead to distorted cognitions about appearance that generate shame (Buhlmann et al., 2007; Buhlmann and Wilhelm, 2004; Buhlmann et al., 2011b; Didie et al., 2006; Feusner et al., 2010; Veale, 2002; Wetterneck et al., 2010).

Although we were unable to identify direct empirical investigations of this process, conceptual discussions highlight specific processing biases that could be associated with body shame. For instance, selective attention to one's perceived defect and to information supporting the existence of the defect could trigger cognitive distortions about one's appearance (Cororve and Gleaves, 2001; Veale, 2002) that may, in turn, generate body shame. Further, two studies demonstrated that appearance-based self-discrepancies exist between "actual self" and self-guides (e.g., "ideal self," "should self") in individuals with BDD (Lambrou et al., 2011; Veale et al., 2003). Self-discrepancy theory posits that discrepancies lead to negative affect, such as shame (Higgins, 1987). Thus, appearance-based self-discrepancies in BDD are a potential source of body shame. However, investigators did not measure shame in either study (Lambrou et al., 2011; Veale et al., 2003). Therefore, empirical research regarding appearance-based self-discrepancies in BDD and body shame is needed.

Furthermore, CB conceptualizations highlight certain cognitive distortions in BDD that may trigger body shame. First, individuals with BDD overvalue the importance of physical appearance (Didie et al., 2010; Kollei et al., 2012; Rosen and Ramirez, 1998), which may be central to shame (Castle and Phillips, 2006; Kollei et al., 2012; McWilliams et al., 2005). Second, BDD sufferers overgeneralize the meaning of having a defect (e.g., "my defect means I'm unlovable") (Cororve and Gleaves, 2001; Rosen, 1995), which may generate body shame. Third, individuals with BDD hold perfectionistic beliefs about appearance (Veale et al., 1996; Wetterneck et al., 2010) that may trigger body shame. Thus, individuals with BDD may experience shame because they hold unattainable, all-or-nothing beauty standards, compounded by an overgeneralized opinion that shortcomings of physical attractiveness mark failure as a person.

Consistent with the OCD literature, CB models of BDD suggest that individuals engage in compulsions (e.g., repetitive mirror checking, camouflaging body parts), to reduce distress

caused by preoccupations (Buhlmann and Wilhelm, 2004). Body shame may drive some of these compulsions (Kollei et al., 2012). Similar to OCD, however, little attention has been paid to the potential role of shame in motivating compulsions.

Together, the conceptual literature suggests that certain information processing biases generate distorted cognitions about one's appearance, which may contribute to heightened body shame in BDD. Body shame may promote compulsions aimed at reducing distress. Empirical work testing each aspect of this CB model is sorely needed. To date, our understanding of shame in CB conceptualizations of BDD is wholly reliant on theoretical and anecdotal support.

Shame in Trichotillomania (Hair-Pulling) and Excoriation (Skin Picking) Disorder

Trichotillomania (TTM) and skin picking (SP) are body-focused repetitive behaviors (BFRBs) that share many phenomenological similarities (Bohne et al., 2005). Our literature searches identified a small base of literature discussing shame in these disorders. Given the sparse literature and highly overlapping conceptual models of these disorders, they are reviewed together here.

General shame in TTM and SP—A handful of literature on TTM (Diefenbach et al., 2005; Drysdale et al., 2009; Klipstein and Berman, 2012; Ko, 1999; Lochner et al., 2005; Neal-Barnett et al., 2011; Norberg et al., 2007; O'Sullivan et al., 2000; Telegdy, 2009; Vythilingum and Stein, 2005; Walsh and McDougle, 2001) and SP (Flessner and Woods, 2006; Keuthen et al., 2001; Odlaug and Grant, 2010; Yosipovitch and Samuel, 2008) makes anecdotal references to the presence and importance of shame. These references do not typically specify the type of shame or provide empirical evidence for the presence of shame. In a dissertation study, "shame and secrecy" was derived as an important theme for eight women with TTM who provided qualitative data on TTM's impact on quality of life via interviews (Herpsberger, 2012). In a similar study of seven women who described TTM experiences via focus groups, all participants described shame/embarrassment (Casati et al., 2000), although the authors did not distinguish between these two affective states.

Consistent with these findings, two studies documented high rates of shame within patients with TTM. In a chart review of 67 TTM patients, 75% discussed feeling shame (Stemberger et al., 2000). Likewise, 89.4% of 47 TTM patients seen in a hospital clinic described shame related to hair pulling (du Toit et al., 2001). It was not clear how shame was measured in this study. Finally, a measure of distress and impairment associated with hair pulling was validated in a dissertation study of 1189 Internet-recruited hair pullers (Larson, 2007). The author describes the emergence of a *shame* factor in this measure, suggesting that shame is one primary underlying factor in distress and impairment among hair pullers.

Only one descriptive study of general shame in SP was identified. Among 31 individuals with SP, self-reported shame after picking correlated strongly (r = .51) with Skin Picking Impact Scale scores (Keuthen et al., 2001). Together, these studies provide an initial, broad look at the potentially high rates of general shame experienced by those with TTM and SP.

Beyond descriptive studies, one dissertation and two published studies have compared general shame in individuals with TTM or SP with college students. In her dissertation, Noble (2012) found that shame on all subscales (characterological, behavioral, bodily) of the self-report Experience of Shame Scale (ESS; Andrews et al., 2002) was higher in 114 participants with TTM compared to 286 college students, with large effects (Cohen's *d*s ranging from 1.10 – 1.56). Similarly, in an online study of 733 participants with self-reported TTM, participants' external shame on the Other-As-Shamer Scale (Goss et al., 1994) was greater than prior reports of scores on this measure in non-clinical college samples (Norberg et al., 2007). Finally, Keuthen et al. (2000) found that a clinical sample of 31 skin pickers reported higher shame (assessed via a single, retrospective item) after picking compared to 82 college students who engaged in some skin picking, with a large effect (Cohen's $d = 1.95$). The descriptive research on shame in TTM and SP suggests that general shame is elevated among clinical, compared to non-clinical, samples.

However, results may differ when shame is compared to other clinical groups. In a study comparing the YSQ shame/defectiveness subscale across 278 OCD and 54 TTM participants (for details, see *General Shame in OCD*), shame/defectiveness scores were higher for the OCD group (Lochner et al., 2005). This suggests that general shame in TTM may not be as severe as that experienced in OCD, but replication of this finding is needed. Overall, the literature regarding general shame in TTM and SP is highly preliminary.

Symptom-based shame in TTM and SP—Although most references to shame in the TTM and SP literature do not explicitly discuss types of shame, two primary types are implied: symptom-based shame and body shame. Symptom-based shame in TTM and SP includes shame related to pulling, picking, and post-pulling/post-picking behaviors (e.g., biting hair, chewing scabs, swallowing hair) (Larson, 2007; Swedo and Rapoport, 1991; Vythilingum and Stein, 2005). The conceptual literature also references symptom-based shame that is derived from the belief that hair pulling is a simple habit (as opposed to understanding that it is a complex behavior) and, therefore, that one should be able to control it easily (Keuthen et al., 2001; Larson, 2007).

In her dissertation, Noble (2012) found that scores on the behavioral shame subscale of the ESS were greater among 114 participants with TTM compared to 286 college students, with a large effect (Cohen's $d = 1.10$). The behavioral shame subscale used may have captured symptom-based shame, but the measure did not assess shame specifically associated with TTM behaviors. du Toit et al. (2001) compared shame across those who primarily engaged in focused (i.e., conscious) hair pulling compared to automatic (i.e., outside of conscious awareness) hair pulling. Focused pulling was associated with more shame, with a large effect (estimated Cohen's $d = .78$), suggesting that there is symptom-based shame associated with awareness of the pulling behavior. It was unclear from the report how shame was measured.

Body shame in TTM and SP—Body shame, experienced in response to damage resulting from BFRBs, may also be prominent in TTM and SP (Casati et al., 2000; Keuthen et al., 2001). For instance, a case description of TTM describes "humiliation [felt]… when I look in the mirror and see the consequences of my hair pulling" (Casati et al., 2000, p. 348).

Thus, unlike BDD, in which body shame is inherent to the disorder, body shame in TTM and SP arises secondarily. It therefore may be a less universal experience in these disorders than in BDD, although that remains an empirical question.

In the dissertation study described above (Noble, 2012), scores on the body shame subscale of the ESS were elevated in participants with TTM compared to HCs, with a large effect (Cohen's $d = 1.36$). Further, a single published study addressed this issue. Using chart reviews of 67 TTM patients, researchers found a significant, strong correlation ($r = .51$) between reports of shame and reports of feeling unattractive (Stemberger et al., 2000). These data offer preliminary evidence of body shame in TTM. Additional empirical research in this area would help clinicians understand the importance of focusing on these two types of shame in treatments of TTM and SP.

Shame as a treatment barrier—As with each of the OCRDs reviewed to this point, shame appears to be a strong contributor to secrecy, withdrawal, and avoidance in TTM and SP. Shame may act as a treatment barrier, creating a negative cycle, as lack of treatment prevents sufferers from obtaining psycho-education, resources, and potential symptom reduction from treatment, each of which may maintain shame.

Much TTM literature, in particular, describes secrecy as a central experience (Diefenbach et al., 2005; Drysdale et al., 2009; Herpsberger, 2012; Ko, 1999; O'Sullivan et al., 2000; Stemberger et al., 2000; Swedo and Rapoport, 1991; Walsh and McDougle, 2001), with several of these discussions directly relating secrecy to feelings of shame. Those with TTM may go to great lengths to prevent others from knowing about the behavior (Bohne et al., 2005; Casati et al., 2000; Keuthen et al., 2001; Walsh and McDougle, 2001) or from seeing hair loss (Drysdale et al., 2009; Keuthen et al., 2001; Woods et al., 2006). These lengths include social withdrawal (Diefenbach et al., 2005; Keuthen et al., 2001), avoidance of activities (e.g., outdoor activities, haircuts) (Stemberger et al., 2000), avoidance of intimacy (Keuthen et al., 2001; Stemberger et al., 2000), and avoidance of psychological treatment or medical healthcare (e.g., to avoid discovery of hair pulling in a physical exam) (Keuthen et al., 2001; O'Sullivan et al., 2000; Telegdy, 2009; Walsh and McDougle, 2001; Woods et al., 2006).

Two empirical studies provide data on the relationship between shame and secrecy or avoidance in TTM. First, far higher rates of participants (over 50%) endorsed pubic hair pulling, which may be a particularly shame-ridden TTM symptom, in an Internet study of 1697 people with self-reported TTM than in prior, face-to-face studies of TTM (Woods et al., 2006). This different pattern of endorsement suggests that shame-driven secrecy may prevent individuals with TTM from endorsing symptoms even in the context of a TTM research study. In a second study, all seven participants in a focus group described secrecy, via camouflaging hair loss, avoiding activities that would show damage, or avoiding social and intimate relationships (Casati et al., 2000).

Although shame-driven treatment avoidance has been noted in each disorder covered to this point, it may be especially salient in TTM. TTM is a highly under-discussed topic (e.g., compared to OCD), and it is poorly understood even by medical doctors (Casati et al.,

2000). Thus, negative experiences disclosing symptoms to doctors who do not understand TTM are likely, and may lead to years of subsequent healthcare avoidance. While less is written about shame and avoidance in SP, a few papers anecdotally describe patterns in SP similar to those described in TTM (Bohne et al., 2005; Keuthen et al., 2001; Yosipovitch and Samuel, 2008). Taken together, anecdotal literature demonstrates that secrecy and avoidance are central for many with TTM and SP. However, research lags behind.

Shame within a cognitive behavioral model of TTM and SP—CB conceptualizations of TTM and SP suggest that pulling and picking may be triggered by a wide array of factors (e.g., sensory, cognitive, environmental, emotional) (Mansueto et al., 1999). Though untested, shame may be an emotional trigger for BFRBs. Moreover, pulling and picking, in addition to post-pulling and post-picking behaviors (e.g., chewing hair, biting roots, chewing scabs), may generate symptom-based shame and secondary body shame. Thus, a cycle may develop, in which BFRBs generate shame, which in turn triggers additional engagement in BFRBs. Research assessing shame as an affective trigger and consequence of BFRBs would further our ability to incorporate these constructs into conceptualizations and treatments of TTM and SP.

Shame in Hoarding Disorder

Very little HD literature discusses shame. Of the literature that mentions shame, there are conflicting opinions. Some of the earliest descriptions of HD (Clark et al., 1975) describe a lack of shame. However, more recent anecdotal reports emphasize shame as a component of HD (Frost and Hristova, 2011; Schmalisch et al., 2010). These later reports describe both symptom-based shame related to saving behaviors (Frost and Hristova, 2011; Schmalisch et al., 2010) and shame about having a mental illness (Schmalisch et al., 2010). In particular, individuals who hoard often hide their home from others (Frost and Hristova, 2011), which may reflect symptom-based shame about saving behaviors. Hiding one's home may also reflect fear of eviction or legal trouble.

The clinical literature on HD contains some recommendations relevant to shame. First, group treatments are described as essential to alleviating shame (Schmalisch et al., 2010). Second, although it can be difficult for clinicians new to HD to respond with neutrality to hoarding environments, neutral, non-disgusted responses are seen as central to reducing shame in treatment (Frost and Hristova, 2011). Finally, clinicians working with families of those who hoard are advised to be aware of the potential presence of shame among family members (Tolin et al., 2008; Wilbram et al., 2008). Clinicians in this circumstance should attend to both the family's shame as well as how family shame and rejection may affect the individual who hoards. It is important for researchers to evaluate shame among patients who hoard and their families, in order to provide empirical support for these clinical recommendations.

To the best of our knowledge, only one empirical study has published data on shame in HD. In structured interviews with 15 people with HD, one participant mentioned "shame/ embarrassment" as a central emotion (Seedat and Stein, 2002). The report does not specify the source of shame, or whether shame and embarrassment were distinguished (they were

mentioned together in the paper). There is clearly a great need for empirical data on all forms of shame in HD.

Shame within a cognitive behavioral model of hoarding disorder—Of all the OCRDs, the literature on shame in HD is most notably scarce. Thus, the next step in extending the literature is to conduct research assessing whether shame is central to hoarding. If evidence suggests that it is, research identifying the types of shame involved in HD will be an additional next step. Without this fundamental empirical information, it is difficult to contextualize shame within CB theory of HD.

The conceptual literature does underscore one cognitive variable that may be related to shame in HD: insight. Insight can vary tremendously in HD (Tolin et al., 2008; Wilbram et al., 2008). In contrast to OCD, many individuals with HD experience symptoms as ego-syntonic (Wilbram et al., 2008). For example, people who hoard may identify as environmentalists and perceive that saving is consistent with environmental efforts. Individuals with poorer insight, for whom hoarding is more ego-syntonic, may experience little symptom-based shame. Research directly studying how insight and attitudes about saving correlate with shame in HD is needed to evaluate this possibility.

Discussion

As highlighted in this review, the role of shame across the OCRDs is an area that deserves attention. A number of types of shame appear relevant in OCRDs. General shame and shame about having a mental illness appear in, but are not unique to, OCRDs. Some instances of symptom-based shame are more specific to OCRDs. In OCD, symptom-based shame may be triggered particularly by violent, sexual, or blasphemous obsessions. In TTM and SP, symptom-based shame may be related to pulling, picking, and post-pulling/picking behaviors. In HD, symptom-based shame may arise in response to beliefs about being defective due to living with clutter. Body shame may be experienced by individuals with BDD, TTM, and SP. Within BDD, body shame appears inherent to the disorder, whereas in TTM and SP body shame may arise as a secondary response to damage done to oneself from BFRBs.

Limitations

Most of the knowledge we have on shame in OCRDs comes from clinical, conceptual, and anecdotal work. Empirical studies do not typically assess specific types of shame, and they often use broad-brush methods of assessing shame in a single item. Moreover, although our conceptual understanding of shame within OCD and BDD is somewhat more developed than in TTM, SP, and HD, we largely lack research testing these conceptual hypotheses about the role of shame. Research investigating shame within CB models would advance our understanding of, and consequently our ability to treat, OCRDs.

Recommendations for Future Research

Based on limitations in the existing research, we make the following recommendations:

1. Researchers should consider the types of shame relevant to their research question and choose measures accordingly.
2. When available, researchers should use validated measures of shame.
3. The literature on shame in TTM, SP, and HD is in its infancy. Descriptive research assessing types of shame relevant to these disorders would be a useful next step.
4. Within OCD and BDD, research is needed testing the role of shame within CB models (e.g., distortions and obsessions leading to shame, which in turn promotes compulsions or withdrawal to reduce shame).
5. Research testing whether current OCD treatments (e.g., ERP) reduce shame, in addition to anxiety, is needed. This may include studying ways to improve treatment of shame, for example, by incorporating modules from third-wave behavioral therapies (e.g., Acceptance and Commitment Therapy [ACT], Dialectical Behavior Therapy [DBT], Compassion-Focused Therapy [CFT]).
6. Given shame's relationship to social and occupational withdrawal, depression, and suicidality within the broader emotions literature, research investigating shame as a risk factor for these outcomes within OCRDs is merited.
7. Research that elucidates the relationship between insight and shame across OCRDs would provide useful knowledge about the relative importance of addressing insight in treatment, in conjunction with shame. In most OCRDs, symptoms are ego-dystonic. Ego-dystonic symptoms are expected to generate greater shame, as the sufferer experiences symptoms as clashing with their self-concept. Conversely, in BDD with poor insight, individuals are less likely to recognize preoccupations as psychological and thus may experience *more* intense body shame.
8. Research testing shame as a barrier to treatment within each OCRD is needed. Empirical support for shame as a treatment barrier would emphasize the importance of targeting shame, in order to promote support-seeking. This could be done in treatment, with those for whom shame did not prevent treatment-seeking, and it could be done on a community level, by spreading awareness about these disorders.

Clinical Implications

Attention to shame in interventions may enhance the effectiveness of OCRD treatments. Clinical implications of the literature reviewed above are presented.

1. Clinicians who work with OCRDs should provide psychoeducation to clients early in treatment. Receiving accurate, objective information from a knowledgeable clinician likely has the potential to be a key opportunity to reduce shame.
2. Relatedly, clinicians should be attentive to receiving information in a neutral, non-judgmental manner, especially when clients disclose shame-ridden symptoms. This can be achieved through normalizing information disclosed by clients and through maintaining neutral facial expressions and non-verbal cues during disclosure and home visits (e.g., with HD clients).

3. Clients may experience relief from shame by joining therapy groups and attending conferences and retreats (e.g., Trichotillomania Learning Center [TLC] Annual Conference/Retreat, International OCD Foundation Annual Conference). These opportunities provide a chance to meet others with the same disorder in addition to knowledgeable professionals. One study of responses to the TLC annual retreat suggested that attendance aids in shame reduction (Lochner et al., 2013).

4. Clinicians should consider whether addressing shame is a relevant goal to incorporate into treatment for OCRD clients. Third wave behavior therapies (e.g., ACT, DBT, CFT) may provide useful shame modules that could be incorporated into current OCRD treatments. Cognitive restructuring may also be key to addressing shame within CB treatments.

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