Abstract

Background: Individuals with mental health concerns face many barriers when accessing psychological treatment. Even when patients overcome these barriers, they often do not receive an evidence-based treatment. Although the current literature highlights these issues clearly across psychological disorders, the research is limited in relation to body dysmorphic disorder (BDD).

Aim: The aim of this study was to examine psychological treatment barriers, treatment delivery preferences, and treatment histories of individuals with symptoms of BDD.

Method: A total of 122 participants with clinically significant BDD symptoms (94% female; M age = 34.19, SD = 10.86) completed the cross-sectional study.

Results: The most frequently reported barriers to accessing psychological treatment for individuals with BDD symptoms were the cost of treatment (41%) and the belief that the symptoms did not warrant treatment (36%). While 69% of treatment seeking participants reported previously receiving CBT for BDD, only 13% of participants appeared to receive best-practice CBT. The preferred modality of future psychological treatment delivery was face-to-face treatment with a therapist once a week (63%), rather than accelerated or remote treatment approaches.

Conclusions: The study suggests that there are significant barriers to accessing CBT for BDD. Reducing these barriers, as well as increasing consumer mental health literacy, is required to improve treatment access and treatment outcomes for individuals with BDD.

Keywords: body dysmorphic disorder; barriers to treatment; help-seeking intention; treatment history; treatment delivery preferences.

Treatment Barriers, Preferences, and Histories of Individuals with Symptoms of Body

Dysmorphic Disorder

Body dysmorphic disorder (BDD) is characterised by a preoccupation with an

imagined or minor flaw in physical appearance, accompanied by repetitive behaviours and/or

mental acts (e.g. checking appearance in the mirror, comparing appearance to others) which

create significant distress and/or impair functioning (American Psychiatric Association,

2013). BDD is a relatively common disorder, with a prevalence of approximately 2%

(Buhlmann et al., 2010; Koran, Abujaoude, Large, & Serpe, 2008; Schneider, Turner, Mond,

& Hudson, 2017). The onset of BDD typically occurs during adolescence (Bjornsson et al.,

2013), and the disorder is generally chronic in nature (Phillips, Menard, Quinn, Didie, &

Stout, 2013). Seventy-five percent of individuals with BDD experience suicidal ideation and

more than one in five have made a suicide attempt (Albert et al., 2019), highlighting BDD as

a major public health concern.

Clinical guidelines recommend cognitive-behavioural therapy (CBT) in the treatment

of BDD (National Institute for Health and Care Excellence, 2005). CBT for BDD is typically

conducted across 8-14 sessions (Harrison, Fernández de la Cruz, Enander, Radua, & Mataix-

Cols, 2016) and generally has a significant focus on within-session and between-session

exposure and response prevention (ERP) (Kelly & Phillips, 2017). ERP for BDD involves

gradually confronting feared situations while eliminating the use of safety behaviours (Kelly

& Phillips, 2017). Meta-analyses have demonstrated the efficacy of CBT for BDD (Harrison

et al., 2016; Williams, Hadjistavropoulos, & Sharpe, 2006), however many individuals

encounter numerous barriers to accessing this treatment (Buhlmann, 2011; Marques,

Weingarden, Leblanc, & Wilhelm, 2011).

North American and European studies have identified shame, stigma, and a

preference for self-reliance as the most frequently endorsed barriers to treatment for

individuals with BDD symptoms (Buhlmann, 2011; Marques et al., 2011). Other common barriers include doubt about treatment efficacy and concerns about treatment costs (Marques et al., 2011). While these studies demonstrate that individuals with BDD experience significant barriers to accessing treatment, they are restricted to specific geographical locations, thus it is not clear if these barriers are applicable to individuals with BDD in other contexts. Another important barrier to accessing psychological treatment for individuals with BDD is that they often present to dermatology, cosmetic or orthognathic clinics, rather than psychiatric or psychological services. For example, Marques and colleagues (2011) identified that one quarter of their sample with BDD had previously accessed a dermatologist to address their body image concerns.

Unfortunately, even when individuals with BDD do seek help from a mental health professional, their symptoms may not be recognised by the clinician (Veale, Akyüz, & Hodsoll, 2015). Furthermore, even when BDD symptoms are correctly identified it appears that patients are generally not provided with an evidence-based intervention. For example, Marques et al. (2011) found that less than 20% of individuals with BDD symptoms had received CBT when they sought help for their symptoms. While under-researched in BDD specifically, this finding is similar to research investigating treatment histories in other obsessive-compulsive and related disorders (OCRDs) (Stobie, Taylor, Quigley, Ewing, and Salkovskis, 2007; Robertson et al., 2020). Given the paucity of research in this area, further research investigating the treatment histories of individuals with BDD is required in order to ensure individuals with BDD are able to access prompt evidence-based treatment for their condition.

Effective psychological treatment for mental health disorders can now be delivered using a variety of methodologies. These treatment approaches can generally be divided into high intensity and low intensity interventions (Wootton, 2016). The most common high

intensity intervention is traditional face-to-face treatment. Typically, face-to-face CBT for BDD is delivered weekly (Kelly & Phillips, 2017), however, accelerating treatment, where patients attend multiple sessions per week, may result in enhanced clinical outcomes, which has been demonstrated in childhood anxiety (Öst & Ollendick, 2017). Accelerated treatments have been demonstrated to be effective for other OCRDs (Jónsson, Kristensen, & Arendt, 2015), as well as other anxiety and related disorders (Ehlers et al., 2014; Wootton, Hunn, et al., 2018), however the acceptability and efficacy of this approach for BDD has only been examined in case studies to date (Aldea, Storch, Geffken, & Murphy, 2009; Le, Merricks, Nadeau, Ramos, & Storch, 2017). Remote high intensity treatment can also be provided via internet or traditional videoconferencing. Similar to accelerated treatments, video-conferencing delivered CBT has been demonstrated to be effective in the treatment of other OCRDs (Himle et al., 2006), as well as other anxiety and related disorders (Sloan, Gallagher, Feinstein, Lee, & Pruneau, 2011). To date, the acceptability and efficacy of videoconferencing-delivered CBT has not yet been investigated in the treatment of BDD.

Low intensity treatment approaches such as internet-delivered CBT (ICBT) and bibliotherapy-delivered CBT (BCBT) require significantly less clinician time, enhancing the efficiency of treatment. Recent meta-analyses have demonstrated that guided ICBT interventions generally result in equivalent outcomes to face-to-face treatment for a variety of psychological disorders (Andersson, Cuijpers, Carlbring, Riper, & Hedman, 2014; Carlbring, Andersson, Cuijpers, Riper, & Hedman-Lagerlöf, 2018). Recent clinical trials have demonstrated that ICBT is efficacious for BDD (Enander et al., 2016; Enander et al., 2019). While BCBT has not yet been examined in BDD patients, this approach has been demonstrated to be efficacious in other OCRDs (Wootton, Dear, Johnston, Terides, & Titov, 2013), as well as other anxiety and related disorders (Hedman, Axelsson, Andersson, Lekander, & Ljótsson, 2016; Wootton, Steinman, et al., 2018).

Despite the multiple options for delivering CBT there is currently no literature examining acceptability and treatment delivery preferences for individuals with BDD symptoms. Research comparing treatment delivery preferences for other mental health conditions have indicated that the majority of individuals would prefer face-to-face treatment in comparison to internet-based treatment, at least for depression (Dorow, Lobner, Pabst, Stein, & Riedel-Heller, 2018) and illness anxiety disorder (Soucy & Hadjistavropoulos, 2017). While it is plausible that individuals with BDD may have similar treatment delivery preferences, it could also be the case that due to their appearance related concerns and preference to manage their own symptoms (Marques et al., 2011), patients with BDD may prefer remote and/or low intensity interventions. This information is needed to inform future policy and treatment delivery for patients with BDD.

Given the limitations of the existing literature the aim of the current study was to examine 1) barriers to psychological treatment; 2) psychological treatment preferences; and 3) treatment histories for individuals with BDD symptoms in an Australian sample. Given the limited research to date, this study is exploratory with no *a priori* hypotheses. The findings are likely to have important implications for the provision of evidence-based treatment for individuals with BDD in Australia.

Method

Participants

One hundred and twenty-two participants (94% female; *M* age = 34.19, *SD* = 10.86; range 18-61) were included in the study. Participants were recruited through advertisements posted in online forums and via hardcopy posters in the Sydney metropolitan area. The online survey was active between March and August 2019. To be included in the study participants were required to be (1) at least 18 years of age; (2) proficient in English; (3) live in Australia; 4) score nine or above on the Dysmorphic Concern Questionnaire (DCQ; Oosthuizen,

Lambert, & Castle, 1998); and 5) complete the demographics form, as well as at least one of the study questionnaires.

Measures

Dysmorphic Concern Questionnaire (DCQ; Oosthuizen, Lambert, & Castle, 1998). The DCQ is a self-report measure comprised of seven items which assess cognitions and behaviours related to dysmorphic concern. DCQ items are rated on a 4-point Likert scale from 0 (*Not at all*) to 3 (*Much more than most people*), with a total score of nine and above indicating the presence of clinically significant BDD symptoms (Mancuso, Knoesen, & Castle, 2010). The DCQ has demonstrated good internal consistency (α = .80) and discriminant validity (Jorgensen, Castle, Roberts, & Groth-Marnat, 2001), as well as high sensitivity (96.4%) and specificity (90.6%) in a BDD outpatient setting (Mancuso et al., 2010). Internal consistency in the present study was excellent (Coefficient H = .90).

Patient Health Questionnaire – 9 Item (PHQ-9) (Kroenke, Spitzer, & Williams, 2001). The PHQ-9 is a nine-item self-report measure of depressive symptoms. Items are rated on a 4-point Likert scale from 0 (*Not at all*) to 3 (*Nearly every day*) and summed to provide an indication of depression severity. Scores of 10 and above represent a clinically significant level of depression, with scores of 5, 10, 15 and 20 indicating mild, moderate, moderately severe, and severe depression respectively (Kroenke, Spitzer, Williams, & Lowe, 2010). The PHQ-9 has demonstrated good internal consistency (α = .86 - .89) and evidence of discriminant, criterion and construct validity (Kroenke et al., 2001). In the current study internal consistency was excellent (Coefficient H = .94).

Treatment Barriers Questionnaire (TBQ). Treatment barriers were measured with the TBQ, a questionnaire that provides participants with 22 response choices that identify a range of barriers to psychological treatment. Participants were asked to *"Please indicate which, if any, of the following factors might impact your decision to seek psychological*

treatment for your appearance related concerns in the future". Examples of items in the TBQ include "*I think I can/should work out my own problems rather than talking to a psychologist*", "*there are no available treatment options or services in my local area*", and "*I can't take time off work for treatment*". All items of the TBQ are outlined in Table 2. The items in this questionnaire were based on items used in similar research (Langley, Wootton, & Grieve, 2018; Robertson et al., 2020). Participants were also asked to indicate their intention to seek treatment for their BDD in the next 12 months *("How likely would you be to seek psychological treatment for appearance related concerns in the next 12 months?")* on a 0 (*Very Unlikely*) to 100 (*Very Likely*) scale.

      Treatment History Questionnaire (THQ). The THQ was provided to participants who indicated past psychological treatment for BDD. The questions in the THQ were based on previous studies that have used a similar approach (Stobie, Taylor, Quigley, Ewing, & Salkovskis, 2007; Robertson et al., 2020) and aimed to elicit whether the CBT received by the participants could be considered best-practice. Participants were asked: 1) their age when they first sought professional help ("*How old were you when you first sought professional help for your appearance-related concerns*"); 2) the total number of health professionals they had approached ("*How many different professionals would you estimate that you have approached for treatment of your appearance-related concerns in total?*"); and 3) the type of treatment they had ever received *("Which of the following types of professional help have you ever received for your appearance-related concerns? a. Supportive counselling (e.g. talking with your therapist about your day to day problems but not specifically focusing on skills to reduce the appearance-related concerns); b. Relaxation (e.g., learning techniques to control your breathing and relax); c. Cognitive and/or behavioural therapy (e.g., learning how to challenge your appearance-related thoughts and/or learning how to gradually confront your*

fears and face the things that you have been avoiding); d. Mindfulness (e.g., learning skills to be more present in the moment); e. Medication; f. Other (describe); g. Not sure").

Participants who indicated that they had previously received CBT were also asked to indicate using a Yes/No response format whether 1) their BDD symptoms were the focus of the majority of sessions *("Thinking about when you've received that treatment in the past did you focus on the appearance-related concerns and symptoms for the majority of the session");* 2) the treatment utilised in-session exposure *("Thinking about when you've received that treatment in the past did you complete in session exposure tasks with your therapist where you confronted feared situations in session without engaging in safety behaviours?")*; 3) sessions were weekly *("Thinking about when you've received that treatment in the past did you have the majority of the sessions with your therapist at least weekly?")*; and 4) whether they were given between-session homework tasks *("Thinking about when you've received that treatment in the past did you get given tasks to complete at home (i.e., outside of the therapy session) in order to practice the skills that you were taught in session?").*

Treatment Preferences Questionnaire (TPQ). The TPQ assessed treatment delivery preferences. Participants were asked to indicate which treatment delivery modality they would prefer (*"If you could only choose one treatment option for your appearance related concerns which of the below would you choose?…").* Treatment delivery options included both high intensity (standard weekly face-to-face treatment, group treatment, accelerated face-to-face treatment, or internet-videoconferencing) and low intensity (ICBT or BCBT). Participants rated on a scale of 0 (*Very Unlikely*) to 100 (*Very Likely)* how likely they would be to use each treatment delivery modality. For low intensity treatments participants were also asked their preferences for adjunctive therapist support *("If you were to do a 12-week treatment program on your own using the internet or a self-help workbook, would you prefer:*

a) to do the program entirely on your own (that is, with no therapist support), or b) to have some therapist support (either over the phone or via email)"), and how they would prefer that support to be delivered (i.e., telephone or email) *("If you were to do a 12-week treatment program on your own using the internet or a self-help workbook, would you prefer: a) contact with a psychologist via email, or b) contact with a psychologist via telephone").*

Procedure

Participants were directed to a survey link via the online/hardcopy advertisements. In order to recruit individuals with likely BDD symptoms the advertisement heading stated *"Do you dislike certain aspects of your appearance? Do you spend a lot of time worrying about how you look? Do these symptoms significantly impact your daily life?"* Participants initially read the participant information statement and signed an online consent form before completing the DCQ. Only participants who scored 9 or above on the DCQ completed the other questionnaires in fixed order. All measures were completed using REDCap electronic data capture tools hosted at the University of Technology Sydney (Harris et al., 2019; Harris et al., 2009). Participants who completed the study were eligible to enter a prize draw to win one of four $50 vouchers for a large Australian retailer, however this information was not provided on the study advertisement. The study was approved by the Human Research Ethics Committee of the University of Technology Sydney.

Data Analysis

Treatment barriers, delivery preferences, and histories were analysed using descriptive statistics. Independent samples t-tests and chi-square analyses were used to examine post-hoc group differences. Magnitude of effect sizes were interpreted in line with Cohen's *d* (where .20, .50 and .80 represent small, medium and large effects respectively) and the phi coefficient (φ; where .10, .30 and .50 indicate small, medium and large effects respectively) (Cohen, 1992). A multiple regression analysis was also performed to examine

the variance of help-seeking intention that can be predicted by the study variables. A power analysis (G*Power 3.1.9.3; Faul, Erdfelder, Buchner, & Lang, 2009) indicated that to examine five predictor variables assuming a medium effect size (f^2 = 0.20; Cohen, 1992), with alpha of .05 and power of .80, 70 participants would be required. All data was analysed with IBM SPSS Statistics for Windows, Version 25.0. Due to the exploratory nature of the study adjustments were not made for multiple comparisons.

Results

Participant Characteristics

Table 1 outlines the demographic information and outcomes on each of the measures. Participants in the study were primarily female (94%) and aged in their mid-thirties (*M* age = 34.19, *SD* = 10.86; range 18-61). The mean for the DCQ was 13.57 (*SD* = 3.17), which is consistent with DCQ scores seen in outpatient BDD samples (Mancuso et al., 2010). The average age of onset of BDD symptoms was 15.08 years (*SD* = 9.48), and the average age at which symptoms impacted upon functioning was 18.52 years (*SD* = 10.31). On average, participants indicated experiencing BDD symptoms for 18.42 years (*SD* = 10.82). The mean for the PHQ-9 was 15.60 (*SD* = 6.63), which fell in the moderately severe range for depressive symptoms. Of the 104 participants who completed the PHQ-9, 86 (82.7%) scored ≥ 10, indicating clinically significant symptoms of depression.

[INSERT TABLE 1 ABOUT HERE]

Treatment Barriers and Treatment Seeking Intention

Endorsed treatment barriers are outlined in Table 2. The most commonly endorsed barriers related to cost (50/122, 41%; *"I would not be able to afford treatment")*, a belief that symptoms do not require treatment (44/122, 36%; *"I don't think my symptoms constitute a mental health condition that requires treatment")*, and a preference to self-manage symptoms

(41/122, 34%; *"I think I can/should work out my own problems rather than talking to a psychologist"*). The average number of reported barriers was 3.51 (*SD* = 3.11; range 0 – 20).

[INSERT TABLE 2 ABOUT HERE]

Group differences in barriers were explored for young adults (18 – 25 years old; *N* = 33) and adults (over 25 years; *N* = 89) across all barriers. Results indicated that having had previously unhelpful support from a psychologist was a significantly greater barrier for young adults compared to adults (χ^2 (1, N = 122) = 4.61, *p* = .03, φ = -.19, small effect). Further, young adults were significantly more likely to endorse being concerned about being criticised by others for seeking help from a psychologist when compared to adults (χ^2 (1, N = 122) = 4.92, *p* = .04, φ = -.20, small effect).

Group differences in barriers were also explored for participants who had previously received psychological support (*N = 55*) and those who had not (*N* = 67). The results indicated that individuals who had previously sought psychological treatment were significantly more likely to endorse having no barriers to treatment compared to those who were treatment naïve (χ^2 (1, *N* = 122) = 6.35, *p* = .02, φ = .23, small effect). Further, those who had previously sought psychological treatment reported that they significantly preferred seeking help from friends and/or family rather than a psychologist, compared to those who were treatment naïve (χ^2 (1, *N* = 122) = 5.96, *p* = .02, φ = .22, small effect). Group differences in barriers were also explored between individuals living in major cities (*N* = 93), compared to regional and rural areas (*N* = 29), however no significant results were observed.

A multiple regression analysis was conducted to assess whether age, geographical location, BDD severity, depression severity, or history of psychological treatment predicted participants' help-seeking intention (participant help-seeking intention was reported on a 0 (*Very Unlikely*) to 100 (*Very Likely*) scale). Table 3 outlines the correlation matrix of the

variables used. Table 4 outlines the standardised and unstandardised coefficients, the standard error for coefficient, the t test statistic, and the probability value for each variable. These factors explained 19% of the variance in future help-seeking intent, $R^2 = .19$, $F_{(5, 98)} = 4.60$, $p < .01$, with previous psychological support significantly predicting likelihood of future treatment-seeking behaviours ($\beta = .42$, $p < .001$). Participants who had previously sought psychological treatment were found to be significantly more likely to seek it in the future ($N = 54$; $M = 57.94$, $SD = 29.29$) than individuals who had never received psychological treatment ($N = 67$; $M = 37.10$, $SD = 27.10$), $t_{(119)} = -4.06$, $p < 0.01$, $d = 0.74$, medium effect.

[INSERT TABLE 3 ABOUT HERE]

[INSERT TABLE 4 ABOUT HERE]

Treatment Delivery Preferences

Table 5 outlines the treatment delivery preferences of the participants. Participants indicated an overwhelming preference for traditional face-to-face treatment (70/111; 63%) followed by low intensity treatment (23/111; 21%). Participants also indicated that if they were to complete a low intensity treatment they would prefer: 1) to complete the program with some therapist support (91/111; 82%) rather than independently (20/111; 18%); 2) therapist support to be via email (74/111; 67%) rather than over the telephone (37/111; 33%); and 3) to complete a treatment program via the internet (62/111; 56%) rather than via bibliotherapy (49/111; 44%).

[INSERT TABLE 5 ABOUT HERE]

Group differences in treatment delivery preferences were examined for age, geographical location and experience with previous psychological treatment. The results indicated a significant difference for geographical location [χ^2 (5, $N = 111$) = 14.62, $p = .01$, $\varphi = .36$, medium effect effect], with those in rural and remote locations more likely to prefer internet videoconferencing than those in urban locations, and those in urban locations more

likely to prefer low intensity interventions compared with those in rural and remote locations. No significant results were found for age or based on experience with previous treatment.

Treatment Histories

Fifty-five participants (55/122; 45% of the total sample) had previously received psychological treatment for their symptoms. On average these participants had seen 3.51 health professionals ($SD = 2.44$) for treatment. 40 participants (40/55; 73%) indicated that they received supportive counselling, 26 participants (26/55; 47%) indicated they received medication, 23 participants (23/55; 42%) indicated they received mindfulness style treatments, 18 participants (18/55; 33%) indicated that they had received relaxation, 4 participants (4/55; 7%) indicated another type of treatment, and 1 participant (1/55; 2%) indicated that they were not sure what kind of treatment they had received. 38/55 participants (69% of those who had accessed previous psychological treatment) reported receiving CBT for their BDD symptoms in the past, of which 18/38 (47.4%) endorsed focusing on their symptoms during session, 14/38 (36.8%) reported completing in-session exposure tasks, 10/38 (26.3%) attended weekly sessions, and 33/38 (86.8%) were assigned between-session homework tasks. Of these 38 individuals, only five (13.2%) received all components of CBT, and therefore likely obtained an evidence-based treatment (when removing the requirement to receive weekly sessions, 6/38 (15.8%) received a likely evidence-based treatment).

Discussion

The aim of the present study was to examine: 1) barriers to psychological treatment; 2) psychological treatment preferences; and 3) psychological treatment histories for individuals with BDD symptoms in an Australian sample. The study was exploratory with no *a priori* hypotheses. The results of the present study revealed that the most common barriers to accessing treatment in this sample was 1) the cost of treatment; 2) the belief that symptoms

did not warrant treatment; and 3) a preference to self-manage symptoms. These findings are generally consistent with international studies examining barriers to treatment for individuals with BDD. For example, Marques et al. (2011) found that similar barriers were common in a US sample of individuals with BDD symptoms. The findings are also consistent with other Australian findings examining barriers to treatment for a range of mental health conditions including obsessive-compulsive disorder (Gentle, Harris, & Jones, 2014), hoarding disorder (Robertson et al., 2020), post-traumatic stress disorder (Spence et al., 2011), and anxiety disorders (Langley et al., 2018). However it is important to highlight that this sample was overwhelmingly female, and males with BDD symptoms may experience different treatment barriers.

These findings have important implications for the provision of mental health care to individuals with BDD in Australia. Firstly, patients in Australia may access psychological treatment services through state funded mental health services or through private practice, and despite significant investment by the Federal Government in improving access to psychologists (Australian Government, 2019), many individuals are unable to access this treatment due to the out of pocket costs that are associated with this approach to treatment. While treatment through state funded services are free, access to these services is extremely limited for patients. Also, while private practice psychologists in Australia can bulk-bill patients, many request higher fees, resulting in out-of-pocket costs for patients. The Australian Psychological Society's recommended rate is currently $260 (Australian Psychological Society, 2020) for a 45-60 minute session.

Secondly, despite participants experiencing clinically relevant BDD symptoms, many indicated that they did not feel the symptoms required treatment. This may reflect poor mental health literacy amongst participants, which is consistent across many mental health conditions (Reavley & Jorm, 2011), or may reflect the low levels of insight seen in BDD

samples (Eisen, Phillips, Coles, & Rasmussen, 2004). It may also indicate the participants in the study had minor symptoms or non-BDD symptoms (i.e., primary concerns with body weight and shape). It is important for future research to elucidate the cause of this finding.

Finally, approximately 34% of participants had a preference to self-manage their symptoms, rather than seeking treatment from a mental health professional. This finding highlights the importance of developing and evaluating high quality self-help interventions that can be disseminated to patients with BDD, who may prefer this approach over face-to-face treatment. Such interventions, such as internet-delivered CBT, have been demonstrated to be effective (Enander et al., 2016; Enander et al., 2019), however currently this treatment has only been examined in Sweden, and is delivered in Swedish. Thus it is important for such programs to be developed and evaluated in other languages and contexts.

We examined group differences in barriers to accessing treatment and found that a fear of being criticised by others for seeking help and previously unhelpful experience with psychologists were significantly greater barriers for younger adults compared to adults. This highlights the importance of disseminating anti-stigma campaigns among young people, as well as the need for all patients to access high quality evidence-based interventions at their first contact with mental health services, to minimise the number of individuals who report dissatisfaction with their treating health professional. When individuals do not receive an evidence-based treatment, they are likely to consider psychological therapy generally to be ineffective, and thus may be unlikely to seek alternative treatment in the future.

Further comparisons demonstrated that individuals who had previously sought psychological support ($N = 55$) were more likely to have no barriers to treatment than those who were treatment naïve ($N = 67$). This is not surprising, as those who have previously had treatment have been able to overcome potential obstacles to seek help. Results of the regression indicated that across all participants previous psychological treatment significantly

predicted future treatment-seeking intent of individuals with BDD symptoms. This may be due to positive experiences associated with psychological treatment such as symptom and distress reduction, however further research is required to clarify this. This is important, especially given the finding in this study that younger adults with BDD symptoms who have previously received what they perceived to be an unhelpful experience with a psychologist were less likely to seek help in the future.

It was also found that individuals who had a history of psychological support would prefer to talk to their friends or family versus a psychologist, compared to those who were treatment naïve. While this finding has been observed in previous studies (Langley, Wootton, & Grieve, 2018) further research is required to understand this phenomenon. However, it was important to note that this barrier *("I prefer to seek help from family or friends rather than a psychologist")* was only reported by a small number of individuals in the study (approximately 4%), and thus may not reflect the views of the majority of individuals with BDD.

Consistent with previous research in other mental health conditions such as depression (Dorow et al., 2018), hoarding disorder (Robertson et al., 2020), and health anxiety (Soucy & Hadjistavropoulos, 2017), standard face-to-face individual treatment was identified as the preferred treatment modality for participants with BDD symptoms. A low intensity approach was the second most popular treatment delivery modality, demonstrating that this approach may be acceptable to individuals with BDD symptoms. Further, participants indicated that if they were to complete a low intensity treatment they would prefer for it to be a guided intervention, and for the guidance to be provided via email. A preference for guided over self-guided remote interventions has also been observed in other mental health conditions, such as depression (Hanson, Webb, Sheeran, & Turpin, 2016). The findings from the current study provide policy makers with useful information about how to

develop low intensity treatment approaches for BDD, however it is important that future studies include a representative sample of individuals with BDD, including higher numbers of males, as treatment preferences may differ by gender.

Consistent with past research on BDD (Marques et al., 2011), the current study demonstrated low rates of help-seeking, with under half of the sample (45%) indicating that they had previously sought psychological support for their BDD symptoms. For those who had received psychological treatment, supportive counselling was the most commonly received treatment, which is inconsistent with the recommendation of treatment guidelines (National Institute for Health and Care Excellence, 2005). Sixty-nine percent of participants who had sought previous psychological treatment had received CBT and when participants were asked about the CBT treatment they received, about one in ten had likely received evidence-based CBT, which we defined as CBT which 1) focussed on BDD for the majority of the session; 2) conducted at least weekly sessions; 3) contained elements of in-session exposure; and 4) included between-session homework tasks. This finding is consistent with previous research examining treatment histories of individuals with OCRDs (Moritz et al., 2019; Stobie et al., 2007; Robertson et al., 2020) and affective and/or anxiety disorders (Harris et al., 2015; Reid et al., 2018). One explanation for the low rates of evidence-based treatment may be therapist drift, which occurs when clinicians move away from providing the best-practice, evidence-based treatment and fail to deliver key components despite having the required training to do so (Waller, 2009; Waller & Turner, 2016). Further research into why CBT for BDD is not being administered to a minimally appropriate level should be conducted in the future.

The current study provides a preliminary understanding of the barriers to psychological treatment, psychological treatment preferences and treatment histories of individuals with BDD symptoms in Australia. However, several limitations of the research

should be considered. Firstly, participants in the study were not diagnosed with BDD by a clinician, and thus legitimate appearance flaws may be present, therefore not meeting the criteria for actual BDD, or their body concerns may be mild, or better explained by another condition, such as an eating disorder. In addition because we required participants to have current clinically relevant BDD symptoms those who had fully recovered from an evidence-based treatment would not have been eligible for the study, thus the results surrounding the delivery of best-practice CBT for BDD may be under-reported in this study. Future similar research would benefit from using a structured interview to affirm a diagnosis of BDD and may wish to include individuals who have fully recovered from BDD.

Secondly, the questionnaires used to collect data on participants' perceived barriers to treatment, treatment histories and treatment delivery preferences have not been empirically validated. It is important for such validated measures to be developed in the future to more accurately study barriers to psychological treatment, psychological treatment histories, and treatment delivery preferences in individuals with BDD. Further, the self-report nature of the information collected regarding treatment histories is problematic, as some participants may have had difficulty distinguishing between different psychological interventions described. Future studies could conduct a file review or interview to increase reliability of responses.

Finally, although attempts were made to recruit a diverse sample, most participants were non-indigenous, female and located in urban areas. The high proportion of female participants in the study is of particular concern, given the gender distribution of BDD in the community is generally equal (Koran, Abujaoude, Large, & Serpe, 2008). Unfortunately, disproportionally high rates of female participation is found in internet survey studies and is consistent with findings in other studies examining OCRDs using a similar recruitment methodology (Robertson et al., 2020; Wootton et al., 2011). Future research in this field would benefit from examining the research questions in a more diverse sample and one that is

representative of individuals with BDD in the community, potentially using large scale, epidemiological surveys.

The current study provides evidence to suggest that individuals with BDD symptoms in Australia face significant barriers to receiving minimally appropriate psychological treatment. Further it was evident that previous help-seeking behaviour was predictive of future help-seeking intention. Therefore, intervention campaigns aimed at increasing consumer mental health literacy may increase the utilisation of psychological services by this population. Additionally, research examining the barriers experienced by mental health professionals in delivering minimally appropriate psychological treatment for BDD would be helpful in informing future training of clinicians.

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