



Evaluating the feasibility and potential efficacy of a brief eTherapy for binge-eating disorder: A pilot study

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Abstract

Objective: For those with binge-eating disorder (BED), access to evidence-based, face-to-face treatment is often constrained by clinician availability and high treatment costs. Emerging evidence suggests online therapy (eTherapy) may navigate these barriers and reduce binge-eating symptomatology; however, less evaluation has been done in those with BED, particularly with briefer programs targeting early change. This study investigated the feasibility and potential efficacy of a brief, supported eTherapy in those with BED or subthreshold BED.

Method: Participants were 19 women with BED who completed a four-session eTherapy. This was a single-arm, pre-post intervention study, with participants completing weekly content and attending telehealth sessions. Key outcomes were assessed by the Eating Disorder Examination Questionnaire-Short (EDE-QS): objective binge episode days, loss of control over eating days, and eating disorder (ED) psychopathology via a total EDE-QS score.

Results: Generalized and linear mixed models showed significantly reduced loss of control over eating days and ED psychopathology. Program feasibility was high, with strong program adherence and a below average attrition rate.

Discussion: Pilot results support the feasibility and potential efficacy of a brief, behavioral-focused eTherapy program in reducing ED pathology in those with BED. Future research should further investigate findings in an adequately powered randomized controlled trial.

Public significance: This study suggests that a brief, behavioral-focused online therapy, guided by non-expert clinicians, can be successfully administered to those with binge-eating disorder (BED) and may be efficacious at reducing eating disorder and other related symptomatology. Brief eTherapies that are effective, accessible, and rapidly available may facilitate earlier intervention in illness and improve treatment outcomes for individuals who experience this common and distressing disorder.

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KEYWORDS

behavior therapy, binge-eating disorder, brief intervention, cognitive behavioral therapy, eating disorders, eTherapy, novel interventions, online therapy, pilot study, self-help

Binge-eating disorder (BED) is a severe and common mental health condition with a protracted course of illness (Davis et al., 2020; Udo & Grilo, 2018). First-line, evidence-based treatment comprises 20-hours or more of individual face-to-face Cognitive Behavioral Therapy (CBT) (Hay, 2020); however, shortages of appropriately trained professionals, high treatment costs, and client-side hesitancy due to self-stigma and previous negative treatment experiences, create barriers to help-seeking (Kazdin et al., 2017; Linardon, Messer, et al., 2020; McClay et al., 2016). To this point, a recent review of studies across high-income countries found less than 10–50% of those with BED access some form of care (Giel et al., 2022).

Supported eTherapies (i.e., digitally-delivered guided self-help programs) for eating disorders (ED) have emerged as promising lower-intensity alternatives that address many of the barriers of face-to-face treatment delivery (Traviss-Turner et al., 2017). These programs provide self-paced interventions most commonly structured on CBT principles for EDs, with varying levels of support provided by a clinician or appropriately trained support person (Yim & Schmidt, 2019). Moreover, their efficacy in reducing ED and binge-eating symptomatology has growing evidence across meta-analyses, with small to medium average effect sizes reported (Barakat et al., 2019; Dölemeyer et al., 2013; Linardon, Shatte, et al., 2020; Melioli et al., 2016).

Despite their promise, eTherapy evaluation in those with BED is limited (Linardon, Shatte, et al., 2020; Moghimi et al., 2021) and most assessed programs have been longer in duration, between four and six months (Carrard et al., 2011; De Zwaan et al., 2017; Wagner et al., 2016). This warrants further investigation given evidence of diminishing treatment effects after eight-sessions of face-to-face CBT (Rose & Waller, 2017), and more than 10-weeks of any treatment (Hilbert et al., 2019), in the those with BED. These results are consistent with non-linear treatment-dose effects observed in EDs and BED, whereby the first four weeks of treatment catalyze the majority of symptomatic improvement (Chang et al., 2021). Given eTherapies are self-help programs that require higher levels of motivation (Day et al., 2013), with low motivation linked to program dropout (Puls et al., 2020), a briefer program set within the timeframe of the most substantial symptomatic improvement (i.e., the first four weeks) might improve adherence and reduce dropout rates. This is pertinent given the poor long-term treatment outcomes associated with dropout in guided self-help programs (Delgado et al., 2014).

The aim of this study is to investigate the feasibility and potential efficacy of a brief, supported eTherapy intervention for people with BED or subthreshold BED. It is hypothesized that participants with BED or subthreshold BED, who complete a brief (four-session) Supported Self-Help Binge-Eating eTherapy (Brief SSH-BEeT) program, will have a significantly reduced frequency of objective binge episode days, loss of control over eating days, and reduced overall ED psychopathology than at baseline assessment. Feasibility will be evaluated via adherence to program content and dropout.

1 | METHOD

Trial registration. Registration number: ACTRN12621001612808.

1.1 | Design

This was a single-arm, uncontrolled study using a repeated measures design, with the time of intervention exposure (pre-intervention and post-intervention) comprising the within group variable.

1.2 | Participants and procedure

Participants were English-speaking and recruited via online methods (e.g., Facebook advertising) from the Australian community. Fifty-five women expressed interest, with 19 women entering the study (Figure S1). Those interested were assessed via a 20-min screening call with a trained researcher using self-designed questions (Barakat et al., 2021), with eligibility confirmed in an online assessment at baseline (Figure S2). Participants were required to have experienced one or more weekly objective binge episodes in the preceding two months (i.e., subthreshold BED), with those experiencing this frequency in the preceding three months considered BED, as per DSM-5 criteria (American Psychiatric Association, 2013). Further eligibility criteria are outlined in Table S1.

Prior to beginning weekly content, participants completed an online weekly assessment comprising the Eating Disorder Examination–Questionnaire Short (Gideon et al., 2016), the Kessler Psychological Distress Scale (Kessler et al., 2002), and risk assessment questions. The duration of Brief SSH-BEeT was approximately four-weeks. Risk associated with participation was low; however, given the clinical population, participant safety was managed via established trial procedures (Barakat et al., 2021).

All participant data were stored on an online database via a secure, firewall protected website. Ethical approval was provided by the Sydney Local Health District RPA Research Ethics and Governance Office (Ethics Approval Number: X18-0486 & 2019/ETH12146) and the Deakin University Human Research Ethics Committee (Ethics Approval Number: 2021-145).

1.3 | Materials

1.3.1 | Brief supported eTherapy intervention

Brief Supported Self-Help Binge-Eating eTherapy (Brief SSH-BEeT) comprises four online (one-hour) sessions of a low-intensity, CBT-based intervention for BED. As described in Table S2, the Brief SSH-BEeT

program is predominantly focused on key behavioral interventions that are core to CBT programs for EDs, including self-monitoring of food intake (via inbuilt digital food and behavior monitoring tools) and regular-eating.

Participants also attended weekly guided sessions (30 min) with a trained clinician via videoconferencing. Therapeutic contact with participants is detailed in Table S3.

1.3.2 | Measures

Eating disorder symptomatology

The Eating Disorder Examination—Questionnaire Short (EDE-QS) (Gideon et al., 2016) was used to evaluate ED and BED symptomatology and has good reliability and validity (Gideon et al., 2016; Prnjak et al., 2020). This questionnaire measured the study's primary dependent variables: frequency of objective binge episode (OBE) days, loss of control over eating (LOC) days, and ED psychopathology (as evaluated by the EDE-QS total score) in the previous seven days. The Eating Disorder Examination—Questionnaire (EDE-Q) (Fairburn & Beglin, 2008) was employed to confirm trial eligibility with regards to BED symptomatology and has good reliability and validity (Aardoom et al., 2012; Peterson et al., 2007).

Psychological distress

The Kessler Psychological Distress Scale (K10) (Kessler et al., 2002) was used to measure the secondary dependent variable of general psychological distress in the previous seven days and has good reliability and validity (Furukawa et al., 2003; Kessler et al., 2002).

Demographic and general health information, risk assessment, and program adherence

Further detail on these indices and measures are outlined in Table S4.

1.4 | Statistical analysis

Data were cleaned and analyzed using SPSS (v.26). Descriptive statistics were used to determine participant characteristics and adherence indices. Two-tailed linear mixed effects and generalized linear mixed effects analyses were performed to evaluate the relationships between pre- and post-treatment continuous (EDE-Q and K10 total scores) and count (OBE days and LOC days) variables, respectively. All available data points were included in analyses (i.e., all participants with a minimum pre-treatment questionnaire). Before analyses, residuals were inspected and found to be normally distributed.

2 | RESULTS

2.1 | Participant characteristics

Participants ($N = 19$) were all female, aged 19.55–53.81 years ($M = 37.69$, $SD = 10.52$), with a body mass index (BMI) of 20.30–44.80

($M = 31.13$, $SD = 9.86$), and an illness duration of 2.02–45.81 years ($M = 21.38$, $SD = 13.65$). Overall, 21% were within a healthy BMI range, whilst 79% were above this range. All participants reported binge-eating symptomatology consistent with the DSM-5 criteria for BED at baseline assessment (American Psychiatric Association, 2013). Further participant characteristics are provided in Table 1.

2.2 | Program dropout and adherence

Out of 19 participants, an overall study dropout rate of 21% was observed ($n = 4$). Further study dropout detail is provided in Figure S1. Adherence indices were evaluated for participants who completed a minimum of one module of eTherapy content ($n = 18$) and are available in Table 2.

2.3 | Treatment outcomes

Results from the generalized and linear mixed models are outlined in Table 2. Participants demonstrated a significant decrease from pre- to post-treatment in their total scores on the EDE-QS ($b = -7.13$, $p < .001$) and the K10 ($b = -3.60$, $p = .002$), representing a large, and medium-to-large effect, respectively. A significant decrease was also noted in the frequency of LOC days ($b = -.70$, $p = .043$), representing a large effect. This indicated an average change from approximately three-to-four LOC days pre-treatment ($M = 1.61$, $SD = .98$) to one-to-two days post-treatment ($M = .80$, $SD = .68$). The difference in frequency of OBE days from pre- to post-treatment was not statistically significant ($b = -.64$, $p = .078$).

Forty percent of participants who completed the post-treatment assessment ($n = 15$) reported zero OBE days in the previous seven-day period. Furthermore, when asked to evaluate their binge-eating at the end of treatment, 87% of participants reported that they believed they had binged less frequently, while 13% stated that they had not noticed a change.

3 | DISCUSSION

The aim of this study was to evaluate the feasibility and potential efficacy of a brief, supported self-help eTherapy intervention (Brief SSH BEeT) for individuals with BED or subthreshold BED. In support of the hypotheses, significantly reduced loss of control over eating (LOC) days and ED psychopathology were found post-intervention. Additionally, there was a significant reduction in the total psychological distress score. Contrary to the hypothesis, OBE days were not significantly reduced post-treatment.

3.1 | Feasibility

Findings suggest that a brief supported online therapy can be effectively administered to people with BED of varying illness duration and

TABLE 1 Participant characteristics at baseline ($N = 19$)

Baseline characteristic	Sample
Employment, n (%)	
Full-time	10 (52.63)
Part-time	7 (36.84)
Unemployed or student	2 (10.53)
Education level, n (%)	
High school	1 (5.26)
Some university or tertiary study	3 (15.79)
Bachelor's degree or post-graduate study	15 (78.95)
Annual gross income in Australian dollars, n (%)	
5000–9999	2 (10.53)
20,000–39,999	4 (21.05)
40,000–69,999	5 (26.32)
70,000–119,999	4 (21.05)
120,000–149,999	1 (5.26)
150,000 or more	3 (15.79)
Cultural background, ^a n (%)	
Australian	12 (63.16)
Aboriginal or Torres Strait Islander	1 (5.26)
New Zealand	2 (10.53)
South American	1 (5.26)
Multiple races	3 (15.79)
Setting of residence, n (%)	
Metropolitan	13 (68.42)
Regional	6 (31.58)
Primary mental health concerns, n (%)	
Eating/weight issues	14 (73.68)
Anxiety	2 (10.53)
Depression	2 (10.53)
Other	1 (5.26)
Secondary mental health concerns, n (%)	
Anxiety	9 (47.37)
Stress	3 (15.79)
Depression	2 (10.53)
Eating/weight issues	3 (15.79)
None	2 (10.53)
Other mental health services currently accessed, ^b n (%)	
Psychologist	8 (42.11)
Psychiatrist	3 (15.79)
Medical doctor	8 (42.11)
Counselor	2 (10.53)
Telephone-based service	2 (10.53)
Self-help book	2 (10.53)
Suicidality and self-harm, ^b n (%)	
Past suicidality	10 (52.63)
Past suicidality in previous 12 months	4 (21.05)
Past suicidality in previous 28 days	2 (10.53)
Past self-harm	2 (10.53)

(Continues)

TABLE 1 (Continued)

Baseline characteristic	Sample
Past suicide attempt	2 (10.53)
BED severity based on DSM-V criteria, n (%)	
Mild (1–3 weekly objective binge episodes)	10 (52.63)
Moderate (4–7 weekly objective binge episodes)	8 (42.11)
Severe (8–13 weekly objective binge episodes)	1 (5.26)
EDE-Q, mean (SD)	
Objective binge episode frequency	11.68 (8.63)
Objective binge episode days	11.58 (7.64)
Dietary restraint	1.80 (1.42)
Eating concern	2.82 (1.51)
Shape concern	4.08 (1.15)
Weight concern	3.59 (1.26)
Global score	3.07 (1.02)

^aCultural background was based upon the classification stipulated by the Australian Bureau of Statistics (2016); the single selection item required the self-identification of a primary cultural background by participants, although there was an option to self-identify specific ethnic or cultural group/s via a free text field.

^bDenotes questions that could be answered multiple times by participants.

severity. A majority of participants believed that the program was helpful in reducing their binge-eating (87%), reflected in high rates of adherence across program content (i.e., 92% of content was completed) which exceeded the average content adherence rate of 50% across supported internet-based mental health interventions (Kelders et al., 2012). The dropout rate (21%) was lower than the average rate of 32% estimated in a meta-analysis of BED eTherapies (Linardon et al., 2018).

3.2 | Preliminary efficacy

Participants demonstrated a significantly lower average ED psychopathology score post-treatment (10.67), well below the clinical cut-off (Prnjak et al., 2020) of 15. The large effect observed exceeds the medium-sized reductions seen in meta-analyses evaluating eTherapies (Barakat et al., 2019; Linardon, Shatte, et al., 2020; Melioli et al., 2016). Significant decreases were also noted for LOC days, with a large effect observed. The change in OBE days was not statistically significant post-treatment. Although these results are consistent with existing evidence of non-significant (Linardon, Shatte, et al., 2020) to medium (Barakat et al., 2019) pooled effects with regards to OBE and LOC days, the absence of statistically significant change in OBE days might reflect the sample's mild-to-moderate OBE frequency at baseline which may have constrained the range of possible improvement. Promisingly, 40% of participants experienced zero OBE days post-treatment, aligning with an estimated average abstinence rate of 46% in self-help programs for BED (Hilbert et al., 2019).

General psychological distress was also significantly reduced post-treatment. The medium-to-large effect observed exceeded

TABLE 2 Adherence and treatment outcomes including means and standard deviations ($n = 18$)

(a) Adherences indices				
Index		%		Mean (SD)
Content completed (out of four modules)		91.75		3.67 (0.84)
Questionnaires completed (out of five modules)		92.20		4.61 (1.14)
Support sessions attended (out of five sessions)		91.20		4.56 (0.98)
Daily food diary entries (average)		-		4.84 (2.32)
Food diary use (≥ 1 daily entry out of 28 days)		83.14		23.28 (7.15)
Regular food monitoring (≥ 5 daily entries out of 28 days)		49.00		13.72 (7.62)
(b) Treatment outcomes				
Outcome	Pre-treatment means (SD)	Post-treatment means (SD)	B [95% CI]	Hedges's g [95% CI]
EDE-QS (total)	17.78 (5.63)	10.67 (4.29)	-7.13*** [-8.79, -5.46]	2.11 [1.18, 3.01]
OBE (days)	1.39 (0.92)	0.73 (0.70)	-0.64 [-1.35, 0.07]	0.67 [0.11, 1.21]
LOC (days)	1.61 (0.98)	0.80 (0.68)	-0.70* [-1.37, -0.02]	1.01 [0.38, 1.62]
K10 (total)	21.11 (6.58)	17.60 (5.32)	-3.60** [-5.86, -1.35]	0.78 [0.20, 1.34]

Note:.. Count variables were modeled with a Poisson distribution. Hedges's g was conducted with paired data. * $p < .05$. ** $p < .01$. *** $p < .001$. Abbreviations: CI, confidence intervals; LOC, loss of control over eating; OBE, objective binge episode; SD, standard deviations.

existing evidence of a small pooled effect on negative affect in ED eTherapies (Melioli et al., 2016) and represented a clinically significant change from an average score representative of a "mild mental disorder," to one suggesting "likely to be well," as per descriptive cut-offs (Andrews & Slade, 2001). When considered alongside the observed reductions in ED psychopathology, these findings suggest the potential of a brief, behavioral-focused CBT eTherapy program to catalyze affective and attitudinal changes without the explicit use of cognitive strategies (Barakat et al., 2017).

In sum, the results from this four-week intervention appear comparable to longer duration ED eTherapies (Barakat et al., 2019; Linardon, Shatte, et al., 2020; Melioli et al., 2016). These preliminary findings provide further evidence for the treatment-dose potency of early sessions in a CBT-based program for BED (Chang et al., 2021). Moreover, given the predominant use of behavioral interventions in this brief program (i.e., food monitoring, regular eating, and weekly weighing), findings further support their potency in catalyzing this early change in the first four weeks of treatment (Barakat et al., 2017; Linardon et al., 2016; Sivyer et al., 2020). Considering these results, a four-session, behavioral-focused eTherapy might have utility as an early intervention for BED, where fast-acting and rapidly accessible treatment could address emerging ED psychopathology before patterns of behavior become entrenched and long-lasting (Mulken & Waller, 2021).

3.3 | Strengths, limitations, and future research

Some of this study's key strengths include a recruited clinical sample that met DSM-5 diagnostic criteria for BED (American Psychiatric Association, 2013) via an interview and evidence-based diagnostic measure (EDE-Q). This is significant given the relative paucity of eTherapy and overall treatment-focused research evaluating purely

BED populations (Hay et al., 2014; Linardon, Shatte, et al., 2020). Support sessions with participants were facilitated by a trained research assistant in 94% of cases, suggesting the ability of eTherapies to navigate the barriers presented by expert-led face-to-face treatment delivery (i.e., accessibility, scalability, and cost) (Fairburn & Murphy, 2015; Kazdin et al., 2017; Lynch et al., 2010).

Although statistically significant reductions were found in most variables of interest, the lack of control group and small, women-only sample limits causal inference and generalizability. Results should be considered provisional until confirmatory replication in a randomized controlled trial (RCT) with an appropriately sized and representative sample. In addition, only one post-treatment timepoint was evaluated due to time constraints. Evidence supports this time juncture as a surrogate for longer-term treatment outcomes (Hilbert et al., 2019). However, future studies should implement follow-up measurements to evaluate longer-term treatment efficacy.

In conclusion, this pilot study of a brief, four-session BED-targeted eTherapy demonstrates strong program feasibility via relatively high adherence and low dropout rates, and promising significant reductions in overall ED psychopathology, BED specific symptomatology (i.e., loss of control over eating days), and general psychological distress, in a clinical sample of individuals with BED. Future research should replicate findings in an appropriately sized RCT and further evaluate eTherapy design characteristics, such as program duration, given evidence of their possible impact on treatment outcomes (Hilbert et al., 2019). Considering the barriers presented by first-line, face-to-face treatment, a brief eTherapy offers significant translational potential as an accessible, cost-effective, and rapidly available treatment option for those with BED.

AUTHOR CONTRIBUTIONS

Sean Rom: Formal analysis; investigation; methodology; project administration; writing – original draft. **Jane Miskovic-Wheatley:** Supervision;

writing – review and editing. **Sarah Barakat**: Conceptualization; methodology; writing – review and editing. **Phillip Aouad**: Project administration; writing – review and editing. **Matthew Fuller-Tyszkiewicz**: Formal analysis; supervision; writing – review and editing. **Sarah Maguire**: Conceptualization; methodology; writing – review and editing.

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CONFLICT OF INTEREST

All authors declare no conflict of interest. The funding sponsors had no role at any stage of this work, that is, in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript and in the decision to publish the results.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. Further information regarding eTherapy materials are available on request from the corresponding author.

ETHICAL STANDARDS

The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant national and institutional committees on human experimentation and with the Helsinki Declaration of 1975, as revised in 2008. This study was approved by the Sydney Local Health District Human Research Ethics Committee (Ethics Approval Number: 2019/ETH12146), and the Deakin University Human Research Ethics Committee (Ethics Approval Number: 2021-145).

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REFERENCES

- Aardoom, J. J., Dingemans, A. E., Slof Op't Landt, M. C. T., & Van Furth, E. F. (2012). Norms and discriminative validity of the eating disorder examination questionnaire (EDE-Q). *Eating Behaviors, 13*(4), 305–309.
- American Psychiatric Association (2013). Force APAD-5 T. In *Diagnostic and statistical manual of mental disorders: DSM-5*. American Psychiatric Association.
- Andrews, G., & Slade, T. (2001). Interpreting scores on the Kessler psychological distress scale (K10). *Australian and New Zealand Journal of Public Health, 25*(6), 494–497.
- Australian Bureau of Statistics. (2016, July 18). Australian Standard Classification of Cultural and Ethnic Groups (ASCCEG). <https://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/1249.0Main+Features12016?OpenDocument>
- Barakat, S., Maguire, S., Smith, K. E., Mason, T. B., Crosby, R. D., & Touyz, S. (2019). Evaluating the role of digital intervention design in treatment outcomes and adherence to eTherapy programs for eating disorders: A systematic review and meta-analysis. *The International Journal of Eating Disorders, 52*(10), 1077–1094.
- Barakat, S., Maguire, S., Surgenor, L., Donnelly, B., Miceska, B., Fromholtz, K., Russell, J., Hay, P., & Touyz, S. (2017). The role of regular eating and self-monitoring in the treatment of bulimia nervosa: A pilot study of an online guided self-help CBT program. *Behavior Science (Basel), 7*(3), 1–17.
- Barakat, S., Touyz, S., Maloney, D., Russell, J., Hay, P., Cunich, M., Lymer, S., Kim, M., Madden, S., Miskovic-Wheatley, J., & Maguire, S. (2021). Supported online cognitive behavioural therapy for bulimia nervosa: A study protocol of a randomised controlled trial. *Journal of Eating Disorders, 9*(1), 1–14. <https://doi.org/10.1186/s40337-021-00482-w>
- Carrard, I., Crépin, C., Rouget, P., Lam, T., Golay, A., & Van der Linden, M. (2011). Randomised controlled trial of a guided self-help treatment on the internet for binge eating disorder. *Behaviour Research and Therapy, 49*(8), 482–491. <https://doi.org/10.1016/j.brat.2011.05.004>
- Chang, P. G. R. Y., Delgado, J., & Waller, G. (2021). Early response to psychological treatment for eating disorders: A systematic review and meta-analysis. *Clinical Psychology Review, 86*, 102032. <https://doi.org/10.1016/j.cpr.2021.102032>
- Davis, H. A., Graham, A. K., & Wildes, J. E. (2020). Overview of binge eating disorder. *Current Cardiovascular Risk Reports, 14*(12), 26.
- Day V, McGrath PJ, Wojtowicz M. Internet-based guided self-help for university students with anxiety, depression and stress: A randomized controlled clinical trial. *Behaviour Research and Therapy* 2013;51(7): 344–351. Available from: <https://www.sciencedirect.com/science/article/pii/S000579671300051X>
- De Zwaan, M., Herpertz, S., Zipfel, S., Svaldi, J., Friederich, H. C., Schmidt, F., Mayr, A., Lam, T., Schade-Brittinger, C., & Hilbert, A. (2017). Effect of internet-based guided self-help vs individual face-to-face treatment on full or subsyndromal binge eating disorder in overweight or obese patients: The INTERBED randomized clinical trial. *JAMA Psychiatry, 74*(10), 987–995.
- Delgado, J., McMillan, D., Lucock, M., Leach, C., Ali, S., & Gilbody, S. (2014). Early changes, attrition, and dose-response in low intensity psychological interventions. *The British Journal of Clinical Psychology, 53*(1), 114–130.
- Dölemeyer, R., Tietjen, A., Kersting, A., & Wagner, B. (2013). Internet-based interventions for eating disorders in adults: A systematic review. *BMC Psychiatry, 13*(1), 207. <https://doi.org/10.1186/1471-244X-13-207>
- Fairburn, C., & Beglin, S. (2008). Eating disorder examination questionnaire (EDE-Q 6.0). *Cognitive Behavioral Therapy for Eating Disorders, 1*, 309–313.
- Fairburn, C. G., & Murphy, R. (2015). Treating eating disorders using the internet. *Current Opinion in Psychiatry, 28*(6), 461–467.
- Furukawa, T. A., Kessler, R. C., Slade, T., & Andrews, G. (2003). The performance of the K6 and K10 screening scales for psychological distress in the Australian National Survey of mental health and well-being. *Psychological Medicine, 33*(2), 357–362.
- Gideon, N., Hawkes, N., Mond, J., Saunders, R., Tchanturia, K., & Serpell, L. (2016). Development and psychometric validation of the EDE-QS, a 12 item short form of the eating disorder examination questionnaire (EDE-Q). *PLoS One, 11*(5), e0152744. <https://doi.org/10.1371/journal.pone.0152744>
- Giel, K. E., Bulik, C. M., Fernandez-Aranda, F., Hay, P., Keski-Rahkonen, A., Schag, K., Schmidt, U., & Zipfel, S. (2022). Binge eating disorder. *Nature Reviews. Disease Primers, 8*(1), 16.

- Hay, P. (2020). Current approach to eating disorders: A clinical update. *Internal Medicine Journal*, 50(1), 24–29.
- Hay, P., Chinn, D., Forbes, D., Madden, S., Newton, R., Sugenor, L., Touyz, S., Ward, W., & Royal Australian and New Zealand College of Psychiatrists. (2014). Royal Australian and New Zealand College of Psychiatrists clinical practice guidelines for the treatment of eating disorders. *The Australian and New Zealand Journal of Psychiatry*, 48(11), 977–1008.
- Hilbert, A., Petroff, D., Herpertz, S., Pietrowsky, R., Tuschen-Caffier, B., Vocks, S., & Schmidt, R. (2019). Meta-analysis of the efficacy of psychological and medical treatments for binge-eating disorder. *Journal of Consulting and Clinical Psychology*, 87(1), 91–105.
- Kazdin, A. E., Fitzsimmons-Craft, E. E., & Wilfley, D. E. (2017). Addressing critical gaps in the treatment of eating disorders. *The International Journal of Eating Disorders*, 50(3), 170–189.
- Kelders, S. M., Kok, R. N., Ossebaard, H. C., & Van Gemert-Pijnen, J. E. W. C. (2012). Persuasive system design does matter: A systematic review of adherence to web-based interventions. *Journal of Medical Internet Research*, 14(6), e152.
- Kessler, R. C., Andrews, G., Colpe, L. J., Hiripi, E., Mroczek, D. K., Normand, S. L. T., et al. (2002). Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychology Medicine*, 32(6), 959–976 Available from: <https://www.cambridge.org/core/article/short-screening-scales-to-monitor-population-prevalences-and-trends-in-nonspecific-psychological-distress/F141675CCD0E08C0FB98E01C006B4E0D>
- Linardon, J., Brennan, L., & de la Piedad Garcia, X. (2016). Rapid response to eating disorder treatment: A systematic review and meta-analysis. *The International Journal of Eating Disorders*, 49(10), 905–919.
- Linardon, J., Hindle, A., & Brennan, L. (2018). Dropout from cognitive-behavioral therapy for eating disorders: A meta-analysis of randomized, controlled trials. *The International Journal of Eating Disorders*, 51(5), 381–391.
- Linardon, J., Messer, M., Lee, S., & Rosato, J. (2020). Perspectives of e-health interventions for treating and preventing eating disorders: Descriptive study of perceived advantages and barriers, help-seeking intentions, and preferred functionality. *Eat Weight Disorder*, 26, 1097–1109. <https://doi.org/10.1007/s40519-020-01005-3>
- Linardon, J., Shatte, A., Messer, M., Firth, J., & Fuller-Tyszkiewicz, M. (2020). E-mental health interventions for the treatment and prevention of eating disorders: An updated systematic review and meta-analysis. *Journal of Consulting and Clinical Psychology*, 88(11), 994–1007.
- Lynch, F. L., Striegel-Moore, R. H., Dickerson, J. F., Perrin, N., DeBar, L., Wilson, G. T., & Kraemer, H. C. (2010). Cost-effectiveness of guided self-help treatment for recurrent binge eating. *Journal of Consulting and Clinical Psychology*, 78(3), 322–333.
- McClay, C. A., Waters, L., Schmidt, U., & Williams, C. (2016). A survey of attitudes towards computerized self-help for eating disorders within a community-based sample. *Behavioural and Cognitive Psychotherapy*, 44(1), 65–78.
- Melioli, T., Bauer, S., Franko, D. L., Moessner, M., Ozer, F., Chabrol, H., & Rodgers, R. F. (2016). Reducing eating disorder symptoms and risk factors using the internet: A meta-analytic review. *The International Journal of Eating Disorders*, 49(1), 19–31.
- Moghim, E., Davis, C., & Rotondi, M. (2021). The efficacy of eHealth interventions for the treatment of adults diagnosed with full or subthreshold binge eating disorder: Systematic review and meta-analysis. *Journal of Medical Internet Research*, 23(7), e17874.
- Mulkens, S., & Waller, G. (2021). New developments in cognitive-behavioural therapy for eating disorders (CBT-ED). *Current Opinion in Psychiatry*, 34(6), 576–583.
- Peterson, C. B., Crosby, R. D., Wonderlich, S. A., Joiner, T., Crow, S. J., Mitchell, J. E., Bardone-Cone, A. M., Klein, M., & le Grange, D. (2007). Psychometric properties of the eating disorder examination-questionnaire: Factor structure and internal consistency. *The International Journal of Eating Disorder*, 40(4), 386–389. <https://doi.org/10.1002/eat.20373>
- Prnjak, K., Mitchison, D., Griffiths, S., Mond, J., Gideon, N., Serpell, L., & Hay, P. (2020). Further development of the 12-item EDE-QS: Identifying a cut-off for screening purposes. *BMC Psychiatry*, 20(1), 1–7.
- Puls, H. C., Schmidt, R., Herpertz, S., Zipfel, S., Tuschen-Caffier, B., Friederich, H. C., Gerlach, F., Mayr, A., Lam, T., Schade-Brittinger, C., Zwaan, M., & Hilbert, A. (2020). Adherence as a predictor of dropout in internet-based guided self-help for adults with binge-eating disorder and overweight or obesity. *The International Journal of Eating Disorders*, 53(4), 555–563.
- Rose, C., & Waller, G. (2017). Cognitive-behavioral therapy for eating disorders in primary care settings: Does it work, and does a greater dose make it more effective? *The International Journal of Eating Disorders*, 50(12), 1350–1355.
- Sivyer, K., Allen, E., Cooper, Z., Bailey-Straebler, S., O'Connor, M. E., Fairburn, C. G., & Murphy, R. (2020). Mediators of change in cognitive behavior therapy and interpersonal psychotherapy for eating disorders: A secondary analysis of a transdiagnostic randomized controlled trial. *The International Journal of Eating Disorders*, 53(12), 1928–1940.
- Traviss-Turner, G. D., West, R. M., & Hill, A. J. (2017). Guided self-help for eating disorders: A systematic review and Metaregression. *European Eating Disorders Review*, 25(3), 148–164.
- Udo T, Grilo CM. Prevalence and correlates of DSM-5-defined eating disorders in a nationally representative sample of U.S. adults. *Biological Psychiatry* 2018;84(5):345–54. Available from: <https://www.sciencedirect.com/science/article/pii/S0006322318314409>
- Wagner, B., Nagl, M., Dölemeyer, R., Klinitzke, G., Steinig, J., Hilbert, A., & Kersting, A. (2016). Randomized controlled trial of an internet-based cognitive-behavioral treatment program for binge-eating disorder. *Behavior Therapy*, 47(4), 500–514. <https://doi.org/10.1016/j.beth.2016.01.006>
- Yim, S. H., & Schmidt, U. (2019). Self-help treatment of eating disorders. *Psychiatric Clinics of North America*, 42(2), 231–241. <https://doi.org/10.1016/j.psc.2019.01.006>

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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