
Article:
Hernandez Hernandez, M.E. and Waller, G. orcid.org/0000-0001-7794-9546 (2021) Are we on the same page? A comparison of patients' and clinicians' opinions about the importance of CBT techniques. Cognitive Behaviour Therapy, 50 (6). pp. 439-451. ISSN 1650-6073

https://doi.org/10.1080/16506073.2020.1862292

Are we on the same page? A comparison of patients' and clinicians' opinions about the importance of CBT techniques

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Funding and grant-awarding bodies: Maria Elena Hernandez Hernandez was funded by the National Council of Science and Technology (Conacyt - Mexico), with the scholarship number 411170. The Conacyt had no role in the preparation of this manuscript.

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Word count: 5657

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Abstract

Clinicians often omit or underuse several techniques while delivering therapy. These omissions can be due to unconscious factors (e.g. clinician's anxiety), or due to clinicians' deliberate decisions (e.g. modifying therapy believing that such modifications are on the patients' best interests). However, little is known about whether patients consider these modifications necessary. The main aim of this study was to explore the opinions about the important aspects of CBT according to both patients' and clinicians' perspectives. It also aimed to determine whether clinicians' anxiety influenced such preferences. To achieve these aims, two groups of participants were approached – CBT clinicians (n=83) and CBT patients (n=167). An online survey with a list of techniques commonly used in CBT was developed for each group, who indicated the importance they attributed to the techniques. Additionally, clinicians completed an anxiety measure. Results indicated that clinicians valued all "change-oriented" techniques and several "interpersonal engagement" techniques more than the patients. The only technique preferred by patients was "relaxation". Higher levels of clinician anxiety were associated with a lower preference for "behavioural experiments" and "exposure". In conclusion, clinicians are encouraged to plan therapy in collaboration with the patient, as well as to discuss the rationale for the implemented techniques.

Keywords: Cognitive behavioural therapy; Therapist drift; Patients' opinions; Therapists' opinions; Therapist factors

Introduction

CBT has shown positive results for the treatment of several psychological disorders (Butler, Chapman, Forman, & Beck, 2006; Hofmann, Asnaani, Vonk, Sawyer, & Fang, 2012). However, CBT is not always effective. It has been shown that the effectiveness of CBT can be compromised by some clinician-related factors. For instance, clinicians tend to underuse or omit some of the most demanding techniques of CBT (e.g., behavioural techniques such as exposure), consciously or inadvertently (Waller, 2009; Waller & Turner, 2016). Research on this therapist "drift" has indicated that clinicians underuse or omit techniques for both unconscious and conscious reasons. *Unconscious omissions* occur by factors such as clinicians' anxiety (Deacon & Farrell, 2013) or personality traits (Peters-Scheffer, Didden, Korzilius, & Sturmey, 2013). For example, Kosmerly, Waller and Robinson (2015) found that more anxious clinicians weighed their patients less frequently when delivering family-based therapy for eating disorders. In a sample of therapists from different theoretical orientations, Meyer, Farrell, Kemp, Blakey and Deacon (2014) found that older and more anxious clinicians were more likely to exclude their patients from exposure therapy. Similarly, Peters-Scheffer, Didden, Korzilius and Sturmey (2013) investigated procedural fidelity in applied behaviour analysis for children with autistic spectrum disorder, and found that therapists with more openness to experience (a dimension of personality from the 'big five' model) adhered less to the treatment procedures.

On the other hand, *conscious omissions* are often made by clinicians under the belief that their patients are exceptional cases, who would not benefit from treatment as recommended by the protocols (Meyer et al., 2014). Such omissions are especially likely if the clinician perceive their patient as "fragile" or "vulnerable" (Meyer et al., 2014). The consequence of these conscious omissions based on clinicians' own judgements is an incomplete delivery of CBT. Prioritising judgement rather than standardised procedures has previously been questioned. Meehl (1954) suggested that a standardised approach would make more reliable predictions in patients' outcomes compared to clinical judgement. This suggestion was later confirmed in meta-analyses by Grove, Zald, Lebow, Snitz and Nelson

(2000) and Hansen, Lambert and Foreman (2002), who showed that clinician judgement is substantially less effective than protocol-driven approaches in terms of patients' outcomes. Other conscious reasons why therapists might underuse techniques can include practical issues, such as limited time to do exposure work outside the office, or patients' reluctance to engage with some techniques (Moritz et al., 2019).

The case of conscious technique omissions based on perceived patient fragility is a particularly worrying one. Clinicians typically make these omissions based on the assumption that they have their patients' best interests in mind. There is, however, the possibility that these therapy adjustments are not the ones that the patients would want or need. For example, a clinician might believe that their patient is in a very delicate emotional state to be able to endure some of the most demanding components of CBT (e.g. exposure or behavioural experiments, given their stress-inducing nature). Consequently, the clinician might minimise or omit the use of these techniques with the patient. However, it is possible that the patient actually considers these techniques important for their recovery, and is willing to engage in them, so the clinician would be making decisions based on inaccurate assumptions about their patients' preferences. This would result in the patient receiving an incomplete version of CBT without a valid justification, increasing the risk of patient dissatisfaction and therapy drop-out (Spring, 2007).

The acceptability of therapies to patients is a topic that has received relatively little attention, despite being a key element in the construct of evidence-based practice (Spring, 2007). However, little is known about what elements of CBT are valued by patients, and whether this concurs with clinicians' opinions. Therefore, it is possible that clinicians' opinions about what should or should not be included in CBT are at odds with patients' opinions. To date, there is limited evidence that the patient's own preferences are considered when making such changes. Clinicians need to be aware of those patients' opinions, so that the core elements of therapy can be discussed with the patient and, where possible, agreed on. If patients and clinicians attribute similar levels of importance to the techniques, this could be an indication that: 1) clinicians have informed correctly to their

patients the benefits of the techniques, and 2) clinicians have taken the patients' opinions into account when planning the therapy.

To date, many studies about self-report of technique use have relied on the consideration of individual techniques (e.g., Kosmerly, Waller, & Robinson, 2015; Waller, Stringer & Meyer, 2012). However, assessing each technique individually involves a multiple comparison issue, where several hypotheses are tested simultaneously and the probability of type 1 error increases (the chance of obtaining a bogus significant result – Keselman, Cribbie, & Holland, 1999). A way of addressing this issue is by grouping similar techniques in order to reduce the number of comparisons and correlations examined. This technique-based clustering has been done previously utilising an *a priori* approach (grouping the techniques according to the researchers' best judgement – e.g. Levita, Gonzalez Salas Dunhe, Girling & Waller, 2016). However, a more objective alternative of technique-based clustering is through a factor analysis. Factor analysis assumes that several variables can be reduced to fewer underlying constructs that share a common variance – dimension reduction (Yong & Pearce, 2013). Besides analysing the preference for each individual technique, there is also a need to evaluate technique preference by factors, so that more reliable, broader results can be obtained.

In order to determine whether patients and therapists have a common perspective on what should be included in CBT, this research had the following aims: First, it will compare the importance that patients and clinicians attribute to specific and clustered CBT techniques, to help clinicians understand how their conscious technique omissions might converge with the patient. We hypothesize that clinicians and patients will differ in which elements they consider more and less important. However, given the evidence for unconscious technique omissions, it is also important to consider whether clinicians' own characteristics also influence their opinions about the best approach to use. Therefore, the second aim is to determine whether therapists' anxiety is associated with the importance they attribute to specific CBT elements. Since clinician anxiety is a relatively robust correlate of whether or not they use some behavioural methods (Meyer et al., 2014; Pittig, Kotter &

Hoyer, 2019; Sars & Van Minnen, 2015), we aim to contribute to the existing literature exploring how clinicians' anxiety relates to their technique preference.

Method

Ethical statement

This research was reviewed and approved by the University of Sheffield's Department of Psychology Ethics Committee (reference number 019455). Informed consent was obtained from the participants prior the start of the study.

Design

This was a cross-sectional mixed study, with correlational and comparative elements.

Participants

To achieve the aims of this study, two groups of participants were approached online – a group of CBT clinicians and a group of CBT patients. A sample size calculation was carried out utilising G*power, based on the study's primary aim – comparing the difference between two independent means (clinicians' and patients' opinions about CBT techniques). With a medium effect size (0.5), a power of 0.80, and a significance level of .05, it was determined that 64 participants would be needed for each group. Clinicians were contacted via the British Association for Behavioural and Cognitive Psychotherapies contact list. They were asked to confirm that they were CBT practitioners, and that they were currently delivering or had delivered CBT in their professional settings. CBT patients were contacted via the University of Sheffield's volunteer mailing list, and by utilizing the services of a company that provides targeted responders (Prolific). Patients contacted through the University mailing list were entered into a draw to win one of five £20 Amazon vouchers, and patients contacted through Prolific received £1 each. Patient inclusion criteria consisted of being at least 18 years of age, and have received or being receiving CBT at the moment of their participation. All participants were also asked to forward the survey to any other potential participants. The characteristics of the groups are presented in the Results section.

Measures and procedure

A Qualtrics online survey was developed for each group (CBT patients and CBT

clinicians). Both surveys collected basic demographic information (age, gender, country of residence, ethnicity). Patients were asked to confirm they received or were receiving CBT at the time of their participation – if they responded "no" or "unsure", they were automatically redirected to the end of the survey. Clinicians were asked questions regarding their experience, theoretical orientation, caseload, and supervision received. The core part of the survey consisted of a list of several techniques commonly utilized in CBT (Table 1), including both supported and less supported techniques. The works of Cowdrey and Waller (2015) and Westbrook, Kennerley and Kirk (2007) were taken as reference for the technique list. A brief description of each technique was provided to all participants where necessary. Patients and therapists were asked to indicate the importance they attributed to each technique from a range to 1 to 7, where 1 was "unimportant" and 7 was "very important".

--- Insert Table 1 about here ---

To address whether clinicians' anxiety was related to technique preference, therapists completed the short version of the Intolerance of Uncertainty (IUS-12; Carleton, Norton, & Asmundson, 2007). Confirmatory factor analysis demonstrates that it yields two scales – prospective anxiety (anxiety over not knowing what is going to happen if one acts) and inhibitory anxiety (avoidance of action due to not knowing the outcome – Carleton et al., 2007). This measure was chosen given its strong internal consistency (Cronbach's alpha = 0.91) and a high convergent validity with the original 27-item version (r=0.96 – Carleton et al., 2007). Item responses are given on a Likert scale from one (not at all characteristic of me) to five (entirely characteristic of me). Since therapist drift involves technique omission (inhibitory anxiety) related to uncertainty about the patients' reaction to the techniques (prospective anxiety), we considered this scale to be appropriate for the purposes of this study.

Data analysis

The statistical analyses were carried out with SPSS v.22. Initially, principal

components analysis was used to determine whether the therapy techniques formed meaningful factors. To address the first aim – comparing patients' and clinicians' technique preference, a *t*-test for independent samples was implemented, correcting for unequal variances when necessary. For the second aim, correlation analyses (Pearson's *r*) were used to determine whether clinicians' anxiety was related to technique preference.

Results

Sample characteristics

Patients. As can be seen in Table 2, the patient sample consisted of 167 participants living in the UK, who indicated they were currently receiving CBT or had received it in the past. Their mean age was 32.2 years old, and 70% of the patients were female. Most of the patients were born in the UK (82.6%), and the ones who were born elsewhere had a mean of 11.3 years living in the UK. The majority of the participants were students (76%). Most of the participants either had finished the treatment or were still under treatment (83.9%), and the remainder (16.1%) had started the treatment but dropped out. More than half of the sample identified themselves as being from a White/Caucasian ethnicity (55.1%).

Therapists. As Table 2 indicates, the therapist sample consisted of 83 participants living in the UK, who stated they delivered or had delivered CBT to their patients. Therapists' mean age was 53.6 years old, and most were women (74.7%). They had a mean of 22 years of experience as clinicians, and their mean duration of experience with CBT was 13.4 years. Most of the therapists received less than one hour of supervision per week (86.7%). Nearly all the clinicians identified their ethnicity as White/Caucasian (95.2%).

-- Insert Table 2 about here --

Do techniques cluster in homogeneous groups?

A principal component factor analysis was implemented (Supplemental Table 1) to analyse technique preference both individually and as a cluster of related techniques. This factor analysis included the data obtained from the responses of both clinicians and patients.

Varimax rotation yielded the most coherent factor structure when compared with the unrotated solution or a Direct Oblimin solution. It revealed an underlying structure of three factors, which explained 44.35% of the variance. Factor 1 included active techniques on which the main goal is to achieve a behavioural change in the patient, therefore, it was named “Change-oriented”. Factor 2 included more conversational techniques, hence, it was identified as “Interpersonal engagement”. Finally, Factor 3 included methods commonly utilized to reduce the patients’ emotional arousal. Therefore, it was named “Calming”.

Patients’ and therapists’ opinions regarding the importance of CBT techniques

Patients and therapists had different opinions regarding the importance of several CBT techniques (Table 3). Clinicians considered all the Change-oriented techniques to be more important than the patients. The effect sizes of these differences ranged from medium to very high, which indicates a large discrepancy in patients’ and clinicians’ opinions. Clinicians also attributed greater importance to several Interpersonal engagement techniques, specifically “alliance”, “motivation” and “psychoeducation”. The effect sizes in this category ranged from medium to high. There was no significant difference in patients’ and clinicians’ opinions regarding the Calming factor overall. However, “relaxation” was preferred by the patients. Table 3 also indicates that, within the groups, patients considered the Interpersonal engagement techniques more important than the Change-oriented or Calming techniques. In contrast, clinicians considered the Change-oriented techniques more important than the Interpersonal engagement or Calming ones.

-- Insert Table 3 about here –

Clinicians’ anxiety and technique preference

Clinicians’ anxiety was assessed to determine whether it was associated with technique preference (Table 4). From all the techniques included in the analysis, only exposure and behavioural activation showed a significant correlation with anxiety. Therapists with higher levels of prospective anxiety had a lower preference for behavioural experiments.

Similarly, high levels of both prospective and inhibitory anxiety in clinicians were associated with a lower preference for “exposure”. However, the overall pattern indicates that there is no systematic relationship between clinicians’ anxiety and technique preference when measured as uncertainty intolerance.

-- Insert Table 4 about here --

Discussion

The main aim of this study was to explore clinicians’ and patients’ opinions about the importance of several techniques commonly used in CBT. The secondary aim was to understand how clinicians’ anxiety plays a role in their opinions. After an exploratory factor analysis, the techniques included in the surveys clustered into three categories – Change-oriented, Interpersonal engagement, and Calming techniques. This pattern is slightly different to the one suggested by Levita et al. (2016). However, their grouping of techniques was “a priori”, whereas the present set are empirically derived, using an exploratory factor analysis. The factor solution that resulted from our research might not be replicated in future studies, given that techniques might be viewed in the complex contexts of therapies (e.g. ‘looking at comorbid problems’ was clustered in the Interpersonal engagement factor in this study, but it could also be considered a Change-oriented technique).

Overall, clinicians and patients had different opinions regarding technique importance. Therapists valued all Change-oriented techniques and several Interpersonal engagement techniques more than the patients, but higher levels of anxiety in clinicians were associated with a lower preference for some behavioural methods. Some previous research has found that CBT is preferred by patients over other type of interventions (e.g. pharmacological treatment – Deacon & Abramowitz, 2005), and that some therapy components are favoured by patients (e.g., therapists’ role, therapists’ characteristics, or treatment type – Glass, Arnkoff & Shapiro, 2001; Swift & Callahan, 2009). However, no studies to date have explored which specific CBT elements are valued by patients, or

addressed whether patients' and clinicians' opinions are similar regarding CBT technique importance.

What might explain this difference in opinions about the importance of specific CBT techniques? One possibility is that, given their training, clinicians are more knowledgeable than patients about the benefits of the techniques, and that they have experience from having seen these techniques work with different patients previously. However, it is also possible that clinicians valuing some techniques more than the patients reflects what has been previously conceptualised as a "paternalistic" approach to therapy (Charles, Gafni, & Whelan, 1999). In the paternalistic approach, therapists believe that they can determine what is in the patient's best interest, with little or no patient involvement (Emanuel & Emanuel, 1992). A further consideration is that clinicians often over-estimate their performance (Parker & Waller, 2015; Walfish, McAlister, O'Donnell, & Lambert, 2012), which might mean that clinicians' qualifications might not be a guarantee that their opinion is always correct.

There is a clear trend that clinicians value most CBT techniques more than the patients, but there was one exception. The only technique that was preferred by the patients over the therapists was "relaxation". Since "relaxation" is a concept commonly utilized in contexts outside CBT, patients may be familiar with it, making them more likely to consider it important. Alternatively, patients might find relaxation more pleasurable than other elements of therapy, which might explain this preference. Interestingly, one technique that was highly valued by both clinicians and patients was maintaining a good therapeutic alliance. Although alliance is certainly an important element of any therapeutic process, previous findings have indicated that this is an overvalued therapeutic tool with low impact in patient outcomes (Brown, Mountford & Waller, 2013, 2014; Martin, Gaske & Davis, 2000).

Therapist anxiety is known to influence their use of techniques in therapy (Meyer et al., 2014; Pittig, Kotter & Hoyer, 2019; Sars & Van Minnen, 2015). In this study, therapists valued some techniques differently according to their level of anxiety. Most notably, higher levels of anxiety in clinicians were associated with a lower preference for "behavioural

experiments" and "exposure". This finding is consistent with the existing literature (e.g. Levita et al., 2016; Meyer et al., 2014; Turner, Tatham, Lant, Mountford, & Waller, 2014). The pattern indicates that anxious clinicians tend to avoid the most stress-inducing techniques of CBT, instead focusing on the less anxiety-inducing and challenging elements of therapy (e.g., talking techniques).

Limitations

Our research has some limitations. Patients were not asked about their main motivation for seeking treatment, which might influence their technique preferences. However, patients were requested to evaluate which techniques they consider more important in a CBT intervention in general, rather than in their own case. Nevertheless, this issue should be further explored in future research. Similarly, the type and form of CBT received by the patients was not known – for example, patients could have engaged in self-help or online versions of CBT. Future studies should screen the type of CBT received by patients, and whether it influences their opinions about what they consider important in therapy. The chosen measure of clinician anxiety (the IUS) could have also impacted the results of this study. Intolerance of uncertainty focuses on a specific element of anxiety – responses to ambiguous situations and the future (Carleton, Norton, & Asmundson, 2007). A broader anxiety scale might have yielded different results (e.g., Beck Anxiety Inventory – Steer & Beck, 1997).

The patient sample was mostly formed of students (70%). Online, self-report surveys commonly draw large numbers of student participants, especially when there is a monetary compensation. This is one of the drawbacks of online survey-based studies, and future studies with participants recruited directly from clinical services are encouraged. Future studies should also include more sophisticated designs, such as investigating client-therapist dyads before treatment. This research should also be replicated in other forms of therapy besides CBT, in order to determine patterns of similarities or differences in the views of patients and therapists in those other approaches. It should also be explored whether factors such as clinicians' experience, age, training, or theoretical background have an impact in

their CBT preferences. Finally, other patient factors and their influence in therapy preferences should be explored, such as level of education, socioeconomic background or length of therapy treatment.

Clinical implications

As Swift and Callahan (2009) state, most patients might have some type of desire for therapy, but not all of them are willing to express such preferences. Therefore, planning therapy in collaboration with the patient is encouraged, as well as discussing the rationale for the therapeutic techniques utilised as treatment progresses. Without that openness, different views about what is more or less helpful in therapy might result in a higher dropout risk. In particular, clinicians are encouraged to better justify and promote the techniques – particularly change-oriented techniques – so that patients are better able to understand and appreciate these elements of treatment. If patients are unable to see the value of these CBT techniques, it might undermine the efficacy of these approaches. Patient participation in decision-making has yielded good results in psychotherapy (Mergl et al., 2011) and in other health settings (Guadagnoli & Ward, 1998), therefore, it should also be considered in CBT delivery.

Conclusion

Patients and clinicians differ in what they consider important in CBT – specifically, clinicians considered most of the techniques more important than the patients. Higher levels of clinicians' anxiety were associated with a lower preference for some behavioural elements of CBT. Rather than automatically modifying CBT in the form of technique underuse or omissions, clinicians are encouraged to discuss with their patients the best way of addressing their needs and preferences in therapy.

Data availability statement

The dataset associated to this research can be made available upon request to the main researcher.

Disclosure of interest

The authors report no conflict of interest.

References

Brown, A., Mountford, V.A. & Waller, G. (2013), Is the therapeutic alliance overvalued in the treatment of eating disorders? *International Journal of Eating Disorders, 46,* 779-782. DOI: 10.1002/eat.22177

Brown, A., Mountford, V., & Waller, G. (2014). Clinician and practice characteristics influencing delivery and outcomes of the early part of outpatient cognitive behavioural therapy for anorexia nervosa. *The Cognitive Behaviour Therapist,* 7, E10. DOI: 10.1017/S1754470X14000105

Butler, A. C., Chapman, J. E., Forman, E. M., & Beck, A. T. (2006). The empirical status of cognitive-behavioral therapy: A review of meta-analyses. *Clinical Psychology Review, 26,* 17-31. DOI: 10.1016/j.cpr.2005.07.003

Carleton, R. N., Norton, M. A. P. J., & Asmundson, G. J. G. (2007). Fearing the unknown: A short version of the Intolerance of Uncertainty Scale. *Journal of Anxiety Disorders, 21,* 105-117. DOI: 10.1016/j.janxdis.2006.03.014

Charles, C., Gafni, A., & Whelan, T. (1999). Decision-making in the physician-patient encounter: Revisiting the shared treatment decision-making model. *Social Science and Medicine, 49,* 651-661. DOI: 10.1016/S0277-9536(99)00145-8

Cowdrey, N. D., & Waller, G. (2015). Are we really delivering evidence-based treatments for eating disorders? How eating-disordered patients describe their experience of cognitive behavioral therapy. *Behaviour Research and Therapy, 75,* 72-77. DOI: 10.1016/j.brat.2015.10.009

Deacon, B. J., & Abramowitz, J. S. (2005). Patients' perceptions of pharmacological and cognitive-behavioral treatments for anxiety disorders. *Behavior Therapy, 36,* 139-145. DOI: 10.1016/S0005-7894(05)80062-0

Deacon, B. J., & Farrell, N. R. (2013). Therapist barriers to the dissemination of exposure therapy. In E. A. Storch & D. McKay (Eds.), *Handbook of treating variants and complications in anxiety disorders* (pp. 363-373). New York, NY, US: Springer Science + Business Media. DOI: 10.1007/978-1-4614-6458-7_23

Emanuel, E. J., & Emanuel, L. L. (1992). Four models of the physician-patient relationship. *Journal of the American Medical Association, 267,* 2221–2226. DOI: 10.1001/jama.1992.03480160079038

Glass, C. R., Arnkoff, D. B., & Shapiro, S. J. (2001). Expectations and preferences. *Psychotherapy: Theory, Research, Practice, Training, 38*, 455-461. DOI: 10.1037/0033-3204.38.4.455

Grove, W. M., Zald, D. H., Lebow, B. S., Snitz, B. E., & Nelson, C. (2000). Clinical versus mechanical prediction: A meta-analysis. *Psychological Assessment, 12*, 19-30. DOI: 10.1037/1040-3590.12.1.19

Guadagnoli, E., & Ward, P. (1998). Patient participation in decision-making. *Social Science and Medicine, 47,* 329-39. DOI: 10.1016/S0277-9536(98)00059-8

Hansen, N. B., Lambert, M. J., & Forman, E. M. (2002). The psychotherapy dose-response effect and its implications for treatment delivery services. *Clinical Psychology: Science and Practice, 9,* 329-343. DOI: 10.1093/clipsy/9.3.329

Hofmann, S. G., Asnaani, A., Vonk, I. J. J., Sawyer, A. T., & Fang, A. (2012). The efficacy of cognitive behavioral therapy: A review of meta-analyses. *Cognitive Therapy and Research, 36,* 427-440. DOI: 10.1007/s10608-012-9476-1

Keselman, H. J., Cribbie, R., & Holland, B. (1999). The pairwise multiple comparison multiplicity problem: An alternative approach to familywise and comparison wise type I error control. *Psychological Methods, 4,* 58-69. DOI: 10.1037/1082-989X.4.1.58

Kosmerly, S., Waller, G., & Lafrance Robinson, A. (2015). Clinician adherence to guidelines in the delivery of family-based therapy for eating disorders. *The International journal of eating disorders, 48,* 223-229. DOI: 10.1002/eat.22276

Levita, L., Gonzalez Salas Duhne, P., Girling, C., & Waller, G. (2016). Facets of clinicians' anxiety and the delivery of cognitive behavioral therapy. *Behaviour Research and Therapy, 77,* 157-161. DOI: 10.1016/j.brat.2015.12.015

Martin, D. J., Garske, J. P., & Davis K. M. (2000) Relation of the therapeutic alliance with outcome and other variables: A meta-analytic review. *Journal of Consulting and*

Clinical Psychology, 68, 438-450.

Meehl, P. E. (1954). *Clinical versus statistical prediction: A theoretical analysis and a review of the evidence.* University of Minnesota Press. DOI: 10.1037/11281-000

Mergl, R., Henkel, V., Allgaier, A. K., Kramer, D., Hautzinger, M., Kohnen, R., Coyne, J., & Hegerl, U. (2011). Are treatment preferences relevant in response to serotonergic antidepressants and cognitive-behavioral therapy in depressed primary care patients? Results from a randomized controlled trial including a patients' choice arm. *Psychotherapy and Psychosomatics, 80,* 39-47. DOI: 10.1159/000318772

Meyer, J. M., Farrell, N. R., Kemp, J. J., Blakey, S. M., & Deacon, B. J. (2014). Why do clinicians exclude anxious clients from exposure therapy? *Behaviour Research and Therapy, 54,* 49-53. DOI: 10.1016/j.brat.2014.01.004

Moritz, S., Külz, A., Voderholzer, U., Hillebrand, T., McKay, D., & Jelinek, L. (2019). "Phobie à deux" and other reasons why clinicians do not apply exposure with response prevention in patients with obsessive-compulsive disorder. *Cognitive Behaviour Therapy*, *48*, 162-176. DOI: 10.1080/16506073.2018.1494750

Parker, Z. J., & Waller, G. (2015). Factors related to psychotherapists' self-assessment when treating anxiety and other disorders. *Behaviour Research and Therapy, 66,* 1-7. DOI: 10.1016/j.brat.2014.12.010

Pittig, A., Kotter, R., & Hoyer, J. (2019). The struggle of behavioral therapists with exposure: Self-reported practicability, negative beliefs, and therapist distress about exposure-based interventions. *Behavior Therapy, 50,* 353-366. DOI: 10.1016/j.beth.2018.07.003

Peters-Scheffer, N., Didden, R., Korzilius, H., & Sturmey, P. (2013). Therapist characteristics predict discrete trial teaching procedural fidelity. *Intellectual and Developmental Disabilities, 51,* 263-272. DOI: 10.1352/1934-9556-51.4.263

Sars, D., & Van Minnen, A. (2015). On the use of exposure therapy in the treatment of anxiety disorders: A survey among cognitive behavioural therapists in the Netherlands. *BMC Psychology, 3,* 26. DOI: 10.1186/s40359-015-0083-2

Spring, B. (2007). Evidence-based practice in clinical psychology: What it is, why it matters; what you need to know. *Journal of Clinical Psychology, 63,* 611-631. DOI: 10.1002/jclp.20373

Steer, R. A., & Beck, A. T. (1997). *Beck Anxiety Inventory*. In C. P. Zalaquett & R. J. Wood (Eds.), *Evaluating stress: A book of resources* (p. 23-40). Scarecrow Education.

Swift, J. K., & Callahan, J. L. (2009). The impact of client treatment preferences on outcome: A meta-analysis. *Journal of Clinical Psychology, 65,* 368-81. DOI: 10.1002/jclp.20553

Turner, H., Tatham, M., Lant, M., Mountford, V. A., & Waller, G. (2014). Clinicians' concerns about delivering cognitive-behavioural therapy for eating disorders. *Behaviour Research and Therapy, 57,* 38-42. DOI: 10.1016/j.brat.2014.04.003

Walfish, S., McAlister, B., O'Donnell, P., & Lambert, M. J. (2012). An investigation of self-assessment bias in mental health providers. *Psychological Reports, 110,* 1-6. DOI: 10.2466/02.07.17.PR0.110.2.2

Waller, G. (2009). Evidence-based treatment and therapist drift. *Behaviour Research and Therapy, 47,* 119-127. DOI: 10.1016/j.brat.2008.10.018

Waller, G., Stringer, H., & Meyer, C. (2012). What cognitive behavioral techniques do therapists report using when delivering cognitive behavioral therapy for the eating disorders? *Journal of Consulting and Clinical Psychology, 80,* 171-175. DOI: 10.1037/a0026559

Waller, G., & Turner, H. (2016). Therapist drift redux: Why well-meaning clinicians fail to deliver evidence-based therapy, and how to get back on track. *Behaviour Research and Therapy, 77,* 129-137. DOI: 10.1016/j.brat.2015.12.005

Westbrook, D., Kennerley, H., & Kirk, J. (2007). *An introduction to cognitive behaviour therapy. Skills and applications.* London, UK: SAGE Publications.

Yong, A. G., & Pearce, S. (2013). A beginner's guide to factor analysis: Focusing on exploratory factor analysis. *Tutorials in quantitative methods for psychology, 9,* 79-94. DOI: 10.20982/tqmp.09.2.p079

Table 1. Techniques rated by the participants

Therapist	Patient
1. Asking the patient to do homework or tasks between therapy sessions	1. Doing homework or tasks between therapy sessions
2. Behavioural experiments (Planned experiential activities, based on experimentation or observation, with the purpose to obtain new information to test the validity of the patient's beliefs)	2. Behavioural experiments (Planned experiential activities, based on experimentation or observation, with the purpose to obtain new information to test the validity of your beliefs
3. Setting an agenda at the beginning of each therapy session	3. Setting an agenda at the beginning of each therapy session
4. Exposure work (Confronting the objects or situations that provoke the patient's anxiety)	4. Exposure work (Confronting the objects or situations that provoke your anxiety)
5. Behavioural activation (Activity scheduling to encourage patients to approach activities that they might be avoiding, in order to refocus on their goals and valued directions in life)	5. Behavioural activation (Activity scheduling to encourage you to approach activities that you might be avoiding, in order to refocus on your goals and valued directions in life)
6. Having a session to set treatment goals	6. Having a session to set treatment goals
7. Asking the patient to complete surveys regularly to monitor their progress	7. Completing surveys regularly to monitor your progress
8. Changing the meaning attached to the patient's thoughts	8. Changing the meaning attached to your thoughts
9. Exploring the patterns in the patient's relationships with other people	9. Exploring the patterns in your relationships with other people
10. Exploring the patient's childhood and past	10. Exploring your childhood and past
11. Looking at other problems besides the patient's initial reason for searching therapy	11. Looking at other problems besides your initial reason for searching therapy
12. Having a good patient-therapist alliance	12. Having a good patient-therapist alliance
13. Enhancing patient's motivation	13. Enhancing your motivation in therapy

14. Psychoeducation (Providing the patients with all the necessary information about their condition, so they can have a better understanding and cope with it better)	14. Psychoeducation (Providing you with all the necessary information about your condition, so you can have a better understanding and cope better with it)
15. Relaxation exercises	15. Relaxation exercises
16. Mindfulness (Sitting silently and paying attention to thoughts, sounds, and the sensations of breathing or parts of the body, bringing the attention back whenever the mind starts to wander)	16. Mindfulness (Sitting silently and paying attention to thoughts, sounds, and the sensations of breathing or parts of the body, bringing the attention back whenever the mind starts to wander)

Note: The techniques were rated on a scale from 1 (unimportant) to 7 (very important)

Table 2. Sample characteristics

Patients (n=167)			Therapists (n=83)		
		n (%)			n (%)
Country of origin	UK	138 (82.6%)	Gender	Women	62 (74.7%)
	Other	29 (17.4%)		Men	21 (25.3%)
Gender	Female	117 (70.1%)	Ethnicity	White/ Caucasian	79 (95.2%)
	Male	45 (26.9%)		Other	4 (4.8%)
	Non-binary	5 (3%)	Supervision received	Less than 1 hour per week	72 (86.7%)
Student status	Undergraduate	65 (38.9%)		1-2 hours per week	11 (13.3%)
	Postgraduate	62 (37.1%)			
	Non-student/ Other	40 (24%)			
Ethnicity	White /Caucasian	92 (55.1%)			
	Black/African descent	19 (11.4%)			
	South Asian	13 (7.8%)			
	East Asian	7 (4.2%)			
	Middle Eastern	3 (1.8%)			
	Hispanic	6 (3.6%)			
	Mixed	27 (16.2%)			
Treatment completion	Yes	125 (74.9%)			
	No	26 (15.6%)			
	Continues under treatment	15 (9%)			

Table 3. Comparison between patients' and therapists' opinions regarding the importance of CBT techniques

	Patient		Therapist		*t*	*p*	*d*
	M	*SD*	*M*	*SD*			
Change-oriented	**4.735**	**0.983**	**5.808**	**0.847**	**8.487**	**<.001**	**1.16**
Asking the patient to do homework or tasks between therapy sessions	4.683	1.793	6.319	1.052	9.063	<.001*	1.11
Behavioural experiments	4.096	1.718	5.970	1.243	9.836	<.001*	1.24
Setting an agenda at the beginning of each therapy session	4.174	1.732	5.723	1.552	6.888	<.001*	0.94
Exposure	4.988	1.686	6.325	0.932	8.066	<.001*	0.98
Behavioural activation	5.269	1.498	6.157	1.217	5.015	<.001*	0.65
Having a session to set treatment goals	4.838	1.658	5.518	1.733	3.007	.003*	0.40
Asking the patient to complete surveys regularly to monitor their progress	4.012	1.639	4.458	1.762	1.975	.049	0.26
Changing the meaning attached to the patient's thoughts	5.826	1.362	5.994	1.464	0.894	*NS*	-
Interpersonal engagement	**5.152**	**1.032**	**5.516**	**0.879**	**2.748**	**0.006**	**0.37**
Exploring the patterns in the patient's relationships with other people	5.114	1.561	5.181	1.503	0.505	*NS*	-
Exploring the patient's childhood and past	4.431	1.940	4.548	1.607	0.371	*NS*	-
Looking at other problems besides the patient's initial reason for searching therapy	4.784	1.753	4.398	1.468	1.730	*NS*	-
Having a good patient-therapist alliance	6.096	1.257	6.873	0.397	7.294	<.001*	0.83
Enhancing patient's motivation	4.766	1.682	5.669	1.250	4.770	<.001*	0.60
Psychoeducation	5.725	1.360	6.428	1.036	4.536	<.001*	0.58
Calming	**4.676**	**1.695**	**4.247**	**1.654**	**1.902**	***NS***	**-**
Relaxation exercises	4.886	1.841	4.199	1.947	2.727	.007*	0.36
Mindfulness	4.467	1.938	4.295	1.890	0.666	*NS*	-

Note: NS=Non-significant. *Significant after Bonferroni correction.

Table 4. Correlation analysis between clinicians' technique preference and anxiety level

	Prospective anxiety		Inhibitory anxiety	
	r	*p*	*r*	*p*
Change-oriented	**-0.015**	***NS***	**-0.059**	***NS***
Asking the patient to do homework or tasks between therapy sessions	0.014	*NS*	-0.085	*NS*
Behavioural experiments	-0.250	.026	-0.220	*NS*
Setting an agenda at the beginning of each therapy session	0.162	*NS*	0.089	*NS*
Exposure	-0.293	.009	-0.229	.042
Behavioural activation	0.047	*NS*	-0.083	*NS*
Having a session to set treatment goals	0.062	*NS*	0.111	*NS*
Asking the patient to complete surveys regularly to monitor their progress	-0.074	*NS*	-0.049	*NS*
Changing the meaning attached to the patient's thoughts	0.087	*NS*	0.113	*NS*
Interpersonal engagement	**-0.088**	***NS***	**-0.046**	***NS***
Exploring the patterns in the patient's relationships with other people	-0.063	*NS*	-0.084	*NS*
Exploring the patient's childhood and past	0.098	*NS*	0.117	*NS*
Looking at other problems besides the patient's initial reason for searching therapy	-0.218	*NS*	-0.093	*NS*
Having a good patient-therapist alliance	0.118	*NS*	0.155	*NS*
Enhancing patient's motivation	-0.186	*NS*	-0.097	*NS*
Psychoeducation	-0.064	*NS*	-0.075	*NS*
Calming	**-0.075**	***NS***	**-0.050**	***NS***
Relaxation exercises	-0.005	*NS*	-0.029	*NS*
Mindfulness	-0.113	*NS*	-0.074	*NS*

Note: NS=Non-significant

Supplemental Table 1. Technique reduction with exploratory factor analysis

	Factors		
	Change-oriented	Interpersonal engagement	Calming
Asking the patient to do homework or tasks between therapy sessions	**0.750**	-0.033	0.008
Behavioural experiments	**0.747**	0.059	0.055
Setting an agenda at the beginning of each therapy session	**0.702**	0.126	0.159
Exposure	**0.640**	0.244	0.133
Behavioural activation	**0.578**	0.012	0.162
Having a session to set treatment goals	**0.533**	0.101	0.327
Asking the patient to complete surveys regularly to monitor their progress	**0.468**	0.056	0.247
Changing the meaning attached to the patient's thoughts	**0.409**	0.255	-0.213
Exploring the patterns in the patient's relationships with other people	0.025	**0.772**	0.192
Exploring the patient's childhood and past	0.060	**0.759**	0.217
Looking at other problems besides the patient's initial reason for searching therapy	-0.101	**0.685**	0.335
Having a good patient-therapist alliance	0.359	**0.461**	-0.252
Enhancing patient's motivation	0.470	**0.445**	0.170
Psychoeducation	0.315	**0.412**	-0.031
Relaxation exercises	0.146	0.136	**0.738**
Mindfulness	0.179	0.040	**0.760**
Cronbach's alpha	**0.795**	**0.729**	**0.723**

Note: Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser normalization. The rotation converged in 9 iterations