**Supporting Information**

**SUPPLEMENTARY FILE 1**

**Details of Psychotherapy Outcome study Methodology Rating Form (POMRF)**

|  |  |  |
| --- | --- | --- |
| **16. Checks for treatment adherence** | | |
| 0 | Poor | No checks were made to assure that the intervention was consistent with protocol. |
| 1 | Fair | Some checks were made (e.g. assessed a proportion of therapy tapes). |
| 2 | Good | Frequent checks were made (e.g. weekly supervision of each session using a detailed rating form). |
| **17. Checks for therapist competence** | | |
| 0 | Poor | No checks were made to assure that the intervention was delivered competently. |
| 1 | Fair | Some checks were made (e.g. assessed a proportion of therapy tapes). |
| 2 | Good | Frequent checks were made (e.g. weekly supervision of each session using a detailed rating form). |
| If insufficient information is given regarding a specific item a rating of 0 is given. | | |

*Notes:* Some trials tested interventions delivered online (e.g., CBT) or which otherwise involved some automation (e.g., biofeedback using a computer programme). Evaluating implementation fidelity in such instances can be different to that required for more traditional psychological interventions (e.g., face-to-face therapy).

Automation means there is likely less opportunity for deviations from the intended treatment. It does not though rule out the necessity to still to monitor for adherence and report the findings. For instance, in the case of an online intervention that is meant to deliver content individualized to users’ preferences and needs, did the rule-based artificial intelligence programmes always work correctly and deliver the right information at the right time? What qualitative assurance checks were made? Accordingly, item 19 from the CONSORT statement for e-health interventions refers to the need to note any technical problems, and other unexpected/unintended incidents that were experienced (https://asset.jmir.pub/assets/public/CONSORT-EHEALTH-v1-6.pdf).

The concept of competence may not though always be applicable to automated interventions. For instance, if the intervention is fully automated and checks with regards adherence have been completed, then there is no obvious need to assess and report on competence. It would though be relevant if intervention still depended in part on a therapist. For example, an intervention may be delivered online but still require a therapist to read and respond to comments posted on a virtual message board by the patient. It such instances it would be important to assess and report how competently the therapist was doing this.

**SUPPLEMENTARY FILE 2**

**Mean score for items within each domain and proportion identified as “strong barriers”**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Domain** | | | | |
|  | **A**  Lack of appreciation of treatment integrity  (items within scale 4) | **B**  Lack of general knowledge about treatment integrity (items within scale 8) | **C**  Lack of theory and specific guidelines on treatment integrity procedures  (items within scale 7) | **D**  Time, cost, and labor  demands  (items within scale 5) | **E**  Lack of editorial  requirement  (items within scale 6) |
| Mean (SD) | 2.51 (0.45) | 3.27 (0.31) | 4.25 (0.30) | 4.24 (0.28) | 3.93 (0.30) |
| % “Strong barrier” | 0 | 0 | 6 (85.7%) | 3 (60.0) | 2 (33.4) |
| % “Barrier” score | 1 (25.0%) | 6 (75.0%) | 1 (14.3%) | 2 (40.0) | 4 (66.6) |
| % “Not a barrier” | 3 (75.0%) | 2 (25.0%) | 0 | 0 | 0 |

*Notes:* Data within table based on responses to survey by N=20 participants; SD, standard deviation; Items with mean rating of ≤3 are considered “not a barrier”, items with mean rating >3 and ≤4 are considered “barriers”, and items with mean rating of >4 are considered “strong barriers.”

**SUPPLEMENTARY FILE 3**

**Bibliography for trials referenced in Table 1**

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**supplementary file 4**

Summary of 11 additional trials of psychological interventions identified from systematic reviews by Al-queel et al.,S4.1 Wagner et al.,S4.2 and Lewis et al. S4.3 and extent to which they assessed and reported on implementation fidelity

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Trial** | **Year** | **Country** | **POMRF** | | | |
|  |  |  | **Adherence** | | **Competence** | |
| Rating | Result reported | Rating | Result reported |
| Adamolekun et al.\* S4.4 \* | 1999 | Zimbabwe | Fair | No | N/A | N/A |
| Brown et al. S4.5 | 2009 | UK | Poor | - | N/A | N/A |
| Glueckauf et al. S4.6 | 2002 | US | Poor | - | Fair | Yes |
| Ibinda et al. S4.7 | 2014 | Kenya | Poor | - | Poor | - |
| Lewis et al. S4.8 | 1991 | Chile | Poor | - | Poor | - |
| Li et al. S4.9 | 2013 | China | Poor | - | Poor | - |
| Modi et al. S4.10 | 2013 | US | Fair | No | Fair | No |
| Pfäfflin et al. S4.11 | 2012 | Germany, Switzerland | Poor | - | Poor | - |
| Pryse-Phillips et al. S4.12 | 1982 | Canada | Poor | - | Poor | - |
| Shope S4.13 | 1980 | US | Poor | - | Poor | - |
| Tang et al. S4.14 | 2014 | China | Fair | No | Poor | - |

*Notes:* To assess adherence and competence in these additional trials the same process as described in the Methods for rating the 50 RCTS/ quasi RCTs was followed. Presented in the table are the rating scores arrived at by consensus by the two independent raters (AJN & SLB). POMRF, Psychotherapy Outcome Study Methodology Rating Form (adherence and competence items each scored on scale of “Poor”, “Fair” and “Good”; N/A = domain of ‘competence’ not applicable due to the nature of the intervention tested within this trial (see Supplementary File 1 for further details) \* IF assessment here related only to patient information leaflet element of trial which was focused on patients.

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