GUIDED SELF-HELP

PRIMARY AUTHOR: G. BRIDGWATER
Review: K. Sarek, E. Hausen

AUGUST 2020
Research Report:
Mental Health – Self-Help
(2020 Recommended Idea)

Primary author: George Bridgwater
Review: Karolina Sarek & Erik Hausen
Date of publication: August 2020
Research period: 2020

This is a summary report about guided self-help, a recommended intervention for improving mental health and subjective well-being. This report corresponds to step four of our research process – the drafting of an in-depth, 80-hour report on a potential intervention. All ideas considered for this cause area in 2020 are listed in this spreadsheet.

Thanks to Karolina Sarek, Erik Hausen, Clare Donaldson, and Juliette Finetti for reviewing the research, and to Antonia Shann, Urszula Zarosa, Nicoleta Faina, and Patrick Stadler for their contributions. We are also grateful to the four experts who took the time to offer their thoughts on this research: Kate Cavanagh, JoAnne Dahl, Paul Farrand, and Steven Hayes.

For questions about the content of this research, please contact George Bridgwater at george@charityscience.com. For questions about the research process, charity recommendations, and intervention comparisons, please contact Karolina Sarek at karolina@charityscience.com.

Charity Entrepreneurship is a research and training program that incubates multiple high-impact charities annually. Our mission is to cause more effective charities to exist in the world by connecting talented individuals with high-impact intervention opportunities. We achieve this through an extensive research process and through our annual Incubation Program.
Research Process

Before opening the report, we think it is important to introduce our research process. Knowing the principles of the process helps readers understand how we formed our conclusions and enables greater reasoning transparency. It will also clarify the structure of the report.

Our research process incorporates elements that are well established in some fields but uncommon in others. This is partly because of the unique goals of our research (i.e. finding new areas for impactful charities to be launched) and partly because we incorporate lessons and methodologies from other fields of research, primarily global health and medical science. Below is a quick overview of some of the key elements.

Iterative depth: We research the same ideas in multiple rounds of iterative depth. Our goal is to narrow down our option space from a very large number of ideas (often several hundred at the start) to a more workable number for deeper reports. This means we do a quick 20-minute prioritization, a longer 2-hour prioritization, and finally an 80-hour prioritization. Each level of depth looks at fewer ideas than the previous round.

Systematic: The goal of our research is to compare ideas for a possible charity to found. To keep comparisons between different ideas consistent our methodology is uniform across all the different ideas. This results in reports that consider similar factors and questions in a similar way across different interventions, allowing them to be more easily compared. This is commonly used in other charity evaluations and encouraged in other fields.

Cluster approach: Comparing different intervention ideas is complex. We are not confident that a single methodology could narrow down the field, in part due to epistemic modesty. To increase the robustness of our conclusions, we prefer instead to look at ideas using multiple independent methodologies and see which ideas perform well on a number of them (more information here). These methodologies include a cost-effectiveness analysis, expert views, informed consideration, and using a weighted factor model. We explain the merits and disadvantages of each method, as well as how we apply it, in the linked documents. Each methodology is commonly used in most fields of research but they are rarely combined into a single conclusion.

Decision relevant: Our research is highly specialized and focused. We only research topics that are directly related to the endline choice of what charity to found. Sometimes cross-cutting research is needed to allow comparison between different ideas, but all our research aims to be directly useful to getting new charities started. This level of focus on targeted practical outcomes is rare in the research world, but is necessary to our goal of generating more charity ideas with minimal time spent on non-charity idea related concepts.
# Table of contents

Description of the intervention 5  
Summary conclusion 6  

1 Prior view 9  
1.1 Informed consideration 9  
1.2 Expert view 9  
1.3 Weighted factor model 9  
1.4 Cost-effectiveness analysis 10  

2 Informed consideration: Crucial considerations 11  
2.1 Therapeutic techniques available 11  
2.2 Short overview of evidence base 11  
2.3 Impact of support on adherence and effect size 14  
2.4 Location selection 18  

3 Expert view 20  

4 Weighted factor model 23  
4.1 Strength of the idea 23  
4.2 Limiting factors 24  
4.3 Execution difficulty 26  
4.4 Externalities 26  
4.5 Causal chain 27  

5 Cost-effectiveness analysis (CEA) 28  
5.1 Overview 28  
5.2 Direct effects 30  
5.3 Costs 31  
5.4 Counterfactual costs 31  
5.5 Affecting factors 32  
5.6 Assumptions 33  

6 Informed consideration: Internal contemplation 34  
6.1 Crucial considerations 34  
6.2 Expert view 34  
6.3 Weighted factor model 34  
6.4 Cost-effectiveness analysis 35  
6.5 Conclusion 35  

References 37
Description of the intervention

Self-help is a self-administered therapeutic intervention whereby an individual makes use of books or other materials to improve their mental health and well-being. With guided self-help, a certain level of professional support is available, while unguided self-help (also known as pure self-help) involves the individual working independently.

This report considers several variations of self-help that a new charity could experiment with and ultimately implement. The basic model is as follows. The charity could operate in a high- or low-income country based out of a central distribution center. Self-help materials could then be distributed in several ways: by the charity directly; through partnerships with local community centers and places of worship; or digitally.

The charity would primarily focus on distributing workbooks, as the evidence base for these is strong. Unlike self-help books, which are consumed passively, self-help workbooks require greater engagement from the reader through written questions, tasks, handouts, exercises, worksheets, and assignments [45]. The intervention could also incorporate online courses.

Workbooks and online courses would minimize the use of staff time, allowing this intervention to more cost-effectively benefit a greater number of beneficiaries. Beneficiaries will read or interact with the material over the course of five to ten weeks, depending on the resource. If guidance is provided, a team of lay health workers will provide short weekly telephone support to beneficiaries. These staff members will need to be trained to provide support for every new self-help material they will deliver. We expect that this could be achieved with between three and seven days of training from more specialist staff.

The specific level of guidance provided will depend on the new charity's initial research and any future experimentation. At this stage, telephone support looks most promising. Skype-based support could plausibly increase the effect size, although we have not examined the evidence base for this. Telephone support would allow each lay health worker to supervise around 150 patients in any given week. Each lay health worker will be supervised by more specialist workers with more training in the specific type of therapy offered. By supervising the work of ten to fifteen other workers [1], one specialist worker could cascade their knowledge to help with the ongoing treatment of 1,500 to 2,250 people each week.
Summary conclusion

This report examines self-help as an intervention from a variety of perspectives. The precise material, method, and length of support were not fully determined, but we found that this method of delivering psychotherapy is generally well evidenced. In total, we found over fifty randomized controlled trials examining the effects of self-help (guided and pure) that demonstrate its efficacy on multiple metrics. Most importantly for this report, multiple trials examine the effects of self-help on subjective well-being. The experts we spoke to agreed with this assessment, indicating that the evidence base for self-help is strong for mild to moderate presentations of depression and a few other conditions.

The main advantage of this intervention over other face-to-face therapy is the reduced demand on staff time. Whereas face-to-face therapy may require ten weekly sessions of one or two hours from a specialized therapist, guided self-help can be delivered with weekly ten-minute calls from lay health workers. This means that guided self-help can achieve a comparable effect size to face-to-face therapy [2] for around 5% of the cost, making it one of the most cost-effective ways to deliver psychotherapy.

From an organizational perspective this charity idea seems to be easy to implement, and we do not expect significant bottlenecks. As with all interventions, funding may be a concern. However, the ability of this organization to target multiple conditions while remaining cost-effective should allow the co-founders to tailor the intervention for condition- or population-specific donors. This model will be easy to test and pivot based on the organization’s monitoring and evaluation or any future academic research.

This intervention could potentially target a variety of neglected problems including depression, anxiety, and chronic pain, which collectively affect approximately 2.1 billion people a year [3][4][5]. These conditions remain mostly untreated even in high-income countries [6]. Given the immense scale of this problem, self-help could be a highly effective intervention.

A charity implementing a self-help intervention has the potential to have a large impact on subjective well-being in both high- and low-income countries. It is therefore Charity Entrepreneurship’s 2020 recommended charity idea for our mental health and happiness cause area.
The table below offers a step-by-step summary of the research for this intervention. Color-coding reflects how well the intervention performed at each stage. The idea sort report, idea prioritization report, supporting reports, and related reports involve background research prior to this report, and are not considered in the final decision on the promise of this intervention.

<table>
<thead>
<tr>
<th>Report type</th>
<th>Summary results</th>
<th>Deeper reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idea sort</td>
<td>During the idea sort report, this idea showed moderate initial promise. It scored well on the weighted factor model (92nd percentile), moderately in cost-effectiveness (68th percentile), and highly for informed considerations (97th percentile).</td>
<td>Full report Process</td>
</tr>
<tr>
<td>Idea prioritization</td>
<td>After two hours researching the cost-effectiveness of this idea, it was the second strongest of over thirty ideas considered.</td>
<td>Full report Process</td>
</tr>
<tr>
<td>Prior view (section 1.)</td>
<td>Our initial research suggested that this could be a promising intervention. However, we had relatively low background knowledge of self-help before in-depth research, and were concerned about its low intensity.</td>
<td>Process</td>
</tr>
<tr>
<td>Informed consideration (section 2.)</td>
<td>Informed consideration occurs at two stages of our research process: the start and the end. Two sections in the report reflect this chronology. At this first stage, we explore what factors are likely to drastically affect the intervention (crucial considerations). Most importantly, we explored i) therapeutic techniques available through this method; ii) staff time such interventions require, and how the level and type of support affect adherence and effect size; and iv) which locations to target and how stigma could affect the intervention. These gave us a better overview of this intervention and greater confidence that it could improve the accessibility of psychotherapy through reducing its cost.</td>
<td>Process</td>
</tr>
<tr>
<td>Expert view (section 3.)</td>
<td>All the experts we spoke to were generally positive about this intervention due to its low cost and large evidence base, seeing it as one of the most cost-effective ways to provide treatment for multiple conditions. They highlighted that self-help is generally for mild to moderate presentation of certain conditions. An initial assumption in our modeling was the potential to replicate the UK scheme Reading Well in a different context. However, all our experts advised against this, as Reading Well uses less well evidenced materials. We also discussed some potential ways to innovate the model to increase the number of cases.</td>
<td>Process</td>
</tr>
<tr>
<td><strong>Weighted factor model (section 4.)</strong></td>
<td>The overall score for this intervention on the WFM was 34.5/50. This was the highest-rated of our eighty-hour reports and in the top 98th percentile when compared to the initial 20-minute sort. The score can be broken down as follows, with the weighting of each criterion in parentheses: 7/10 for strength of idea (2), 8/10 for limiting factors (1.5), 6/10 for execution difficulty (1), and 5/10 for externalities (0.5). The largest remaining concerns are with recruiting beneficiaries; the talent requirement for the co-founders at later stages in the charity’s development; and the generalizability of the evidence base to low-income countries.</td>
<td>Process</td>
</tr>
<tr>
<td><strong>Cost–effective analysis (section 5.)</strong></td>
<td>We modeled the cost–effectiveness of this intervention under six scenarios, using the satisfaction with life scale (SWLS) and quality-adjusted life years (QALYs). We measure the expected number of incremental increases on the SWLS and of QALYs per dollar spent. Our metrics report (forthcoming) provides further information on how and why we selected these metrics. All scenarios were among the most cost–effective mental health interventions. The most likely scenario had a cost–effectiveness of $78 or $20 per annual point increase on the SWLS scale for a high- and low-income country respectively, increasing to $25 and $8 without counterfactuals. In this case the estimated dollar cost per QALY is $20,016 in a high-income country and $1,203 in a low-income country, or $2,588 and $942 per QALY respectively when counterfactuals are ignored.</td>
<td>Process</td>
</tr>
<tr>
<td><strong>Informed consideration (section 6.)</strong></td>
<td>The second part of our informed consideration closes the report. This internal contemplation allows our team to reflect on the data and evidence gathered throughout the process. We conclude that self-help is the strongest intervention examined in this cause area: it is therefore our 2020 recommended mental health charity idea.</td>
<td>Cause area Process</td>
</tr>
<tr>
<td><strong>Supporting reports</strong></td>
<td>Two supporting reports are applicable to this idea. The metrics report (forthcoming) examines various quality of life measures and discusses why the metrics used in this eighty-hour report were selected. The cause area report explains why we think mental health and subjective well-being is a promising area to research.</td>
<td>Cause area Process</td>
</tr>
</tbody>
</table>
1 Prior view

This brief section summarizes our team's thoughts on this intervention before starting in-depth research.

We expected the promise of the idea to regress upon further examination due to the less intense nature of self-help and its reliance on recipient treatment adherence. However, its flexibility with respect to beneficiaries and therapeutic techniques was expected to benefit the idea, allowing the charity or research to pivot to more promising subareas.

At this stage of the research, our subjective likelihood of recommendation was:

![Confidence interval graph](image)

1.1 Informed consideration

A key strength of this intervention is that the charity could easily pivot to different therapeutic techniques and target different conditions. Our main concerns with self-help as an intervention at this stage were the treatment adherence rate and the staff time required to provide support. A potential issue in low-income countries in particular could be the lack of knowledge and stigma surrounding mental illnesses. For instance, if the target population does not recognize the illness and seek help, identifying those in need of treatment could be difficult.

1.2 Expert view

We expected experts to be somewhat negative towards this intervention given the concerns surrounding the completion rate and the low intensity of the intervention. Depending on location, we also expected some concern about adapting therapeutic techniques to the local culture.

1.3 Weighted factor model

Guided self-help was in the 89th percentile for the weighted factor model during the twenty-minute idea sort. We expected this to improve upon further
examination, as our estimate of the strength of the idea was conservative at this earlier stage of the research process.

1.4 Cost-effectiveness analysis

Once ideas were adjusted for uncertainty and counterfactuals, guided self-help was in the 69th percentile for cost-effectiveness during the five-minute cost-effectiveness analysis (CEA), and the third percentile during the two-hour CEA. Its performance at these stages suggests that this intervention could plausibly be highly cost-effective. However, given the initial uncertainty surrounding a few factors such as attrition we did not have a high level of confidence in this intervention’s cost-effectiveness at the prior view stage.
2 Informed consideration: Crucial considerations

After the prior view, we began the research process by identifying crucial considerations for self-help. In this early phase, we investigated the following factors:

- What therapeutic techniques are available through this method?
- Which techniques seem the most well evidenced?
- How much staff time do self-help interventions require?
  - How does the level and type of support affect adherence and effect size?
- Which areas would be best to target, and how could stigma affect this intervention?

2.1 Therapeutic techniques available

Most major therapeutic techniques can be delivered through a self-help format. The *Overcoming* series [7,8] of self-help books predominantly uses cognitive behavioral therapy (CBT). However, the series also provides access to acceptance and commitment therapy (ACT), compassion focused therapy (CFT), mindfulness, dialectical behavior therapy (DBT), interpersonal psychotherapy (IPT), and rational emotive behavior therapy (REBT). Self-help materials can also blend these approaches [46]. Theoretically, it seems any type of therapy can be translated into workbook form. A charity focused on self-help could tackle or pivot to a wide variety of problems using whichever technique proves most effective.

2.2 Short overview of evidence base

A quick search found many impact evaluations and systematic reviews, including meta-analyses examining a wide variety of techniques: the table overleaf lists some of these studies and their summary findings. These reviews suggest that both pure and guided self-help have significant effects on depression. Some evidence suggests that dropout rates and therefore completion rates are not significantly different from those of traditional face-to-face therapy [2]. Notably, the addition of guidance has a significant effect on treatment outcomes, with telephone support having the greatest effect. We could not determine which therapeutic technique has the greatest effect with this quick review.
<table>
<thead>
<tr>
<th>Study</th>
<th>Examined</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cavanagh (2014) [9]</td>
<td>15 RCTs (7 ACT, 4 MBCT and 4 multi-component)</td>
<td>“Interventions that included mindfulness and/or acceptance-based components produced significant benefits in comparison to control conditions on measures of mindfulness/acceptance, depression and anxiety with small to medium effect sizes. Engagement with the self-help interventions varied but on average two-thirds of participants completed post-intervention measures.”</td>
</tr>
<tr>
<td>Farrand (2013) [10]</td>
<td>38 RCTs</td>
<td>“Overall effect size did not significantly differ by type of support (Q = 0.85, df = 2, p = 0.65) (guided: Hedges’ g = −0.53; minimal contact: Hedges’ g = −0.55; self-administered: Hedges’ g = −0.42). For guided and self-administered types of support, planned comparisons revealed a trend for effect size to vary by mental health condition and for guided CBT self-help the modality of support was significant (Q = 6.32, df = 2, p = 0.04), with the largest effect size associated with telephone delivery (Hedges’ g = −0.91).”</td>
</tr>
<tr>
<td>Spijkerman (2018) [11]</td>
<td>RCT on the effects of compassion focused therapy (CFT)</td>
<td>“On all secondary outcome measures but positive affect, the intervention group showed significantly greater improvements up to three-month follow-up. At nine-month follow-up, improvements on all measures were retained or amplified among CFT participants.” Email assistance had a larger effect than pure self-help.</td>
</tr>
<tr>
<td>Coull (2011) [12]</td>
<td>13 RCTs</td>
<td>“Meta-analysis indicated the effectiveness of GSH at post-treatment, although GSH was found to have limited effectiveness at follow-up or among more clinically representative samples.”</td>
</tr>
<tr>
<td>Cuijpers (2010) [2]</td>
<td>21 RCTs</td>
<td>“The overall effect size indicating the difference between guided self-help and face-to-face psychotherapy at post-test was $d=−0.02$, in favour of guided self-help. At follow-up (up to 1 year) no significant difference was found either. No significant difference was found between the drop-out rates in the two treatments formats.”</td>
</tr>
<tr>
<td>Study</td>
<td>Sample Size</td>
<td>Results</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Gellatly (2007) [13]</td>
<td>34 RCTs</td>
<td>“Greater effectiveness was also associated with recruitment in non-clinical settings, patients with existing depression (rather than those ‘at risk’), contact with a therapist (i.e., guided self-help) and the use of cognitive behavioural therapy (CBT) techniques. However, only guided self-help remained significant in the multivariate analysis [regression coefficient 0.36, 95% confidence interval (CI) 0.05–0.68, p=0.03]. In the subset of guided studies, there were no significant associations between outcomes and the session length, content, delivery mode or therapist background.”</td>
</tr>
<tr>
<td>Straten (2009) [14]</td>
<td>10 RCTs</td>
<td>“The intervention did improve sleep efficiency (d = 0.42; p &lt; 0.05), sleep onset latency (d = 0.29; p &lt; 0.05), wake after sleep onset (d = 0.44; p &lt; 0.05) and sleep quality (d = 0.33; p &lt; 0.05) but not total sleep time (d = 0.02; p &gt; 0.05). The sleep improvements were maintained over the longer term. Symptoms of anxiety and depression also decreased after self-help (d = 0.28; p &lt; 0.05 and d = 0.51; p &lt; 0.05, respectively). Although based on a very limited number of studies, the face-to-face treatments did not show statistically significant superiority to the self-help treatments. The effect sizes associated with self-help treatments might be overestimated due to publication bias.”</td>
</tr>
<tr>
<td>Yan–Yee Ho (2015) [15]</td>
<td>20 RCTs</td>
<td>“Results showed that self-help CBT improved sleep, sleep-related cognitions and anxiety and depressive symptoms. Effect sizes for sleep-diary-derived sleep efficiency, sleep onset latency, and wake after sleep onset at immediate posttreatment were 0.80, 0.66, and 0.55, respectively. The average dropout rate of self-help CBT at immediate posttreatment was 14.5%, which was not significantly different from the 16.7% in therapist-administered CBT. Subgroup analyses supported the added benefit of telephone consultation.”</td>
</tr>
</tbody>
</table>
2.3 Impact of support on adherence and effect size

Level of support & adherence

Based on our rough impression, the lowest levels of adherence seem to be around 20–30% even with no or minimal support [34] [40]. Completion rates may in some cases be as high as 90% [36], but seem to be more around 50–60% on average [17] [18]. Thus if providing support increases costs by less than 200–300%, providing extra support should make the intervention more cost–effective due to increasing the treatment completion rate. Only so much can be concluded from examining these studies as they mostly examine ACT and as adherence rates may be reduced in less controlled settings.

Table from Cavanagh et al. (2014) [9]

<table>
<thead>
<tr>
<th>Study</th>
<th>Support Overview</th>
<th>Engagement</th>
<th>Support staff time and type (X if amount is unknown)</th>
<th>Length</th>
<th>% of participants who completed the whole course (~ for estimate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buhrman et al. (2013)</td>
<td>Users submitted homework to their therapist weekly and received feedback within 24h (method unspecified). Plus 2 x 30 minute phone calls</td>
<td>Mean 4.2 (SD = 2.7) treatment sections completed 40% completed all 7 sections.</td>
<td>60 mins phone X mins feedback</td>
<td>7 wks</td>
<td>40%</td>
</tr>
<tr>
<td>Study</td>
<td>Intervention</td>
<td>Completion</td>
<td>Time</td>
<td>Results</td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------</td>
<td>-------</td>
<td>-----------</td>
<td></td>
</tr>
<tr>
<td>Carlbring et al. (2013) [33]</td>
<td>15 minute therapist support per week.</td>
<td>5.1 modules completed on average Mean 270 (range 21–1449) min spent logged on to site 28% completed all 7 modules</td>
<td>120 mins therapist support</td>
<td>8 wks</td>
<td>28%</td>
</tr>
<tr>
<td>Fledderus et al. (2012) [34]</td>
<td>Set emails and responses to participant emails offering advice and instruction 1 = 3 minute email contact 2 = 9 minute email contact</td>
<td>Mean 7.1 (range 4–8) weeks treatment completed Mean 7.4 (range 1–9) emails sent to therapist Participants spent on average 4h per week on the program.</td>
<td>X mins emails</td>
<td>9 wks</td>
<td>~30%</td>
</tr>
<tr>
<td>Glück and Maercker (2011) [35]</td>
<td>Reminder emails.</td>
<td>64% completed 6 or more days of training.</td>
<td>X mins emails</td>
<td>2 wks</td>
<td>~10%</td>
</tr>
<tr>
<td>Hesser et al. (2012) [36]</td>
<td>Individual emails offering support, advice and clarification Mean number of emails per participant = 10, mean number of minutes per email = 3</td>
<td>91% ACT participants completed treatment phase.</td>
<td>30 mins emails</td>
<td>8 wks</td>
<td>91%</td>
</tr>
<tr>
<td>Jeffcoat and Hayes (2012) [37]</td>
<td>6 online quizzes with standardized feedback</td>
<td>64% reported reading whole book and doing exercises.</td>
<td>X mins feedback</td>
<td>8 wks</td>
<td>64%</td>
</tr>
<tr>
<td>Study</td>
<td>Intervention Description</td>
<td>Duration</td>
<td>Rate</td>
<td>Effectiveness</td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------------------------------------------------------------------------------------</td>
<td>----------</td>
<td>------</td>
<td>---------------</td>
<td></td>
</tr>
<tr>
<td>Johnston et al. (2010) [17]</td>
<td>Weekly telephone support 92% completed at least 3 weeks of treatment 50% completed 6 weeks of treatment.</td>
<td>X mins phone</td>
<td>6 wks</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>Lappalainen et al. (2013) [38]</td>
<td>3 group support meetings (4 + 2 + 2 h total) 91% intervention users reported being ‘active users’ of at least one treatment tool.</td>
<td>480 mins group support</td>
<td>3 mths</td>
<td>N.A</td>
<td></td>
</tr>
<tr>
<td>Ljótsson et al. (2010) [39]</td>
<td>Individual emails offering corrective psychoeducation, support and guidance. Mean support time = 165 mins (range = 8–315 mins) 69% reached the final step of the treatment and engaged in exposure exercises.</td>
<td>165 mins emails</td>
<td>10 wks</td>
<td>69%</td>
<td></td>
</tr>
<tr>
<td>Meyer et al. (2009) [40]</td>
<td>None 97% completed at least 1 session 36% completed 5 or more sessions</td>
<td>None</td>
<td>9 wks</td>
<td>~30%</td>
<td></td>
</tr>
<tr>
<td>Morledge et al. (2013) [41]</td>
<td>Fully automated message board with moderator to facilitate and lead discussion 35% of participants in the Internet-based stress management program enrollees showed online program activity for 6–8 weeks.</td>
<td>X mins moderation</td>
<td>8 wks</td>
<td>~30%</td>
<td></td>
</tr>
<tr>
<td>Study Reference</td>
<td>Description</td>
<td>Effect Size</td>
<td>Duration</td>
<td>Follow-up</td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>-------------</td>
<td>-------------</td>
<td>----------</td>
<td>-----------</td>
<td></td>
</tr>
<tr>
<td>Muto et al. (2011) [42]</td>
<td>6 online quizzes with standardized feedback. Study-site message board. 74% completed at least 1 quiz; those who took quizzes on average completed 83%</td>
<td>X mins feedback</td>
<td>8 wks</td>
<td>N.A</td>
<td></td>
</tr>
<tr>
<td>Niles et al. (2013) [43]</td>
<td>Two face-to-face sessions at outset and 20 minute weekly phone calls. 63% completed all readings, 89% completed at least 75% of the readings Mean of 137 (SD = 91) minutes per week mindfulness practice.</td>
<td>X face to face 120 mins phone</td>
<td>6 wks</td>
<td>63%</td>
<td></td>
</tr>
<tr>
<td>Thorsell et al. (2011) [18]</td>
<td>Initial and end of treatment meetings (90 min each), weekly phone support (30 min each week) plus option to email therapist in</td>
<td>63% of those who started ACT treatment completed it.</td>
<td>180 mins meeting 210 mins phone</td>
<td>7 wks</td>
<td>63%</td>
</tr>
<tr>
<td>Warnecke et al. (2011) [44]</td>
<td>None (Audio CD of guided mindfulness practice (30 min) daily for 8 weeks in medical students so might not be useful)</td>
<td>64% completed record of mindfulness practice Mean 27 (range 0–52) days of mindfulness practice</td>
<td>None</td>
<td>8 wks</td>
<td>64%</td>
</tr>
</tbody>
</table>

**Type of support & effect size**

Pure unguided self-help has a significant effect on several psychiatric conditions, so it is possible that no staff time would be required. However, the effect of the treatment is larger the more guidance is provided. Telephone delivery seems to have
the largest effect size and no support the smallest (guided: Hedges’ $g^2 = -0.53$; minimal contact: Hedges’ $g = -0.55$; self-administered: Hedges’ $g = -0.42$; telephone delivery: Hedges’ $g = -0.91$) [10]. The addition of regular emails may be one way to increase the effect [11] and probably does not use as much staff time. The exact breakdown in effect size and time commitment will be investigated in more depth during the cost-effectiveness analysis.

2.4 Location selection

Stigma surrounding mental health is an important factor in selecting a location for this intervention. If this intervention were run in Western countries, where stigma is lower, this issue can be somewhat avoided; however, costs may be higher. Shipping is likely to be more reliable in developed nations, and shipping costs do not seem to increase clearly alongside GDP [47]. Telephone delivery could potentially cause the cost to rise in developed nations, as operators may need to be in the same country to avoid accent or language issues and local support staff would require larger wages. The cost-effectiveness of this intervention in high-income countries is explored further in section 5 of this report.

In low- and middle-income countries, stigma may be a barrier to implementation. For example, when interviewed on their views of depression Indian students were significantly less likely than US students to express the importance of medication or therapy/counseling in their answers [48]. This means that Indian students were more likely to favor nonprofessional, active coping methods for the treatment of depression rather than seek professional help. Differences can even be found between different ethno-cultural groups within a country. Among inner city residents in Hartford, Connecticut, Euro-American participants were more likely than African American and Latino participants to seek the advice of mental health professionals [49].

This said, guided self-help is a form of therapy that is arguably well-suited for effectiveness in regions where stigma is higher, as it can be practiced in private and does not require patients to visit a therapist. Indeed, patients do not need to reveal their condition to others and expose themselves to discrimination to receive treatment.

---

1 Hedges’ $g$ is a measure of effect size that shows the difference between two means in comparison to the pooled effect size. 0.2 is considered a small effect size, 0.5 medium, and above 0.8 is a large effect size.
Different therapeutic techniques or framings can also account for cultural variations in attitudes towards and preferred treatment for psychiatric conditions. For example, Indian students are more likely to “endorse social support and spiritual reflection or relaxation” as ways to deal with depression [48]. This might make them more receptive to mindfulness based cognitive therapy than to normal CBT. Alternatively workbooks could target particular religious communities, akin to *The Compassion-Based Workbook for Christian Clients* [16].

Even if stigma cannot be avoided through the privacy of the intervention or otherwise mitigated, it would still be possible to target various populations that are more receptive to therapy.
3 Expert view

This section summarizes conversations between the lead researcher and a range of experts, mostly consisting of university professors specialized in research on self-help and low-intensity interventions, and authors of self-help books.

Overall, experts generally agree that this program would be a promising and cost-effective form of psychotherapy. There was some disagreement about the optimal method of delivery or support. Three of the four experts spoken to highlighted the extensive evidence base for telephone support to suggest that this would be the optimal method of support. Dr. JoAnne Dahl pointed to newer techniques such as the use of avatars, which has shown great promise but does not yet have a large evidence base.

General consensus was that the use of workbooks was unlikely to work in libraries. Community centers or religious centers were highlighted as good alternatives. Cultural adaptation was an initial concern, but we discussed various techniques and timelines for mitigating this. An additional RCT may be necessary to achieve full confidence in the effect.

Professor Paul Farrand

Profile: Paul Farrand is the director of the low-intensity CBT (LICBT) clinical training portfolio within clinical education development and research (CEDAR) at the University of Exeter. He works to support LICBT interventions within the NHS England Improving Access to Psychological Therapies (IAPT) mental health program for the treatment of common mental health problems. He has researched multiple low-intensity CBT programs and conducted multiple meta-analyses into self-help interventions and modes of support.

Summary: Paul was skeptical that we would be able to partner with libraries if we were providing workbooks as they need to be written in. He also suggested working from diverse locations, such as churches and local community centers, to help overcome service barriers. In regard to support, Paul indicated that the evidence base is most extensive for telephone support and this should provide the largest effect size. An alternative less intense mechanism could be providing a support line rather than regular calls. Where it is necessary to adapt the workbooks to new cultural contexts, he expects this to take about three months. Overall, Paul was positive about the intervention at least for mild to moderate presentations of
certain conditions, but highlighted slight variations in the model that could make it more effective.

*More information can be found in the conversation summary.*

**Professor Kate Cavanagh**

Profile: Kate Cavanagh is Professor of Clinical Psychology and Senior Lecturer in Clinical Psychology at the University of Sussex. She has worked on multiple papers and randomized controlled trials on self-help. Her particular area of expertise is the evaluation and implementation of self-help and digital mental health technologies for common mental health problems.

Summary: Unfortunately the recording of the interview was lost; notes here are thus from memory. Overall Kate saw promise in the intervention and explained some of the strengths and weaknesses of the different models of delivery. Discussing the trade-off between digital versus physical self-help workbooks, she explained that patient preferences were split 50:50 between the two. She highlighted the *Overcoming* series as particularly well evidenced.

*More information can be found in the conversation summary.*

**Professor Steven Hayes**

Profile: Steven Hayes is Nevada Foundation Professor in the Behavior Analysis program at the Department of Psychology at the University of Nevada. Dr. Hayes has been President of Division 25 of the AAAPP, of the American Association of Applied and Preventive Psychology, and the Association for Behavioral and Cognitive Therapy. He also developed acceptance and commitment therapy (ACT), a widely used and evidence-based procedure often used in counseling. He has written multiple self-help books involving this technique, including *Get Out of Your Mind and Into Your Life*, and contributed to *Living Beyond Your Pain*.

Summary: Steven was very positive toward running a guided self-help intervention. His impression was that pure self-help would be the most cost-effective way to deliver self-help, but that it could have drawbacks. Providing support can serve to professionalize the service and increase the investment of recipients. He discussed some alternative methods to achieve this. The two main underlying methods are giving people a good reason to stick with the treatment, and giving them greater agency. There is a good evidence base that shows that allowing people to choose between multiple workbooks improves the effect. He agreed with Farrand’s
suggestion of partnering with religious leaders rather than libraries, and cautions us against too stringently applying Western psychiatry in a different cultural context, as this can have detrimental effects. This may be an area about which the charity must think carefully, adapting materials and designing the program with input from the indigenous population.

More information can be found in the conversation summary.

JoAnne Dahl

Profile: Dr. Dahl has recently retired from her position as professor of psychology at Uppsala University in Sweden. She specializes in acceptance and commitment therapy (ACT) for chronic pain. JoAnne is the author of the well-evidenced ACT self-help book for chronic pain, *Living Beyond Your Pain*.

Summary: JoAnne highlighted other methods of delivery as more promising. She emphasized the lower cost of delivering digital workbooks and the potential use of avatars to provide support. Although she does not think the evidence is there to fully back avatars, the studies that exist have shown some promise. Overall, she indicated that remote support works best, as her past experience has shown that getting health care workers to different locations can be difficult in low- and middle-income countries.

More information can be found in the conversation summary.
4 Weighted factor model

In this stage of research, we scored self-help based on preset criteria and weightings. We also generated a causal chain.

A strong evidence base exists for guided self-help when using condition-specific measures such as the Beck Depression Inventory or Generalized Anxiety Disorder 7-item (GAD-7). This will allow the charity to select self-help material and best practices for providing support. As a form of therapy, self-help can be delivered cheaply, especially in LMICs, and its effect is not too dissimilar to face-to-face therapy. Counterfactual replaceability may be a concern in some locations. In the UK, for example, there are already government programs that draw on self-help, such as the Improving Access to Psychological Therapies (IAPT) program and the Reading Well scheme.

This graphic shows the score of the intervention in each area:

<table>
<thead>
<tr>
<th>Factor</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strength of the idea</td>
<td>7/10</td>
</tr>
<tr>
<td>Limiting factors</td>
<td>8/10</td>
</tr>
<tr>
<td>Execution difficulty</td>
<td>6/10</td>
</tr>
<tr>
<td>Externalities</td>
<td>5/10</td>
</tr>
</tbody>
</table>

4.1 Strength of the idea

Score: 7/10

A wide range of studies examine the effects of guided and pure self-help interventions. The National Institute for Health and Care Excellence (NICE) has a large library of 2,930 previous studies and ongoing studies examining guided self-help [50]. Among these we examined 13 meta-analyses and systematic reviews and over fifty randomized controlled trials. All demonstrated a medium to large effect size on measures of depression, anxiety, and subjective well-being [51]. The effect size for the Quality of Life Inventory (QOLI), EQ-5D-5L, or other quality-adjusted life year measures was much smaller and in some studies insignificant. Most of these RCTs on workbooks had quite low sample sizes, either due to a low initial sample or because of high dropout rates. Thus some of the findings of these studies might not hold at a larger scale outside of a controlled setting.
Although we have not done so in this time-capped review, it is possible to compare the effect of individual workbooks. Many self-help workbooks have RCTs examining their effects. We recommend that a charity operating this intervention examine the effect of each workbook when deciding whether to include it in their portfolio. They would also have access to existing best practices [52], research into cultural adaptation [53], and the most effective support types [54].

While there are no external cost-effectiveness analyses of guided self-help using subjective well-being measures, our internal models (discussed in section 5) suggest it is quite promising. It was the most cost-effective non-policy intervention when modeled with a two-hour CEA at an earlier stage of our research, and some models of delivery appear highly cost-effective in the twenty-hour CEA. Partnering with local libraries in LMICs to loan out workbooks and providing short telephone-based support (scenario 4 in our 20-hour CEA) looks particularly promising in terms of cost-effectiveness. However, this would be more difficult to achieve than distributing new workbooks to beneficiaries, which is thus the most likely scenario for this intervention.

One potential issue with self-help as an intervention is the lower cost-effectiveness when examining QALYs due to the low effect on this metric. The model for scenario 4 has a high intervention cost-effectiveness for QALYs, but when accounting for the counterfactual costs it becomes less promising at the scale used in the model. At a larger scale this is no longer the case, and this intervention could perhaps even be competitive with highly cost-effective global health interventions.

An additional problem is that almost all of the existing evidence, outside of a few trials [29][30][31], was conducted in high-income countries. Some variation in culture and context between these trials shows the effect generalized in multiple contexts. Nonetheless, the lack of research in low-income countries gives us less confidence in the effect of this intervention in this context.

4.2 Limiting factors

Score: 8/10

The potential limiting factors for this intervention depend largely on country selection. In the UK, for example, counterfactual replaceability is the main concern, as schemes such as Reading Well [55] already provide self-help books. In 2018/2019, 323,139 people borrowed at least one book in the Reading Well scheme. Many other charities in the UK provide free resources online [56] or catalogs of books that they
recommend people purchase [57]. Guided self-help is even available on the NHS [57, 58]. However, the treatment gap for depression and anxiety in the UK remains high. According to a 2004 WHO report [59], approximately 60% of people with depression and 70% of people with anxiety do not receive treatment. This may have reduced in the past 16 years but more recent research commissioned by the NHS Confederation in 2018 found that the NHS budget would have to double to reduce the treatment gap from 60 percent to 30 percent [60]. Even if these programs do provide complete coverage for unguided self-help these programs do not provide telephone support. A new charity could specialize in this element of the intervention and partner with Reading Well.

Some other countries have adopted similar schemes to the one first deployed in Wales, including Scotland, Ireland, Denmark, and New Zealand [61]. However, these have been deployed more locally than in the UK, and there may be space for a new charity to operate the full model in these countries. Funding is not as significant a concern within developed countries, as numerous grants [62] and foundations are available [63]. Operating in a more developed country may also provide the opportunity to fundraise from recipients, as Action for Happiness does [64]. However, we expect this option to be less likely for this intervention. Alternatively it may be possible to use mostly trained volunteers using a similar model to Nightline in the UK [65].

By contrast, treatment for mental health conditions is almost completely inaccessible in some developing countries. Operating in these locations would thus avoid concerns of replaceability. In the context of a developing country, we expect fundraising to be more difficult. Smaller amounts of funding should be more easily achieved to test out the organization, but at maximum scale, funding would be the limiting factor.

Under the assumption that funding is not an issue, talent and logistical bottlenecks are unlikely to be an issue. It is possible to provide scripts and train telephone operators to provide support. Delivering workbooks or providing access to the materials from local libraries or community centers could also be easily achieved. At a very large scale, management of a growing team of support workers may become an issue. Finally, recruiting beneficiaries could be a possible limiting factor.

Strong monitoring and evaluation would be important to ensure that the intervention is correctly implemented. If guidance were provided over the phone, it would be easy to conduct surveys before and after the intervention.
4.3 Execution difficulty

Score: 6/10

Initially, this charity should be fairly easy to operate, with a small number of support staff. However, the demand for operations and management would increase as the organization grows. Even at a moderate scale of 10,000 patients, the organization would need fourteen support staff if the support demanded per patient is a total of 60 minutes of staff time. At a larger scale, it is likely that at least one of the original co-founders would need to be replaced by someone with more experience running large organizations. Ideally, one of the co-founders would have the experience or aptitude to hire and manage a large team.

In regard to the intervention itself, outcomes are easily measurable through follow-up surveys. If previous research is incorrect and one workbook is found to be ineffective, the quick feedback loops will allow the charity to pivot rapidly.

4.4 Externalities

Score: 5/10

Some forms of this intervention can have a negative effect on certain groups. This was demonstrated by Haeffel (2010), who showed that “participants who were high in rumination and experienced stress exhibited significantly greater levels of depressive symptoms after completing the traditional cognitive skills workbook” [66]. This was the case immediately post-intervention, but symptoms decreased below baseline at the four-month follow-up. If these findings are replicated, screening would be necessary to prevent those at risk of negative effects from gaining access. Alternatively, the cognitive change chapters associated with the negative effect could be removed. Given the significantly higher number of studies demonstrating a positive effect and as the negative findings focus on one chapter, Haeffel’s findings should not update us significantly against self-help.
Given the current imbalance between disease burden and efficiently allocated spending [67], we expect global mental health to improve over the next ten to fifty years. Founding a charity now could thus be expected to have a disproportionate influence. However, other organizations (such as the Center for Global Mental Health [68], which has been operating for over 10 years, or the Happier Lives Institute which has a more explicit aim to move funds to more effective areas are likely to have a much greater effect.

### 4.5 Causal chain

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Activities</th>
<th>Outputs</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff time (30-120mins per beneficiary)</td>
<td>Staff provide telephone support</td>
<td>Guided self-help therapy</td>
<td>Subjective well-being</td>
</tr>
<tr>
<td>Staff trained in low intensity psychotherapy</td>
<td></td>
<td>Pure self-help therapy</td>
<td></td>
</tr>
<tr>
<td>Call monitoring by specialist staff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recruit and screen beneficiaries (method may vary)</td>
<td>Beneficiaries have access to self-help resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide access to online self-help resources</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deliver workbooks (cost $3-12)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Options that we believe have a **strong** positive impact on life satisfaction
- Options that we believe have a **moderate** positive impact on life satisfaction
5  Cost–effectiveness analysis (CEA)

This section summarizes our CEA, which weighs the costs of running this intervention against the QALY and subjective well–being benefits.

5.1  Overview

Based on our report on subjective well–being metrics (forthcoming) we modeled guided self–help using two different metrics: the satisfaction with life scale (SWLS) and quality–adjusted life years (QALYs). The two metrics are not comparable, but we use both for different approaches of assessing the effectiveness of the intervention. Figures reflect the annual dollar cost per QALY gained, and per point increase on the SWLS.

Less weight was given to the QALY model in our decision–making as less evidence was available in the literature on mental health. Most of our interventions ranked the same whether QALYs or subjective well–being metrics were used. The metrics used only makes a significant difference when comparing our report on Fortify Health or other global health interventions to mental health interventions.

Estimates have been given for total and intervention cost–effectiveness, where intervention cost–effectiveness excludes staff, logistical, and counterfactual costs. This is so that when comparing to other interventions it is possible to tell if a poor overall estimate is due to a low scale and therefore relatively fixed costs, or due to a weakly cost–effective intervention.

Methods of delivery

Our cost–effectiveness analysis considered six scenarios. The cost of the intervention under these different scenarios varies according to the income level of the country of operations, the support available to beneficiaries, and whether the workbooks distributed are new or reused (details in the table overleaf).

Scenarios 1 and 2 are the most likely scenarios for this intervention, and involve distributing new workbooks to each beneficiary. Other scenarios are less likely to be successful, relying on the charity’s ability to find volunteers, reuse workbooks, or decrease the price of workbooks. If the charity were able to succeed under such constraints, however, this could further reduce the cost of the intervention.

The majority of the scenarios examine the cost–effectiveness of guided self–help; only scenario 5 entails pure self–help, providing automated email support but no
telephone support. Since this scenario could operate fully remotely, the country
does not affect cost-effectiveness.

### Characteristics of different cost-effectiveness scenarios

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Country income</th>
<th>Workbooks</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Low</td>
<td>New</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scenario 1</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Scenario 2</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Scenario 3</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Scenario 4</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Scenario 5</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Scenario 6</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

### Cost–effectiveness estimates for each scenario

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Estimate</th>
<th>Guesstimte SWLS Model ($ per SWLS)</th>
<th>Google Sheet SWLS model ($ per SWLS)</th>
<th>Google Sheets QALY model ($ per QALY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario 1</td>
<td>total</td>
<td>link</td>
<td>77.98</td>
<td>20,016</td>
</tr>
<tr>
<td></td>
<td>intervention</td>
<td>link</td>
<td>25.21</td>
<td>1,644</td>
</tr>
<tr>
<td>Scenario 2</td>
<td>total</td>
<td>link</td>
<td>20.36</td>
<td>1,165</td>
</tr>
<tr>
<td></td>
<td>intervention</td>
<td>link</td>
<td>8.00</td>
<td>556</td>
</tr>
<tr>
<td>Scenario 3</td>
<td>total</td>
<td>link</td>
<td>54.68</td>
<td>4,574</td>
</tr>
<tr>
<td></td>
<td>intervention</td>
<td>link</td>
<td>19.79</td>
<td>1,347</td>
</tr>
<tr>
<td>Scenario 4</td>
<td>total</td>
<td>link</td>
<td>8.08</td>
<td>512</td>
</tr>
<tr>
<td></td>
<td>intervention</td>
<td>link</td>
<td>2.64</td>
<td>178</td>
</tr>
<tr>
<td>Scenario 5</td>
<td>total</td>
<td>link</td>
<td>3.22</td>
<td>426</td>
</tr>
</tbody>
</table>
We took into account the following factors in our CEAs:

- Direct effects
- Costs
- Counterfactual costs
  - Funding counterfactuals
  - Staff counterfactuals
- Affecting factors

Our considerations for these issues are laid out in the sections below. Further discussion can be found in the supplement.

### 5.2 Direct effects

Detailed figures (including ranges) can be found in our Guesstimate models, linked in the table above.

The direct effect of this intervention is simply the average effect of guided or pure self-help workbooks. In this CEA we used the SWLS and measured outcomes in terms of point increases on this scale each year. This was calculated from a variety of factors, but most prominently:

- Percentage of those treated by condition (depression, anxiety or chronic pain)
- The effect of guided self-help for chronic pain, estimated from Johnston et al. (2010) [17] and Thorsell et al. (2011) [18].
- The effect of unguided self-help for chronic pain, estimated from the studies mentioned above [17][18] but discounted using the effect size ratio of pure vs telephone guided self-help from Farrand (2013) [10].
The existence of studies directly examining the effect of some self-help programs on subjective well-being increases our confidence in this intervention. The estimate above with the least certainty is the effect for anxiety. The studies used examine a variety of self-help interventions including internet-delivered cognitive behavioral therapy, which may be less generalizable. Thus the estimated effect used in our CEA is from a comparable but not identical self-help program.

5.3 Costs

Detailed figures (including ranges) can be found in our Guesstimate models, linked in the table above.

- Core staff costs: $205K
- Logistics & administration costs: $110K
  - Drawn from Charity Science Health’s 2017 budget [22] and the expected office space required per staff member
- Intervention cost
  - Cost for workbooks: Overcoming Depression [8], Overcoming Anxiety [7], and Living With Your Pain [23]
  - Delivery costs
  - Recruitment costs
  - Cost of providing telephone support
  - For the library model: number of uses before books need to be replaced

5.4 Counterfactual costs

Detailed figures (including ranges) can be found in our Guesstimate models, linked in the table above.

- Funding counterfactual costs
  - Based on: amount of funding diverted per year from high- and medium-impact charities and the estimated cost-effectiveness of high- and medium-impact charities from the distribution of effects from our idea prioritization report [24].
- Staff counterfactual cost
  - An estimate for the counterfactual cost of the co-founders and core staff, had they been working at other organizations or earning to give.
5.5 Affecting factors

We conducted a sensitivity analysis (excluding counterfactuals) to find the affecting factors, i.e. the inputs to which each Guesstimate model is most sensitive. These are shown in the table below, with Guesstimate models linked for reference.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Affecting factor 1</th>
<th>Affecting factor 2</th>
<th>Affecting factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario 1</td>
<td>Mins of staff time per participant (r²=0.46)</td>
<td>Length of time the effect lasts (years) (r²=0.11)</td>
<td>Number of beneficiaries (r²=0.10)</td>
</tr>
<tr>
<td>Scenario 2</td>
<td>Net effect from Dear (2017) (r²=0.37)</td>
<td>Length of time the effect lasts (years) (r²=0.19)</td>
<td>Mins of staff time per participant (r²=0.13)</td>
</tr>
<tr>
<td>Scenario 3</td>
<td>Mins of staff time per participant (r²=0.37)</td>
<td>Length of time the effect lasts (years) (r²=0.20)</td>
<td>Number of beneficiaries (r²=0.14)</td>
</tr>
<tr>
<td>Scenario 4</td>
<td>Mins of staff time per participant (r²=0.43)</td>
<td>Number of beneficiaries (r²=0.13)</td>
<td>Length of time the effect lasts (years) (r²=0.10)</td>
</tr>
<tr>
<td>Scenario 5</td>
<td>Number of beneficiaries (r²=0.47)</td>
<td>Length of time the effect lasts (years) (r²=0.08)</td>
<td>Net effect from Dear (2017) (r²=0.01)</td>
</tr>
<tr>
<td>Scenario 6</td>
<td>Number of beneficiaries (r²=0.23)</td>
<td>Mins of volunteer support time per participant (r²=0.16)</td>
<td>Recruitment cost (r²=0.001)</td>
</tr>
</tbody>
</table>

As shown in the table, the largest affecting factors across models are (1) hours of staff time per participant and (2) duration of effect:

1. Any change in the level of support provided will moderately affect the cost-effectiveness because of the high cost of providing support in a high-income country.
2. Our confidence interval for the duration of the effect is quite low. Although longer term follow-up studies have been done [25] [2] [26] [27] [28] for guided self-help and face-to-face therapies (which may have comparable effect lengths), these studies usually do not follow the participants for long
enough to be confident in the effect. Many of the studies we examined for self-help only measured outcomes directly after treatment and the longest follow-ups tended to be about only one year later. Charity Entrepreneurship is skeptical of any claim without strong evidence of its validity; our estimate for the length of effect (1–1.5 years) reflects this. It is plausible that the effect lasts much longer than modeled, but we do not have sufficient evidence to be confident in this. The same parameter is used in all our mental health interventions, so a reduction in duration of effect should not alter the promise of this intervention relative to others we have considered.

5.6 Assumptions

Our cost-effectiveness analysis relies on several assumptions. Some of these may increase the intervention’s estimated cost-effectiveness, while others may decrease it. We expect co-founders of a new charity to experiment within the first few months to reduce the remaining uncertainties. We have assumed that:

- The cost of translating and culturally adapting the workbooks can be excluded.
- There are no additional donations from patients in high-income countries.
- Partnering and maintaining relationships with libraries or community centers can be achieved by a few key staff.
- Training for support workers does not take a significant length of time.
- We are unable to partner with authors to reduce the cost of self-help books.
- Self-help materials are provided entirely in physical form rather than online.
- Recruiting beneficiaries does not require significant resources.
- The effect of the workbook drops off rapidly after the typical follow-up length carried out by studies.
- Providing lower levels of support is the optimal trade-off between cost, effect size, ease of recruiting beneficiaries, and counterfactual replaceability.
6 Informed consideration: Internal contemplation

In this stage, we analyzed all the data and insights gathered through previous steps in the research process. The most important conclusions from each are summarized here, as are our team’s overall thoughts on guided self-help as an intervention.

6.1 Crucial considerations

Crucial considerations research indicated that self-help could be used to deliver a wide variety of therapeutic techniques. The existing literature on each technique is broad, and a charity could draw on it to prioritize the materials they will use. Although pure self-help has a significant effect, the typical minimum support used in existing studies is around one hour of staff time for guided self-help and pure self-help retains the majority of the effect. Telephone support was associated with the largest effect sizes, and was the method assumed in our cost-effectiveness analysis.

6.2 Expert view

All the experts we spoke to were generally positive about guided self-help. A few discussed models of delivery not considered in the CEA. These models will be considered in more depth during research for the implementation report or in the first few months after the Incubation Program by the newly-launched charity.

The most significant update from expert interviews concerned the low likelihood of working with libraries. Certain self-help resources are not reusable, which would make it less useful to partner with them.

6.3 Weighted factor model

The evidence base for guided and pure self-help is very strong in high-income countries, where most trials have taken place. A given self-help resource will have significantly less evidence, but providing CBT or ACT through this format has been well researched. Our confidence in the evidence reduces in low-income countries, as these are outside the original context of the existing RCTs. However, given the large body of evidence in a variety of high-income countries, we expect the results to be somewhat generalizable.
The low cost makes this intervention appear very cost-effective under our analysis, although we found no external cost-effectiveness analysis using subjective well-being. The largest concerns within the weighted factor model are counterfactual replaceability and the difficulty of recruiting beneficiaries. However, we expect both factors to vary largely from country to country, so this concern could be avoided during the country prioritization phase.

Depending on the method and intensity of support this could be a difficult charity to run, as the number of staff may need to be quite large. However, expansion would take place later in the charity’s life cycle, so one or both of the co-founders could replace themselves at this stage if they believe they lack the necessary skills.

6.4 Cost-effectiveness analysis

The cost-effectiveness analysis considered six different models of delivery but was not exhaustive. The most likely models for this charity are Scenario 2, in a low-income country, which is highly cost-effective; and Scenario 1, in a high-income country, which is moderately cost-effective. The models are not very sensitive to most inputs, but are all greatly affected by the duration of the effect and the level of support provided. Duration of effect involves significant uncertainty, as most studies only measure follow-up to a maximum of one year. It is plausible that the effect could last much longer than we have modeled, but without more evidence we cannot be confident of this.

The level of support provided has the potential to change how promising this idea looks. If a new charity’s initial tests find that more guidance is needed for a moderate effect, this idea would be less cost-effective and thus less promising. Given existing research into self-help, this seems unlikely.

6.5 Conclusion

Although we have not determined the exact ideal model and materials for a self-help intervention, we are confident that many variations of this idea would be promising models for a new charity. The materials used can be determined in the new charity’s first few months; our implementation report will also conduct an initial investigation.

Overall, self-help looks to be one of the most cost-effective interventions examined in our 2020 research period. It also has a strong evidence base in high-income countries, and a large ability to test and pivot into more promising areas. Given its
strengths, self-help looks to be the most effective intervention from this research period. As such, it is our 2020 recommended intervention for our mental health and subjective well-being cause area.
References


4. This is the world’s biggest mental health problem – and you might not have heard of it [Internet]. World Economic Forum. [cited 2020 Jun 15]. Available from: https://www.weforum.org/agenda/2019/01/this-is-the-worlds-biggest-mental-health-problem/


22. Public CSH Budget 2017 USD [Internet]. Google Docs. [cited 2020 Apr 16]. Available from: https://docs.google.com/spreadsheets/d/1YcMdYbpxarONoSs_PCAiKRR2c4g9YPIXzR81owdV8k/


44. Warnecke, E., Quinn, S., Ogden, K., Towe, N., & Nelson, M. R. A randomised controlled
trial of the effects of mindfulness practice on medical student stress levels. Medical Education; 2011;45(4), 381–388. doi:10.1111/j.1365-2923.2010.03877.x


51. Guided self-help: Quality and quantity of studies [Internet]. Google Docs. [cited 2020 Apr 9]. Available from: https://docs.google.com/spreadsheets/d/1qm3fneZn7niwEBIU34KTLumv_eAgm0REF007UhtPsM/


55. Reading Well [Internet]. [cited 2020 Apr 9]. Available from: https://reading-well.org.uk/

56. Living Life to the Full | helping you help yourself [Internet]. [cited 2020 Apr 9]. Available from: https://llttf.com/

57. Self Help Guides For Overcoming Mental Health Problems [Internet]. [cited 2020 Apr 9]. Available from: https://overcoming.co.uk/37/Books


60. UK: £1.77B mental health treatment gap for young people [Internet]. Science|Business. [cited 2020 Apr 9]. Available from: https://sciencebusiness.net/network-news/uk-ps177b-mental-health-treatment-gap-young-people


68. Centre for Global Mental Health | Working to close the treatment gap for people living with mental, neurological and substance use disorders [Internet]. [cited 2020 Apr 9]. Available from: https://www.centreforglobalmentalhealth.org/