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A qualitative examination of low intensity cognitive behaviour therapy to reduce anxiety and depression during the COVID-19 pandemic

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Abstract

Objective: The COVID-19 pandemic has had a severe impact on mental health worldwide with increased anxiety and depression in the community widely documented. There is an urgent need to deliver low intensity cognitive behaviour therapy (CBT) tailored to mitigate the impacts of the pandemic, but these approaches need to be assessed for their acceptability and usefulness. The aim of this research was to engage in a qualitative study of participants views surrounding anxiety and depression during the pandemic and feedback on the acceptability and usefulness of a low intensity CBT intervention for adults during the pandemic to inform intervention development and refinement.

Method: There were 21 participants (21-80 years, M = 40.90 years, SD = 16.33; 71% female) from Australia who participated in qualitative interviews who had completed intervention in a randomised controlled trial of low intensity Cognitive Behaviour Therapy (CBT) for anxiety and depression during the pandemic.

Results: Themes emerged including the negative impact of the COVID-19 pandemic on mental health, prior experience of psychological therapy or CBT, acceptability and usefulness of the intervention, participants ideas for intervention improvement and preferences for using the guide. The majority of participants reported the intervention was useful, however suggested several areas including content and format to improve the intervention and feedback on what they would prefer for an intervention.

Conclusions: A low intensity CBT intervention for anxiety and depression was reported as useful and acceptable by participants for their concerns related to the pandemic and exacerbation of pre-existing anxiety and depression.

Keywords: Qualitative, Low Intensity, Cognitive Behaviour Therapy, Internet, COVID-19

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The COVID-19 pandemic has been associated with high rates of psychological distress worldwide. In an Australian survey, Dawel et al. (2020) reported elevated anxiety and depression compared to pre-COVID norms, with concerns over finances and job loss, rated as amongst the most significant concerns. The negative impact of lockdown and social distancing resulting in social isolation have been widely noted (e.g., Holmes et al., 2020). Not surprisingly, loneliness is a significant problem during the pandemic, being found to moderate depression in a longitudinal study of first and second wave lockdowns in Europe (Probst et al., 2020), similar to other studies (e.g., Palgi et al., 2020). Similarly, concerns over the impact of the pandemic on increasing pre-existing psychological issues such as health anxiety have been reported (Jungmann & Witthoft, 2020). The increased focus on germs/contamination and handwashing has been noted as reasons to exacerbate symptoms of obsessive-compulsive disorder (OCD) (Shafran et al., 2020).

The negative impact of the COVID-19 pandemic on mental health in the general population has been significant and not constrained to those with pre-existing psychological disorders. In a Dutch case-controlled cohort study, a large community sample without psychological disorders experienced significantly greater increases in symptoms of anxiety and depression compared to those with diagnoses of depression, anxiety disorders and OCD (Pan et al., 2021). In a systematic review regarding mental health during the pandemic, Xiong et al. (2020) found in studies conducted across eight countries, that there were high rates of anxiety, depression, post traumatic stress disorder, and general psychological distress, with many studies reporting community samples met clinical thresholds for anxiety and depression. Risk factors associated with psychological distress included frequent exposure to news about the pandemic, female gender, younger age and unemployment (Xiong et al.,

2020). Clearly, there is a need for psychological interventions in the community to improve mental health which can be easily and rapidly disseminated.

Low intensity Cognitive Behaviour Therapy (CBT) has been defined as interventions which use self-help materials as either unguided or guided interventions, which involve no more than 6 hours of guidance (Shafran et al., 2021). Low intensity CBT can be delivered in a variety of formats including internet, telephone and self-help book interventions (Shafran et al., 2021). Low intensity unguided CBT delivered via the internet has significant promise as a scalable intervention for widescale dissemination during the pandemic. Internet delivered treatments which can be disseminated without guidance offer significant public health benefit (Andersson, 2016). While there are many options for CBT delivered online, most are general treatment services, and there is a need for tailored CBT which is specific to concerns over the pandemic and for symptoms which may be exacerbated by the pandemic, for example health anxiety and OCD (Jungmann & Witthoft, 2020; Shafran et al., 2020). Recently, the impact of a brief low intensity unguided CBT intervention in 225 adults (age range 18-80 years, 85% female) was evaluated and found significant reductions in anxiety (d = 0.36 [0.18, 0.54]) and depression (d = 0.28 [0.11, 0.45]) compared to controls (Egan et al., 2021). The self-help intervention (see Egan et al., 2021) was unguided, and participants reported spending less than 30 minutes reading the intervention (Egan et al., 2021). The intervention (see www.covidcbt.org) was specifically designed to mitigate the impact of the pandemic, for example guidance on reducing excessive handwashing, planned worry time for health anxiety, moderation and reduction of media consumption about the pandemic, and cognitive therapy techniques (e.g., thought records and behavioural experiments) using the examples of loneliness and social isolation due to lockdown, and concerns about employment and financial stress. While the outcomes of the recent RCT (Egan et al., 2021) are encouraging in terms of reductions in anxiety and

depression, more detailed qualitative feedback would be useful from participants regarding their experience of psychological distress during the pandemic and their experience of using the low-intensity intervention specific to COVID-19.

The aim of the current study was to engage in a qualitative study of experiences of anxiety and depression during the pandemic and feedback regarding a low-intensity CBT intervention designed specifically for concerns during the COVID-19 pandemic (Egan et al., 2021). The research questions were: (1) what are participants views regarding a low intensity CBT intervention for concerns during the COVID-19 pandemic and (2) do participants report mental health issues specific to the COVID-19 pandemic when providing feedback on the intervention? The first research question is important to assess since feedback and acceptability data is a critical part of the development and refinement of a new intervention. User acceptance is a core component in the success of any psychological treatment, including low intensity and internet delivered treatments (Rost et al., 2017). The second research question is important to address to determine qualitative feedback from participants to enable a deeper understanding of unique mental health challenges during the pandemic. Understanding the nature of experiences of anxiety and depression and whether this is different during the pandemic, may inform the development of psychological treatments specific to COVID-19, given the widespread increase in anxiety and depression during the pandemic (Xiong et al., 2020). It is important to examine if participants mention particular aspects of the pandemic which have been noted to have a higher likelihood of exacerbation, including health anxiety (Jungmann & Witthoft, 2020) and OCD (Shafran et al., 2020).

Method

Participants

Participants were 21 individuals residing in Australia, aged between 21 and 80 years (*M* = 40.90 years, *SD* = 16.33; 71% female). All 225 people who participated in a Randomised Controlled Trial (RCT) of the efficacy of unguided low intensity CBT for anxiety and depression with adults in Australia and the UK during the COVID-19 pandemic were invited to participate (see Egan et al., 2021 for a description). Of these 225 people, 22 people expressed interest in qualitative interviews regarding their experience of the intervention (response rate of 10%). There were 22 people interviewed, 21 from Australia and one participant from the UK. The participant from the UK was excluded from the qualitative analysis since this country of residence was an outlier in comparison to the Australian sample.

Participants were recruited for the RCT (Egan et al., 2021) from the community through paid social media advertising on the internet in Australia and the UK to an advertisement with the question "are you interested in improving your mental health during the COVID-19 pandemic?". A study link was provided and participants were directed to a screening survey on Qualtrics. If participants were appropriate for the RCT (i.e., no moderate or high suicide risk) they were randomised to the intervention or control (for further details see Egan et al., 2021). Inclusion criteria for the RCT were above 18 years of age and residing in Australia or the UK. Inclusion criteria for the current study was completion of the intervention evaluated in Egan et al. (2021). Exclusion criteria were moderate to high suicide risk on the Mini International Neuropsychiatric Interview (Sheehan et al., 1998). All participants resided in Australia, with most in the state of Western Australia (41%), followed by New South Wales (27%), Victoria (14%), Queensland (9%), and the Australian Capital Territory (5%) (see Table 1 for further details). In terms of

context, at the time of the study (August-September 2020) participants from Victoria experienced a strict lockdown whereas there were low rates of community transmission of COVID-19 in the other states of Australia at the time.

[Insert Table 1 here]

Measures

Semi-structured interview

A semi-structured interview was developed to guide the interviews as seen in Table 2. The aim was to conduct a descriptive, qualitative study to investigate experiences of anxiety and depression and the acceptability and feedback regarding unguided low intensity CBT to target concerns during the COVID-19 pandemic. A semi-structured interview was designed to gain specific feedback on the intervention rather than open questioning typically utilised in qualitative research (Denzin & Lincoln, 2000). The questions were derived by the research team and based on extensive clinical and research experience with evidence based psychological therapies.

[Insert Table 2 here]

Survey Question

Participants were asked to answer a survey question on whether they identified any gaps in the guide (1 = strongly disagree to 5 = strongly agree), and an open-ended item asking them to recommend services that might help fill any identified gaps, which supplemented the structured interview questions about other areas participants thought should be included in the intervention.

Intervention content

The intervention was a 10-page PDF document with 14-point Times New Roman font, including text, ten graphics (e.g., images for example of children playing, an older adult exercising), three worksheets (e.g., behavioural experiments and thought records), and a list

of website links (e.g., MindEd, Mindspot) and crisis phone numbers. The Flesch-Kincaid reading level was 11 (highschool level English). The intervention included CBT strategies (e.g., problem solving, thought records, behavioural experiments) and mindfulness, as well as child and adolescent mental health, strategies for children with disabilities, and older adults. It was tailored to address specific concerns likely to arise from COVID-19 including health anxiety and excessive handwashing, as well as how to moderate media consumption on the pandemic for children and adults. The literature was searched to include strategies which have been reported during the pandemic, including loneliness, social isolation, financial and job security concerns, consumption of media about the pandemic, health anxiety and OCD (Palbi et al., 2020; Probst et al., 2020; Jungmann & Witthoft, 2020; Shafran et al., 2020; Xiong et al., 2020). The intervention also contained links to CBT websites, as well as evidence supported e-books on CBT for youth and adults. The intervention also listed crisis and other services (e.g., financial counselling, domestic violence, in Australia and the UK). The intervention was made available online (www.covidcbt.org) after the trial completion in October 2020.

Procedure

The research was approved by the Curtin University Human Research Ethics

Committee (HRE2020-0424), all participants provided written informed consent prior to
participation, and the RCT (Egan et al., 2021) was registered on the Australian New Zealand

Clinical Trails Registry on 30 July 2020 (ACTRN12620000779976p). Participants from the

RCT (Egan et al., 2021) completed a follow-up survey asking a series of questions relating to
their experiences with the self-help guide they were emailed and completed over a 1-week
period, including an item relating to any gaps they had identified (see Egan et al., 2021 for
further details of the RCT). A final question in the survey provided participants with the
option to express interest in participating in an interview. Participants who expressed their

interest provided informed consent to participant in oral interviews. The interviews were conducted over a six-week period from August to October 2020 by SU a trainee Clinical Psychologist and CG and LW, Clinical Psychology Registrars. The time of interviews varied between 7 to 41 minutes (M=15 mins). The interviews were conducted on Zoom and recorded. Once the interview was transcribed it was stored as a deidentified transcript on a secure research drive at Curtin University and the recording was destroyed.

Thematic Analysis

The data was analysed using NVIVO (QSR International Pty Ltd., 2018) by SU using a qualitative, inductive content analysis to examine central themes as outlined by Braun and Clarke (2006). The interpretation of themes could be influenced by the researchers' prior knowledge. Consequently, the coding and themes which were generated were discussed with the senior author SE and co-authors CG and LW in weekly meetings during the qualitative analysis until consensus was reached. Specifically, the interviews were listened to and transcribed by the three authors who had interviewed participants: SU, CG and LW. Only SU engaged in the coding of the interviews using NVIVO, without a pre-defined coding system.

Results

Thematic analysis resulted in five themes being identified (see supplementary Table 3).

Theme 1

Negative Impact of the COVID-19 Pandemic on Mental Health

A major theme was the *Negative Impact of the COVID-19 Pandemic on Mental*Health (see supplementary Table 3 for supporting quotes). Several participants noted anxiety

and depression, for example, "I've suffered a little bit from depression." [female, 43 years] which had occurred during the pandemic, e.g., "I've sort of had some experience with anxiety and depression over the last probably 12 or 18 months or so." [male, 42 years] Eight participants said that they had a history of anxiety and/or depression, for example:

"I'm a very anxious person, I've got a diagnosed anxiety disorder, I've had it for a long time." [female, 34 years]

Several participants noted that during lockdown, some of their symptoms had either returned or worsened, for example, some talked about anxiety and depressive episodes recurring over lockdown:

"I know that even within myself, so I have all sorts of anxieties that had risen and sort of put me at risk of sinking into my depressions" [female, 55 years]

Participants said that during the pandemic, their worry related to the uncertainties of viral contamination and risks to vulnerable populations (e.g., older adults, immune compromised), for example:

"One of the younger grandchildren have a chronic condition, it's incurable, it's similar to CF [Cystic Fibrosis], and I know that her two older siblings are really concerned that if she'll get the coronavirus she'll die." [female, 70 years]

Participants also reported impacts of financial stress and job loss, for example, "...a couple topics that I'd found affected my experience during COVID-19 like particularly, budgeting" [female, 22 years]. They also talked about social isolation and the difficulty of family separation due to border closures to contain COVID-19 which were in place between the states of Australia preventing travel between states and international travel. Participants commented that transitioning out of lockdown posed challenges in terms of social anxiety after a long period of limited social contact, and suggested this was an area to specifically cover in the intervention, for example: "Maybe just to say it's aright if you don't like crowds

or social gatherings" [female, 68 years]. Some participants commented on transitioning back to a work setting after long periods of working at home was difficult, for example:

"Maybe there was a need for more work based... you know, how you transition back into work... because that's quite stressful, kind of, do I actually want to do this, do I want to go back, something around that." [female, 51 years]

Theme 2

Prior Experience of Psychological Therapy or Cognitive Behaviour Therapy

Eight participants described having prior experience with or knowledge of either therapy or CBT, and these participants characterised the intervention as being a refresher for them, "It does say things that I've already, you know, been taught before because I have been diagnosed with anxiety before, but I feel like it's a good refresher." [female, 24 years] Participants said the intervention provided reminders for strategies that they may have either forgotten or engaged in less than they would like, for example, "The guide was… a helpful reminder of things that [I] either already knew about just based on my background [or I was] kind of reminded of in my own therapy." [female, 34 years]

Theme 3

Acceptability and Usefulness of the Intervention

A major theme emerged of Acceptability and Usefulness of the Intervention.

Participants said that the guide had been useful (21 participants, referenced 33 times, see supplementary Table 3 for supporting quotes). Participants commented that they liked the information being collated in one place, that the guide was easy to use and understand, and that the language was normalising and de-stigmatising. Participants generally liked the way the guide was presented, that it included worksheets, and that it covered a broad range of topics for various populations and ages, for example:

"I really liked the fact that you had the whole range of information available, so you

didn't only have the CBT in there but you also had the mindfulness stuff in there, and you know activities and everything... and also links to other places, so that was incredibly useful." [female, 55 years]

The majority, (21 participants), said that they would recommend the guide to others. Example quotes illustrating positive feedback on the intervention were:

"It provides a set of quite simple self-help behaviours, that is easy to try out engaging in. [female, 22 years]

A range of sub-themes were derived (see supplementary Table 3), which included aspects that participants mentioned about the intervention, such as that it was collated in one place, for example "I liked that it was like a range of information all in one place" [female, 32 years]. Another sub-theme was easy to use and understand, for example "it was simple and easy to follow...it was clear and the language used was clear" [female, 70 years]. A sub-theme found the intervention useful emerged, for example "I've got one child and she's seventeen, it is helpful and she's got OCD around contamination, so the guide was helpful" [female, 47 years]. Another example quote for this sub-theme was "it definitely addressed a couple of topics that I'd found affected my experience during COVID-19 like particularly budgeting and...access to resources like exercising" [female, 22 years]. However, some quotes indicated that participants only engaged in one component of the intervention, for example "the only thing I probably did was the behavioural [experiment] worksheet, so I found that to be quite helpful" [female, 23 years].

Further sub-themes included that the *language was not stigmatising*, for example "its worded in a way that doesn't make it feel particularly punitive" [female, 34 years]. The sub-theme *liked presentation and length* was represented by the example "the layout was easy to look at, yeah, it was very clear" [female, 32 years]. The sub-theme *liked it is*

evidence based was demonstrated by the quote "It's good. I mean its obviously got a really good evidence based" [female, 34 years]. Liked worksheets was another sub-theme, for example "I like that there were actually activities in there for you to do...behavioural experiments" [female, 31 years]. The sub-theme range of information for different ages was represented by the quote "I liked at the end they had CBT links for children and the elderly" [female, 36 years]. Another sub-theme relevant to anxiety and depression was evidenced by the following quote "you have focused specifically on the anxiety the depression related to the COVID." [male, 36 years]. A final sub-theme would recommend to others was demonstrated by the statement "something I would definitely recommend to the kids in my school as well" [male, 40 years].

Theme 4

Participants Ideas for Intervention Improvement.

A major theme to emerge was participants ideas for intervention improvement, which represented more negative aspects of participants statements regarding the intervention, and should be considered in balance with the feedback in the previous theme. Participants made suggestions for additional areas they thought the guide should cover, which was identified as a major theme, including more information on improving healthy diet and avoiding excessive eating or substance use as unhelpful coping strategies. Participants also suggested inclusion of more tailored information for vulnerable populations such as Indigenous Australians. Seven participants mentioned that they felt the guide had too many words or too many links, and that this could be overwhelming to somebody who was feeling anxious or depressed, illustrated by the quote:

"Sometimes all the words just get in the way and... if they are in distress they won't read all that. So more images." [female, 34 years].

Several participants also commented on the limited accessibility of the guide currently to those who cannot read, and suggested the addition of audio versions of the resources. An example quote illustrating this is:

"At the moment your resource is geared at people who can read... so that excludes people with disabilities, so if you're blind that's basically it, if you can't read, that's it. And I wonder whether there's a possibility of making that resource available in multiple ways, maybe that it's read to someone like an audiobook." [female, 55 years]

Specific sub-themes (see supplementary Table 3) included additional areas for the intervention to cover, for example "I guess for some people grief, grieving is a problem" [male, 80 years]. Some of the key areas participants mentioned were their views for providing an app format, hard copy preference, and prefer in depth e.g., "more in depth, that's my recommendations" [male, 39 years]. Negative aspects of the intervention were represented by the sub-theme too condensed, too many links or too many words. The sub-theme increased accessibility for the intervention was represented for example by "I'm a big fan of audio visual...being able to like, listen to something or to put a short video on" [male, 36 years]. Would not recommend the intervention was represented by one participant "I think it's quite general and if I had a friend reach out to me about a specific concern, um, if I was reaching out for a resource to point them to, it'd probably be a little bit more specific" [female, 22 years].

Theme 5

Preferences for Using the Guide

Another major theme was *Preferences for Using the Guide*. Four participants said that they viewed the guide as a starting point, which they thought would be suitable for those

who have not engaged in psychological treatment before and less severe in terms of their symptoms of anxiety and depression. Participants commented they liked the inclusion of additional resources such as websites and phone numbers as an option, as they felt that depending on the level of need for support, they could read further by following the links provided, for example:

"I liked that it wasn't overloaded with information rather it had some information and it had links to click to go elsewhere to get more information, if that's what you wanted." [male, 42 years].

Ten participants reported that they had followed up some of the external resources, mentioning specific websites they had visited (e.g., links to websites such as The Black Dog Institute, Mindfulness exercises through Jon Kabat-Zinn, and websites listing support for OCD, anxiety disorders, and bipolar disorder). Six participants stated that they intended to follow up websites listed in the intervention in the future. Participants generally described their experience with using the guide as brief, and that instead they felt that it was something keep and to refer back to if needed, illustrated by the quote:

"I probably didn't give it as much thought other than 'right, stick it on one side on the computer, if I need it it's there." [male, 80 years].

In terms of preferences for unguided use or receiving additional support in using the guide, 15 participants commented that they preferred to use the guide without help, and five would have liked to have received further assistance. Participants also said that even though they may personally prefer to use it on their own, they referred to a number of populations who they felt may need additional support, including young children, older adults, culturally and linguistically diverse populations, those who have not completed CBT before, and more severely anxious or depressed individuals, for example: "I think if I was coming to it new, some guidance would probably be good." [female, 28 years].

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Suggestions for improvement of the intervention from survey responses

When asked if they felt there were any gaps in the intervention, of the 112 participants who were in the intervention group from the RCT (Egan et al., 2021), 44% either disagreed or strongly disagreed, 36% were unsure, and 21% felt that there were gaps. Several individuals suggested that resources or services aimed at providing emotional support to others (i.e., friends and family) would be beneficial. Other individuals recommended that the guide should have more resources than were already included for specific groups (e.g., older adults, children) and further culturally appropriate resources for Aboriginal and Torres Strait islander individuals. Some suggested that there should be more lay-language content within the guide rather than links to external resources. Finally, participants suggested the intervention content should be more accessible by using audio and visual learning techniques, for example podcasts or audio book versions of the intervention.

Discussion

Participants feedback on a low intensity CBT intervention for anxiety and depression during the pandemic indicated that although a small number of participants mentioned areas for improvement, and areas they did not find useful, the majority stated the intervention was useful and acceptable (21 participants, referenced 33 times). Most participants said that they preferred to use the intervention unguided. Themes emerged including the mental health impact of the pandemic and lockdown including exacerbating pre-existing symptoms of anxiety and depression. Participants reported worry regarding viral contamination, risks to vulnerable populations, financial stress, job loss and social isolation and loneliness, consistent with the quantitative literature (Dawel et al., 2020; Holmes et al., 2020; Palgi et al., 2020; Probst et al., 2020; Xiong et al., 2020). Separation

from family members due to border closures, which were in place to contain the virus, was noted as a specific concern by participants, some of whom expressed distress over not being permitted to travel.

The majority of participants said they preferred to use the intervention without guidance, which is interesting given evidence consistently suggests that guidance improves effect sizes in low intensity treatments (see Andersson, 2016 for a review). How to reconcile this difference between participants' preferences for unguided intervention, with the research literature demonstrated superior efficacy for guided intervention is a question for future research. It would be interesting to present participants with information prior to intervention on the superior efficacy of guided treatment to determine if this would alter their choice of guidance or unguided intervention. Nevertheless, an advantage of the intervention is that it can be rapidly disseminated without input from health professionals providing guidance.

Most participants described their use of the intervention as brief (see Egan et al., 2021), where most reported reading the intervention in less than 30 minutes. Less than half of participants said they had followed up on suggested websites in the intervention for example, CBT websites and lists of CBT self-help books available as e-books. Based on participants' feedback, website links were added on Culturally and Linguistically Diverse (CALD) populations, as well as perinatal mental health, a gap identified by some participants, to improve the intervention before dissemination. The intervention was made publicly available and disseminated to people in Australia and the UK in October, 2020. Future work should seek to provide alternative formats for intervention. In the dissemination phase, based on feedback from participants that they would like alternative formats, we produced a video which was a summary of the intervention (see www.covidcbt.org). Future research should include more accessible and engaging delivery through

podcasts, audiobooks, and interactive web content, given some participants preferences for alternative modes of delivery.

There were limitations of the study. First, there may have been bias in those who expressed interest in the qualitative interviews, not all participants from the RCT (Egan et al., 2021) were interviewed, and potentially those participants who liked the guide offered to be interviewed about the intervention. There may also have been a bias towards receiving more positive feedback from participants on the intervention due to the format of the questions, for example, "what did you like about the guide". Another limitation is that interviews were not coded by authors independent to the study. It is possible that the authors conducting the interviews, thematic analysis and consensus about themes could be biased towards interpretation of responses as indicating a positive view about the intervention. Further, there was variability in rates of COVID-19 in the area that participants were interviewed in, from some experiencing strict lockdown in Melbourne, Australia, to those in areas of Australia with few cases of community transmission. Therefore, the sample had a high degree of heterogeneity in experiences with the pandemic. A further limitation of the study is that saturation of themes may not have been reached by the sample only consisting of participants from Australia. One participant from the UK was interviewed and reported experiences of pre-existing OCD symptoms regarding contamination and germs being exacerbated by the pandemic resulting in increased handwashing. This single participant from the UK was not included in the analysis as they represented an outlier in terms of all other participants residing in Australia, however raises the issue that further qualitative research with a broader range of participants would be useful to examine issues which are pertinent during the pandemic.

Recent research has highlighted the limitations of traditional qualitative approaches in responding to the pandemic and has suggested a need for a different methodology during the

pandemic (Vindrola-Padros et al., 2020). Rapid research evaluation and appraisal in qualitative research has been suggested during the pandemic to improve qualitative research in a time sensitive, rapid real-world context of the pandemic (Vindrola-Padros, 2021). This approach to rapid qualitative evaluation includes bypassing traditional transcribing of interviews to analyse data directly from interview recordings or field notes and concurrent data collection and analysing (Vindrola-Padros, 2021). A limitation of the current study was that participatory research methods were not conducted, and future rapid qualitative research on mental health during the pandemic should follow this approach by actively collaborating with stakeholders in the design and implementation of the research (Vindrola-Padros, 2021). Despite these limitations, the qualitative interviews sought to capture a range of experiences, and useful information was gained to refine the intervention and address gaps seen by participants before widescale dissemination, and areas of feedback from participants was acted on by producing a video version of the intervention.

In summary, participants reported that a low intensity CBT intervention tailored for the COVID-19 pandemic was useful for worry and low mood related to the pandemic and exacerbation of pre-existing anxiety and depression. The intervention has been widely disseminated and is available on the internet in the public domain.

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Table 1

Demographics of the sample

	Participants	
	(n =21)	
Age	40.90 (16.33)	
Age range	21-80	
Gender		
- Male	6	
- Female	15	
Employment		
- Student	3	
- None/retired	2	
- Unemployed	2	
- Casual/Part-time	6	
- Full-time	8	
Location		
- WA Perth	7	
- WA Regional	2	
- Rest of Australia	12	
NSW Sydney	3	
NSW Regional	3	
VIC Melbourne	2	
VIC Regional	1	
QLD Brisbane	2	
ACT Canberra	1	

Note. WA = Western Australia, NSW = New South Wales, VIC = Victoria, QLD = Queensland, ACT = Australian Capital Territory, Regional = rural/country area.

Interview questions

- 1. Can you please tell me how relevant and useful the guide was to your own experiences of symptoms of anxiety and depression? If you do not have experiences of anxiety and depression, how useful to do you think the guide would be for your family and friends? Did you follow up any of the websites or resources for yourself?
- 2. Do you have children/teenagers living at home with you? If so, can you please tell me how useful the guide was for helping your children with anxiety and depression? Did you follow up any of the websites or resources for your child/teenager?
- 3. What did you like about the guide?
- 4. What did you not like about the guide? Any suggestions for what you think is missing from the guide or what you would have liked?
- 5. What other areas do you think could be useful or relevant for the guide to cover?
- 6. Do you have any other comments you think we should consider in what would appeal to you or others in a guide for CBT strategies during the COVID-19 pandemic?
- 7. Would you have preferred to have some guidance in using the guide or work through it on your own as you did?
- 8. Would you recommend the guide to your family or friends?
- 9. Do you have any further comments you think are important for us to consider?

Supplementary Materials

Table 3. Comprehensive themes and quotes included in qualitative analysis.

Participants ideas for intervention improvement			
	Additional areas for the intervention to cover		"One of the bigger problems with COVID-19 and isolation at home was about eating. Eating habits." [female, 36 years]
			"I guess for some people grief, grieving is a problemThat is an area I would like to explore" [male, 80 years]
			"Maybe there was, maybe there was a need for more work based you know, how you transition back into work because that's quite stressful, kind of, do I actually want to do this, do I want to go back, something around that." [female, 51 years]
			"Maybe just to say it's aright if you don't like crowds or social gatherings" [female, 68 years]
			"If you mention some specific things for race, or gender, or culture" [male, 39 years]
			"I can see there's it's mentioned to avoid, um, excessive alcohol and caffeine, um, being, uh, maybe like a bit more about substance abuse of any kind" [female, 22 years]
		App format	"Maybe putting it in an app format or something like that possibly might be one thing to consider" [female, 31 years]
			"I think maybe a little mobile app would be helpful, instead of a huge document or something like that. That would be able to reach more people" [female, 43 years]

	Hard copy preference	"I'm very much a, a text person, and preferably hard copy" [female, 68 years]
		"I think the option to receive a printed copy, would be great. Like, so you can, like, carry it with you when you are going out or if you are with someone, you can refer back to it" [female, 53 years]
	Prefer more depth	"More in depth, that's my recommendations, yep." [male, 39 years]
		"elaborating on a concept a little bit more." [male, 35 years]
	Too condensed, too many links, or too many words	"Personally, I think it's a lot to take in, I guessI think there might be space to increase the graphics and decrease the words. [female, 23 years]
		"Sometimes all the words just get in the way and people don't want to, if they are in distress they won't read all that. So more images, stuff like that." [female, 43 years]
Increased accessibility for the intervention		"I'm a big fan of audio visual Sometimes, reading, especially when you're having one of those episodes, where, I get a bit of depression, and trying to write something when I'm in that funk is very difficult so being able to like, listen to something or to put a short video on really helps." [male, 36 years]
		"at the moment your resource is geared at people who can read so that excludes people with disabilities, so if you're blind that's basically it, if you can't read, that's it. I wonder whether there's a possibility of making that resource available in multiple ways, maybe that it's read to someone like an audiobook of something like that At the moment that's a cohort that's being excluded" [female, 55 years]

	Would not recommend the intervention	"I'm not sure if I would and the reason isn't necessarily that it's not good. I think it's quite general and if I had a friend reach out to me about a specific concern, um, if I was reaching for a resource to point them to, it'd probably be little bit more specific" [female, 22 years]
Negative impact of the COVID- 19 pandemic on mental health		
	History of anxiety or depression	"I have been diagnosed with anxiety before, but I feel like it's a good refresher." [female, 24 years]
		"I've sort of had some experience with anxiety and depression over the last probably 12 or 18 months or so." [male, 42 years]
		"I've suffered a little bit from depression." [female, 43 years]
		"So I think, I think for people who have mental health issues and anxiety, and I'm one of those" [female, 55 years]
		I'm a very anxious person, I've got a diagnosed anxiety disorder, I've had it for a long time." [female, 34 years]
		"I've got extensive history with therapy and CBT, but having it all in sort of one thing that's quite useful. Um, because, you know when I get anxious I go, oh I don't know what I'm supposed to be doing" [female, 28 years]
	Prior experience of psychological therapy or cognitive behaviour	"It does say things that I've already, you know, been taught before because I have been diagnosed with anxiety before, but I feel like it's a good refresher." [female, 24 years]
	therapy	"I think the guide was helpful, a helpful reminder of things that I'd already been, either already knew about just based on

			my hookground also was uh kind of
		r	my background, also was, uh, kind of reminded of in my own therapy" [female, 34 years]
		٤	"nothing was new to me because I've got extensive history with therapy and CBT" [female, 28 years]
	The intervention as a refresher	Y F C Y S a t t	"While some of what was in the guide was things I've covered with a psychologist anyway I thought it was quite handy as a bit of a refresher as to what I've covered." [male, 42 years] "I had been meditating earlier in the year, and I'd kind of gotten really busy and then I stopped and so the reminder to kind of go back and do that was helpful." [female, 31 years] "I have a vague idea of, like, the existing content anyway so in terms of
		f	its usefulness it's just a nice refresher for things that I already know, I guess." [female, 34 years]
Acceptability and usefulness of the intervention			
	Collated in one place	٤	"It was good to have it as a bit of a guide to refer back to and a centralised location to go" [male, 42 years]
		i	"I liked that it was like a range of information all in one place" [female, 32 years]
		t	"If you really need resources or help at the time it's all there." [female, 43]
		t S S	"I think it's a little bit more accessible than, you know, maybe trying to do your own research on the internet or something. It makes it a little bit more approachable for people" [female, 22 years]

	"Having it all on one sheet helped."
	[male, 35 years]
	"Having it all in sort of one thing that's quite useful. Um, because, you know when I get anxious I go, oh I don't know what I'm supposed to be doing, ahh, I haven't actually written down, you know, in one spot" [female, 28 years]
Easy to use and understand	"It was all compact into a small document, so as, I could easily read it" [female, 36 years]
	"it's easy to read, actually, the way it's all set up and the, the headlines, they're all easy to read as well it's easy to like fill in everything" [female, 24 years]
	"It was simple and easy to follow it was clear and the language used was clear." [female, 70 years]
	"I just opened it and read through it, and it was quite easy to understand. The layout was easy to look at it was very clear." [female, 32 years]
	"The other part I like is the examples So that it's, that makes the information more digestible." [female, 23 years]
	"Even for people with sort of vision issues, it was clear that the font you chose, was very clear and easy to read" [male, 36 years]
	"it provides a set of quite simple self- help behaviours, that is easy to try out engaging in. [female, 22 years]
Found the intervention useful	"another good thing was the part where it tells you some things you can do to, you know, distract yourself from your anxiety and all that, like exercise and all that, and do like, different hobbies and stuff. That was good." [female, 24 years]

		"I've got one child and she's seventeen, it is helpful and she's got OCD around contamination, so the guide was useful" [female, 47 years]
		"The only thing I probably did was the behavioural worksheet, so I found that to be quite helpful. I think because it's like right in front of me, and I can just fill it in." [female, 23 years]
		"For me, I've suffered a little bit from depression and the guide was good for information about those kind of sway in mood, those are good indications if you are going to go down that track, in that sense the guide was very helpful" [female, 43 years]
		"It definitely addressed a couple topics that I'd found affected my experience during COVID-19 like particularly, budgeting, and access to resources like exercising." [female, 22 years]
Language was not stigmatisin	g	"it's worded in a way that doesn't make it feel particularly punitive" [female, 34 years]
Liked presentation as length	d	"I like the way it's laid out the way it's all set up and the, the headlines, they're all easy to read as well But yeah, I liked that set-up as well, it's easy to like fill in everything Yeah, I really liked the set-up." [female, 24 years]
		"It wasn't overly long, is a good one, but it packed in a lot of information still so it was concise and easy to follow, but still very helpful." [male, 42 years]
		"I mean the age groups things as well and the contact lists were really good." [male, 40 years]
		"The layout was easy to look at, yeah it was very clear." [female, 32 years]
		"It stood out really well, I think the good thing about the way that

	everything's presented is, it's clearly
	pitched at a range of people so it's good." [female, 34 years]
Liked that it is evidence-based	"It's good. I mean it's obviously got a really good evidence base." [female, 34 years]
Liked worksheets	"I think as well the pleasant activity scheduling is something when I get busy and stressed I easily forget to do, so that was really helpful just from that perspective." [female, 31 years]
	"I like that there were actually activities in there for you to do behavioural experiments" [female, 31 years]
	"I guess the other thing is I really like that worksheet that was in it that you could just do." [female, 23 years]
Range of information for different ages and populations	"I liked at the end they had the CBT links for children and elderly." [female, 36 years]
	"So I thought that was quite handy. Umm, for the elderly as well, because my parents are quite elderly" [female, 36 years]
	"I thought that just overall the guide kind of covered a range of different topics which was made it broad in general enough that way if you were to suggest it to people they wouldn't feel super offended" [female, 31 years]
	"I like the fact that it was it covered a broad range of topics that would be relevant to a range of different people experiencing a range of different difficulties because of the pandemic." [female, 31 years]
	"What I really liked was the fact that you had the whole range of information available, so you didn't only have the CBT in there but you also had the mindfulness stuff in there" [female, 55 years]

	Relevant to anxiety and depression	"I think in general it does have, like, a general wellbeing type of message It doesn't just apply to people with anxiety and depression. I think everything here can be applied to anyone, really." [female, 23 years] "You have focused specifically on the anxiety the depression related to the COVID. So you've covered all the links pertaining to those areas, yeah." [male, 36 years] "It seems pretty comprehensive and very targeted towards people suffering from anxiety and depression." [female, 43 years]
	Would recommend to others	"It's the sort of thing that, if we had copies of, we could have somebody come and speak about it, or just tell people that we've got copies, and if they'd like them so I would recommend it yep." [female, 68 years] "I actually have thought about passing it on to a couple of people to have a look thorough. Uhm, especially a couple of my volunteer ambulance officers because we deal with people who have mental health issues" [female, 70 years] "Definitely, something I would definitely recommend to the kids in my school as well." [male, 40 years]
Preferences for using the intervention		
	Additional resources as an option	"And I liked that it wasn't overloaded with information rather it had some information and it had links to click to go elsewhere to get more information, if that's what you wanted." [male, 42 years] "I liked that it did have additional

	something particular." [female, 31 years] "I also liked that there was all of the different resource lists, because then I can always refer back to it later and have a look." [female, 32 years] "So I think that given you had all those resources and links in there, I think there was enough for people who were curious to have a closer look at that."
	"That there was further resources but also there was enough for me to go, like if I was in the middle of that sort of anxious spiral that was enough for me to go, this is where to start and if I need something further there was more than enough" [female, 28 years]
Preference for guided use of the intervention	"Yeah, I think I would have preferred the guidance specifically in a recording format, as opposed to having to attend a particular session at a particular time. I think just a short video or something that would walk me through certain things and visually, you know, that would be really helpful." [female, 31 years]
	"sometimes having a clinician sitting there with the fact sheet with you talking you through the things that it says can often make a really big difference as well." [female, 22 years]
Intend on following up resources in the future	"there's a lot of links to it, so I'll have to go through it in more in detail when I have time to click on each of the links and save the resources." [female, 36 years]
	"I haven't gone through them, but I've sort of read what sort of links there are there, and I have been to some of the links before. So, definitely I'll go through them and look up some of the other resource links." [female, 32 years]

Populations who may require guidance in using the intervention	"I don't mind doing it by myself but maybe other people might need some guidance or a reminder, to set up a reminder to go back and help you know, like "Have you done this?" [female, 47 years]
	"I think, again, having an adult there to kind of talk them through the information that's there, or maybe walk them through the behavioral experiment exercise or something would dramatically increase its capacity to, you know, give them support and help I think it's definitely a resource that might be difficult for a young, a young child to sort of engage with themselves." [female, 22 years]
	"I work with Aboriginal students, many of them just wouldn't do it on their own, I think the majority of them would have preferred to have someone to do it." [female, 55 years]
Preference for unguided use of the intervention	"I was quite happy to work through it on my own, because you can fit it around other things that you need to do, and timewise it's given me something to do in my spare time if I don't have anything else to do." [female, 53 years]
	"It was very clear, and I wouldn't need any guidance I just opened it and read through it, and it was quite easy to understand." [female, 32 years]
	"I think there's enough information to be able to do it on your own. I don't think it needs other instructions around it." [female, 34 years]
Saved the intervention for future use	"I've saved it on my phone so in the future, I can look at those again, so I found it useful." [female, 24 years]
	" it's got a range of different things, even the self-help books, that's something I would look at, um, again in the future. So I think it's great to have,

		and I just saved it to my phone and I can keep referring back to it. So I thought that it was handy to have." [female, 32 years] "I probably didn't give it as much thought other than: "right, stick it on one side on the computer, if I need it it's there."" [male, 80 years] "I guess in a sense it's like a little pocket guide, or a tool they could use, so that was helpful." [female, 43 years]
The guide as a starting point		"Yeah, I think, a sort of an introduction on how you can kind of support yourself. But, like, obviously if they're struggling a bit more then, you know, that plus something else would be good." [female, 21 years]
	Suitable for therapy-naive	"For someone that perhaps doesn't have any background in understanding some of that information. It's set out really well." [female, 34 years] "Like there's enough there to kind of, if you have a little bit of experience, it can go further, but it's a nice little starting point if you don't have experience." [female, 28 years]
Useful if willing to engage with resources		"I think probably the hardest part is trying to the market the guide and communicate the guide to get people to actually take an interest in it, because I think once that they do, they will generally find it quite helpful and quite useful. [male, 42 years] "I think that guides like this really great resources for people who are sort of willing and able to engage with them." [female, 22 years]

Note. Italic font denotes major themes.