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Article

"Doing What Matters in Times of Stress" to Decrease Psychological Distress During COVID-19: A Randomised Controlled Pilot Trial

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Abstract

Despite the increasing psychological distress during COVID-19, utilisation of face-to-face psychological interventions decreased profoundly. The aim of this study involving two parallel, two-armed pilot randomised controlled trials was to examine the effectiveness of a guided self-help intervention "Doing What Matters in Times of Stress" (DWM) in decreasing psychological distress in Turkish and Syrian participants. Seventy-four Turkish nationals and 50 Syrian refugee adults with psychological distress were randomly allocated to a DWM group or wait-list control group. The primary outcome measure was the Patient Health Questionnaire 9 postintervention. Secondary outcome measures were the Generalised Anxiety Disorder Scale, posttraumatic stress disorder (PTSD) Checklist for DSM-5, Generalized Self-Efficacy Scale and Acceptance and Action Questionnaire-II postintervention. Although this study was not powered to detect a significant effect for DWM postassessment between DWM and the control group, results showed a significant improvement in depression symptoms among Turkish participants in the DWM group ($d = 0.46$) and in PTSD symptoms among Syrian participants in the DWM group ($d = 0.67$) from pre- to postintervention assessment. These results indicate the potential of DWM to decrease mental health problems during the pandemic and importance of a fully powered, definitive controlled trial to examine its effectiveness both for the host community and refugees to reduce psychological distress during COVID-19.

Key implications for practice

- COVID-19 increased the need for alternatives to face-to-face psychological interventions.
- Tele-health or online psychosocial interventions may be a feasible option to alleviate psychological distress during pandemics.
- DWM was found to be feasible to test in larger, definitive trials and implement during the COVID-19 pandemic to alleviate pandemic-related psychological distress.

Keywords: COVID-19, feasibility, guided self-help interventions, mental health, refugees

Introduction

Since the outbreak of the COVID-19 (coronavirus) pandemic in December 2019, nearly 250 million people have been infected and 5 million died (World Health Organization, 2021). Imposed by COVID-19, the so-called new normal including several stressors such as physical distancing, quarantine, economic recession, change in daily routines, loneliness, fear of contagion and uncertainty about the future is likely to cause mental health problems such as depression and anxiety (Brooks et al., 2020; González-Sanguino et al., 2020).

As in previous outbreaks such as the severe acute respiratory syndrome (SARS) (Reynolds et al., 2008) and the Middle East respiratory syndrome (MERS) (Kim et al., 2018), the COVID-19 pandemic has had adverse psychological effects. Recent systematic reviews and meta-analyses highlight the potent risk for common mental health problems during the current pandemic (Wu et al., 2021;

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Xiong et al., 2020). Despite evidence showing that certain groups such as healthcare workers, patients with chronic diseases and previous mental health problems and those infected with COVID-19 are vulnerable to psychological distress (Hao et al., 2020; Sawalha, 2021), the general population is also at high risk of having mental health problems. A meta-analysis of 68 studies indicated the estimated prevalence of depression and anxiety as 30% and 33% respectively among the general population during the COVID-19 pandemic (Wang et al., 2020). Furthermore, a nationwide study conducted in the UK found an overall increase in psychological distress during the current pandemic compared to the prepandemic period (Pierce et al., 2020).

Pandemics may have diverse psychosocial effects on different groups. Along with other vulnerable groups, refugees experienced several difficulties during COVID-19 (Alemi et al., 2020). Refugees in general experience economic and social hardship (Miller & Rasmussen, 2017) which may worsen during pandemics. This may be related to adverse social determinants of health such as financial problems, residing in crowded places/living conditions, limited access to care and language barriers which may undermine following and adherence to safety guidelines. Lockdowns and related economic recession may affect specific sectors where refugees mostly work (Brickhill-Atkinson & Hauck, 2021). Taking economic and social problems together, refugees could be at higher risk for mental health problems during pandemics. Turkey is the world's top refugee-hosting country with 3.6 million Syrian refugees currently residing in Turkey (United Nations High Commissioner for Refugees, 2020). Owing to both traumatic experiences during war and flight and postdisplacement stressors, refugees are already at high risk of developing common mental health disorders. A recent meta-analysis of common mental disorders among refugees reported prevalence estimates as 31.5%, 31.46% and 11% for depression, posttraumatic stress disorder (PTSD) and anxiety respectively (Blackmore et al., 2020). A prospective study with Yezidi refugees in Iraq indicated an increase in the prevalence of depression, anxiety and PTSD diagnosis during COVID-19 compared to before the pandemic (Kizilhan & Noll-Hussong, 2020). In general, however, there is a scarcity of research among refugees during COVID-19.

Mental disorders may cause a profound burden on people and depression is one of the leading causes of disability and the global burden of disease among adults (World Health Organization, 2020a). Despite the existence of evidence-based interventions, owing to constraints such as physical distancing and quarantine, utilisation of traditional face-to-face intervention has become very challenging during the pandemic (Wind et al., 2020). Telehealth or online psychosocial interventions as a way to increase the capacity and accessibility of mental health services might be a feasible option to alleviate psychological distress during the pandemic. Such interventions may be provided as self-help with minimal or no guidance. Previous studies show that both guided and unguided self-help interventions are effective in reducing psychological distress such as depression and anxiety (Fledderus et al., 2012; Lintvedt et al., 2013). Self-help and face-to-face interventions are found to be almost equally effective in some studies (Cuijpers et al., 2010). Following this line of work, to support managing stress and coping with adversity from many causes, including COVID-19, the World Health Organisation (WHO) released an illustrated guide of the Self-Help Plus (SH+) intervention package (Epping-Jordan et al., 2016) called "Doing What Matters in Times of Stress" (DWM; World Health Organization, 2020b), which includes brief audio exercises to support practice in stress management techniques and a simple to read illustrated guide. It can be provided as an unguided intervention (e.g. giving out the self-help book) or provided with guidance, for example using regular phone calls by briefly trained facilitators to motivate and support use. The present pilot study aimed to examine feasibility, acceptability and likely effectiveness of this remote intervention including a guided self-help intervention in decreasing depressive symptoms in Turkish and Syrian adults living in Turkey during the COVID-19 pandemic.

Methods

Participants and Procedure

Two parallel, two-armed pilot randomised controlled trials were conducted between November 2020 and January 2021. The study was approved by the university's ethics committee (020.200.IRB3.080) and registered online (NCT04631887). Both Turkish and Syrian participants were recruited via social media (see Figures 1 and 2 for CONSORT diagram). The inclusion criteria were a) being above 18 years of age, b) being literate (in Turkish or Arabic) and c) having self-reported psychological distress (a Kessler Psychological Distress Scale, Kessler-10 score of above 15). For Syrians, being under temporary protection status was an additional inclusion criterion. Exclusion criteria were having an imminent risk of suicide or severe cognitive impairment.

A total of 130 Turkish and 121 Syrian participants completed screening measurement. Among them, 74 Turkish and 50 Syrian participants were found eligible to participate in the study. With a 1:1 randomisation ratio using a computer-generated random number list (https://www.randomizer.org/), they were randomly assigned to the intervention group in which participants received the self-help intervention called DWM (38 Turkish and 26 Syrian participants) or the wait-list control (WLC) group (36 Turkish and 24 Syrian participants) in which participants received self-assessments. Demographic characteristics are given in Tables 1 and 2. There were no significant differences between the DWM and control group on any demographic characteristics in Turkish and Syrian samples. Both intervention groups received self-assessment tools at preintervention and postintervention (7 weeks after the preintervention).

Doing What Matters in Times of Stress

DWM is an illustrated self-help guide from the SH+ intervention (Epping-Jordan et al., 2016). It was released

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Figure 1: *Consort flow diagram for Turkish participants (trial 1).*

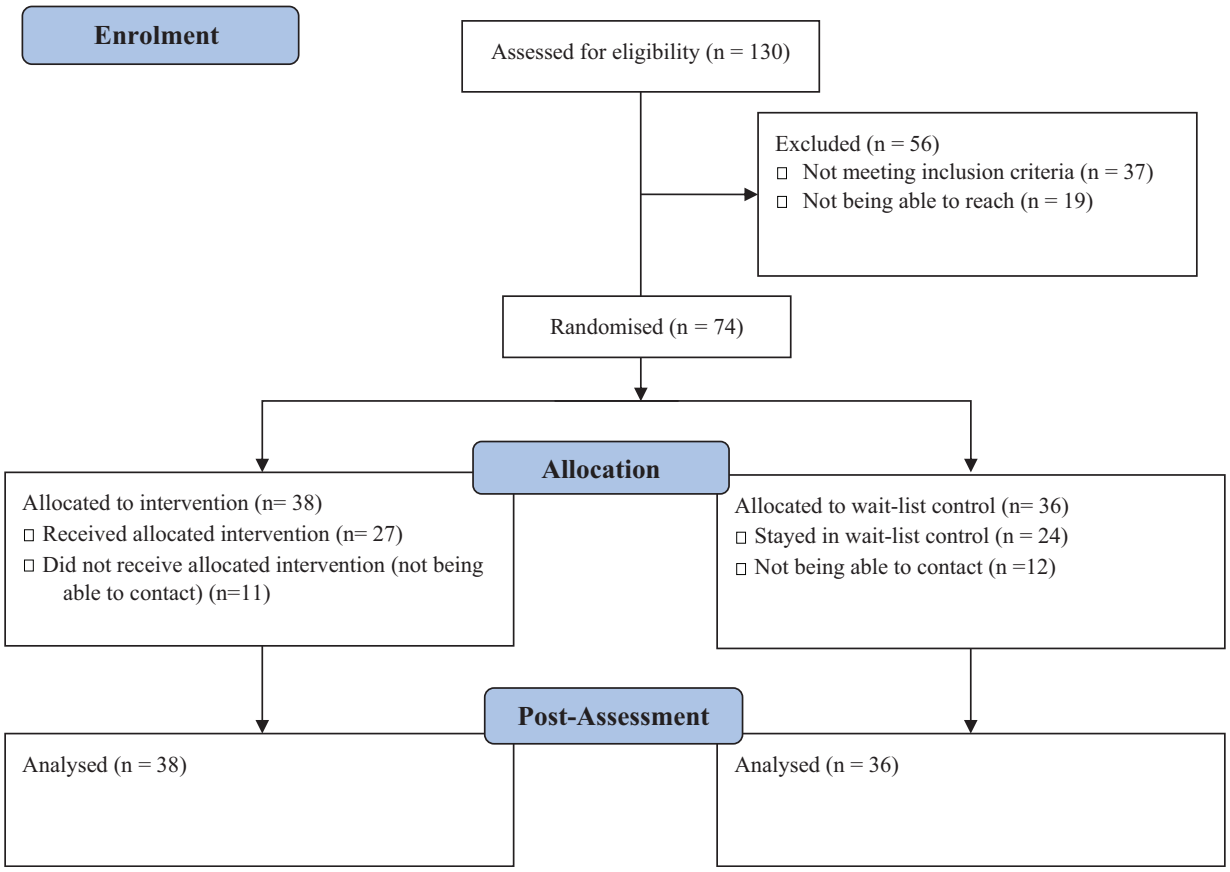
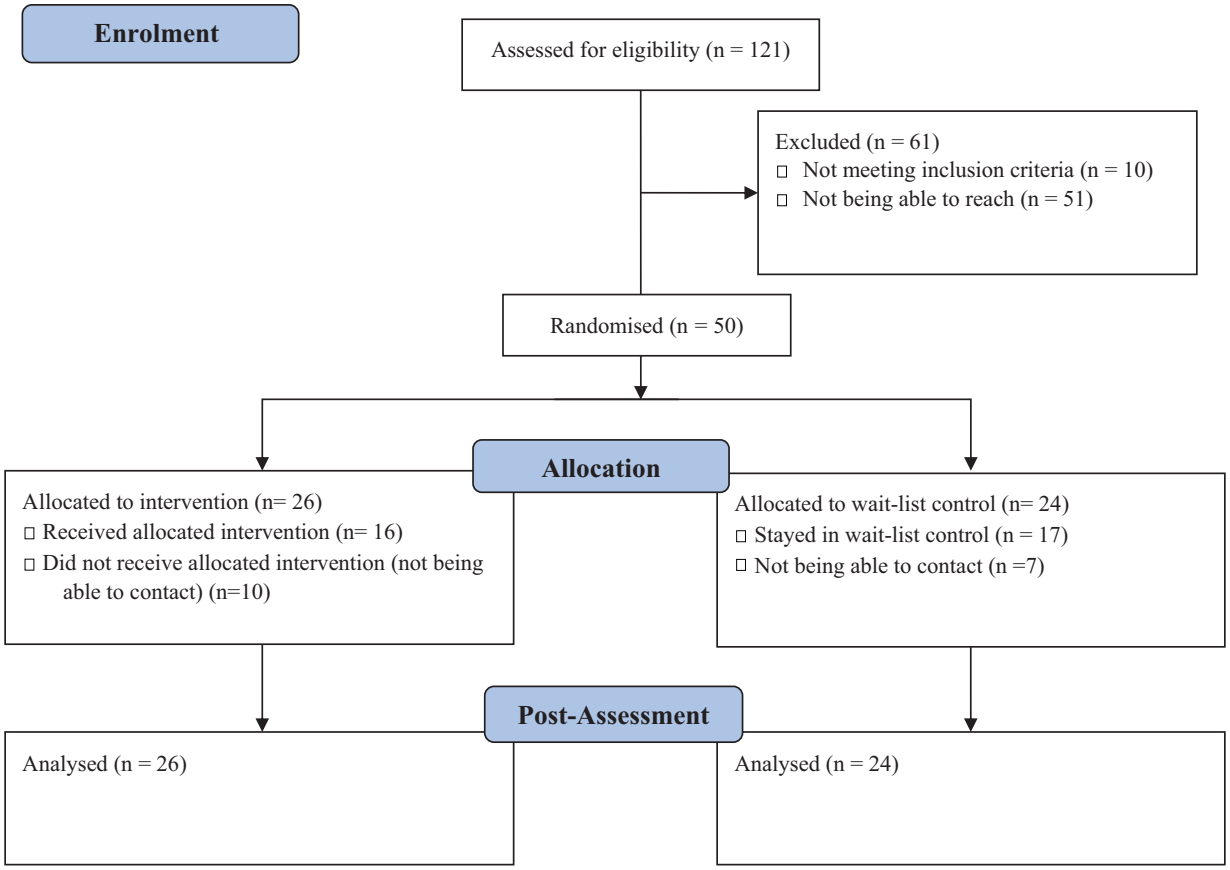


Figure 2: *Consort flow diagram for Syrian participants (trial 2).*



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by WHO in 2020 to support coping with an adversity, including adversity caused by COVID-19. The guide contains the same information as found in the full SH+ course and is based on acceptance and commitment therapy (Hayes et al., 2013), which introduces new ways to accommodate difficult emotions and thoughts instead of suppressing them. SH+ was found to be effective in reducing psychological distress and improving psychological flexibility and functionality (Tol et al., 2020). DWM consists of five sections (grounding, unhooking, acting on your values, being kind and making room) with prerecorded audio files for the exercises. Participants in the DWM condition were called three times (at the beginning with the delivery of the booklet, 2 weeks after the first contact and 5 weeks after the first contact) by psychology graduate students who had been trained (for over 3 hours) on providing guided self-help on the DWM guide to monitor the progress of the participants and motivate use of DWM guide. Psychologists provided little guidance to the participants as to how to use the manual and overcome barriers such as lack of time and motivation while using the manual. Participants were encouraged to work on one section each week and practise the related exercises.

Measures

Psychological Distress Level

The Kessler-10 (Kessler et al., 2002) was used as a screening measurement for psychological distress. On a five-point Likert scale (1 = none of the time, 5 = all of the time), participants were asked to rate how often they experienced psychological distress (e.g. feeling tired out of no reason, feeling nervous and feeling anxious) in the previous 30 days. Higher total scores indicate higher psychological distress. The validated Turkish and Arabic version of the scale showed good psychometric properties (Altun et al., 2019; Easton et al., 2017). The Cronbach alpha was 0.93 for the Turkish and 0.91 for the Arabic sample in the present study.

Depressive Symptoms

The primary outcome measure was the Patient Health Questionnaire-9 (Kroenke & Spitzer, 2002). Used to assess depressive symptoms in the previous 2 weeks, it has nine items rated on a four-point Likert scale (0 = not at all, 3 = nearly every day). Example items are "little interest or pleasure doing things", "feeling down", "depressed" and "hopeless". Higher total scores indicate a higher level of depressive symptoms. The Turkish and Arabic version of the scale has good psychometric properties (Sari et al., 2016; Sawaya et al., 2016). The internal consistency was 0.78 for the Turkish and 0.93 for the Arabic sample in this study.

Anxiety Symptoms

Anxiety symptoms were assessed using the Generalised Anxiety Disorder Scale (GAD-7; Spitzer et al., 2006),

Table 1: *Demographic and COVID-19 Related Characteristics of Turkish Participants (Trial 1)*

Baseline demographic characteristics and outcome measures	DWM (n = 38)	Control group (n = 36)	Between group comparison
Age, mean (SD)	34.47 (10.42)	35.61 (12.28)	$t(53) = 1.799$, $P = 0.712$
Gender, n (%)			
Female	33 (86.8%)	18 (75%)	$x^2(1) = 1.413$, $P = 0.234$
Male	5 (13.2%)	6 (25%)	
Marital status, n (%)			
Married	14 (43.8)	8 (34.8%)	$x^2(2) = 1.805$, $P = 0.406$
Single	16 (50%)	11 (47.8%)	
Other	2 (6.3%)	4 (17.4%)	
Education (%)			
High school and below	0 (0%)	2 (8.7%)	$x^2(2) = 3.08$, $P = 0.214$
Bachelor's degree	21 (65.6%)	15 (65.2%)	
Master's degree and above	11 (34.4%)	6 (26.1%)	
Household income (%)			
≤3.000 Turkish liras	4 (12.5%)	3 (13%)	$x^2(3) = 0.916$, $P = 0.822$
3.001–5.000 Turkish liras	7 (21.9%)	7 (30.4%)	
5.001–7.000 Turkish liras	6 (18.8%)	5 (21.7%)	
≥7.001 Turkish liras	15 (46.9%)	8 (34.8%)	
Infected with COVID-19 (%)			
Currently infected	0 (0%)	0 (0%)	$x^2(3) = 0.833$, $P = 0.659$
Not infected	29 (90.6%)	19 (82.6%)	
Infected in the past	1 (3.1%)	1 (4.3%)	
Not sure	2 (6.3%)	3 (13%)	
Knowing someone infected with COVID-19 (%)			
Yes	29 (90.6%)	17 (73.9%)	$x^2(1) = 2.731$, $P = 0.098$
No	3 (9.4%)	6 (26.1%)	

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Table 2: *Demographic and COVID-19 Related Characteristics of Syrian Participants (Trial 2)*

Baseline demographic characteristics and outcome measures	DWM (n = 26)	Wait-list control group (n = 24)	Between group comparison
Age, mean (SD)	33.61 (8.11)	32.84 (7.10)	$t(40) = 1.251, P = 0.749$
Gender, n (%)			
Female	10 (38.5%)	10 (45.5%)	$x^2(1) = 0.240, P = 0.624$
Male	16 (61.5%)	12 (54.5%)	
Marital status, n (%)			
Married	17 (68%)	17 (81%)	$x^2(2) = 2.068, P = 0.356$
Single	6 (24%)	4 (19%)	
Other	2 (8%)	0 (0%)	
Education (%)			
High school and below	9 (36%)	4 (19%)	$x^2(2) = 5.148, P = 0.076$
Bachelor's degree	13 (52%)	17 (81%)	
Master's degree and above	3 (12%)	0 (0%)	
Household income (%)			
≤2.000 Turkish liras	10 (40%)	5 (25%)	$x^2(3) = 3.362, P = 0.339$
2.001–3.000 Turkish liras	6 (24%)	4 (20%)	
3.001–5.000 Turkish liras	5 (20%)	9 (45%)	
≥5.001 Turkish liras	4 (16%)	2 (10%)	
Infected with COVID-19 (%)			
Currently infected	2 (8%)	3 (14.3%)	$x^2(3) = 2.239, P = 0.524$
Not infected	29 (90.6%)	19 (82.6%)	
Infected in the past	1 (4%)	2 (9.5%)	
Not sure	6 (24%)	7 (33.3%)	
Knowing someone infected with COVID-19 (%)			
Yes	11 (47.8%)	12 (63.2%)	$x^2(1) = 0.987, P = 0.320$
No	12 (52.2%)	7 (36.8%)	

which includes seven items (e.g. feeling nervous, anxious or on edge and worrying too much about different things) rated on a four-point Likert scale (0 = not at all, 3 = nearly every day). Total scores were calculated with higher scores indicating a higher level of anxiety symptoms. The Turkish and Arabic versions of the GAD-7 were used in the present study (Konkan et al., 2013; Sawaya et al., 2016). We found the Cronbach alpha 0.86 for the Turkish sample and 0.91 for the Arabic sample in the present study.

PTSD Symptoms

The short form of the PTSD Checklist for DSM-5 was used to assess PTSD symptoms (Zuromski et al., 2019). This short form with four items was found to be closely aligned with the long version. The items are "suddenly feeling or acting as if the stressful experience were actually happening again (as if you were actually back there relieving it)", "avoiding external reminders of the stressful experience (for example people, places, conversations, activities, objects or situations)", "feeling distant or cut off from other people", and "irritable behaviour, angry outbursts or acting aggressively". Higher total scores indicate a higher level of PTSD symptoms. The Cronbach alpha was 0.84 for the Turkish sample and 0.81 for the Arabic sample in this study.

Self-Efficacy

The General Self-Efficacy Scale with 10 items was used to assess perceived general self-efficacy (Schwarzer & Jerusalem, 1995). Items (e.g. "I can usually handle whatever comes my way") are rated on a four-point Likert scale ranging from 1 = not at all true to 4 = exactly true. Total scores were computed with higher scores indicating higher perceived general self-efficacy. The Turkish and Arabic versions of the scale were used (Aypay, 2010; Crandall et al., 2015). The internal consistency was 0.89 for the Turkish sample and 0.92 for the Arabic sample in this study.

Psychological Flexibility

Psychological flexibility was assessed using Acceptance and Action Questionnaire-II which includes seven items rated on a seven-point Likert scale (1 = never true, 7 = always true; Bond et al., 2011). This scale has been validated in Turkish and Arabic (Hemaid et al., 2016; Yavuz et al., 2016). Lower total scores indicate higher psychological flexibility. In this study, Cronbach alpha was 0.87 for the Turkish sample and 0.88 for the Arabic sample.

Data Analysis

To determine the required sample size, a power analysis was conducted using G*Power 3.1 software (Faul et al., 2009). The effect size was determined in line with the previous study which tested the effectiveness of SH+ in conflict-affected setting (Tol et al., 2020). To detect a small-to-medium effect size with a power of 80% at an alpha level of 0.05, a sample size of 64

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including 32 in the DWM and 32 in the control group was required.

All analyses were conducted using IBM SPSS 26.0 for Windows. Descriptive analyses to show the demographic characteristics of groups were conducted. Groups were compared on baseline characteristics by using an independent sample *t* test for continuous variables and a chi-square significance test for categorical variables. The differences between DWM and WLC group were examined with an intent-to-treat analysis. Linear mixed-effects models with the fixed effects of group (DWM versus WLC group), time (pre- versus postintervention assessment) and time by group and random effect of the subject were used. This was chosen over any other method because it reduces bias, handles missing data and thereby prevents loss of power (Salim et al., 2008). The mean differences between the intervention and control at posttest and change in the score from pre- to postintervention were calculated with 95% confidence intervals (no Bonferroni adjustment was made). Within- and between-group effect sizes were estimated by calculating Cohen *d* based on the pooled standard deviation (Cohen, 1988).

Results

Fifty-one participants (27 DWM and 24 WLC) in the Turkish sample (trial 1) and 33 participants (16 DWM and 17 WLC) in the Syrian sample (trial 2) completed the study. The drop-out rate was 31% and 34% for the Turkish and Syrian samples, respectively. No adverse events were reported.

Tables 3 and 4 report the results for primary and secondary outcome measures for the Turkish and Syrian samples.

Primary Outcomes

Linear mixed model analysis for depressive symptoms among Turkish participants showed a significant interaction effect between time and group, $F(1, 65.11) = 4.49$, $P = 0.038$. The group comparison at the postintervention narrowly failed to reach significance at the $P < 0.05$ ($F[1, 120.01] = 3.88$, $P = 0.051$). However, within-group comparison was significant, indicating an improvement over time in depressive symptom scores for DWM group, but not for WCL group ($F[1, 64.314] = 4.11$, $P = 0.047$). This result indicates the potential utility of DWM in reducing depressive symptoms. Neither the effect of group ($F[1, 76.44] = 1.18$, $P = 0.281$) nor time ($F[1, 65.11] = 0.46$, $P = 0.502$) was significant.

For the Syrian sample, the interaction effect between time and group was not significant, $F(1, 33.20) = 1.41$, $P = 0.244$. Furthermore, no significant effect time of time or group was found ($F[1, 33.20] = 1.01$, $P = 0.322$, $F[1] = 47.03 = 0.05$, $P = 0.827$, respectively). These results indicate no significant impact of the intervention on depressive symptoms for this sample.

Secondary Outcomes

In the Turkish sample, except for PTSD symptoms, none of the impacts on secondary outcomes were significant (see Table 3). There was a main effect of group allocation on PTSD symptoms: participants in the DWM group (M

Table 3: *Summary Statistics and Results from Mixed-model Analysis of Primary and Secondary Outcomes for Turkish Participants (Trial 1)*

Measure	Preintervention	Postintervention	Between-group comparison at postintervention			Within-group comparison		
	M (SD)	M (SD)	Mean differences (95%)	*P*-value	Effect size	Mean differences (95%)	*P*-value	Effect size
PHQ-9								
DWM	9.00 (3.75)	7.14 (4.36)	2.40 (−0.013–4.82)	0.051	0.55	1.86* (0.03–3.69)	0.047	0.46
WLC	8.58 (3.63)	9.54 (4.35)				0.96 (−0.97–2.89)	0.323	0.24
GAD-7								
DWM	6.68 (3.70)	5.27 (4.38)	1.59 (−0.863–4.04)	0.202	0.36	1.42 (−0.47–3.30)	0.138	0.34
WLC	6.33 (3.65)	6.86 (4.37)				0.53 (−1.43–2.48)	0.593	0.13
PCL-5 short-form								
DWM	6.11 (3.24)	5.14 (3.87)	1.98 (−0.18–4.15)	0.072	0.51	0.96 (−0.76–2.69)	0.268	0.27
WLC	7.39 (3.20)	7. 13 (3.86)				0.26 (−1.53–2.05)	0.769	0.07
General self-efficacy								
DWM	26.26 (4.30)	27.97 (4.84)	1.90 (−0.81–4.61)	0.168	0.39	1.70* (0.05–3.35)	0.044	0.37
WLC	26.22 (4.25)	26.07 (4.82)				0.154 (−1.56–1.87)	0.858	0.03
AAQ-2								
DWM	21.32 (7.32)	19.31 (8.35)	4.29 (−0.38–8.97)	0.072	0.52	2.01 (−1.04–5.05)	0.193	0.26
WLC	24.39 (7.23)	23.60 (8.23)				0.79 (−2.38–3.95)	0.621	0.10

AAQ-II, Acceptance and Action Questionnaire-II; DWM, Doing What Matters in Times of Stress; GAD-7, Generalised Anxiety Disorder Scale; PCL-5, PTSD Checklist for DSM-5; PHQ-9, Patient Health Questionnaire-9; WLC, wait-list control.
Note. ** p < .05, ** p < .01, *** p < .001.*

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Table 4: *Summary Statistics and Results from Mixed-Model Analysis of Primary and Secondary Outcomes for Syrian Participants (Trial 2)*

Measures	Preintervention	Postintervention	Between-group comparison at postintervention			Within-group comparison		
	M (SD)	M (SD)	Mean differences (95%)	*P*-value	Effect size	Mean differences (95%)	*P*-value	Effect size
PHQ-9								
DWM	12.35 (5.37)	10.19 (6.29)	1.57 (−5.98–2.84)	0.481	0.25	2.15 (−0.70–5.01)	0.134	0.37
WLC	11.58 (5.76)	11.76 (6.43)				0.18 (−2.62–2.97)	0.898	0.03
GAD-7								
DWM	10.65 (4.62)	9.34 (5.56)	1.81 (−2.08–5.70)	0.356	0.32	1.32 (−1.44–4.08)	0.339	0.26
WLC	8.83 (4.96)	11.15 (5.64)				2.31 (−0.40–5.02)	0.092	0.44
PCL-5 short-form								
DWM	7.46 (3.00)	5.30 (3.44)	1.85 (−0.58–4.37)	0.133	0.53	2.16* (0.72–3.60)	0.005	0.67
WLC	6.71 (3.22)	7.15 (3.54)				0.44 (−0.97–1.85)	0.530	0.13
General self-efficacy								
DWM	24.58 (5.15)	25.48 (6.00)	3.46 (−0.75–7.68)	0.106	0.57	0.91 (−1.78–3.59)	0.497	0.16
WLC	28.00 (5.53)	28.95 (6.14)				0.95 (−1.68–3.57)	0.469	0.16
AAQ-2								
DWM	32.50 (7.51)	28.81 (8.40)	0.96 (−4.98–6.89)	0.749	0.15	3.69† (0.49–6.88)	0.025	0.46
WLC	30.33 (8.06)	29.77 (3.70)				0.57 (−2.56–3.68)	0.715	0.09

AAQ-II, Acceptance and Action Questionnaire-II; DWM, Doing What Matters in Times of Stress; GAD-7, Generalised Anxiety Disorder Scale; PCL-5, PTSD Checklist for DSM-5; PHQ-9, Patient Health Questionnaire-9; WLC, wait-list control. ***Note.*** ** $p < .05$, ** $p < .01$, *** $p < .001$.*

= 7.26, SE = 0.57) had significantly lower level of PTSD symptoms than those in the WLC group ([M = 5.62, SE = 0.55], F[1, 69.25] = 4.26, P = 0.043) at posttest.

For Syrian participants, the interaction effect between time and group on PTSD symptoms was significant, F(1, 33.22) = 6.87, P = 0.013. Between-group comparison was not significant (F[1, 72.66] = 2.31, P = 0.133). The within-group comparison was significant, F(1, 33.22) = 6.87, P = 0.013. There was a significant improvement in PTSD symptoms of the DWM group over time, but not of the WLC group (F[1, 33.68] = 9.26, P = 0.005). None of the other differences in secondary outcomes for Syrian participants (between- or within-group) were significant (see Table 4). These results indicate that the intervention did not yield a significant difference between the intervention and control group at the postassessment. Yet, it has potential to reduce mental health symptoms based on the within-group results.

Discussion

The present randomised controlled pilot study investigated the feasibility and acceptability of conducting a fully powered RCT, a scalable, guided self-help intervention called DWM. To the best of our knowledge, this is the first study testing the effects of DWM on reducing COVID-19 related distress. We could not reach the predetermined sample size in either sample. Therefore, this study was underpowered to detect significant differences on primary and secondary outcome measures. We did not find a significant effect of DWM on either primary or secondary outcome measures compared to the WLC group. However, we observed significant within-group effects on a number of outcome variables. Among Turkish participants in the DWM group, depression scores significantly reduced from pre- to postintervention assessment. Furthermore, PTSD symptoms significantly decreased from pre- to postintervention assessment among Syrian participants in the DWM group. These within-group changes over time point to the possibility of finding significant effects of DWM if a larger sample size is achieved. Thus, future randomised controlled trials with a larger sample size will likely be more informative in showing the effects of DWM on alleviating COVID-19 related distress. Testing the effectiveness of DWM in large trials is especially important when the ease of its use is taken into account. Besides, DWM has been translated into several languages and can be easily adapted to the different cultures and/or groups.Cumulative evidence shows that COVID-19 takes a very heavy toll on mental health as well as physical health (see Wang et al., 2020; Wu et al., 2020 for meta-analyses). Indeed, disadvantaged groups such as refugees have been hit the hardest by COVID-19 (Lancet, 2020). Furthermore, utilisation of mental health services becomes difficult due to the restrictions and following regulations during the pandemic (Moreno et al., 2020). Telehealth or online mental health service provision appears to be one of the promising solutions (Goldman et al., 2020). A considerable number of studies have been launched to test the effectiveness of both guided and unguided internet-delivered psychosocial interventions among different groups such as the general population (Al-Alawi et al., 2021; O'Donnell et al., 2020), COVID-19 patients (Shaygan et al., 2021; Wei et al., 2020), health care workers (Weiner et al., 2020) and patients with chronic diseases (Mikocka-Walus et al.,

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2020). Some completed trials showed very promising results on reducing psychological distress (e.g., Al-Alawi et al., 2021; Shaygan et al., 2021; & Wei et al., 2020). Considering the potential of DWM to reduce psychological distress and ease in its application, DWM could be a good alternative to face-to-face interventions during the current pandemic.

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Conflicts of interest

There are no conflicts of interest.

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