



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



## Group Cognitive–Behavioral Therapy via Telebehavioral Health for Those With Psychotic Spectrum Disorders: A Case Series

Hannah L. Joseph, *Georgia State University*  
Ana Martinez de Andino and Keith Wood, *Emory University*

*Telebehavioral health emerged as an important practice during the coronavirus disease 2019 (COVID-19) pandemic as an opportunity for continued evidence-based mental health intervention, while minimizing exposure to coronavirus contagion. Though preliminary research suggests feasibility and positive outcomes of telebehavioral health practice for people with schizophrenia spectrum and other psychotic disorders, there is limited research about implementation and effectiveness of this practice (Kasckow et al., 2014). This case series highlights the transition from in-person to telebehavioral health practice of a Cognitive Behavioral Social Skills Training for Schizophrenia group due to the COVID-19 pandemic. This article summarizes: (a) the staff procedures needed to transition the group from in-person to telebehavioral health, (b) participant outcome data, (c) session attendance data, and (d) survey results from facilitators and participants about barriers and facilitators of the transition to telebehavioral health, and about how the virtual platform altered the therapeutic relationship and engagement. Participant outcome and engagement data suggest that, not only were two participants able to transition to telehealth and complete the program, but both participants also showed notable improvement in treatment engagement, goal progress, and skill acquisition. Surveys of six facilitators and one participant highlight how the transition to telebehavioral health had treatment advantages (e.g., therapeutic relationship, treatment engagement, group dynamics). Though survey results highlighted several implementation challenges in using the new virtual platform (e.g., technological connectivity, confidential space for engagement), no survey respondents reported that participation in this program resulted in harm to facilitators or participants. All facilitators and one participant agreed that the transition from in-person to virtual services was easy and reduced transportation barriers. Given the limited treatment engagement for this population (Lora et al., 2012) and the importance of early intervention to maximize clinical outcomes (Black et al., 2001; Bottlender et al., 2003), unanimous facilitator and participant report about improved patient attendance and participation in treatment after the transition to telebehavioral health was critically important. Though results of this case study are promising in suggesting telebehavioral health could be a viable modality for providing psychosocial treatment to people with schizophrenia spectrum and other psychotic disorders, more rigorous study is needed.*

**S**CHIZOPHRENIA spectrum and other psychotic disorders are a class of diagnoses primarily characterized by symptoms of psychosis (e.g., hallucinations, delusions, thought disorder, disorganized behavior, negative symptoms). This subset of disorders includes schizophrenia, schizoaffective disorder, delusional disorder, schizotypal personality disorder, schizophreniform disorder, brief psychotic disorder, specified and unspecified schizophrenia spectrum, as well as psychosis associated with substance use or medical condi-

tions (American Psychiatric Association, 2015). Prevalence estimates of psychotic disorders vary based on the study design and population; however, a recent meta-analysis estimated the 12-month prevalence was 4.03 people with psychotic disorders per 1,000 individuals (Moreno-Küstner et al., 2018).

Pharmacologic and psychosocial treatments aim to reduce psychotic symptoms, distress, and dysfunction associated with psychotic symptoms, and increase daily functioning (Kreyenbuhl et al., 2010). Best practice for treatment includes antipsychotic medications to provide relief from psychotic symptoms, as well as evidence-based psychosocial interventions to provide additional relief from psychotic symptoms and to improve social and role functioning (Kopelovich & Wood, 2017). The two best validated psychosocial

---

*Keywords:* telebehavioral health; treatment accessibility; treatment engagement; psychosis

1077-7229/20/© 2021 Association for Behavioral and Cognitive Therapies. Published by Elsevier Ltd. All rights reserved.

interventions for individuals with schizophrenia spectrum disorders are Cognitive Behavioral Therapy for Psychosis (CBTp) and Social Skills Training (SST). CBTp focuses on use of cognitive and behavioral psychological strategies to reduce positive and negative psychotic symptoms, as well as mood symptoms, and the distress and disability associated with hallucinations and delusions (Mueser et al., 2013). CBTp has been found to improve symptoms and functionality in individuals with persistent psychotic symptoms who were unresponsive or partially responsive to medication alone. Similarly, SST aims to enhance social competence and remediate psychosocial deficits present in the schizophrenia spectrum and other psychotic disorders. Meta-analyses have found that SST has positive effects on assertiveness, social functioning, social and daily living skills, community functioning, and negative symptoms (Mueser et al., 2013).

Though there are promising effective interventions for individuals with schizophrenia, the World Health Organization Assessment Instrument for Mental Health Systems estimates roughly two thirds of those with the disorder do not receive treatment (Lora et al., 2012). Frequently individuals with schizophrenia, limited by financial, transportation, housing, employment, substance use and medical challenges, do not have effective interventions available to them or have difficulty accessing such treatments. It is especially important that these services are available, accessed and utilized promptly, because having a longer duration of untreated psychosis is associated with worse clinical outcomes (Black et al., 2001; Bottlender et al., 2003).

Providing high-quality psychosocial intervention via telehealth for individuals with psychotic disorders may help to boost treatment availability, accessibility, and utilization. Telehealth has been shown to increase accessibility of high-quality health care, especially to those with limited means for care and limited access to transportation (Dorsey & Topol, 2016). A systematic review of existing research suggests that therapeutic interventions via telebehavioral health for individuals with psychotic symptoms are just as effective as in-person treatments, despite the historic skepticism about conducting virtual skills training and therapeutic interventions with this population (Sharp et al., 2011). Recent research also highlights the feasibility and acceptability of emerging telehealth interventions among people with serious mental illness in general (Naslund et al., 2015) and with psychotic disorders more specifically (Alvarez-Jimenez et al., 2014).

Though there has been increased interest in delivering services via telehealth, its use has been minimal, especially for individuals with schizophrenia spectrum

disorders. However, public health guidelines effectively prohibited in-person, face-to-face services to and with most of the population during the coronavirus disease 2019 (COVID-19) pandemic. Telebehavioral health emerged as a particularly important practice during the COVID-19 pandemic as an opportunity for continued evidence-based mental health intervention, while minimizing exposure to coronavirus contagion. Protecting the health of this population is particularly important because those with schizophrenia and other psychotic disorders—many of whom live in congregate housing or are homeless, have poor physical health conditions, are socioeconomically disadvantaged, and function under stressful conditions—are at a higher risk of both contracting and spreading the virus (Kozloff et al., 2020). Though preliminary research suggests feasibility and positive outcomes of telebehavioral health practice for people with schizophrenia spectrum and other psychotic disorders, there is limited research about implementation and effectiveness of this practice (Kasckow et al., 2014). There appears to be a gap in the literature about how to transition in-person care to telehealth platforms, particularly for group skill and psychotherapeutic interventions with this population.

This case series highlights the transition from in-person to telebehavioral health practice due to the COVID-19 pandemic. This paper will review the aforementioned transition of a Cognitive Behavioral Social Skills Training (CBSST) for Schizophrenia group program in an urban southeastern U.S. city. The program functions in an outpatient behavioral health clinic that primarily serves Black and low-income individuals with serious mental illness and behavioral health conditions who lack the finances or private insurance to otherwise pay for services. This article summarizes: (a) the staff procedures needed to transition the group from in-person to telebehavioral health, (b) participant outcome data, (c) session attendance data, and (d) survey results from facilitators and one participant about barriers and facilitators of the transition to telebehavioral health, and about how the virtual platform altered the therapeutic relationship and engagement.

## Method

### Intervention

CBSST is a group psychosocial rehabilitation intervention program designed to assist individuals with schizophrenia and other serious mental illnesses to attain improved levels of adaptive functioning and recovery (Granholm et al., 2016). The program combines aspects of both CBTp and SST, and consists of three skill-oriented intervention modules: cognitive,

social communication, and problem-solving. The director of the program added an additional fourth goal attainment module which focuses on identifying realistic employment, housing, relationship, learning, leisure, and healthy living goals and working an established 10-step process towards attainment. The cognitive (“stinkin thinkin”) module focuses on identifying how thinking affects feelings and behaviors and how to catch, check, and change (the 3-Cs) thoughts in the process of improving accuracy, helpfulness, and pleasant feelings and desired behaviors. The social communication module focuses on: (a) identifying the verbal and nonverbal components in social interactive speaking and listening, (b) effectively communicating to improve and strengthen relationships, minimize conflicts and confusion, and get desired outcomes from others. The problem-solving module focuses on identifying interferers (problems) to successful functioning and goal attainment and working an effective method to reach goal attainment and solve other problems (Granholtm et al., 2016). The results of four randomized control trials suggest that the CBSST program is effective at improving functioning and reducing negative symptoms (Granholtm et al., 2014; Granholtm et al., 2013; Granholtm et al., 2008; Granholtm et al., 2005).

In the outpatient behavioral clinic, the CBSST program is implemented in a 2-day intensive 6- to 8-week program. A team of five clinical psychology doctoral students, predoctoral clinical psychology interns, and postdoctoral residents assist in the group facilitation. The director of the program, a licensed psychologist, also attends all groups and supervises all facilitators. All facilitators meet weekly as a team to review facilitator performance and participant progress, and to plan for any adaptation or changes needed for upcoming groups. All sessions follow a similar structure including developing an agenda collaboratively at the start of each session, reviewing the skill and homework from the previous session, introducing new session content, assigning new homework, and soliciting participant feedback on the session. See Table 1 for a session by session overview of the planned session content for the CBSST program.

### **Transitioning the CBSST Group to Telebehavioral Health**

The CBSST group had met for two meetings of the goal and cognitive groups and one meeting of the social skills and problem-solving groups before the COVID-19 pandemic resulted in the closure of the in-person groups at the outpatient clinic. See Table 2 for a review of what session content was covered in each

group, with reference to the disruption of the COVID-19 pandemic. After all clinicians underwent at least one American Psychological Association sponsored telebehavioral health introduction webinar, the group transitioned to being hosted virtually. Facilitators had two team meetings to discuss the logistics and troubleshoot technological difficulties in advance. The team reviewed updated consent procedures for group participation (e.g., attestation to location, agreement not to record session, secure internet connection). There was a two-and-a-half-week lapse in intervention during which time the outpatient clinic developed additional telebehavioral health policies. During this time, the postdoctoral resident on the team conducted 5- to 10-minute phone check-ins with the group participants to ensure continuity of treatment, participant safety, and to provide basic coping assistance.

Though the team had already established group norms with participants for in-person sessions, facilitators and participants collaboratively developed guidelines for group participation via telebehavioral health. Guidelines included a hand signal to indicate if one has something to say but has not had the chance to participate, procedures for troubleshooting technological connectivity issues, muting when not speaking, and code words to indicate limits to privacy (e.g., someone has entered the room).

### **Participants**

Participants for this program were recruited via interdisciplinary referrals (e.g., case managers, social workers, psychiatrists) within the outpatient clinic. Clinical doctoral students also identified potential participants from medical chart review. Eligible participants were: (a) those who demonstrated engagement with other services at the outpatient clinic (e.g. case management, psychiatric services, open psychotherapy groups), (b) those with a diagnosis of serious behavioral disorder or schizophrenia spectrum and other psychotic disorders, and (c) those with an interest in participating. Of the 86 individuals identified as eligible, 19 had already completed the program, 34 were in the process of being contacted, 11 expressed no interest in participating in a group program, 17 were unreachable, and 2 were deemed not appropriate. At the time of the COVID-19 pandemic, 3 were currently enrolled in the intervention. Many were unreachable or in the process of being contacted due to inconsistent phone access and housing instability.

One participant attended the second meeting of the cognitive and goals groups and expressed interest in continued involvement, but was unable to secure a private space for participation in the group via telebehav-

Table 1  
CBSST Session Objectives

Session	Goal	Cognitive	Social Skills	Problem Solving
Week 1	<ul style="list-style-type: none"> <li>• Introduction and orientation to goal group and entire CBSST program</li> <li>• Group expectations</li> <li>• Identify participants' current dream life goal</li> <li>• Identify top two adaptive functioning situations (e.g. work, housing, transportation, behavioral health treatment, medication treatment)</li> <li>• Complete a portion of the Adaptive Behavior Functioning Inventory</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction and orientation to cognitive group</li> <li>• Introduce cognitive triad (linking thoughts, feelings &amp; behavior)</li> <li>• Discuss difference between thought versus feeling</li> </ul>	<ul style="list-style-type: none"> <li>• Introductions and orientation to social skills group</li> <li>• Introduce the importance of communication</li> <li>• Learn nonverbal communication skills</li> <li>• Practice active listening skills</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction and orientation to problem solving group</li> <li>• Introduce step-wise problem solving skill</li> </ul>
Week 2	<ul style="list-style-type: none"> <li>• Goal Brainstorming</li> <li>• Review Adaptive Behavioral Functioning Inventory, Part II (school/training, leisure/fun, self-care)</li> </ul>	<ul style="list-style-type: none"> <li>• Introduce concept of cognitive appraisal</li> <li>• Discuss and practice identifying thoughts</li> <li>• What are helpful and unhelpful thoughts?</li> </ul>	<ul style="list-style-type: none"> <li>• Telebehavioral health consent</li> <li>• Group expectations/norms for telebehavioral health</li> <li>• Learn expressing pleasant feelings skill</li> </ul>	<ul style="list-style-type: none"> <li>• Learn to specify problems</li> <li>• Assess how thoughts related to problems</li> </ul>
Week 3	<ul style="list-style-type: none"> <li>• Specific Measurable Achievable Relevant Time-bound (SMART) goal generation in Adaptive Behavioral Functioning domain of interest</li> </ul>	<ul style="list-style-type: none"> <li>• Introduce reality testing and cognitive errors</li> </ul>	<ul style="list-style-type: none"> <li>• Learn making a positive request skill</li> </ul>	<ul style="list-style-type: none"> <li>• Learn to consider all solutions then assess them</li> </ul>
Week 4	<ul style="list-style-type: none"> <li>• SMART goal generation</li> <li>• Develop plan for progress towards goals</li> <li>• Identify progress and barriers towards goals</li> </ul>	<ul style="list-style-type: none"> <li>• Practice generating alternative thinking</li> <li>• Practice cognitive reappraisal</li> </ul>	<ul style="list-style-type: none"> <li>• Talk to others about goals/learn help seeking behavior</li> <li>• Practice making a positive request</li> </ul>	<ul style="list-style-type: none"> <li>• Learn to lay out a detailed plan to solve your specified problem</li> </ul>
Week 5	<ul style="list-style-type: none"> <li>• Review SMART goals</li> <li>• Review and update plan for progress towards goals</li> <li>• Identify progress and barriers towards goals</li> </ul>	<ul style="list-style-type: none"> <li>• Practice cognitive reappraisal</li> <li>• Introduce behavioral experiments</li> </ul>	<ul style="list-style-type: none"> <li>• Expressing unpleasant feeling skill</li> </ul>	<ul style="list-style-type: none"> <li>• Practice problem solving issues related to goals</li> </ul>
Week 6	<ul style="list-style-type: none"> <li>• Review SMART goals</li> <li>• Review and update plan for progress towards goals</li> <li>• Identify progress and barriers towards goals</li> </ul>	<ul style="list-style-type: none"> <li>• Practice cognitive reappraisal and behavioral experiments</li> </ul>	<ul style="list-style-type: none"> <li>• Catch up and practice skills already introduced</li> </ul>	<ul style="list-style-type: none"> <li>• Catch up and practice skills already introduced</li> </ul>
Week 7	<ul style="list-style-type: none"> <li>• Consolidate learning from group/reflect on progress</li> <li>• Identifying ongoing goals and reinforce continued treatment engagement</li> <li>• Ask for participant feedback on the group</li> </ul>	<ul style="list-style-type: none"> <li>• Consolidate learning from group/reflect on progress</li> </ul>	<ul style="list-style-type: none"> <li>• Consolidate learning from group/reflect on progress</li> <li>• Identifying ongoing goals and reinforce continued treatment engagement</li> </ul>	<ul style="list-style-type: none"> <li>• Consolidate learning from group/reflect on progress</li> </ul>

(continued on next page)

Table 1 (continued)

Session	Goal	Cognitive	Social Skills	Problem Solving
		<ul style="list-style-type: none"> <li>Identifying ongoing goals and reinforce continued treatment engagement</li> <li>Ask for participant feedback on the group</li> </ul>	<ul style="list-style-type: none"> <li>Ask for participant feedback on the group</li> </ul>	<ul style="list-style-type: none"> <li>Identifying ongoing goals and reinforce continued treatment engagement</li> <li>Ask for patient feedback on the group</li> </ul>

ioral health and therefore stopped participating after the transition. However, the participant continued to engage in brief phone check-ins with the intent of reengaging once the clinic shifts back to in-person services. Of the 3 participants enrolled in the intervention at the start of the COVID-19 pandemic, 2 continued to participate after the group transitioned to telebehavioral health.

### Data Collection Procedures

#### Medical Record Data

Emory University's Institutional Review Board (IRB) approved collection of pre- and post-CBSST program behavioral health assessment (psychiatric diagnosis, psychosocial behavioral health), treatment information (psychiatric medication management, clinic psychosocial individual, group, day and case management, and service adherence and utilization [psychiatric emergency room, crisis stabilization, and inpatient admissions]), and program participant performance and skill utilization ratings were available via the health systems' electronic medical record system.

#### Survey Data

Georgia State University's IRB approved collection of facilitator and participant survey data. After completing the CBSST program, surveys were administered to six facilitators and one participant enrolled in CBSST at the time of the transition to telehealth services, asking all participants to reflect on the benefits and challenges of the transition to telehealth practice. Clinicians were emailed a link to the anonymous online Qualtrics survey to complete with a copy of the consent form attached. The postdoctoral resident who routinely calls the participants to follow-up with their treatment engagement called the two participants who completed the CBSST curriculum and provided

the opportunity for them to complete the survey. The postdoctoral resident was only able to contact one of the two participants, as one did not return her contact attempts. She provided the participants the option of completing the survey online or via phone with her, with the participant electing to complete the survey over the phone.

### Measures

Baseline assessments were completed as planned, including demographic information, Positive and Negative Syndrome Scale, Choice of Outcome in CBT for Psychoses, and the Defeatist Performance Attitude Scale (DPAS). Follow-up assessments would have used the same measures, however, due to IRB constraints about virtual administration of measures, no follow-up assessments were able to be completed due to the COVID-19 pandemic. At the time of the identified cohort the amended IRB allowing virtual conditions and procedures had not yet been approved (the university actually placed a temporary hold on nonessential research projects).

#### Demographics

This form records age, gender, racial/ethnic identities, current employment, housing, relationship status, education, and leisure activity status. Participants were asked to complete this only during the baseline assessment.

#### Positive and Negative Syndrome Scale (PANSS)

The PANSS is a semistructured interview that aims to assess the presence and severity of positive and negative symptoms of psychosis, as well as general psychopathology for individuals with a psychiatric disorder within the past week (Kay et al., 1967). It includes 30 items that consists of 7 positive symptom items, 7 negative symptom items, and 16 general psy-

Table 2  
CBSST Session Content Covered

Session	Goal	Cognitive	Social Skills	Problem Solving
Week 1	<ul style="list-style-type: none"> <li>• Introduction and orientation to goal group and entire CBSST program</li> <li>• Group expectations</li> <li>• Identify participants' current dream life goal</li> <li>• Identify top two adaptive functioning situations (e.g. work, housing, transportation, behavioral health treatment, medication treatment)</li> <li>• Complete a portion of the Adaptive Behavior Functioning Inventory</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction and orientation to cognitive group</li> <li>• Introduce cognitive triad (linking thoughts, feelings &amp; behavior)</li> <li>• Discuss difference between thought versus feeling</li> </ul>	<ul style="list-style-type: none"> <li>• Introductions and orientation to social skills group</li> <li>• Introduce the importance of communication</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction and orientation to problem solving group</li> <li>• Introduce stepwise problem solving skill</li> </ul>
Week 2	<ul style="list-style-type: none"> <li>• Identify how participant wants his/her adaptive functioning situations to change</li> </ul>	<ul style="list-style-type: none"> <li>• Introduce concept of cognitive appraisal</li> <li>• Discuss and practice identifying thoughts</li> <li>• What are helpful and unhelpful thoughts?</li> </ul>	<p>In-person services were disrupted due to COVID-19 pandemic, services transitioned to telebehavioral health practice after a 2.5 week lapse.</p>	
	<p>In-person services were disrupted due to COVID-19 pandemic, services transitioned to telebehavioral health practice after a 2.5 week lapse.</p>		<ul style="list-style-type: none"> <li>• Telebehavioral health consent</li> <li>• Group expectations/norms for telebehavioral health</li> <li>• Introductions and orientation to social skills group</li> <li>• Introduce the importance of communication</li> <li>• Learn nonverbal communication skills</li> <li>• Practice active listening skills</li> </ul>	<ul style="list-style-type: none"> <li>• Telebehavioral health consent</li> <li>• Group expectations/norms for telebehavioral health</li> <li>• Learn to creatively brainstorm all possible solutions to a problem</li> </ul>
Week 3	<ul style="list-style-type: none"> <li>• Telebehavioral health consent</li> <li>• Group expectations/norms for telebehavioral health</li> <li>• Identify specific goal areas for deeper discussion</li> <li>• Identify barriers to developing goals and achieving goal steps</li> <li>• Review goal step accomplishment status</li> </ul>	<ul style="list-style-type: none"> <li>• Telebehavioral health consent</li> <li>• Group expectations/norms for telebehavioral health</li> <li>• Introduce reality testing and cognitive errors</li> </ul>	<p>No participants attended this session</p>	<ul style="list-style-type: none"> <li>• Learn to consider all solutions then assess them</li> </ul>
Week 4	<ul style="list-style-type: none"> <li>• Identify specific goal areas for deeper discussion</li> </ul>		<ul style="list-style-type: none"> <li>• Practice active listening skills</li> </ul>	

(continued on next page)

Table 2 (continued)

Session	Goal	Cognitive	Social Skills	Problem Solving
	<ul style="list-style-type: none"> <li>Identify progress and barriers towards goals</li> </ul>	<ul style="list-style-type: none"> <li>Review reality testing and cognitive errors</li> </ul>		<ul style="list-style-type: none"> <li>Learn to lay out a detailed plan to solve your specified problem</li> </ul>
Week 5	<ul style="list-style-type: none"> <li>Identify specific goal areas for deeper discussion</li> <li>Identify progress and barriers towards goals</li> </ul>	<ul style="list-style-type: none"> <li>Practice generating alternative thinking</li> <li>Practice cognitive reappraisal</li> </ul>	<ul style="list-style-type: none"> <li>Talk to others about goals/learn help seeking behavior</li> <li>Practice making a positive request</li> <li>Expressing unpleasant feeling skill</li> </ul>	<ul style="list-style-type: none"> <li>Practice problem solving issues related to goals</li> </ul>
Week 6	<ul style="list-style-type: none"> <li>Identify specific goal areas for deeper discussion</li> <li>Identify progress and barriers towards goals</li> </ul>	<ul style="list-style-type: none"> <li>Practice generating alternative thinking</li> <li>Practice cognitive reappraisal</li> </ul>	<ul style="list-style-type: none"> <li>Learn expressing pleasant feelings skill</li> </ul>	<ul style="list-style-type: none"> <li>Learn to lay out a detailed plan to solve your specified problem</li> </ul>
Week 7	<ul style="list-style-type: none"> <li>Consolidate learning from group/reflect on progress</li> <li>Identifying ongoing goals and reinforce continued treatment engagement</li> <li>Identify progress and barriers towards goals</li> <li>Ask for participant feedback on the group</li> </ul>	<ul style="list-style-type: none"> <li>Consolidate learning from group/reflect on progress</li> <li>Identifying ongoing goals and reinforce continued treatment engagement</li> <li>Ask for participant feedback on the group</li> </ul>	<ul style="list-style-type: none"> <li>Talk to others about goals/learn help seeking behavior</li> <li>Practice making a positive request</li> <li>Expressing unpleasant feeling skill</li> </ul>	<ul style="list-style-type: none"> <li>Consolidate learning from group/reflect on progress</li> <li>Identifying ongoing goals and reinforce continued treatment engagement</li> <li>Ask for patient feedback on the group</li> </ul>

chopathology items. Clinicians score questions on a 7-point Likert scale ranging from absent (1) to extreme (7). Items for the three subscales are summed resulting in a Positive Scale, Negative Scale, and General Psychopathology Scale. Scores on the PANSS range from 30 to 210, with higher scores indicative of more severe psychopathology. In order to create clinically meaningful cutoff scores, studies have compared ratings on the PANSS to scores on the Clinical Global Impressions Scales (e.g., Leucht et al., 2005; Leucht, 2014). In a study of over 4,000 patients with schizophrenia, the following cutoff scores were created from the PANSS total score: “Mildly III” as 57–61, “Moderately III” as 73–78, and “Markedly III” as 93–96 (Leucht et al., 2005).

#### *Choice of Outcome in CBT for Psychoses (CHOICE)*

The CHOICE is a 21-item self-report questionnaire that aims to measure recovery from mental health difficulties and the use of adaptive skills from a CBT per-

spective (Greenwood et al., 2010). It assesses a variety of domains, including cognitive flexibility, social relations, and problem solving. For each item of the CHOICE, severity and satisfaction dimensions are assessed on a 7-point Likert scale.

#### *Defeatist Performance Attitude Scale (DPAS)*

The DPAS is a 15-item self-report subscale of the Dysfunctional Attitude Scale (Cane et al., 1986). This scale assesses endorsement of defeatist attitudes about one’s ability to perform goal-directed tasks on a 7-point Likert scale from disagree totally (1) to agree totally (7). Scores range from 15 to 105, with higher scores indicative of more severe defeatist performance attitudes.

The following measures were used in a facilitator and participants surveys completed after their participation in the CBSST group.



### *Overall Rating of Transition to Telebehavioral Health*

Group participants and clinicians were asked to rate how they felt the CBSST group transition to telebehavioral health went on a 7-point scale from extremely difficult (1) to extremely easy (7).

### *Ease of Transition to Telebehavioral Health*

Group participants and clinicians were asked one open-ended question about the “unexpected benefits in switching to telebehavioral health.” Group participants and clinicians were also asked to identify what “has gone well/been easy about the CBSST group transition to telehealth” from a checklist of six items: continued treatment during COVID-19 pandemic; technology has facilitated treatment engagement; elimination of client transportation challenges; treatment delivery is largely the same virtually as it was in person; it is easy to see other people’s facial reactions because you can see all faces on a screen; Other. Participants and clinicians were offered a free response box to explain the “other” response option. They were asked to indicate all that apply.

### *Challenges in Transition to Telebehavioral Health*

Group participants and clinicians were asked one open-ended question about the “unexpected hardships in switching to telebehavioral health.” Group participants and clinicians were also asked to identify what “has been difficult about the CBSST group transition to telehealth” from a checklist of five (for participant survey)/seven items (for clinician survey): technological difficulties; lack of personal connection when meeting virtually; taking telehealth training webinars was burdensome (clinician survey only); learning new protocol (clinician survey only); anxiety about telehealth; client crises are difficult to manage at a distance (clinician survey only); hard to find a confidential space where can participate from home (participant survey only); Other. Participants and clinicians were offered a free response box to explain the “other” response option. They were asked to indicate all that apply.

### *Useful Tools for Facilitators*

Clinicians were asked to identify what “has been useful” in the transition from a checklist of seven items: webinar training on telehealth; creating group norms with group participants (e.g., hand signal to get attention of group members, code word about when need to leave); practicing using Zoom in advance of sessions; drawing on your experience facilitating this group in person; reading research on telehealth practice; teamwork with other group facilitators to troubleshoot problems; Other. Clinicians were offered a free

response box to explain the “other” response option. Clinicians were asked to indicate all that apply.

### *Unhelpful Obstacles for Facilitators*

Clinicians were asked to identify what “has been unhelpful to you in making the transition” from a checklist of six items: lack of relevant research; lack of precedent for virtual group psychotherapy in this clinic; lack of training in telebehavioral health prior to this pandemic; limited previous experience delivering telebehavioral health services; uncertainty and anxiety about the COVID-19 pandemic; Other. Please describe. Clinicians were offered a free response box to explain the “other” response option. Clinicians were asked to indicate all that apply.

### *Impact on Therapeutic Relationship*

Participants were asked to give an open-ended response to the prompt, “describe how switching to telebehavioral health has impacted your relationship with group facilitators.” Similarly, clinicians were asked to provide an open-ended response to the prompt, “describe how switching to telebehavioral health has impacted the therapeutic relationship between facilitators and clients.” Participants were asked to rate, “how has switching to telebehavioral health impacted your relationship with group facilitators?” on a 5-point scale from significantly hurt the therapeutic relationship (1) to significantly improved the therapeutic relationship (5). Using the same scale, clinicians were asked to rate, “how has switching to telebehavioral health impacted the therapeutic relationship between facilitators and clients?”

### *Impact on Participant Engagement*

Participants were asked to give an open-ended response to the prompt, “describe how switching to telebehavioral health impacted your attendance and participation.” Similarly, clinicians were asked to give a free response to the prompt, “describe how switching to telebehavioral health impacted group member engagement (e.g. attendance, participation).” Participants were asked to rate, “how has switching to telebehavioral health impacted your attendance and participation in group activities?” on a 5-point scale from significantly worsened engagement (1) to significantly improved engagement (5). Using the same scale, clinicians were asked to rate, “how has switching to telebehavioral health impacted group member engagement (e.g. attendance, participation)?”

### *Impact on Group Dynamics*

Participants and clinicians were asked to give a free response to the prompt, “describe how switching to

telebehavioral health changed the group dynamics of sense of belonging and mutual support.” Participants and clinicians were also asked to rate “how has switching to telebehavioral health changed the feeling of sense of belonging and mutual support in the CBSST group?” on a 5-point scale from significantly worsened dynamics (1) to significantly improved dynamics (5).

## Results

### Participant Description

Participant A completed the group program and the anonymous survey. Participant A identified as a single, adult Black man, who presented to the clinic for treatment of a psychotic spectrum disorder. During his baseline assessment, the participant scored a 9 on both the PANSS Positive Scale and the PANSS Negative Scale, as well as 23 on the PANSS General Psychopathology Scale, with highest scores related to suspiciousness and anxiety. With a total PANSS score of 41, participant A would fall below the “Markedly Ill” clinical cutoff set forth by Leucht and his colleagues (2005). Despite his reduced psychopathology, participant A still demonstrated a high level of defeatist performance attitude with an overall score of 83 on the DPAS (range 15–105). On the CHOICE, participant A’s mean satisfaction score was 5.76, and his mean severity score was 5.84, indicating above average satisfaction regarding his perceived abilities across cognitive flexibility, problem solving, and social relations. Of note, he rated his ability to cope with group situations as the poorest across both dimensions. At the end of his assessment, the participant was deemed appropriate for the group program and identified his adaptive goal areas as related to employment (“I want to work as a cook”) and housing (“I want to live independently”).

Participant B completed the group program but did not respond to contact attempts for completion of the anonymous survey. Participant B identified as an adult Black woman who presented to the clinic for treatment of a psychotic spectrum disorder. During her baseline assessment, the participant scored a 26 on the PANSS Positive Scale, an 11 on the PANSS Negative Scale, and a 43 on the PANSS General Psychopathology Scale, with highest scores related to delusions, somatic concerns, suspiciousness, and lack of judgment/insight. Given her PANSS total score of 80, participant B appears to fall within the “Moderately Ill” cutoff set forth by Leucht and colleagues (2005). Moreover, her overall score on the DPAS was a 77, indicating a high level of defeatist performance attitude. On the CHOICE, participant B’s mean satisfaction score was 2.96, and her mean severity score was 3.62. Participant

B’s poorest ratings across both dimensions included her ability to cope with unpleasant feelings, her ability to deal with a crisis, feeling safe and secure, facing her own upsetting thoughts and feelings, peace of mind, and sense of being in control of her life. At the end of her assessment, participant B was deemed appropriate for the group program and identified her adaptive goal areas as related to employment (“I want to find an administrative job”) and school (“I want to graduate business school”).

### Participant Engagement

Each group (goal, cognitive, social skills, and problem solving) met 7 times for a total of 28 sessions. Prior to the COVID-19 pandemic, participant A had attended 2 out of 8 in-person group sessions (25% attendance), whereas participant B had attended 6 out of the 8 sessions (75% attendance). During the 2-week gap following the closure of in-person clinic services, both participants quickly expressed interest in continuing the group program and were notably happy to hear that services would continue virtually. Upon transition to telebehavioral health, both participants demonstrated improved attendance, with 8 out of 20 telehealth group sessions attended (40% attendance) for participant A, and 18 out of 20 telehealth sessions attended (90% attendance) for participant B. In addition, for the groups missed, participant A provided advanced notice of conflicts in his schedule and the reasons for his absence, which had not occurred prior to the COVID-19 pandemic.

### Participant Treatment Progress

In addition to his improved attendance, participant A made notable progress towards his treatment goal, as well as increased proficiency in cognitive, social, and problem-solving skills. At the beginning of treatment, participant A identified his long-term goal as “I want to work as a cook or chef.” He indicated his short-term, program goal to be “Practice cooking.” He began to cook Saturday breakfast for his family, at first with the help of his daughter, but soon after cooked independently. By the end of the group program, participant A was regularly cooking Saturday breakfast on his own, and had cooked dinner sides on his own. Due to his continued success, he expressed an interest in learning to cook fried chicken, which he considered a challenging task. As a result, he watched his daughter cook, and made a detailed description of the recipe and ingredients needed. Moreover, regarding his skill acquisition, participant A demonstrated notable improvement in his ability to complete the 3 C’s, use

SCALE to solve problems, and engage in effective social skills.

Similarly, participant B demonstrated progress toward her treatment goal, as well as increased proficiency in cognitive, social, and problem-solving skills. At the beginning of treatment, participant B identified her long-term goal as “I want to find a job in administration.” Her short-term, program goal was to “Apply to jobs” as well as “Update [her] resume.” During the program, participant B applied to a number of jobs, and by the end of group program she was employed as a virtual tutor. Furthermore, regarding her skill acquisition, participant B demonstrated improvement in her ability to identify her thoughts, feelings, and behaviors, as well as her engagement and use of SCALE to solve problems. She also employed and practiced communication skills, such as effectively expressing pleasant and unpleasant feelings, in her home with her parents.

## Survey Results

Six facilitators and one participant completed online anonymous surveys about their experiences during the transition of the CBSST group from traditional in-person to telebehavioral health.

## Overall Transition to Telebehavioral Health

When asked to rate how easy the overall transition to telehealth was for the CBSST, five of the six group facilitators suggested that the process was easy (four reported the transition was moderately easy, one reported the transition was extremely easy) and one facilitator suggested it was neither easy nor difficult. The participant also reported that the transition to telebehavioral health was moderately easy.

## Ease of Transition to Telebehavioral Health

When asked about benefits to use of telebehavioral health, all facilitators and the participant indicated that telebehavioral health helped facilitate continued treatment during the COVID-19 pandemic, technology facilitated treatment engagement, and telebehavioral health eliminated transportation challenges. Five facilitators also indicated that treatment delivery was largely the same virtually as it was in person. Four facilitators noted it was easy to monitor client facial reactions because it was easy to see all faces at once on a screen. Three facilitators noted that the online platform made it easier to share online resources/activities and use an interactive whiteboard via screen share features.

## Challenges in the Transition to Telebehavioral Health

Five facilitators and the participant indicated that technological difficulties were challenging. Some facilitators explained that it took time to learn to fully utilize Zoom, others noted that they sometimes lost connection during the group. The participant noted that it was “frustrating” when there were connectivity challenges in the middle of a session. Additionally, facilitators noted not all participants had wireless internet services and some used lots of their data on smartphones in order to participate. Two facilitators and the participant also described that it was sometimes difficult for participants to find a confidential space to participate in therapy. Two facilitators noted anxiety about telehealth with concerns that the transition would not go well, two facilitators reported that it was difficult to learn new protocol for telehealth, and one facilitator noted that it was burdensome to take telehealth training webinars. One facilitator and the participant indicated feeling a lack of personal connection when meeting virtually compared to when meeting in person.

## Useful Tools for Facilitators

Asked to identify what was helpful in transitioning online, all facilitators reported that their ability to draw on their experience facilitating the group in person before the transition to telebehavioral health and their ability to rely on teamwork with the other group facilitators to troubleshoot problems were helpful. Five facilitators found it helpful to create group norms with participants, including hand signals to get the attention of group members when issues arose, and code words to indicate when a disruption in privacy occurred in the home environment. Five facilitators also found it helpful to practice using the Zoom platform in advance of the session. Two facilitators found webinar trainings to be helpful. Two reported that it was helpful to read research about telebehavioral health practice.

## Unhelpful Obstacles for Facilitators

When asked what was unhelpful in the transition to telebehavioral health, four facilitators noted their limited experience delivering services via telebehavioral health and three noted their lack of training delivering telebehavioral health services prior to the pandemic. Three facilitators noted the lack of research on the topic was unhelpful, and four suggested that the lack of a precedent for virtual group psychotherapy in this

clinic was unhelpful. One facilitator also noted that uncertainty and anxiety about the COVID-19 pandemic was unhelpful for the facilitators and one facilitator noted that this was also unhelpful for the participants.

### **Impact on Therapeutic Relationship**

When asked to assess changes to the therapeutic relationship between participants and facilitators after switching to telebehavioral health, two facilitators reported no change to the relationship, four facilitators and the participant indicated a slight improvement to the therapeutic relationship. Two facilitators explained that increased attendance may have also benefited the therapeutic relationship. Two facilitators and the participant also noted that increased communication with participants outside of groups to remind them about the group may have played a part in strengthening relationships.

### **Impact on Participant Engagement**

All survey participants reported that treatment engagement improved with the transition to telebehavioral health (three facilitators and one participant endorsed significant improvement, and three facilitators endorsed slight improvement). They described that attendance improved, and participants appeared to be more willing to volunteer to participate. Some facilitators also noted that recruitment for the group became easier and future groups that were fully delivered via telehealth had more participants. One facilitator and the participant explained that using telebehavioral health eliminated transportation barriers, which improved attendance.

### **Impact on Group Dynamics**

All facilitators reported that group dynamics improved (four endorsed slight improvement, two endorsed significant improvement). They explained that the group demonstrated increased belonging and mutual support. Others noted that increased attendance likely resulted in group participants building closer relationships. Another explained that group participants may feel more comfortable sharing personal information when they are at home. Additionally, two facilitators pointed out that participants had the shared experience of participating in the group during the global pandemic, which may have contributed to group participants bonding. Another facilitator noted that improvements to group dynamics in subsequent cohorts that were completed fully online. In contrast, the participant reported that there were no changes

to the group dynamic after the transition to telehealth. The participant explained that, when the group is conducted via telehealth, “we have fun just like we did in person.”

## **Discussion**

This study was intended to fill a gap in the literature about how to implement high-quality Cognitive Behavioral Therapy for Psychosis (CBTp) and Social Skills Training (SST) for people with schizophrenia spectrum and other psychotic disorders via telebehavioral health. Not only were two participants able to transition to telehealth and complete the program, both participants also showed notable improvement in treatment engagement, goal progress, and skill acquisition. Surveys of facilitators and one participant highlight how the transition to telebehavioral health had treatment advantages (e.g., therapeutic relationship, treatment engagement, group dynamics). Though survey results highlighted several implementation challenges in using the new virtual platform (e.g., technological connectivity, confidential space for engagement), no survey respondents reported that participation in this program resulted in harm to facilitators or participants. All facilitators and one participant (who completed the survey) agreed that the transition from in-person to virtual services was easy and reduced transportation barriers. Due to the disruption in in-person group psychotherapy at the outpatient client during the COVID-19 pandemic, the use of telebehavioral health facilitated treatment continuity for participants.

Some facilitators noted that the lack of research on this topic and the lack of precedent for psychotherapy groups via telebehavioral health were unhelpful. In an effort to contribute to a gap in the literature, this study attempts to summarize the procedure this team of clinicians took to transition the Cognitive Behavioral Social Skills Training (CBSST) group to telebehavioral health in an outpatient behavioral health clinic. Facilitators noted that their intentional establishment of group norms for telebehavioral health (e.g., procedure for muting, troubleshooting connectivity issues, code words for confidentiality), and practicing using the Zoom platform in advance were helpful to them in transitioning from in-person to virtual services. Additionally, the team noted that a strong sense of collaboration and teamwork among the facilitators was key to troubleshooting inevitable challenges.

The telebehavioral health challenges that facilitators and the participant noted in their surveys identify some important areas for improvement in future interventions. For example, facilitators and the participant noted technology difficulties, which suggests that

efforts to improve participant connectivity (e.g., grant writing to secure adequate technology, instruction about boosting internet speed through use of an ethernet cable) and proficiency with technology (e.g., brief training in use of software) may facilitate treatment engagement. Additionally, challenges in finding a confidential space to engage in therapy suggests that efforts to find a secure location that is convenient to the participant (e.g., community center, community mental health clinic) may facilitate engagement. For example, had such an option for a safe, private space been available during this group's transition to telebehavioral health, one CBSST group participant would have had the option to continue with treatment during the COVID-19 pandemic.

Given the limited treatment engagement for this population (Lora et al., 2012) and the importance of early intervention to maximize clinical outcomes (Black et al., 2001; Bottlender et al., 2003), unanimous facilitator and participant report about improved participant attendance and participation in treatment after the transition to telebehavioral health was key. Consistent with that report, anecdotally CBSST group sizes have grown since the transition to telebehavioral health. Prior to the COVID-19 pandemic, four group cohorts had completed the program with group sizes ranging from 4 to 6 individuals. Since the completion of the group summarized in this article, one group cohort has completed the program entirely virtually with 8 individuals. However, there were still challenges to treatment engagement (one participant attending 43% of sessions and the other attending 89% of sessions), which highlights the need for more rigorous and controlled study to assess whether treatment engagement differs when services are provided in person or online.

The small group size in this case study likely influenced the experience for participants. The cohort participants tended toward more isolative and withdrawn functioning, possibly associated with their identified psychiatric conditions. The program purposefully kept group sizes small and had a minimum of two, and usually three, clinicians functioning as participant facilitators. This group composition insured a quasi-safe group "feel" even when only one cohort participant was present and more individualized attention even when there were more cohort participants. In some ways doing the groups virtually had a stronger individual, more intimate orientation due to separate, unique physical location characteristics and a greater focus on facial expressions and upper body characteristics. There was not time or opportunity for cohort participants to informally interact outside the structured group time and there appeared to be little to no out-

of-group contact frequently seen among in-person group members.

There are likely some unique contributing factors due to the timing of this group. The facilitated group interaction at the onset of the global pandemic likely contributed to a positive group atmosphere and shared lived experience for clinicians and clients. In an effort to adhere to social distancing guidelines to control the spread of COVID-19, clients were connecting to the virtual platforms from their homes. Moving the group from in-person to virtual may have afforded some increased sense of intimacy. For example, participants and facilitators were seeing into each other's homes, which sometimes involved seeing pets and other aspects of one's home. In terms of group activities, groups continued to be private and confidential, requiring participants to stay in a private room in their home or car. Thus, our participant working towards cooking was not able to be in his kitchen to demonstrate his progress, as this was not a private space. However, during certain role-play activities, our participants and facilitators were asked to incorporate items from the home.

There were other individuals who were interested in participating in the group, but were unable to at that time due to lack of privacy (e.g., living in a homeless shelter) or inconsistent access to video platform (e.g., unable to afford mobile data on their device). This likely created a selection bias in our final pool of participants. Additional outreach efforts are needed to reach those who are unstably housed with limited means for technology to ensure equal access to virtual platforms.

## Future Research

Though results of this case study are promising and suggest that telebehavioral health could be a viable modality for providing psychosocial treatment to people with schizophrenia spectrum and other psychotic disorders, more rigorous study is needed. It is recommended that future research use a randomized control trial model to assess clinical outcomes, treatment engagement, therapeutic relationship, and group dynamics comparing participants in in-person CBSST groups to those delivered via telebehavioral health. Given the potential temporal influences of the pandemic on treatment engagement in this study, it would be important to continue to engage in this research after the resolution of the COVID-19 pandemic. Additionally, large-scale assessment of health care service utilization data could help describe demographically who was more likely to gain access to care after services transitioned to telebehavioral health and who lost access to care after being served in-person. More con-

trolled study about whether offering services via telebehavioral health improves accessibility of services for those with psychotic spectrum disorders is needed, with attention to session attendance, patient satisfaction with care, and likelihood of treatment engagement after referral to care. Particular attention needs to be paid to accessibility of care for those living in rural settings whether there are no local in-person providers, those with physical disabilities, and those with limited incomes for whom transportation might be a challenge.

The COVID-19 pandemic has dramatically increased the use of telehealth (Mann et al., 2020). As the vaccines are rolled out and the population approaches herd immunity, clinicians in various treatment settings will be faced with the decision about whether to transition all care back to in-person or whether to continue to provide some interventions virtually. Further research (as indicated above) about treatment outcomes, engagement, and satisfaction with services will be helpful to clinicians in deciding whether to continue to provide such services via telehealth.

## References

- Alvarez-Jimenez, M., Alcazar-Corcoles, M. A., Gonzalez-Blanch, C., Bendall, S., McGorry, P. D., & Gleeson, J. F. (2014). Online, social media and mobile technologies for psychosis treatment: A systematic review on novel user-led interventions. *Schizophrenia Research, 156*(1), 96–106.
- American Psychiatric Association (2015). *Schizophrenia Spectrum and Other Psychotic Disorders: DSM-5® Selections*. American Psychiatric Pub.
- Black, K., Peters, L., Rui, Q., Milliken, H., Whitehorn, D., & Kopala, L. (2001). Duration of untreated psychosis predicts treatment outcome in an early psychosis program. *Schizophrenia Research, 47* (2–3), 215–222.
- Bottlender, R., Sato, T., Jäger, M., Wegener, U., Wittmann, J., Strauß, A., & Möller, H. J. (2003). The impact of the duration of untreated psychosis prior to first psychiatric admission on the 15-year outcome in schizophrenia. *Schizophrenia Research, 62*(1–2), 37–44.
- Cane, D. B., Olinger, L. J., Gotlib, I. H., & Kuiper, N. A. (1986). Factor structure of the dysfunctional attitude scale in a student population. *Psychodiagnostic Processes: Personality Inventories and Scales, 42*, 307–309.
- Dorsey, E. R., & Topol, E. J. (2016). State of telehealth. *New England Journal of Medicine, 375*(2), 154–161.
- Granholt, E., Holden, J., Link, P. C., & McQuaid, J. R. (2014). Randomized clinical trial of cognitive behavioral social skills training for schizophrenia: Improvement in functioning and experiential negative symptoms. *Journal of Consulting and Clinical Psychology, 82*(6), 1173.
- Granholt, E., Holden, J., Link, P. C., McQuaid, J. R., & Jeste, D. V. (2013). Randomized controlled trial of cognitive behavioral social skills training for older consumers with schizophrenia: Defeatist performance attitudes and functional outcome. *The American Journal of Geriatric Psychiatry, 21*(3), 251–262.
- Granholt, E., McQuaid, J. R., & Holden, J. L. (2016). *Cognitive-behavioral social skills training for schizophrenia: A practical treatment guide*. Guilford Publications.
- Granholt, E., McQuaid, J. R., Link, P. C., Fish, S., Patterson, T., & Jeste, D. V. (2008). Neuropsychological predictors of functional outcome in Cognitive Behavioral Social Skills Training for older people with schizophrenia. *Schizophrenia Research, 100*(1–3), 133–143.
- Granholt, E., McQuaid, J. R., McClure, F. S., Auslander, L. A., Perivoliotis, D., Pedrelli, P., Patterson, Thomas, & Jeste, D. V. (2005). A randomized, controlled trial of cognitive behavioral social skills training for middle-aged and older outpatients with chronic schizophrenia. *American Journal of Psychiatry, 162*(3), 520–529.
- Greenwood, K. E., Sweeney, A., Williams, S., Garety, P., Kuipers, E., Scott, J., & Peters, E. (2010). CHOICE of outcome in CBT for psychoses (CHOICE): The development of a new service user-led outcome measure of CBT for psychosis. *Schizophrenia Bulletin, 36*(1), 126–135.
- Kasckow, J., Felmet, K., Appelt, C., Thompson, R., Rotondi, A., & Haas, G. (2014). Telepsychiatry in the assessment and treatment of schizophrenia. *Clinical Schizophrenia & Related Psychoses, 8*(1), 21–27A.
- Kay, S. R., Fiszbein, A., & Opler, L. A. (1967). The positive and negative syndrome scale (PANSS) for schizophrenia. *Schizophrenia Bulletin, 13*(2), 261–276.
- Kopelovich, S. L., & Wood, K. (2017). Schizophrenia spectrum and other psychotic disorders: Treatment. In A. Wenzel (Ed.), *The SAGE encyclopedia of abnormal and clinical psychology* (pp. 2976–2980). SAGE Publications.
- Kozloff, N., Mulsant, B. H., Stergiopoulos, V., & Voineskos, A. N. (2020). The COVID-19 Global Pandemic: Implications for People With Schizophrenia and Related Disorders. *Schizophrenia Bulletin*.
- Kreyenbuhl, J., Buchanan, R. W., Dickerson, F. B., & Dixon, L. B. (2010). The schizophrenia patient outcomes research team (PORT): Updated treatment recommendations 2009. *Schizophrenia Bulletin, 36*(1), 94–103.
- Leucht, S. (2014). Measurements of response, remission, and recovery in schizophrenia and examples for their clinical application. *Journal of Clinical Psychiatry, 75*(1), 8–14.
- Leucht, S., Kane, J. M., Kissling, W., Hamann, J., Etschel, E., & Engel, R. R. (2005). What does the PANSS mean? *Schizophrenia Research, 79*(2–3), 231–238.
- Lora, A., Kohn, R., Levav, I., McBain, R., Morris, J., & Saxena, S. (2012). Service availability and utilization and treatment gap for schizophrenic disorders: A survey in 50 low-and middle-income countries. *Bulletin of the World Health Organization, 90*, 47–54B.
- Moreno-Küstner, B., Martín, C., & Pastor, L. (2018). Prevalence of psychotic disorders and its association with methodological issues. A systematic review and meta-analyses. *PLoS One, 13*(4).
- Mueser, K. T., Deavers, F., Penn, D. L., & Cassisi, J. E. (2013). Psychosocial treatments for schizophrenia. *Annual Review of Clinical Psychology, 9*, 465–497.
- Naslund, J. A., Marsch, L. A., McHugo, G. J., & Bartels, S. J. (2015). Emerging mHealth and eHealth interventions for serious mental illness: A review of the literature. *Journal of Mental Health, 24*(5), 321–332.
- Sharp, I. R., Kobak, K. A., & Osman, D. A. (2011). The use of videoconferencing with patients with psychosis: A review of the literature. *Annals of General Psychiatry, 10*(1), 14.
- Mann, D. M., Chen, J., Chunara, R., Testa, P. A., & Nov, O. (2020). COVID-19 transforms health care through telemedicine: Evidence from the field. *Journal of the American Medical Informatics Association, 27*(7), 1132–1135. <https://doi.org/10.1093/jamia/ocaa072>.

We thank our team of facilitators and group participants for participating in the CBSST group and follow-up survey amid the COVID-19 global pandemic.

Address correspondence to Hannah Joseph, Georgia State University, Department of Psychology, 140 Decatur St., Suite 1113, Atlanta, GA 30303. e-mail: [hjoseph8@student.gsu.edu](mailto:hjoseph8@student.gsu.edu).

*Received: August 31, 2020*

*Accepted: June 19, 2021*

Available online 28 July 2021