# Randomized Controlled Trial of a Brief Video Intervention to Reduce Self-Stigma of Mental Illness

Doron Amsalem, MD; Samantha E. Jankowski, MA; Philip Yanos, PhD; Lawrence H. Yang, PhD; John C. Markowitz, MD; R. Tyler Rogers, MA; T. Scott Stroup, MD; Lisa B. Dixon, MD, MPH; and Leah G. Pope, PhD

#### Abstract

Objective: Self-stigma, a phenomenon wherein individuals internalize self-directed negative stereotypes about mental illness, is associated with negative outcomes related to recovery. This randomized controlled study assessed the efficacy of a brief social contact—based video intervention in reducing self-stigma in a large sample of individuals ages 18–35 endorsing an ongoing mental health condition. We hypothesized that the brief video would reduce self-stigma.

**Methods:** In January and February 2023, we recruited and assigned 1,214 participants to a brief video-based intervention depicting a young individual living with mental illness sharing his personal story or to a non-intervention

control. In the 2-minute video, informed by focus groups, a young individual described struggles with mental illness symptoms; this was balanced with descriptions of living a meaningful and productive life. Self-stigma assessments (Stereotype Endorsement, Alienation, Stigma Resistance, Perceived Devaluation Discrimination, Secrecy, and Recovery Assessment Scale) were conducted pre- and post-intervention and at 30-day follow-up.

**Results:** A  $2 \times 3$  group-by-time analysis of variance showed that mean self-stigma scores decreased in the intervention arm relative to control across 5 of 6 self-stigma domains: Stereotype Endorsement (P=.006), Alienation (P<.001), Stigma Resistance (P=.004), Secrecy (P<.001), and Recovery Assessment Scale (P<.001).

Cohen *d* effect sizes ranged from 0.22 to 0.46 for baseline to post-intervention changes. Baseline and 30-day follow-up assessments did not significantly differ.

Conclusions: A 2-minute social contact—based video intervention effectively yielded an immediate but not a lasting decrease in self-stigma among young individuals with ongoing mental health conditions. This is the first study to examine the effect of a video intervention on self-stigma. Future trials of self-stigma treatment interventions should explore whether combining existing interventions with brief videos enhances intervention effects.

**Trial Registration:** NCT05878470 *J Clin Psychiatry 2024;85(1):23m15034 Author affiliations are listed at the end of this article.* 

ental illness stigma is an umbrella term referring to a series of processes that result from the attachment of negative stereotypes to the label of mental illness, including beliefs that having mental illness implies incompetence, dangerousness, and inability to recover. These negative stereotypes lead many community members to discriminate against, and socially distance themselves from, people diagnosed with mental illnesses. People living with mental illnesses, in turn, often recognize these negative stereotypes and, anticipating discrimination from others, avoid both social interaction and seeking mental health services.<sup>2</sup> Even more insidiously, negative stereotypes may be internalized, with individuals believing themselves incompetent or unable to recover. The "illness identity" model posits that internalized/self- stigma is associated with a range of recovery-related negative outcomes, including impaired hope, self-esteem, social

relationships, employment, and treatment adherence and worsening symptom severity. A recent review found consistent support for this pattern of relationships irrespective of diagnostic makeup or geographic location.<sup>3,4</sup>

These consequences of self-stigma on recovery make it essential to create interventions to reduce it. Existing interventions include manualized, group-based approaches such as Narrative Enhancement and Cognitive Therapy (NECT), 5 Coming Out Proud, 6 Anti-Stigma Photovoice, 7 and Ending Self Stigma. 8 These time-consuming, resource-intensive interventions are generally delivered face to face and use psychoeducational and cognitive approaches to counter stigmatizing beliefs about mental illness. 9

For example, NECT, a structured, 20-session groupbased program, combines psychoeducation and cognitive restructuring. NECT focuses on teaching and practicing skills to challenge negative thoughts about the self,

Scan Now



Cite and Share this article at Psychiatrist.com

## **Editor's Note**

We encourage authors to submit papers for consideration as a part of our Early Career Psychiatrists section. Please contact Joseph F. Goldberg, MD, at jgoldberg@psychiatrist.com.

## **Clinical Points**

- Existing self-stigma interventions target individuals in group settings who are already in treatment; these interventions are relatively lengthy, costly, and challenging to disseminate.
- Brief videos are effective in reducing self-stigma (short-term) among people living with a mental health

with narrative psychotherapy elements emphasizing meaning-making and transforming one's life story in more uplifting ways. Coming Out Proud<sup>6</sup> and Honest, Open, Proud<sup>10</sup> explore the risks and benefits of disclosing mental health conditions in order to increase empowerment.6 Another self-stigma-reducing intervention is Anti-Stigma Photovoice,<sup>11</sup> a group-based approach that empowers people living with serious mental illness by giving them cameras to document their experiences and inform social action. During 6 weekly sessions, participants discuss photographs and events that reflect recovery and wellness. Photovoice has been shown to improve community participation.<sup>11</sup> All of these interventions have been shown to reduce self-stigma.9 However, because such interventions target people in group settings who are already in treatment, they likely miss important, vulnerable populations of people who are not connected to mental health treatment.

Online interventions can reach a wider audience than face-to-face interventions, including people reluctant to seek mental health care (perhaps due to self-stigma); they also offer anonymity to individuals reluctant to socialize.<sup>12</sup> Existing interventions to reduce other types of stigma, such as public stigma (negative attitudes and behaviors toward individuals with mental health problems),13 have utilized social contact-based approaches, which involve exposure to an individual with a stigmatized illness to disconfirm stereotypes. 14,15 These interventions have demonstrated effectiveness in both video and in-person formats.16 In our prior randomized controlled trials,17-21 we demonstrated the efficacy of brief 60-120 second social contact-based videos in reducing public stigma in young adults at post-intervention and 30-day follow-up. We focused on youth because of their age overlap with the onset of many mental health conditions and the possibility of early intervention before stigma attitudes crystallize.

No research has evaluated brief contact-based video interventions for reducing self-stigma. We have shown that brief videos reduce public stigma, but it remains unclear whether they will produce similar benefits for self-stigma. Brief videos have the advantages of easy distribution, lower cost, and the ability to reach youth who consume internet-based content. Thomas et al<sup>12</sup> posit that video self-stigma interventions using a positive role model presenter may have an impact similar to public

stigma interventions by disconfirming stereotypes and promoting empowerment. Following the Corrigan et al<sup>6</sup> theme of "coming out," videos may model the benefits and challenges of an in-person discussion of stigma and mental health concerns.12 Therefore, this randomized controlled study evaluated efficacy of a brief video in self-stigma reduction at baseline, post, and 30-day follow-up for 18- to 35-year-olds endorsing mental health conditions. Participants were randomly assigned to a video intervention or non-intervention control group. We hypothesized that the brief video would reduce self-stigma.

## **METHODS**

## **Participants and Recruitment Procedure**

In January and February 2023, we recruited participants who reported ongoing mental health conditions using Prolific, a crowdsourcing platform often used in psychiatric research.<sup>22</sup> The platform ensures respondent consistency in sociodemographic and other responses over time, runs checks to identify bots, blocks participants who conceal their location, and creates anonymous unique Prolific participant IDs.<sup>23</sup> To further verify the accuracy of results, we excluded participants who failed attention-testing questions (eg, "In the following question, please choose the fourth answer") and added a timer to ensure that participants viewed the video (100 seconds) before the "next" button appeared. We included only English-speaking, 18- to 35-year-old US residents who answered affirmatively to: "Do you have-or have you had—a diagnosed, ongoing mental health/illness/ condition?" Participants were compensated \$1.10 per study step, with maximum compensation of \$2.20. This study was registered with ClinicalTrials.gov (NCT05878470). The New York State Psychiatric Institute Institutional Review Board approved the project. Participants first reviewed an informed consent form. Those agreeing to participate were directed to complete the study procedures via Qualtrics, a secure, online data collection tool.

#### Intervention

We compared efficacy of a brief (119 seconds) social contact-based video to a non-intervention control. People with lived experience of serious mental illness collaborated in developing the video. We conducted 2 focus groups of people (n = 12) with serious mental illness to inform video content and drafted a video script that included direct quotes from focus group participants. We then reconvened the two groups (n = 9) to elicit feedback and suggested edits. Focus group transcripts were analyzed using thematic content analysis.<sup>24</sup> The emergent themes and input of the post-video focus groups were published separately.25 Themes emerging in the process included the following: the negative effects of being diagnosed with SMI; being stereotyped; the value of relatable, recovery stories and seeing the person as a whole; and the utility of focusing on symptoms and experiences rather than diagnosis-specific language. These themes align with existing literature on reducing self-stigma. The video presented a young Black man in his early twenties, a professional actor, sharing his scripted personal story of struggles with psychotic illness and raising themes of recovery and hope ("It was hard to get to work because I'd hear voices" . . . "things got better and started changing once I started thinking that I have an illness but I'm not the illness" . . . "there are so many doctors and support groups that can understand and help you if you let them"). The video is available at https://vimeo.com/714556741/d51f44c67e.

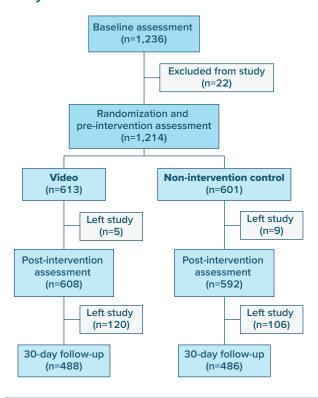
#### Instruments

We assessed self-stigma using 23 items across 6 domains: Stereotype Endorsement, Alienation, Stigma Resistance, Perceived Devaluation Discrimination, Secrecy, and Recovery Assessment Scale. We analyzed each subscale separately. Three subscales of the Internalized Stigma of Mental Illness, each comprising 4 items, <sup>26</sup> assessed Stereotype Endorsement (eg, "Mentally ill people shouldn't get married"), Alienation (eg, "I am embarrassed or ashamed that I have a mental illness"), and Stigma Resistance (eg, "I can have a good, fulfilling life, despite my mental illness") (Cronbach  $\alpha = 0.71$ , 0.82, and 0.62, respectively). Four items of Perceived Devaluation Discrimination<sup>27</sup> measured perceived likelihood of a person with mental illness being accepted as a close friend or potential date or being hired for a job ( $\alpha$  = 0.71). Three Secrecy items, derived from Link et al,<sup>27</sup> measured whether a person with mental illness should reveal it to others (eg, "If you have ever been treated for a serious mental illness, the best thing to do is to keep it a secret"). The 3 items had good internal consistency in our sample ( $\alpha = 0.85$ ). Four items from the 41-item Recovery Assessment Scale<sup>28</sup> assessed perceived recovery, namely, participant hopefulness about the future, willingness to ask for help, ability to handle life events, and feeling that something good will eventually happen ( $\alpha = 0.80$ ). Responses range from 1 ("strongly agree") to 4 ("strongly disagree"), with a fifth option ("I prefer not to answer").

### **Analysis**

The main outcome measures were reduction in mean stigma scores across each of the 6 domains (Stereotype Endorsement, Alienation, Stigma Resistance, Perceived Devaluation Discrimination, Secrecy, and Recovery Assessment Scale). Participants were randomized to either intervention or control arms, with sample size calculation based on our previous studies.  $^{17-21}$  Pearson  $\chi^2$  and independent t tests compared sociodemographic characteristics across groups. Repeated measures analysis of variance (ANOVA) compared the mean stigma score as the sum of each stigma domain between intervention and control arms over 3 time points. We used independent t tests to compare group changes between baseline and post-

Figure 1. **Study Profile** 



intervention and between baseline and 30-day follow-up. As an exploratory analysis, independent sample *t* tests compared Black and non-Black individuals' results within each group. Data were analyzed using SPSS version 28.0.

## **RESULTS**

## **Sample Characteristics**

After we excluded 22 (2%) participants who failed validity tests, 1,214 individuals completed the preintervention assessment. Of these, 1,200 (99%) completed post-intervention assessment, and 974 (80%) completed 30-day follow-up assessment (Figure 1). Sociodemographic characteristics did not differ across study arms (Table 1), nor did baseline characteristics between follow-up completers and non-completers. Mean  $\pm$  SD participant age was  $28.0 \pm 4.7$  years (range, 18-35). Roughly half of the participants were female (n = 621, 51%). One hundred thirty-nine (11%) participants self-identified as Hispanic; 61 (6%), as non-Hispanic Black; 880 (82%), as non-Hispanic White; 82 (8%), as non-Hispanic Asian; 10 (1%), as non-Hispanic Native American; and 42 (4%), as Other.

#### **Intervention Effects**

Outcomes differed significantly between study arms. A  $2 \times 3$  group-by-time ANOVA showed mean self-stigma scores decreased in the intervention arm relative to control across 5 of the 6 self-stigma domains:

Table 1. **Demographic Characteristics of Study Participants** 

Items		Video (n = 613)		rol 01)	Tot (n = 1,		Statistic		
	Mean	SD	Mean	SD	Mean	SD	t	P	
Ageª	28.2	4.6	27.7	4.7	28.0	4.7	1.80	.071	
	n	%	n	%	n	%	$\chi^{2,b}$		
Gender							3.47	.324	
Women	303	49	318	53	621	51			
Men	253	41	237	39	490	40			
Transgender/ non-binary/other	57	9	43	7	103	9			
Race and ethnicity							2.44	.785	
Hispanic	73	12	66	11	139	11			
Non-Hispanic Black	33	6	28	5	61	6			
Non-Hispanic White	444	82	436	82	880	82			
Non-Hispanic Asian	41	8	41	8	82	8			
Non-Hispanic Native American	5	1	5	1	10	1			
Non-Hispanic Other <sup>c</sup>	17	3	25	5	42	4			
Education							7.51	.276	
Never completed high school	5	1	8	1	13	1			
High school graduate	104	17	92	15	196	16			
Some college credit	220	36	204	34	424	35			
Bachelor's degree	204	33	237	39	441	36			
Master's degree	63	10	49	8	112	9			
Doctorate degree	16	3	10	2	26	2			

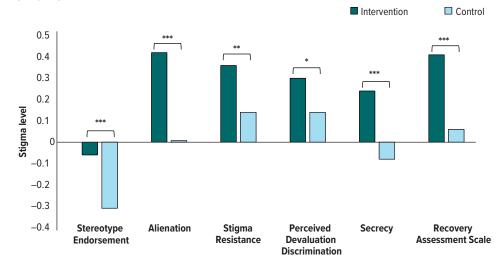
alndependent t tests.

Stereotype Endorsement ( $F_2 = 5.2, P = .006$ ), Alienation  $(F_2 = 13.1, P < .001)$ , Stigma Resistance  $(F_2 = 5.5, P = .004)$ , Secrecy ( $F_2 = 13.2, P < .001$ ), and Recovery Assessment Scale ( $F_2 = 15.0, P < .001$ ). The sixth domain, Perceived Devaluation Discrimination, approached significance  $(F_2 = 2.9, P = .057)$ . Figure 2 presents the mean score differences between video intervention and control groups between baseline and post-intervention across stigma domains, showing that the control arm changed only slightly, in contrast to the intervention arm. Independent t tests showed significant between-group differences between the video intervention and control from baseline to post-intervention across all 6 stigma domains (Table 2). Cohen d effect sizes ranged from 0.22 to 0.46 for baseline to post-intervention changes. We found no difference between baseline and 30-day followup assessments as scores returned to baseline levels.

Table 3 presents mean scores and standard deviations of the 23 self-stigma items and compares baseline to postintervention changes between video intervention and control groups. Changes in 17 items (74%) differed significantly between video and control groups from baseline to postintervention. For example, for "I feel inferior to others who don't have a mental illness" (Alienation), mean scores changed from  $2.3 \pm 1.0$  (range 1-4) at baseline to  $2.1 \pm 1.0$  at post-intervention in the intervention group (t = 5.4, P < .001), whereas the control group showed no change. Baseline and 30-day follow-up assessments did not significantly differ.

To better understand specific components driving these changes, we conducted a secondary item-level analysis. As

Figure 2. Mean Score Differences Between Video Intervention (n=613) and Control (n=601) Groups Between Baseline and Post-Intervention Across Stigma **Domains**<sup>a</sup>



<sup>&</sup>lt;sup>a</sup>Higher scores indicate greater change in stigma: Stereotype Endorsement, range 4–16; Alienation, range 4–16; Stigma Resistance, range 4–16; Perceived Devaluation Discrimination, range 4–16; Secrecy, range 3–12; Recovery Assessment Scale, range 4–16. Independent t tests: t ranged from 2.5 to 5.9 for baseline-post changes, \*P=.013, \*\* P<.001, \*\*\*P<.001. Cohen d effect sizes ranged from 0.22 to 0.46 for baseline-post changes.

<sup>&</sup>lt;sup>b</sup>Pearson χ<sup>2</sup>.

<sup>&</sup>lt;sup>c</sup>Non-Hispanic Other: multiracial (n=39), Middle Eastern (n=2), unspecified (n = 1).

the protagonist in the video was a Black man, we examined whether race and gender had greater influence on people with similar characteristics. No gender differences were found between video and control groups, but Black individuals reported greater self-stigma reduction than non-Black individuals in the Secrecy domain (baseline/post-intervention change = 0.84 vs 0.19; t = 3.4, P < .001) only in the video group (Figure 3). However, only 78 (7%) of respondents were Black individuals, with only 41 assigned to video intervention, limiting power to find a difference.

Table 2.

Comparison of Changes From Baseline to Post-Intervention in Stigma Scores Between Study Arms<sup>a</sup>

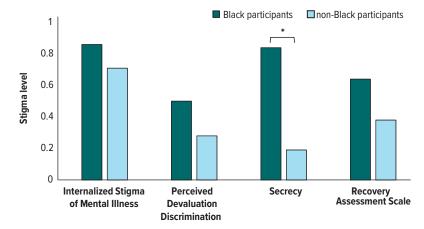
	Video (n = 608)		Control (n = 592)
Stigma domain	Mean	SE	Mean SE t
Stereotype Endorsement	-0.06	0.05	-0.31 0.04 3.5***
Alienation	0.42	0.06	.007 0.04 5.6***
Stigma Resistance	0.36	0.05	0.14 0.04 3.3**
Perceived Devaluation Discrimination	0.30	0.05	0.14 0.04 2.5*
Secrecy	0.24	0.04	-0.07 0.03 5.5***
Recovery Assessment Scale	0.41	0.05	0.07 0.03 5.9***

<sup>a</sup>Higher scores indicates higher stigma; Stereotype Endorsement (range 4–16); Alienation (range 4–16); Stigma Resistance (range 4–16); Perceived Devaluation Discrimination (range 4–16); Secrecy (range 3–12); Recovery Assessment Scale (range 4–16). Cohen *d* effect sizes ranged from 0.22 to 0.46 for baseline–post changes.

Abbreviation: SE=standard error.

Figure 3.

Mean Change Differences Between Video Intervention
Groups in Black Participants (n=41) and Non-Black
Participants (n=564) Between Baseline and PostIntervention Across Stigma Domains<sup>a</sup>



<sup>&</sup>lt;sup>a</sup>Higher scores indicate greater change in stigma: Internalized Stigma of Mental Illness, range 12–48; Perceived Devaluation Discrimination, range 4–16; Secrecy, range 3–12; Recovery Assessment Scale, range 4–16.

## **DISCUSSION**

Our randomized controlled trial tested the utility of a brief intervention in reducing self-stigma among 1,214 young individuals reporting mental health conditions. Focus groups of people with lived experience informed the video of a young Black man sharing his personal struggles with psychosis while raising themes of recovery and hope. As hypothesized, and complementing our previous public stigma findings, the video-based intervention yielded lower immediate post-intervention rates of self-stigma than the non-intervention control. This effect proved transient, however. This is the first study to demonstrate self-stigma reduction among young adults with ongoing mental health conditions. The extremely brief intervention required minimal resources and could easily be used to reach a wider audience.

The effect of the social contact—based video on stigma reduction corroborates literature emphasizing that stories of recovery are associated with destigmatizing mental illnesses. 14,29–31 Li et al31 tested reactions of 191 general public participants (ages 17–62, mean age 21) after viewing several videos of a person living with schizophrenia discussing either his symptoms or recovery. Emphasizing recovery-oriented themes lowered stigma more than symptom-based content. However, each video lasted about 10 minutes, and the study took place in a university social psychology laboratory. Our online 2-minute video intervention targeted people with lived experience of mental illness. Brevity has advantages: lower cost, fewer resources, and greater ease of dissemination to large audiences. Traditionally, young adult social

contact interventions have taken place in educational environments like colleges and schools.32,33 An emerging trend toward online platforms has accelerated dramatically since the COVID-19 pandemic, changing the dissemination of knowledge and increasing use of social media and the internet.34,35 Brief videos better suit younger audiences. In an era of brief knowledge bites, mostly consumed via social media (eg, Instagram or TikTok), shorter interventions may better capture young viewer's attention spans. Future research should define the optimal length for sustainable interventions for stigma reduction and who is most likely to benefit.

Our negative 30-day follow-up findings diverge from our previous studies showing longer-term effects of brief video interventions in reducing public stigma toward people living with psychosis.<sup>17–21</sup> Perhaps the difference between public and self-stigma explains this. Public stigma refers to

permissions@psychiatrist.com. | © 2024 Physicians Postgraduate Press, Inc.

<sup>\*</sup>P<.05. \*\*P=.001. \*\*\*P<.001.

<sup>\*</sup>Independent t tests: t = 3.4, P < .001.

Table 3. Comparison Between Video and Control Groups at Baseline and Post-Intervention<sup>a</sup>

	Baseline				Post-Intervention					es From
	Video		Control		Video		Control		Baseline to Post-Intervention	
Items	Mean	SD	Mean	SD	Mean	SD	Mean	SD	t	р
Internalized Stigma of Mental Illness										
Stereotype Endorsement										
1 People with mental illness cannot live a good, rewarding life	1.4	0.6	1.3	0.6	1.4	0.7	1.5	8.0	NS	NS
2 Mentally ill people shouldn't get married	1.2	0.5	1.2	0.5	1.2	0.5	1.3	0.5	NS	NS
3 Because I have a mental illness, I need others to make most decisions for me	1.4	0.6	1.4	0.6	1.4	0.6	1.4	0.6	3.4	***
4 I can't contribute anything to society because I have a mental illness	1.3	0.6	1.3	0.5	1.3	0.6	1.3	0.6	2.6	**
Alienation										
5 I am embarrassed or ashamed that I have a mental illness	2.1	0.9	2.0	0.9	2.0	0.9	2.0	0.9	2.2	*
6 I am disappointed in myself for having a mental illness	2.0	0.9	2.0	1.0	1.9	0.9	2.0	0.9	4.1	***
7 I feel inferior to others who don't have a mental illness	2.3	1.0	2.3	1.0	2.1	1.0	2.2	1.0	5.4	***
8 People without mental illness could not possibly understand me	2.4	0.9	2.4	0.8	2.4	0.9	2.4	0.9	3.3	**
Stigma Resistance										
9 I feel comfortable being seen in public with an obviously mentally ill person	2.1	8.0	2.1	8.0	2.0	8.0	2.0	8.0	2.0	*
10 I can have a good, fulfilling life, despite my mental illness	1.7	0.7	1.7	0.7	1.6	0.7	1.6	0.7	NS	NS
1 People with mental illness make important contributions to society	1.4	0.6	1.4	0.5	1.4	0.5	1.4	0.6	2.8	**
12 Living with mental illness has made me a tough survivor	1.9	8.0	1.9	0.8	1.8	0.8	1.9	0.7	3.2	**
Perceived Devaluation Discrimination										
3 Most people would accept a person with mental illness as a close friend	2.2	0.7	2.1	0.7	2.1	0.7	2.1	0.7	NS	NS
14 Most people would be reluctant to date a person who has been hospitalized for serious mental disorder	2.5	0.8	2.5	0.8	2.5	8.0	2.5	8.0	NS	NS
15 Most employers will hire a former mental patient if he or she is qualified for the job	2.5	8.0	2.5	8.0	2.3	0.7	2.4	0.7	3.7	***
16 Most employers will pass over the application of a former mental patient in favor of another applicant	2.8	0.7	2.8	0.8	2.7	0.7	2.8	0.7	NS	NS
Secrecy										
17 You believe that a person who has recovered from a mental illness experienced earlier in life should not tell other people about it	1.7	0.7	1.7	0.7	1.6	0.7	1.7	0.7	4.8	***
18 If you have ever been treated for a serious mental illness, the best thing to do is to keep it a secret	1.6	0.7	1.7	0.7	1.6	0.7	1.7	8.0	4.0	***
19 In view of society's negative attitudes toward people with serious mental illnesses, you would advise people with serious mental illnesses to keep it a secret	1.9	8.0	1.9	0.8	1.7	8.0	1.9	8.0	3.4	***
Recovery Assessment Scale										
20 I can handle what happens in my life	2.0	0.7	2.0	0.6	1.9	0.7	1.9	0.6	2.2	*
21 Something good will eventually happen	1.8	0.7	1.7	0.7	1.7	0.7	1.8	0.7	3.9	***
22 I'm hopeful about my future	2.0	8.0	2.0	8.0	1.9	0.8	1.9	0.8	2.4	*
23 I am willing to ask for help	2.0	8.0	2.0	0.8	1.9	0.7	2.0	0.8	5.4	***

changes from baseline to post-intervention between video and control groups: \*P<.05. \*\*P<.01. \*\*\*P<.001.

negative attitudes and beliefs against people with mental illness, whereas self-stigma refers to internalization of public stereotypes, lessening hope and self-esteem and leading to negative effects on recovery outcomes among people living with mental illnesses. 4,13,36 Self-stigma, being more personal, appears harder to enduringly change. Other self-stigma interventions showed longer effects<sup>5,6,37</sup> but included much longer interventions: 20 sessions (NECT<sup>5</sup>), 10 sessions (Photovoice<sup>38</sup>), or three 2-hour sessions (Coming Out Proud<sup>6</sup>).

What could promote a more lasting effect? Options might include several videos presenting people with differing recovery stories, or a series of videos presenting different aspects of the same protagonist's recovery process. Our previous studies showed a beneficial effect for an

additional "booster" video in increasing help-seeking intentions among a group of affected health care and other essential workers during the COVID-19 pandemic. 38,39 Social media influencers widely employ the latter approach on social media platforms to connect with young audiences. For example, a recent study<sup>40</sup> showed the important effect of social media influencers on suicide. Tweets graphically describing suicide deaths were harmful, whereas those presenting suicide as undesirable or preventable were helpful.<sup>40</sup> These results suggest social media influencers as potential vectors for intervention. Future studies should explore these avenues for self-stigma reduction, test the optimal number of presenters/videos and time intervals, and assess whether they affect longer-term results.

Another pathway is to incorporate brief video

interventions into existing self-stigma reduction programs. The video might provide a discussion point for group or individual-based interventions, facilitating more lasting change. Agreement with negative stereotypes (as reflected in the Stereotype Endorsement subscale) is an important component of the self-stigma construct that could perhaps be more rapidly addressed through a brief video. Other components include "alienation" and "social withdrawal," which might be much more intimately tied to one's personal story and should be explored.

Self-stigma reduction interventions<sup>5–8</sup> like NECT<sup>5</sup> are usually based on psychoeducation and cognitive restructuring to counter stigmatizing beliefs about mental illness.<sup>9</sup> Adding an easily disseminated emotional component of social contact—based content might increase their participants' receptiveness, bolstering treatment effects. Alternatively, brief videos could be introduced at pivotal points of a person's experience with mental illness: at time of first diagnosis, while initiating treatment, or to encourage continuing treatment when an individual is considering discontinuing prematurely. Future trials of self-stigma interventions should study whether combining them with the brief video intervention enhances outcomes.

A secondary analysis found no ethnoracial differences in response to the control condition, but Black individuals relative to non-Black individuals reported greater reduction on the Secrecy self-stigma subscale after viewing the Black protagonist. A similar pattern emerged on other subscales (Internalized Stigma of Mental Illness [Stereotype Endorsement, Alienation, and Stigma Resistance], Perceived Devaluation Discrimination, and Recovery Assessment Scale) but lacked statistical significance, probably due to the paucity of Black participants. This finding corroborates our previous studies testing gender/race roles in public stigma, 17,20 which showed greater reduction among viewers of similar gender/race in the video condition only. This strengthens our assumption that shared characteristics play a meaningful role, intensifying emotional engagement and, thereby, the effect of the video. Studies need to explore the role of gender and race in the reduction of self-stigma.

#### Limitations

Our study has several limitations. The findings are limited to Prolific participants, who might not fully represent young individuals with mental illnesses, thus limiting generalizability. The ethnoracial breakdown of our study participants differed from the US census population: 8% non-Hispanic Asian in our sample vs 5% in the census, 6% vs 12% non-Hispanic Black, 11% vs 16% Hispanic, and 82% vs 64% non-Hispanic White. The low number of non-Hispanic Black participants gave us insufficient power to evaluate race differences.

As we did not assess participant diagnoses, the proportion of participants meeting formal criteria for

"serious mental illness" is unknown. Previous research with Prolific suggests that most participants likely would not have met criteria for "serious mental illness," the group of prime concern regarding self-stigma. It will be important to determine the extent to which our video based intervention can impact self-stigma among persons meeting criteria for serious mental illness. If effective with this group, our video intervention might be useful for targeting self-stigma in a range of people impacted by mental health conditions, decreasing stigma among a much broader audience than traditional/in-person self-stigma interventions might be able to impact. Future studies should assess symptoms and/or diagnoses and explore whether they moderate the efficacy of the intervention. Our study included a single video, precluding testing the influence of other genders, ages, races, and ethnicities on self-stigma reduction. Finally, we assessed attitudes, which may be subject to social desirability.41

## **CONCLUSIONS**

Self-stigma is a crucial factor in mental health. A 2-minute, focus group-informed, social contact-based video intervention effectively led to an immediate but not lasting decrease in self-stigma among young individuals with ongoing mental health conditions. The brief video reduced self-stigma by humanizing mental illness and focusing on recovery and hope. This is the first study to examine such an effect on self-stigma. This simple, brief, easy-to-disseminate video-based intervention could increase hope and self-esteem among people with mental illnesses. More studies are required to examine its longer-term sustainability by presenting a series of videos featuring several protagonists or a single protagonist ("social media influencer"), or as an augmentation to existing self-stigma reduction interventions. Additional work is also needed to better assess whether matching the gender and race of the protagonist with the target population increases intervention effects.

### **Article Information**

Published Online: March 6, 2024. https://doi.org/10.4088/JCP.23m15034 © 2024 Physicians Postgraduate Press, Inc.

Submitted: July 22, 2023; accepted October 24, 2023.

**To Cite:** Amsalem D, Jankowski SE, Yanos P, et al. Randomized controlled trial of a brief video intervention to reduce self-stigma of mental illness. *J Clin Psychiatry*. 2024;85(1):23m15034.

Author Affiliations: New York State Psychiatric Institute and Department of Psychiatry, Columbia University Vagelos College of Physicians & Surgeons, New York (Amsalem, Jankowski, Markowitz, Rogers, Stroup, Dixon, Pope); Department of Psychology, John Jay College Of Criminal Justice, City University of New York, New York (Yanos); Department of Social and Behavioral Sciences, College of Global Public Health, New York University, New York (Yang).

Corresponding Author: Doron Amsalem, MD, Department of Psychiatry and the New York State Psychiatric Institute, Columbia University Irving Medical Center, 1051 Riverside Dr, New York, NY 10032 (doron.amsalem@nyspi.columbia.edu).

Relevant Financial Relationships: The authors report no conflicts of interest.
Funding/Support: This study is supported by the Optimizing and Personalizing

interventions for people with schizophrenia Across Lifespan (OPAL) Pilot Award.

Acknowledgments: The authors thank the people who shared their personal stories and those who participated in the study.

Additional Information: The data that support the findings of this study are available on request from the corresponding author (D.A.).

#### References

- 1. Corrigan PW. Mental health stigma as social attribution: Implications for research methods and attitude change. Clin Psychol (New York). 2000;7(1):48-67.
- 2. Thornicroft G. Most people with mental illness are not treated. Lancet. 2007;370(9590):807-808.
- Corrigan PW, Rao D. On the self-stigma of mental illness: stages, disclosure, and strategies for change. Can J Psychiatry. 2012;57(8):464-469.
- 4. Yanos PT, DeLuca JS, Roe D, et al. The impact of illness identity on recovery from severe mental illness: a review of the evidence. Psychiatry Res. 2020:288:112950.
- 5. Yanos PT, Lysaker PH, Silverstein SM, et al. A randomized-controlled trial of treatment for self-stigma among persons diagnosed with schizophrenia-spectrum disorders. Soc Psychiatry Psychiatr Epidemiol. 2019;54(11):1363-1378.
- Corrigan PW, Larson JE, Michaels PJ, et al. Diminishing the self-stigma of mental illness by coming out proud. Psychiatry Res. 2015;229(1-2):148-154.
- 7. Russinova Z, Gidugu V, Rogers ES, et al. Fostering the community participation of individuals with psychiatric disabilities: effectiveness of a new peer-led photovoice-based intervention. Psychiatr Rehabil J. 2023;46(3):196-210.
- 8. Lucksted A, Drapalski A, Calmes C, et al. Ending self-stigma: pilot evaluation of a new intervention to reduce internalized stigma among people with mental illnesses. Psychiatr Rehabil J. 2011;35(1):51-54.
- Yanos PT, Lucksted A, Drapalski AL, et al. Interventions targeting mental health self-stigma: a review and comparison. Psychiatr Rehabil J. 2015;38(2):171-178.
- 10. Rüsch N, Kösters M. Honest, Open, Proud to support disclosure decisions and to decrease stigma's impact among people with mental illness: conceptual review and meta-analysis of program efficacy. Soc Psychiatry Psychiatr Epidemiol. 2021;56(9):1513-1526.
- 11. Cabassa LJ, Nicasio A, Whitley R. Picturing recovery: a photovoice exploration of recovery dimensions among people with serious mental illness. Psychiatr Serv. 2013;64(9):837-842.
- 12. Thomas N, McLeod B, Jones N, et al. Developing Internet interventions to target the individual impact of stigma in health conditions. Internet Interv. 2015:2(3):351-358.
- Parcesepe AM, Cabassa LJ. Public stigma of mental illness in the United States: a systematic literature review. Adm Policy Ment Health. 2013;40(5):384-399.
- Corrigan PW, Michaels PJ, Vega E, et al. Key ingredients to contact-based stigma change: a cross-validation. Psychiatr Rehabil J. 2014;37(1):62-64.
- Thornicroft G, Mehta N, Clement S, et al. Evidence for effective interventions to reduce mental-health-related stigma and discrimination. Lancet. 2016;387(10023):1123-1132.
- 16. Janoušková M, Tušková E, Weissová A, et al. Can video interventions be used to effectively destigmatize mental illness among young people? A systematic review. Eur Psychiatry. 2017;41(1):1-9.
- Amsalem D, Yang LH, Jankowski S, et al. Reducing stigma toward individuals with schizophrenia using a brief video: a randomized controlled trial of young adults. Schizophr Bull. 2021;47(1):7-14.
- 18. Amsalem D, Markowitz JC, Jankowski SE, et al. Sustained effect of a brief video in reducing public stigma toward individuals with psychosis: a randomized controlled trial of young adults. Am J Psychiatry. 2021;178(7):635-642.
- Amsalem D, Valeri L, Jankowski SE, et al. Reducing public stigma toward individuals with psychosis across race and gender: a randomized controlled trial of young adults. Schizophr Res. 2022;243:195-202.

- 20. Amsalem D, Jankowski SE, Pagdon S, et al. "It is hard to be a woman with schizophrenia": randomized controlled trial of a brief video intervention to reduce public stigma in young adults. J Clin Psychiatry. 2022;84(1):22m14534.
- 21. Jankowski SE, Yanos P, Dixon LB, et al. Reducing public stigma towards psychosis: a conceptual framework for understanding the effects of social contact based brief video interventions. Schizophr Bull. 2023;49(1):99-107.
- Peer E, Brandimarte L, Samat S, et al. Beyond the Turk: alternative platforms for crowdsourcing behavioral research. J Exp Soc Psychol. 2017;70:153-163.
- 23. Palan S, Schitter C. Prolific.ac—a subject pool for online experiments. J Behav Exp Finance. 2018;17:22-27.
- Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol. 2006;3(2):77-101.
- 25. Amsalem D, Rogers RT, Stroup TS, et al. Self-stigma among people with serious mental illnesses: the use of focus groups to inform the development of a brief video intervention. Psychiatr Rehabil J. 2023;46(3):243-249.
- Ritsher JB, Otilingam PG, Grajales M. Internalized stigma of mental illness: psychometric properties of a new measure. Psychiatry Res. 2003;121(1):31-49.
- Link BG, Struening EL, Neese-todd S, et al. On describing and seeking to change the experience of stigma. Psychiatr Rehabil Skills. 2002;6(2):201-231
- Corrigan PW, Salzer M, Ralph RO, et al. Examining the factor structure of the Recovery Assessment Scale. Schizophr Bull. 2004;30(4):1035-1041.
- Corrigan PW, Powell KJ, Michaels PJ. The effects of news stories on the stigma of mental illness. J Nerv Ment Dis. 2013;201(3):179-182.
- Corrigan PW, Vega E, Larson J, et al. The California schedule of key ingredients for contact-based antistigma programs. Psychiatr Rehabil J. 2013;36(3):173-179.
- 31. Li Y, Sorrentino RM, Norman RMG, et al. Effects of symptom versus recovery video, similarity, and uncertainty orientation on the stigmatization of schizophrenia. Pers Individ Dif. 2017:106:117-121.
- 32. Morgan AJ, Reavley NJ, Ross A, et al. Interventions to reduce stigma towards people with severe mental illness: systematic review and meta-analysis. J Psychiatr Res. 2018;103:120-133.
- Flanigan LK, Climie EA. A review of school-based interventions to reduce stigma towards schizophrenia. Psychiatr Q. 2020;91(4):983-1002.
- 34. Amsalem D, Dixon LB, Neria Y. The coronavirus disease 2019 (COVID-19) outbreak and mental health: current risks and recommended actions. JAMA Psychiatry, 2021;78(1):9-10.
- 35. Barney A, Buckelew S, Mesheriakova V, et al. The COVID-19 pandemic and rapid implementation of adolescent and young adult telemedicine: Challenges and opportunities for innovation. J Adolesc Health. 2020;67(2):164-171.
- 36. Dubreucq J, Plasse J, Franck N. Self-stigma in serious mental illness: a systematic review of frequency, correlates, and consequences. Schizophr Bull. 2021;47(5):1261-1287.
- Russinova Z, Rogers ES, Gagne C, et al. A randomized controlled trial of a peerrun antistigma photovoice intervention. Psychiatr Serv. 2014;65(2):242-246.
- 38. Amsalem D, Wall M, Lazarov A, et al. Destigmatising mental health treatment and increasing openness to seeking treatment: randomised controlled trial of brief video interventions. BJPsych Open. 2022;8(5):e169.
- Amsalem D, Lazarov A, Markowitz JC, et al. Video intervention to increase treatment-seeking by healthcare workers during the COVID-19 pandemic: randomised controlled trial. Br J Psychiatry. 2022;220(1):14-20.
- 40. Sinyor M, Williams M, Zaheer R, et al. The association between Twitter content and suicide. Aust N Z J Psychiatry. 2021;55(3):268-276.
- Perinelli E, Gremigni P. Use of social desirability scales in clinical psychology: a systematic review: social desirability scales in clinical psychology. J Clin Psychol. 2016;72(6):534-551.