HOPE Study Details

The Harnessing Online Peer Education (HOPE) online intervention involves participants and peer leaders in an online community.

In multiple studies, we have found that the HOPE social media approach is a feasible, acceptable, and effective method to deliver peer-led behavioral interventions, including among African Americans and Latinx (1–5): a) HOPE interventions for multiple conditions (e.g., HIV, substance use, anxiety) have consistently led to significantly more behavior change compared to control groups, including with studies among communities of color (3,6–9). For example, when compared with control group participants, intervention group participants were significantly more likely to accept the offer for the HIV self-testing kit (intervention 130 of 450, 29%; control 102 of 450, 22.7%; odds ratio = 1.43, 95% confidence interval: 1.04 to 1.95, P = 0.03), report having taken an HIV self-test within the past 3 months (odds ratio = 1.47, 95% confidence interval: 1.01 to 2.13, P = 0.04), and report drinking fewer glasses of alcohol in an average week (P = 0.01) (9). HOPE studied have also created long-term, organically-grown, online communities: For example, in one study, although participation was voluntary, > 80% of participants actively communicated with other participants (10,11). In that same study, retention rates were >90% at 12-week follow-up and > 83% at 1-year follow-up. This is particularly important as most Internet studies have retention rates < 70% (12–15).

Participant Recruitment Details

Ads targeted those with anxiety with statements such as, “Anxious about coronavirus?” or, “Worried about coronavirus?” Ads mentioned that participants would be completing surveys and joining an online group but did not specifically highlight that they could potentially receive

informational resources to help with anxiety (though this is mentioned in the study information sheet). For those who did not join groups right away, we attempted to replace these participants before starting the study. If participants hadn't responded by the end of the day, the study team reached out by email and phone, up to three times per day. After two days of no response, recruitment was reopened and those who hadn't joined the group were replaced. Recruitment ads were once again placed and if respondents were eligible and completed the baseline survey, they were sent an invite to replace an unfilled spot (in order of participant ID). As long as there were still open spots, those who were replaced were reminded that they could still contact us if they wanted to continue with the study. If they did reach out in time, they would then replace the next unfilled spot.

Participant Responsibilities/Knowledge Clarification

Participants were told to use the group as they wanted and to continue using Facebook as they normally would. Participation and engagement in the online community group was voluntary, and participants could stop engaging/participating at any time. Participants could do everything a peer leader could do and could make their own posts, direct messages, and real-time chat with other participants and peer leaders.

In the study information sheet, participants were informed that if they were assigned to the intervention group there would be peer leaders who would attempt to interact with them about mental health and support topics. Participants were not informed the names of these peer leaders or who they were. Participants may, however, have been able to know who the peer leaders were as peer leaders were actively posting and leading conversations on the online community. Additionally, if participants asked a peer leader if they were a peer leader, peer leaders were instructed to inform them that they were a peer leader.

Peer Leader Training And Supervision Details/Clarifications

Enrolled peer leaders participated in 3 online training sessions (on Zoom) of approximately 3 hours each. Session 1 began with an introduction about the study and the study team, as well as an ice breaker to get to know each other. This session focused on COVID-19 background information including symptoms, disease progression, pathophysiology, epidemiology, prevention and treatment. Misinformation about COVID-19 was also addressed. A quick overview about Facebook features was also presented. Throughout the session, peer leaders were asked questions about the topics and also participated in group activities where they would practice posting and commenting on Facebook. After, the training session, peer leaders were also given a homework assignment. (i.e. find a video about COVID-19 education and post it in the group). This was done to help recap what they learned, practice interacting with others on Facebook, and prepare them for the next training session.

Session 2 began with a quick recap of the first session. Components of communication and various ways of communication were discussed during this session and applied to the Facebook environment. This session also focused on stigma and mental health. Types of anxiety were introduced in this session, as well as strategies for coping and how to reduce stigma and anxiety around COVID-19. The timeline of the study was explained and they were shown how to fill out the weekly tracking sheet. Weekly topics to go over were also introduced. For example, in the first week we recommended not even focusing on COVID-19 and just posting about friendly topics to help build rapport. Overall, we let them know it was a free-flowing group and conversations within the groups also depended on how participants reacted and what participants posted or commented about. As with the last session, peer leaders were asked questions throughout the session and given time to practice communication on Facebook through various

activities. Peer leaders were also given another homework assignment to complete before the final session.

Session 3 again began with a recap of the previous session. This session focused on study logistics. Peer leaders were introduced to the study design and briefed on how participant recruitment took place/ who the participants are. Peer leaders were also reminded again about their responsibilities and provided with examples of types of posts to post each week. As with the previous sessions, peer leaders were asked questions throughout the session and given time to practice communication on Facebook through various group activities. Finally, it was stressed that peer leaders were not to give any medical advice and only direct participants who asked to consult their physician. Any inappropriate posts or concerns about participants were also to be immediately reported to the study team. Time was also set aside at the end to answer any pressing questions."

Slides from all three sessions were given to the peer leaders, as well as the electronic resources that we send participants (slides and resources can be shared upon request). Peer leaders also joined a private, hidden Facebook group specific to peer leaders. Here peer leaders could ask the study team questions or ask each other questions, as well as share resources and posts that were successful or difficult. The study team could also highlight posts that received a lot of engagement from the previous week.

Some peer leaders may choose to do more than others but, every week, peer leaders were tasked with reaching out to their assigned participants, at least three times per week. Time commitment for peer leaders ranged from approximately 30 minutes to 3 hours per week. Calls with the study team for weekly check-in were generally 10-15 minutes. While we shared with them resources and could highlight examples of successful posts, the content and topic of their posts were solely

up to the peer leader. Peer leaders would then complete a tracking sheet every week that documented who they reached out to and if there was a response. At the end of each week, someone from the study team would call the peer leaders to check-in, answer any questions, and discuss any problems (problems with tracking sheet, ideas for posting, etc.). Peer leader training, peer leaders' ongoing communication with the study team, and peer leaders' ongoing communication with each other helped guide peer leaders to know how to communicate with the participants. Content and topics of posts may also depend on how participants interact in the groups. For example, during training, we give a rough guideline of first 2 weeks are friendly conversations, next two weeks are about sharing knowledge and experiences, and debunking myths, and last two weeks are about prevention and coping. If participants already start posting about myths in the first week or talking about their anxiousness, the peer leaders won't wait till week 3 or week 5 to address these posts.

Other Study Clarifications

In regards to Facebook groups, private means that only members of the group can see who's in the group and what they post. Hidden (formerly called secret) means only members can find the group in search and other places on Facebook. Even if an outsider were to get the group link, they would only see an error page that says, "This content isn't available right now."

University of California, Irvine
Study Information Sheet

Harnessing Online Peer Education (HOPE) COVID-19/Coronavirus Study

Lead Researcher
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- Please read the information below and ask questions about anything that you do not understand. A researcher listed above will be available to answer your questions.

- You are being asked to participate in a research study. Participation in this study is voluntary. You may choose to skip a question or a study procedure. You may refuse to participate or discontinue your involvement at any time without penalty or loss of benefits. You are free to withdraw from this study at any time. **If you decide to withdraw from this study you should notify the research team immediately**.

- You are being asked to participate in this research study to study whether peer leaders on an online social network can help to teach participants about risks, prevention methods, and to reduce fear and anxiety surrounding COVID-19.

- You are eligible to participate in this study if you *meet the following inclusion criteria:*

  1. Adults, 18 years or older, who are competent to give informed consent
  2. English speakers only
  3. Moderate to severe GAD-7 rating in relation to COVID-19
  4. Not currently taking anxiety medication
  5. Uses social media and/or online communities greater than twice per week
  6. Willing and capable of understanding and assenting to an online informed consent form
  7. Has, or is willing to accept a friend request and group request from our Facebook social media page
  8. Completes the baseline survey

- The research procedures involve the following:
  1. Fill out an online questionnaire (every two weeks of the study) assessing your knowledge, attitudes, and behaviors in regards to the Coronavirus. You will also have the option to email us to receive information about cognitive behavioral therapy and related resources for reducing health anxiety.
  2. Join the HOPE online community social networking page. You will be assigned to an online community. Participants (and peer leaders if you are in the intervention group) may request to become your social network "friends" and to chat with you. If your settings allow, we will track your social networks to see how they change and grow.
  3. Log onto the group and be willing to communicate with the other participants for the 6-week duration of the study.

4. After the 6-week duration of the study, you will be asked to complete another questionnaire assessing the same items in a 6-week follow-up survey, as well as be invited to receive resources on how to reduce health anxiety

You will be asked to log onto the group page at least 3 times a week for 6 weeks. However, this participation is voluntary. You will be asked to complete a questionnaire at the completion of the study, every two weeks of the 6-week study, and at a 6-week follow up.

- Possible risks/discomforts associated with the study include the following:
    - Risks of breach of confidentiality. While the research team will do their best to maintain confidentiality, including coding any identifiable data, and storing data on an secure server, the nature of a Facebook group is such that we cannot guarantee complete confidentiality due to the possibility, although it may be discouraged, of group members disclosing information discussed in the group.
    - Emotional risk. Coronavirus is currently a sensitive topic and has caused many people anxiousness and stress. While we hope that our study will help reduce stress surrounding the Coronavirus, talking about this topic may trigger an unwanted emotional response.

- Participating in this study may help reduce stress and anxiety you may be experiencing due to the Coronavirus. The results of the research may also benefit society by educating others about health and the potential for an educational tool in times of public health crises. Additionally, you may benefit from the study by gaining understanding of healthy behaviors.

- There are no alternative procedures available. The only alternative is not to participate in this study.

- Your participation will be compensated in the form of an online Amazon gift certificate. You will be paid $15 for each time you complete the survey, from baseline (plus being fully enrolled by joining the group) to final, and $20 in amazon gift cards for completing the 6-week follow-up post-intervention survey. You will receive a total of $80 if you complete all study questionnaires. If you start any of these surveys but do not complete them, or if you skip any questions, you will still receive your payment for the survey.

- All research data collected will be stored securely and confidentially. Confidentiality will be maintained by means of having your responses coded so that they cannot be identified. The codes will be kept on a computer that will be stored securely. Only the investigator will have access to this information. Additionally, identifiers might be removed from the identifiable private information and, after such removal, the information could be used for future research studies without additional informed consent from you.

- The research team, authorized UCI personnel, and regulatory entities, may have access to your study records to protect your safety and welfare.

- While the research team will make every effort to keep your personal information confidential, it is possible that an unauthorized person might see it. We cannot guarantee total privacy.

Future Research Use

Researchers will use your information to conduct this study. Once the study is done using your information, we may share them with other researchers so they can use them for other studies in the future. We will not share your name or any other private identifiable information that would let the researchers know who you are. We will not ask you for additional permission to share this de-identified information.

- To help us protect your privacy, we have obtained a Certificate of Confidentiality from the National Institutes of Health (NIH). With this Certificate, researchers cannot be forced to disclose information that may identify you in any federal, state, or local civil, criminal, administrative, legislative, or other proceedings or be used as evidence, for example, if there is a court subpoena, unless you have consented for this use. Information, documents, or biospecimens protected by this Certificate cannot be disclosed to anyone else who is not connected with the research except, if there is a federal, state, or local law that requires disclosure (such as to report child abuse or communicable diseases but not for federal, state, or local civil, criminal, administrative, legislative, or other proceedings, see below); if you have consented to the disclosure, including for your medical treatment; or if it is used for other scientific research, as allowed by federal regulations protecting research subjects.

  The Certificate cannot be used to refuse a request for information from personnel of the United States federal or state government agency sponsoring the project that is needed for auditing or program evaluation by NIH which is funding this project. You should understand that a Certificate of Confidentiality does not prevent you from voluntarily releasing information about yourself or your involvement in this research. If you want your research information released to an insurer, medical care provider, or any other person not connected with the research, you must provide consent to allow the researchers to release it.

  The Certificate of Confidentiality will not be used to prevent disclosure as required by federal, state, or local law. Researchers will voluntarily disclose information to prevent serious harm to you or to someone else including, incidents of a child, elder, and dependent adult abuse or neglect, which will be reported to the appropriate authorities

  The Certificate of Confidentiality will not be used to prevent disclosure for any purpose you have consented to in this informed consent document. You should understand that a Certificate of Confidentiality does not prevent you or a member of your family from voluntarily releasing information about yourself or your involvement in this research. It will be disclosed only with your permission. Identifiers collected (Names, dates, postal addresses, email addresses, phone numbers, facial images from Facebook profile photo, and IP addresses) will be removed before any potential future use for research studies without additional consent from you.

- The researchers intend to keep the de-identified research data indefinitely.

- Information collected from you for this study and/or information obtained from Facebook may be used in this research or other research, and shared with other organizations. You will not share in any commercial value or profit derived from the use of your information and/or information obtained from Facebook.

- Your participation will be compensated in the form of an online Amazon gift certificate. You will be paid $15 for each time you complete the survey, from baseline (plus being fully enrolled by joining the group) to final, and $20 in amazon gift cards for completing the 6-week follow-up post-intervention survey. You will receive a total of $80 if you complete all study questionnaires. If you decide to withdraw from the study or are withdrawn by the research team, you will receive compensation for the visits that you have completed.

- There is no cost to you for participation in this study. However, there may be out-of-pocket expenses such as parking and transportation fees.

- If, during the course of this study, significant new information becomes available that may relate to your willingness to continue to participate, this information will be provided to you by the research team listed at the top of the form.

- If you have any comments, concerns, or questions regarding the conduct of this research please contact the researchers listed at the top of this form.

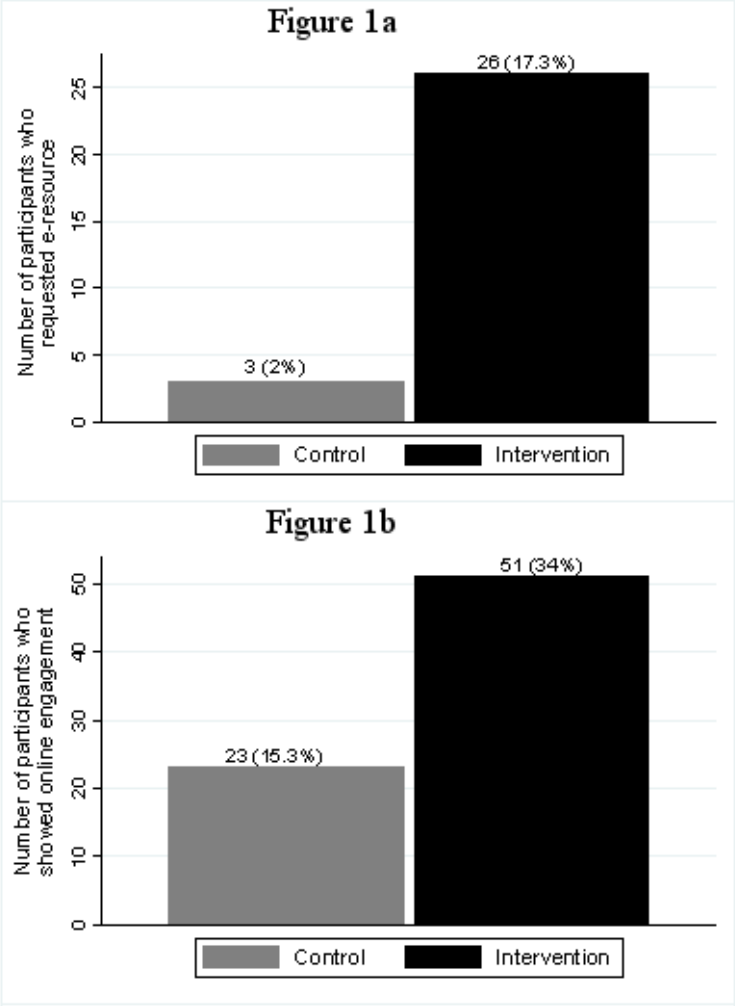
- It is important that you promptly tell the researchers if you believe that you have been injured because of taking part in this study. You can tell the researcher in person or call him/her at the number listed at the top of this form.

- Please contact the UCI Institutional Review Board by phone, (949) 824-7295, by e-mail at IRB@research.uci.edu or at 141 Innovation Drive, Suite 250, Irvine, CA 92697 if you are unable to reach the researchers listed at the top of the form and have general questions; have concerns or complaints about the research; have questions about your rights as a research subject; or have general comments or suggestions.

- If you have questions about your informed consent or any aspects of this consent form you can email your questions to hopeuci@hs.uci.edu.

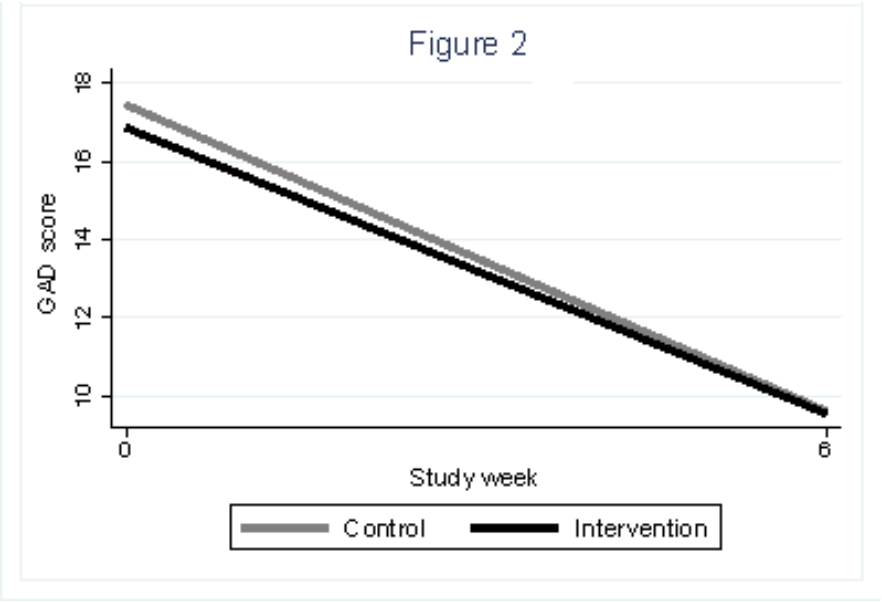
- **What is an IRB?** An Institutional Review Board (IRB) is a committee made up of scientists and non-scientists. The IRB's role is to protect the rights and welfare of human subjects involved in research. The IRB also assures that the research complies with applicable regulations, laws, and institutional policies.

Figure. Description of key outcome variables across intervention and control groups: 1a: Number of participants who requested evidence-based self-coping e-resource by the end of the study (i.e. week 6); 1b: Number of participants who showed consistent online engagement over the study period (estimated at study week 6)



Data Supplement for Ugarte et al., An Online Community Peer Support Intervention for Help Seeking: A Randomized Controlled Trial, Psychiatric Services (doi: 10.1176/appi.ps.202000817).

Figure. GAD scores at study week 0 and study week 6



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CONSORT 2010 checklist of information to include when reporting a randomised trial*

Section/Topic	Item No	Checklist item	Reported on page No
Title and abstract			
	1a	Identification as a randomised trial in the title	1
	1b	Structured summary of trial design, methods, results, and conclusions (for specific guidance see CONSORT for abstracts)	1
Introduction			
Background and objectives	2a	Scientific background and explanation of rationale	2
	2b	Specific objectives or hypotheses	2
Methods			
Trial design	3a	Description of trial design (such as parallel, factorial) including allocation ratio	2
	3b	Important changes to methods after trial commencement (such as eligibility criteria), with reasons	NA
Participants	4a	Eligibility criteria for participants	2
	4b	Settings and locations where the data were collected	2-4
Interventions	5	The interventions for each group with sufficient details to allow replication, including how and when they were actually administered	3
Outcomes	6a	Completely defined pre-specified primary and secondary outcome measures, including how and when they were assessed	3-4
	6b	Any changes to trial outcomes after the trial commenced, with reasons	NA
Sample size	7a	How sample size was determined	NA
	7b	When applicable, explanation of any interim analyses and stopping guidelines	NA
Randomisation:			

Sequence generation	8a	Method used to generate the random allocation sequence	3
	8b	Type of randomisation; details of any restriction (such as blocking and block size)	3
Allocation concealment mechanism	9	Mechanism used to implement the random allocation sequence (such as sequentially numbered containers), describing any steps taken to conceal the sequence until interventions were assigned	NA
Implementation	10	Who generated the random allocation sequence, who enrolled participants, and who assigned participants to interventions	3
Blinding	11a	If done, who was blinded after assignment to interventions (for example, participants, care providers, those assessing outcomes) and how	NA
	11b	If relevant, description of the similarity of interventions	NA
Statistical methods	12a	Statistical methods used to compare groups for primary and secondary outcomes	4
	12b	Methods for additional analyses, such as subgroup analyses and adjusted analyses	4
Results			
Participant flow (a diagram is strongly recommended)	13a	For each group, the numbers of participants who were randomly assigned, received intended treatment, and were analysed for the primary outcome	4
	13b	For each group, losses and exclusions after randomisation, together with reasons	3-4
Recruitment	14a	Dates defining the periods of recruitment and follow-up	2-3
	14b	Why the trial ended or was stopped	NA
Baseline data	15	A table showing baseline demographic and clinical characteristics for each group	Table 1
Numbers analysed	16	For each group, number of participants (denominator) included in each analysis and whether the analysis was by original assigned groups	3-4
Outcomes and estimation	17a	For each primary and secondary outcome, results for each group, and the estimated effect size and its precision (such as 95% confidence interval)	4
	17b	For binary outcomes, presentation of both absolute and relative effect sizes is recommended	4

Ancillary analyses	18	Results of any other analyses performed, including subgroup analyses and adjusted analyses, distinguishing pre-specified from exploratory	NA
Harms	19	All important harms or unintended effects in each group (for specific guidance see CONSORT for harms)	NA
Discussion			
Limitations	20	Trial limitations, addressing sources of potential bias, imprecision, and, if relevant, multiplicity of analyses	4-5
Generalisability	21	Generalisability (external validity, applicability) of the trial findings	4-5
Interpretation	22	Interpretation consistent with results, balancing benefits and harms, and considering other relevant evidence	5
Other information			
Registration	23	Registration number and name of trial registry	NA
Protocol	24	Where the full trial protocol can be accessed, if available	NA
Funding	25	Sources of funding and other support (such as supply of drugs), role of funders	2

*We strongly recommend reading this statement in conjunction with the CONSORT 2010 Explanation and Elaboration for important clarifications on all the items. If relevant, we also recommend reading CONSORT extensions for cluster randomised trials, non-inferiority and equivalence trials, non-pharmacological treatments, herbal interventions, and pragmatic trials. Additional extensions are forthcoming: for those and for up to date references relevant to this checklist, see www.consort-statement.org.

CONSORT
TRANSPARENT REPORTING of TRIALS

CONSORT 2010 Flow Diagram