

## Transcript:

# Coping with COVID in Our Everyday Lives – Evidence for What Works

Presenter: Jonathan Kanter  
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PRESENTER: Good morning, everyone. We're just going to let people continue to come in as we get started. Welcome to our webinar today, Coping with COVID in our Everyday Lives-- Evidence for What Works. It's presented by Dr. Jonathan Kanter.

This webinar today is brought to you by the Great Lakes PTTC and SAMHSA, the Great Lakes ATTC, MHTTC, and PTTC are all funded under the following cooperative agreements. This presentation was prepared for the Great Lakes PTTC under that cooperative agreement. The opinions expressed in this webinar are those of the speaker and do not necessarily reflect the official position of DHHS or SAMHSA.

The PTTC uses affirming language to promote the application of evidence-based and culturally informed practices. We believe that words do have power. And again, thank you for joining us.

I have some housekeeping details to go over quickly. If you are having technical issues, please individually message either Kristina Spannauer or Stephanie Behlman in the chat section at the bottom of your screen and they will be happy to assist you. Also, during the presentation, if you have any questions for Dr. Kanter, please put them in the Q&A section also at the bottom of the screen and we will respond to those at the end of the presentation.

Due to the large number of attendees, your microphones and video will be turned off during the webinar. We will send you a link after this presentation for a very short survey. We would really appreciate it if you could fill it out. It probably takes about three minutes.

We are recording this webinar. And it will be available along with the slides on our website. That usually takes us about two weeks.

And certificates of attendance will also be sent out for people who attend the full session. And those will be sent via email. And they can take about two weeks as well. If you would like to see what else the Great Lakes ATTC, MHTTC, or PTTC are up to, please follow us on Facebook and Twitter.

And again, our speaker today is Dr. Jonathan Kanter. Dr. Kanter is the director of the University of Washington's Center for Science of Social

Connection. Over the course of his career, Dr. Kanter has investigated psychosocial interventions for depression, including how to disseminate culturally appropriate, easy to train, evidence-based approaches with an emphasis on evidence-based treatments such as behavioral activation for groups who lack resources and access to care. Welcome Dr. Kanter. And I'm going to turn it over to you.

JONATHAN KANTER: Good morning, everybody. My audio is OK? You can hear me?

PRESENTER: It's great. Thank you.

JONATHAN KANTER: Yeah, good morning, everybody. It's great to be here with everyone this morning. I'm here in Seattle, Washington. So over the course of this talk, you may see my room get lighter as the sun rises on the window next to me.

But even though I'm here in Seattle, I should note that, before moving here to Seattle about seven, eight years ago, I spent 10 years living in Milwaukee, Wisconsin. So I am very familiar with the Great Lakes region. And in fact, my daughter was born in Wisconsin and definitely considers herself a Wisconsinite. So I have fond memories of being in the region with all of y'all.

I started this talk with this picture that I took because I think it's important-- even though I'll be giving you some data, I think it's important to acknowledge just what a year this has been. And I took this picture actually in the park just a few blocks from us across the street here in Seattle at Green Lake Park. And I think, in a way, it summarizes in two very simple sentences what a lot of 2020 has been for most of us-- we are closed, and Black Lives Matter.

And those two sentences do a good job actually of summarizing the research that my center has been doing, not just since the beginning of the pandemic but over the last seven years. We essentially research social connection and how to help people have good, meaningful, quality intimate relationships. And we also research racial justice and racism. And I won't be talking too much about the racial justice and racism arm of the research from my center today.

But I do think it's important to acknowledge everything that's going on this year. And as we approach this holiday season and the vaccines are now finally starting to land in hospitals around the country, I think it's sometimes helpful to just take a moment and reflect on what a year this has been.

And I'll get to this towards the end of the talk. But I think it's important to acknowledge how much we have taken in this year. And when this pandemic started back in February, back in March, there was this feeling of overwhelm. And of course, for many of us, it's continued and shifted and evolved.

But at the same time, I think, like a water balloon taking in more water and expanding and expanding and not bursting, I think, we are all learning that we can take in more discomfort, we can take in more stress, and we can keep

going every day without bursting. Perhaps we're realizing that we can take in more than we thought we could. We're realizing that, even though our brains may tell us, I can't take another day, this is intolerable, it must stop, our human bodies are actually designed to take in an incredible amount of stress and keep going.

That said, of course, there are negative health effects of stress on our bodies, which are real. But at the same time, we are built by nature to be responsive to stress and to keep going. And I think we've learned that, unfortunately, the hard way this year. So as I start this talk, it may be helpful for everyone to just take a breath and reflect and realize what you've gone through and how we can keep going.

So I want to talk to you all primarily about a study that we did here in Seattle. If you remember, Seattle was the first US city to have a COVID-19 outbreak. This happened for us back in February. We were really the first state-- Washington was the first state for the governor to impose some social restrictions and some lockdown orders back in March.

And we realized relatively early that something unusual was happening, not just here in Seattle. But we realized that it was going to spread throughout the country relatively quickly. And so we started doing research very rapidly.

We essentially closed down all of our previous research back in February and March because all of our research before then was with live participants. And we quickly started doing online research. The first thing we did is we asked 500 Seattle people, people in King County here in Seattle, to participate in a study where every evening at 6:00 PM we text messaged them a brief survey. And they completed that survey to just let us know how they were coping.

And those 500 people gave us those survey responses every evening for three months. And back in March when we started that, we thought, well, three months-- the crisis will be over by then. And if you remember back then-- boy, were we wrong.

And so at the end of the three months, we asked our participants to continue giving us survey responses every week. And they're still giving us responses today. So eight months later, we're still collecting that data.

Also in March, we started a national study. And that's the study I want to talk to you all about today. We basically did a very similar thing with our national sample. We asked them every evening-- at 8:00 PM, not 6:00 PM, we text messaged them a brief phone survey to give us data on how they were coping.

But what we also did in the national study-- and I'll give you more details of this in a second-- is, during the middle of that study, half of them who were randomly selected, we also text messaged them in the morning tips for how to cope better. We wanted to see if we could actually help people cope better. So I want to report to you on what we found in that study today.

But I also want to acknowledge that all you have to do is a quick Google search, coping with COVID, and you will get hundreds of articles and thousands of bits of advice. And I have done my best to trying to establish expertise in this area, to peruse as much of that advice as possible. And I have to say, I'm not too concerned about any of it.

But that said, most of it lacks evidence. And my guess is most of the advice that you can get through Google searching will be helpful and actually is relatively consistent with what we have to offer here today but probably not going to be helpful for those who need help the most, probably not going to be helpful for those who are really struggling. And quite honestly, the evidence-based insights and tips that I have to offer you today are not designed for those people who need help the most either.

People who are really struggling right now, we need to get them hooked into mental health professionals and other experts who can really work with people on their problems and their struggles one on one. And I just want to be clear, that's not what I have to offer everyone today. I have to offer everyone today sort of population-based tips that we can deliver really quickly to people and try to help as many people as possible recognizing that some people, of course, are going to need more help than just a quick suggestion text messaged to their phone every morning.

OK, we chose text messaging as the way of implementing our intervention simply because we didn't have time to do anything more fully. I also think that text messaging is smart for several reasons. Number 1, it's easy to do.

We didn't have time or money when we started this to develop an app or to do anything very high tech. But we were able to very quickly put these suggestions that we developed on a website and then text message people links to the website. And the website had some brief audio recordings that we made walking people through the interventions. Sometimes the website had a conversation between me and another member of our lab or between two members of our lab where we tried the suggestions ourselves. And we were talking about how it went.

So we were able to put this together relatively quickly in a relatively low cost. And I think that's a real advantage of text. Everyone is talking about apps these days. And that's great. But apps are hard to build and design and hard to change.

OK, so this is the question we asked-- can we translate key evidence-based insights from relationship and psychological science into brief and effective suggestions that individuals could implement daily? And the hope was that people could quickly improve their relational well-being and decrease depression and loneliness at a critical time early in the pandemic. So we focused on depression and loneliness for, I think, reasons that are now obvious to everybody.

Very early in the pandemic, as you remember, people were very worried about loneliness. Because of all of the social isolation and social distancing restrictions, people were very worried about loneliness. And to be clear, what we have found through other studies by the researchers, including our own, is that the wave of loneliness that we were predicting, that sort of epidemic, if you will, of loneliness that we were predicting that was going to wash across society actually did not materialize.

And I think why it did not materialize is because people adjusted. People saw loneliness on the horizon. And people adjusted their own behavior and stayed out of the depths of despair of loneliness. I think this pandemic has taught us that, as human beings, social connection, social relationships are so important to many of us that we're going to violate social distancing guidelines in order to keep them going.

So we could talk about the ethics of course. But the bottom line is we did not see loneliness wash across society. And we learned a very important lesson, that loneliness is a function of the quality of our social relationships. It's not a function of the quantity of them. We'll talk more about that in a minute.

And of course, depression-- we were also very worried about depression on the other hand. And unlike loneliness, we have seen substantial and significant increases in population-level depression over the course of this pandemic. And that's, of course, a great concern.

So here's what we did in our study. We recruited-- we were hoping for 2,000. We didn't quite get there. We recruited 1,600 adults across the United States.

You can see the distribution of where in the United States our participants came from, mostly on the coasts. But there are a sizable number in the middle of the country as well. It looks like we have one participant if I am understanding the map correctly in New Mexico, for example. So we didn't quite do as well as we wanted in New Mexico and a couple of other states there. In the middle of the country, we didn't get too many participants.

And the participants were mostly white. I don't have the breakdown of demographics. But unfortunately, they were-- well, they were mostly white. We didn't get as much ethnic and racial diversity as we were hoping. But I will talk about those numbers in a few minutes-- and slightly more females than males and a range of income distributions and, as a reminder, every evening at 8:00 PM.

What we did in the national study is we did this for four weeks starting in April and then ending in July. Everybody in the study got a text message in the evening every evening for four weeks. And that text message linked them to a survey where they told us how they were coping.

And then I'll get to in a few minutes half of them also got these text messages for two weeks in the morning that were suggestions for how to cope better.



But first, I just want to share with you what we learned from these text messages in the evenings.

So who, according to our data, is more depressed on a day-to-day basis based on their baseline characteristics based on what we knew about them before they started this study? And so this graph here is just a simple display of the size of the effects. So I'll walk you through it real quickly.

Baseline relationship satisfaction, there was really no affect there. In other words, if you're satisfied with your relationships at the beginning of all of this, it does not predict your depression at all. Gender did not predict depression in our study. Race did not predict depression. And income did not predict depression.

Relationship status-- in other words, are you in a relationship, are you married/widowed, are you single-- also did not predict depression. But being a parent versus not being a parent did significantly predict depression.

And what we found is that people who were not parents were more likely to be depressed. That's a small effect there. You can see those blue bars show you the size of the effect. So we have a small effect that people who are not parents are more depressed in our research compared to people who are parents.

Likewise, people who were under 35 were more depressed than people who were older. And this, I think, is the phenomenon that surprised a lot of us around the country. And that's received actually a decent amount of media attention that younger and single people were struggling more with adjusting to the pandemic than were older people or people who were parents.

Now, of course, there's been a lot of discussion about school and the effects of school on parenting and on families and on kids. And all of that is, of course, true. But people are adapting. And those people who are having more trouble adapting in terms of depression were actually the younger people and people who weren't parents.

Likewise, people who had a previous depression diagnosis were more likely to struggle with depression. This is, of course, important. And people who actually reported that they were having positive COVID symptoms and, of course, people who gave us information during the study that they tested positive were experiencing more depression over the course of our study than people who weren't.

The single biggest predictor from these baseline characteristics of depression was simply, when we started to study, how depressed were you? So that's different than having a previous depression diagnosis in the past. This is just, are you feeling down right now as we started the study? Those people who started the study feeling down were, of course, most likely to remain feeling down and to get even worse over the course of the study.

So the point here is not so much previous diagnosis that matters but how you're feeling right now that matters. And that's sort of obvious. But we have data to support it.

Now, I'll walk you through this slide. It's a little hard to see. But I'll spend a minute on it. And hopefully, it will become clear for all of you.

These are now predictors of depression from day-to-day experiences. So the previous slide was more like characteristics of people. This is more like what people are doing. So of the things that people are doing day to day, what's actually predicting depression?

And again, the size of the bar shows you how strong the effect is. And so just to cut to the big conclusion, you can see down there at the bottom, anxiety and loneliness, those are by far our biggest predictors of depression day to day. And everything on this slide was a significant predictor.

Now, the green and the red, I shared this slide with my daughter the other day. And she says, why did you make it the colors of the Christmas tree? It wasn't my intention.

Green essentially means go. And red means stop. And so basically, green means there's a positive predictor. Red means it's a negative predictor.

So in other words, those first two green bars at the top, the amount of media-assisted social interactions or the amount of in-person social interactions, those were positive-- excuse me, I got it backwards. Those are good predictors. In other words, the more social interactions people had, the less depressed they were.

Versus awareness of feelings, the more aware of feelings people were, the more depressed they were. So green means it's a good thing. Red means it's a bad thing.

And what this shows us with those first two green bars is that the quantity of social interactions that people were having during the pandemic does matter. The more social interactions people were having, whether they were online-- that's what I meant by media assisted-- essentially, online social interactions or live social interactions, that does matter. The more you're having, the less depressed you are.

But they don't matter much at all compared to the quality of those interactions. All of our measures of interaction quality are much stronger predictors of depression than just the quantity. And I think that's really the take-home message.

As I talk about the intervention, I'll talk to you all about the quality of social interactions in much more detail because that's really what we tried to help people with. But let me just focus on one or two things here just to give you a couple of take-homes from some of these other findings.

First, awareness of feelings. We found that the more aware of your feelings you were on a day-to-day basis-- we simply asked in our survey, how aware are you of your feelings right now? The more aware people were of their feelings, the more depressed they were.

That was a little concerning to me at first because, when we intervene on people, the very first thing we do is we try to increase awareness. However, when we try to increase awareness, when we try to help people, it's not just awareness that we're increasing, but it's a particular kind of awareness. It's an awareness infused with acceptance. It's what we could call mindful awareness.

And we know from dozens of studies that helping people with the right kind of awareness and accepting gentle, compassionate awareness of our feelings has great depression reduction and prevention benefits. But simply being aware without that compassion, without that acceptance, well, that's much harder, obviously.

Not going to talk too much about financial security here today. We did find that people who were experiencing financial insecurity were more likely to be depressed. There's great concern, of course, about the economic consequences of the pandemic. And our data support that.

However, I do want to point out that, compared to some of these other predictors, it was a relatively small effect. And what I want to point out is that those people who were likely having the major financial consequences that are falling on many people in our society right now they likely were not in our study. Or if they really had those major life consequences-- a job loss or unable to pay a mortgage or rent or whatever-- they probably dropped out of our study when those things happened.

They weren't going to keep up with us. They had other fish to fry. And I'm concerned about them. So I want to say the financial consequences are probably a major problem even though our data suggests they were a relatively small predictor. I think that's a function of our study.

Down here at the bottom, here the biggest predictors-- anxiety and loneliness. Well, there's hundreds of studies on how anxiety often precedes and predicts depression. That happens through multiple mechanisms, which I won't get into today because it would be a tangent.

But safe to say, if we're worried about stress, if we're worried about day-to-day stress and day-to-day anxiety, then we're worried about the right thing. Everything we can do to just get people's stress down is going to be important, not just in dealing with the consequence of stress but also in preventing and helping mitigate depression. And finally, the single biggest predictor of depression that we see in our study is whether people were reported feeling alone.



So again, we didn't see a wave of loneliness in our study. And other studies support this too. We didn't see a wave of loneliness. But we are seeing those who are lonely are also more likely to be depressed. And that's probably why so many people were adapting and trying to do things to make sure they were not lonely. And that's actually what we wanted to help people with in our research as well.

So those were some of the predictors of depression from our evening surveys. And I want to walk you through the intervention for a few minutes. Let me see how I'm doing on time here. OK, yeah, good.

So I now want to walk you through the intervention for a few minutes. So we called the intervention part of our study, the center suggests, simply because, when we sent the text messages to people every morning, we led that text message with, good morning. Today, our center suggests, and then we gave some suggestion for what we wanted people to try that day to cope with the pandemic better.

We collected data for an entire month. And so on this screen, you see 0 to essentially 28, four weeks. And what we did for the center suggests, for the intervention, was we text messaged people these tips just in the middle two weeks of the month. So that allowed us to essentially have a one week of baseline data collection, one week of follow-up data collection. And then in that 14-day period in the middle, we texted these suggestions.

Now, even though we developed these suggestions ourselves, we weren't the innovators of the ideas behind these suggestions. We looked to science for what to suggest to people. Science was pretty clear on most of our suggestions-- and I'll walk you through them in a minute or two.

What was novel about our study-- not that we were using evidence-based suggestions. What was novel was that we were text messaging them, these suggestions, to people every morning in the hopes that it would help. That's what we didn't know. Could we actually take evidence-based relationship science, put it in the form of these brief suggestions, text message it to people, and get people to cope better.

So this is just a sample of one slice of our data. I'm not going to go through the data in detail because I think that would bore the heck out of all y'all. But these are actually depression findings. The red line is the intervention group. The black line is the control group.

What you see, by the way, right here at the beginning of the study during the baseline-- so we see a little drop in depression for both groups. So this is probably simply the effect of being in the study, feeling like they're part of something, having somebody paying attention to them, caring about them, asking how they're doing. So we see that a little drop in depression just from being in the study. But then once the intervention starts, we see the control condition not showing any more drop. And then we see a nice effect for the intervention condition.

Now, we included statistically-- I won't get into the details here. But statistically, we included a whole bunch of variables in our statistical model here. We included a whole bunch of covariates. We included gender and race and income and geographic location in our model.

And so for that reason, I'm going to show you what our predictions based on the covariates look like rather than the raw data. The raw data corresponds with these predictions. But these predictions give us a little better sense for what we expect based on all of these covariates in our model.

And what this shows here is the size of the intervention effect-- in other words, the difference between how our control group and how our intervention group is doing over the two weeks of the intervention and then this last follow-up period. And what it shows us with that black line is that the intervention effect is growing over time. People are getting less and less depressed the longer they're staying in the intervention.

And then right here, this is essentially when we stopped at day 21 of the 28-day study. This is when we stopped giving people tips. And relatively quickly after we stopped giving people tips, they stopped being helped by the intervention.

Now, that was sort of a concern. We would ideally love it to be the case that we could just text message people tips for two weeks and then they're good to go forever into the future. Well, that's not what we found.

We found that they were being helped by the tips when we were giving them the tips. And then when we stopped being-- then we stopped giving them the tips, the help seemed to deteriorate very rapidly. This is the intervention effect for depression.

Same exact thing for loneliness. People were helped when we were giving them the tips. And then the help went away there very quickly.

And we also measured relationship satisfaction. And same thing for relationship satisfaction-- people were feeling better, doing better with their relationships when we were giving them something to do. And then the effect went away very rapidly.

OK, so bottom line of our study here is that we found significant effects during the intervention period. But they were no longer significant by the end of follow-up. And I'll talk about that in a few minutes what to do about that.

What I want to do now is walk you through what this intervention looked like. First of all, those people who were feeling less depressed, who were feeling less lonely, and who were reporting more relationship quality by the end of the two-week period, what can we say about who those people were? Well, the good news is, as far as depression and loneliness is concerned, it seemed to help everybody equally.

There were really no differences in gender. There were no differences by race. There were no differences by income. The tips seemed to help everybody approximately equally.

For relationship quality however, we found some characteristics associated with improvement. We found that those people who were reporting more relationship quality over the course of our study were more likely to be older. They were more likely to be living alone. And they were more likely to be white.

Now, it pains me to tell you that last bit of data there. It pains me to say that the people who were identifying as white in our study seemed to benefit from the relationship stuff better than people who identified as Latino or Black or Asian. I don't like reporting that to you given the focus on racial justice in my lab.

That is however what we found. And I'm happy to take questions about that as to why when we get to it. But for now, I'm just going to put that out there and move on with some other findings. That finding-- older, living alone, and white-- just to be clear, it was only for relationship quality, not for depression and loneliness.

Here's what the intervention looked like. Again, from relationship science, there's quite a bit that we know about how to help people improve their relationships. I already talked to you a little bit about the importance of not just any old awareness but the importance of becoming aware of your feelings with acceptance and with compassion.

Again, some of us could call this mindfulness. But I know some people have a negative reaction to the term mindfulness. So I'm just going to call it awareness.

So some of our tips were awareness interventions helping people become more accepting and aware in a mindful way of what they were feeling. I'll walk you through some of that in a minute. Some of our tips were simply vulnerable self-disclosure tips. We wanted to help people talk about how they really feel-- not just superficial chit-chat, but to really encourage people to talk about how they're really feeling.

We know from decades of research and relationship science that getting people to talk about who they really are, how they really feel, what they really need is important to relationships. We'll simply call this courage for the sake of our talk here. And then finally, we wanted to help people listen better. When somebody else in a relationship is doing vulnerable self-disclosure with you, how do you respond? We want people to respond well.

We know that interaction-- somebody talks about how they feel, the other person responds well-- I'm just going to call it love. That interaction is the basic dance step of good relationships. That interaction is the pot of gold at

the end of the relationship rainbow. When people do this, relationships improve relatively quickly.

Now, as a scientist, I don't think I need to tell all of you this because you know it just from living in your lives and experiencing this over the course of your lives. This is hard to do, sharing how we feel with other people. But we know that, when we do it, relationships improve. And I think, if there's one thing this pandemic has taught us, it's how important it is to go back to these basic dance steps of relationships.

So we shared a tip a day for 14 days. And here are the 14 tips that we shared with them. And I'm going to walk you through a few of them in detail in a minute or two.

But for now, I'll just give you a long list. You can sort of guess what the tips were just based on the title. And I don't have time to walk you through all 14. But for now, I just want to say that these tips were just trying to get people to be more aware of how they feel with acceptance and compassion, to talk to each other about what's important to them in their life, and to respond to each other well.

We asked people at the end of each day, how helpful were these tips for your mental health? Here's what we found. Again, the larger the bar, the more people reported these tips were helpful for their mental health.

And so I just want to highlight that if you just look at the size of these bars, what we actually found were that people were saying these awareness tips tended to be the most helpful. And in fact, these two tips right here, breathing and acceptance, people reported to us were the most helpful for their mental health. I'll give you a minute or two of more description of what these tips were. But these were the most basic interventions of our entire set of suggestions, just getting people to slow down and take some breaths over the course of the day and connect with their bodies and to do this with acceptance. That tended to be what people said was most helpful, really basic stuff.

We also asked people how helpful were each of these tips for your relationships-- not just for your mental health but for your relationships. And here, we see a slightly different pattern. Number 1-- not too much difference between the different tips.

But if you want to zero in and select a few that seem to be particularly helpful, I am going to suggest that this tip called Bringing your Critical Thoughts with You, this vulnerable self-disclosure tip called Expanding your Social Group, and then this responsiveness tip called Being a Vulnerability Hawk tended to be most successful. And so these are tips that cut across all three of our categories of awareness, courage, and love. So that's what we found.

I think that lesson-- this is what it all looks like together. This is a bit of a mess. But if you want to put the data on helpful for relationships, the orange bars

and the blue bars helpful for mental health-- put all that together. You can see which tips were most successful in general for both. And again, probably the single most important tip was just breathing, just helping people go back to the very basics.

So for the last minute or two of my talk-- well, about five or 10 minutes of my talk, I just want to walk you through some of these tips in a little more detail, some of the tips that we thought from our data were most successful. So first, some of these awareness tips. What we know from dozens of studies and psychological science and relationship science is that, when you can simply slow yourself down over the course of the day and then notice when you are on autopilot and try to connect with a little more intention or deliberateness with yourself, your feelings, your body, and what's going on in the space around you, you're likely to have a more successful day. And the most important thing to do here is to just breathe.

So what we did in our suggestions is we just asked people to take a three-minute meditation with us. And it was just about breathing. You could try this right now if you want as you're listening to me talk. I just encourage you to just take a few gentle breaths.

And with each breath, you may notice your body relaxing just a bit. You may notice, again, like I said at the beginning, like a water balloon, you have the capacity to expand and feel stress and keep going. You can center yourself. You can identify who do you want to be in relationships and in life. And then you can do a little bit better job interacting.

So that was essentially what we did with breathing. We encouraged people to do this with us in the morning just listening to an audio recording. And then we encouraged people to try to remember to do it over the course of the day, just 30 seconds of breathing.

Acceptance was similar. The acceptance meditation was also just a very brief two to three-minute meditation. The only difference was, during the meditation, we asked people to really notice how they were feeling and breathe in acceptance. Whatever you're feeling, can you just soften around the edges of it? Can you make space for it? Again, like a water balloon, just fill up with your feelings with acceptance and compassion and keep going.

My favorite intervention, quite honestly, was this intervention that we called Bringing Critical Thoughts with You. And similar to the other interventions, it was just a brief meditation, I can't remember, two or three minutes. The acceptance meditation focused on opening up to, with compassion, whatever you were feeling. But Bringing Critical Thoughts intervention focused on opening up to whatever you were thinking.

And in particular, we asked people to imagine having a social interaction with somebody they cared about. And perhaps it's an interaction with somebody where you're worried about how the interaction will go. Maybe this is somebody who you haven't spoken to in a long time. I think during the



pandemic, many people had the impulses or the urges to reach out to and connect with old friends or old family members who they hadn't spoken to in a while. And we really encourage that.

But for those kinds of interactions, talking to somebody you haven't spoken to in a while, you may have these critical thoughts that you have with you. Uh, they're still upset with me! Or yeah, they're not going to want to speak with me. Or in my case, I wanted to reach out to a cousin in New York City back when the pandemic was ravaging New York City.

And I had this thought. He's just going to think I'm calling him because I'm interested in New York City and not him. So the intervention we did was to breathe, notice those critical thoughts, and imagine you are a bus driver. And those critical thoughts are like passengers on your bus. And instead of trying to kick the passengers off the bus or arguing with the passengers or not letting them on the bus in the first place, just let them on the bus and keep driving your bus towards your goals, towards your values. People found that idea, that metaphor very helpful.

So those are just some of the acceptance and awareness interventions that we did. And again, there's nothing really unique. We didn't make this stuff up. This is stuff from decades of relationship science. All we did was package it in a novel way and try to get it to people every morning through text messages.

I wanted to also share with you before I stop just one more intervention. And this is the one called Being a Vulnerability Hawk. This was the responsiveness or love intervention that our participants rated as the most helpful intervention for their relationships.

And what we did with this intervention is we asked people to try to pay attention over the course of the day to every social interaction they were having, whether they were interacting with their daughter or their husband or wife or a friend or somebody at work. Try to notice in every social interaction small moments of vulnerability in those around you. Try to look for the subtle nuances when somebody else may be self-disclosing something vulnerable to you, even subtle things like just talking about how their day was or saying, I didn't sleep well last night or saying, yeah, I'm really tired, just noticing that vulnerability as an opportunity for connection.

Paying attention with empathy and caring and love to those around us, really noticing with exquisite sensitivity the vulnerability in others, we didn't tell people how to respond too much. We just said, notice and just let people respond. And what we found-- I should put it differently.

What has been found in other studies is that, when we orient people towards empathy in this way that, not only it helps the other person because you're going to likely respond with more empathy to them. But it also helps you. This sort of paying attention to others with empathy and caring and giving and gratitude has mental health benefits for the person doing the caring as well as

benefits for the person receiving the caring. And this is borne out in our research.

So I don't have time to go through the rest of the interventions with you. And I do want to make sure you have 15 minutes for questions. So I'll stop here.

This is some final thoughts on what we found. Number 1, again, we didn't make this up. We're just trying to take evidence from relationship and psychological science and get it out there. And so there's nothing unique about our work. I think I'm orienting all of you to these kinds of ideas. You could develop it yourselves.

For example, Vivek Murthy, by the way, our new surgeon general-- actually, I should say our renewed surgeon general, because he was also surgeon general under Obama, he actually has written a tremendous book on loneliness. And his intervening years between his two stints as surgeon general, he became very interested in loneliness.

And if you google him, listen to him talk about loneliness and connection, you will find an incredible resonance with the work I just presented today. It's really exciting to have a surgeon general who's talking about this kind of relationship and psychological science and recognizing how important it is to our coping. So I suspect you're going to hear even more of this from the White House as we engage in the transition to the next administration.

Our interventions only worked during the period in which we were giving the interventions. And so that's a lesson, right? Two weeks isn't enough. We have to find ways to give people ongoing support. Or we have to make this more stronger such that people learn how to keep this going in their lives even without the tips from us. But we didn't succeed there at the moment.

Especially for the relationship quality interventions, as I mentioned, it's clear that we did not do well enough for our different ethnic and cultural groups. We tried by the way. Our team was a multiracial team.

But it all happened so fast at the beginning of this pandemic. We were not able to be sensitive enough to the needs of different ethnic and cultural groups. And I don't want y'all to make the same mistakes we made with this study because it's really important to not make these mistakes. And I have a bit of shame that we didn't do better. But there it is.

And finally, I really think the ultimate lesson of the pandemic is for all of us to go back to the basics of relationships to try to get quality and caring and love going. What matters is not how many relationships we have but the quality of those relationships. As we head into the holiday season, I think these reminders are more important than ever.

You might not be able to have the same Christmas celebration. If you're celebrating Christmas or however you're celebrating, you might not be able to have the same fun and raucous and large Christmas celebration. But you can

still create moments of intimacy and moments of quality between you and those you care about. You can still let others know how much you love them, how much you care about them.

And guess what? That's what really matters. This is the stuff that really matters to relationships, not just how many you have.

OK, so thank you all for your time. I'm happy to now open this up to reactions and comments and questions and stop here.

PRESENTER: Thank you very much. This was a fascinating study and information. And we appreciate you sharing it with us. And we do have about 15 questions. So we will get through them as quickly as possible.

And just a quick note-- for people, because I'm aware of people's time, if we do not get through all of the questions, Dr. Kanter will answer them in writing. And we will post them on the website when we post the recording and the slides.

So the first one is, any information on interventions for youth ages 12 to 25.

JONATHAN KANTER: Our research, it required people 18 or over. So I can speak with confidence for the people over 18. Like I said before, we did not see any differences in depression and loneliness. I think the suggestions I have are workable for young adults.

Kids, I think, it's a different talk. Certainly, the ideas that I laid out of increasing awareness, increasing disclosure, and increasing responsiveness are important to kids as well. But how to implement that, how to communicate that effectively to parents and kids would require different strategies than what I talked about today. So I can't speak too much to that unfortunately.

PRESENTER: Thank you. How did you compensate for the digital divide, those who do not have technology-- so lower income, diverse, persons of color?

JONATHAN KANTER: Yeah, that's actually why we tried to keep it simple. There is research that more people-- older adults, people in rural communities who don't have good digital access, and people who identify as ethnic or racial minorities are more likely to use text messaging and to search websites than they are to necessarily download and use an app. And so that's actually one of the reasons why we like the text message intervention to keep it simple. There's research that older adults, for example, are more likely to use text message interventions or to receive and work with text messages than they are to download apps.

That said, we-- so that's how we tried to solve it. That said, we didn't solve the digital divide. That is also a different question than something we can answer.

And in fact, we did unfortunately see some people drop out of our study, a minority of people. I can give you the numbers if you really wanted. We did see some people drop out of our study because their cell phones were not able to actually receive our text messages in a coherent way. They were getting them garbled because they had old cell phones. And because we rushed to put this thing up, we didn't fully vet the technology with all available cell phone options.

So it's a problem to solve. But again, I think keeping it as simple as possible is an important part of the solution.

PRESENTER: Great! Thank you. This study occurred fairly early during the pandemic. I wonder if now that the pandemic is many months old study results would be similar or different. Also, it would be interesting to see if essential workers had differing mental health than nonessential workers.

JONATHAN KANTER: Yeah. Other research suggests that essential workers are struggling with stress and mental health more than our non-essential workers. And of course, that makes sense. And so there are subgroups of people who, as this pandemic goes on and on and on, are going to struggle with more stress and more depression than other groups.

So the basic tips that we have to offer here, which are sort of population level, again, not dealing with severe depression. Those tips I am confident apply across the whole time period. But there are some groups of people who need more help than what we can offer in text message interventions. And essential workers and people who are really struggling with financial security and things like that are definitely in that group of people who are going to need more help than were offered with this population-level intervention.

The last thing I'll say here is, on the slide, I have Black Lives Matter. Right smack in the middle of our intervention period-- not in the middle, but towards the end-- we had the murder of George Floyd and then the National Black Lives Matter protest movement that caused tumult for everyone no matter what side of the movement you ended up being on politically. And so I do think an important component of this pandemic is dealing with the racial inequities and the other economic inequities in terms of how it's played out.

And as you saw, minorities didn't get the same benefits from our intervention in terms of relationship quality. And I just think it's so important that we devote time and resources to working with communities of color to develop resources that work for them. And again, we didn't succeed as well as we needed to at that in this study.

PRESENTER: Thank you. This question touches a little bit on essential workers as well. But did you analyze religious affiliations or different occupational fields in your study?

JONATHAN KANTER: We asked about that. And we did not see any meaningful differences in outcomes based on religion or different types of employment. So we did not see that.

Again, what seems to be the biggest driver of depression here was baseline depression. And so people are sort of bringing how they react to events with them into this study. And we can't necessarily fix that with these tips.

The second biggest driver of depression over the course of our study was stress. And so we can all guess who's feeling more stress than others based on how this pandemic is playing out. And those are obvious. But we also understand that some people are simply going to be more reactive to stress characterologically and going to have a harder time as well.

So I think there's a lot of interest in sort of identifying characteristics of people who are doing worse. And again, I think it's more important to just think about who's under the most stress. Those are the ones who are going to need the most help.

PRESENTER: Thank you. Was the quarantine status in each area considered or factored in? For instance, Carolinas were very late to implement quarantine regulations where Ohio was one of the front runners.

JONATHAN KANTER: Yeah. We didn't have enough state-by-state representation to be able to look at that. So you saw that map where we only had smaller numbers of people in certain states and then larger numbers of people in other states. And those numbers are fairly predictable based on the population levels of states. And so yeah, we would need a more nationally representative sample to be able to answer those questions. And we unfortunately couldn't do that.

PRESENTER: OK. Do you think the more aware, the more depressed they were because they just started to think about their feelings more? Or maybe folks didn't have a good language to talk about it.

JONATHAN KANTER: A couple of things there. And I don't know scientifically. I'm just give you my impressions, I guess. But probably the biggest thing is what I would call the reverse causality idea. So in other words, when people were feeling more depressed, they were more aware of their feelings.

So it's not as if awareness produces depression. It's more that, when you're more depressed, that depression is just screaming at you in your body. And now, you're more aware of how depressed you are. When you're not depressed, you're just going through your day. And you're not aware of your feelings.

And so again, I think that's probably what's going on that, when people are feeling more stress, more anxiety, more discomfort, that feeling is just louder for them. And so they're more aware. And so that's why we really have to



work on, when you're feeling that way, can we feel and be aware in certain ways that are helpful rather than just being aware and miserable?

PRESENTER: OK. That makes sense. We have time for probably one more question. And just a quick reminder that, if we didn't get to your questions, we will get them answered and put them up on the site.

Were participants not in the control group encouraged to use the tips they were texted during the study? Or was it understood that they would only use the hints on the days that you sent them?

JONATHAN KANTER: We tried to get them to keep using the tips. We had suggestions. Actually, our last day of suggestions was called Taking It on the Road where we encourage them to keep this going and to try to keep doing this on a day-to-day basis. And there were other moments throughout the 14-day intervention period where we encouraged people to keep it going.

But it looks like they didn't do that. And that makes sense. We all know what it's like as human beings to try to build routines, to try to start a new exercise routine or to do something different or to change a habit.

And as a behavioral scientist, I'm a big believer-- I'm sorry, this is a little geek term-- of what we call stimulus control, just how important it is to help people remember to do the important things just with a little reminders. With my clients-- I'm a clinical psychologist-- I would just tell people to put sticky notes all over their house reminding them to do the important things. And when you don't have those sticky notes, people forget.

So I think that is a problem we have to solve. We did not successfully get people to build these repertoires to keep this stuff going on their own. But I don't think that's a function of people being lazy or anything like that.

I just think, as human beings, this is actually where people need help. So anything we can do to kind of keep those reminders going in a daily way keep that, what I call, stimulus control going I think is really important to getting people to engage in lifestyle change, to helping people engage in behavior change over time. It's tough stuff.

PRESENTER: Thank you. Just one really quick question. Do you think if there was an equal number of participants from each race the findings would have been different?

JONATHAN KANTER: No. I think we failed our Black and Brown communities in this study with respect to relationship quality. I think we needed to do a better job speaking to their cultural needs than we did. And I don't like saying that. But I do think that's what happened.

And again, this is important to me in my career. I wish I could redo it. I'm planning on in the future doing a better job with develop-- I think at this point, because there's so many cultural differences and so many differences, we

need to really speak to tailoring interventions to different ethnic and cultural groups. And it's not necessarily going to be as easy as a one-size-fits-all thing. For depression and loneliness, it did seem to help a lot of people. But relationships are pretty idiosyncratic. And I don't think we got it as right as we needed to for our Black and Brown communities unfortunately.

PRESENTER: Thank you. I'm conscious of-- our hour is up. I want to let people know that there were several questions about books and authors that you mentioned. So we'll make sure that we get that information and put it up on the website as well as any additional questions that we were not able to answer.

I want to thank you again Dr. Kanter. This was a fascinating and really helpful presentation. And I want to thank everyone on our webinar for their time. So again--

JONATHAN KANTER: Yeah, happy to talk more and answer the questions. And if people want to follow up, my email is-- well, I guess I took my email down. But it's in the slides. So feel free to follow up with me, hopefully, not all of you at once.

PRESENTER: Thank you all very much for your time. And have a great afternoon.

JONATHAN KANTER: Take care, everyone.