

National Park Service
Conservation & Outdoor Recreation Division
Healthy Recreation Community of Practice
Continuing Education Webinar

The Intersection of Nature & Mental Health

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March 23, 2023

Panelists:

Dr. Vaile Wright, American Psychological Association
Ms. Allison Colman, National Recreation and Park Association
Dr. Keith Tidball, Cornell University
Moderators: Attila Bality, NPS Stephanie Tepperberg, NPS

AB

Bality, Attila P0:09

Good afternoon. Today's Healthy Recreation Community of Practice webinar is focusing on the Intersection of Nature and Mental Health. RTCA and COR staff indicated a need for more knowledge on this topic. Today's session addresses the evidence, and our April 20 webinar will address the physical projects we can encourage our project partners to consider for improving the mental wellness of their community.

According to the CDC: Mental health includes our emotional, psychological and social well-being. It affects how we think, feel and act. It also helps determine how we handle stress, relate to others, and make healthy choices. Mental health is important at every stage of life, from childhood and adolescence through adulthood. It is important for overall health. Mental and physical health are equally important components of overall health. For example, depression increases the risk for many types of physical health problems, particularly long-lasting conditions like diabetes, heart disease and stroke. Similarly, the presence of chronic conditions can increase the risk for mental illness.

So, our work in the physical space and helping with physical activity in the parks and trails work surely addresses can help address the mental health, so this is a really good space for us to play in today.

Our format will be presentations from each panelist, followed by questions from our moderators. We invite challenging questions from the panelists as well. Webinar participant will also have time for questions and discussion.

AB

Bality, Attila P1:37

Our panelists today include: Vaile Wright, Senior Director of Health Care Innovation at the American Psychological Association, Allison Coleman, director of health at the National Recreation and Park Association and 3rd Doctor Keith Tidball, the Senior extension associate at the Department of Natural Resources and Environment at Cornell University.

Stephanie and Laura and I have had the opportunity to work with these folks the last couple weeks, setting up his webinar and really excited about what we can offer you This afternoon.

So, let's introduce Vaile Wright to you. She's the senior director of healthcare innovation in American Psychological Association. She is a licensed psychologist and researcher focusing on developing strategies to leverage technology and data to address issues within the healthcare, including increasing access, measuring care and optimizing treatment delivery at both individual and system levels. She's a spokesperson for APA and has been interviewed in the major news networks, NPR topics related to stress and politics and discrimination, harassment, COVID and mental illness, and telehealth and technology.

She's got her PhD in counseling psychology from the University of Illinois, Urbana Champaign, and is a licensed in the District of Columbia. Welcome Vaile. Take it away.

Wright, Vaile3:08

Thanks so much. It's exciting to be here. Umm, so exciting that you know, when I told my husband you're not going to believe it. I am presenting to the National Park Service. He said to me. Wow, you've got to tell him the story about how you did the Grand Canyon rim to rim hike in one day. And I said, I don't know that they want to hear that story. But when I told it to Stephanie until they said, you know, they gave the approval. So, if we go to the **next slide** just to actually prove and that I did it, this is me was the group of individuals about 5:00 AM.

Uh, this is me descending. That's me in the middle trying to look happy, but not really being happy. And then this is me actually coming out the other side, which is the only thing you care about is getting out of the Canyon. So, this isn't really a pro mental health story. It wasn't really supporting my mental health. I think it's critical to think about how do we accomplish things and how do we think about the role of nature and our lives. And when I when I think about how this relates to this group.

To go to the **next slide**, I live in Illinois, so obviously to train for this, I couldn't be training on mountains. I had to train on the Illinois Prairie path. So, I live in the western suburbs of Chicago and this Prairie path is a critical component of our community. So much so that when my husband and I were buying our house together, we ensured that it was near enough to the Prairie path that we could walk to. And so, this is how we trained. We walked on the path every Saturday morning with our packs on and our snacks and our water and.

You know, at our think greatest training, what hike it was, you know, 7 and one-half miles down and seven and one-half back and you know I think about that sense of community because if you're at the same path every Saturday morning, you start to see the same people. And so how does that community help support our mental health and what aspects of the path itself could designers think about in terms of supporting more for mental health? And so that's I think to me the exciting part of this discussion is the opportunity that we have here.

To really innovatively think about, how do we address them on the health needs of this population, cuz we go to the **next slide**, this is where the stuff gets less fun. We're in a mental health crisis. I doubt that this is a shock to anybody in this space, but that is where we are, and we were before the pandemic and the reality is it's only been exacerbated over the last three years. And so, we see just these increases in mental illness across the country and across the globe because of COVID. And if we go to the **next slide**.

Wright, Vaile5:43

It's not just COVID, although that's played a huge role and the impacts of COVID, but it's a variety of different stressors that we're experiencing in this country and again across the globe. So, it's inflation and it's money in the economy which we hear in our stress in America studies, is really rising to the top of stressors. It's what we hear in the news. It's this constant 24/7 news cycle that exposes us to traumatic images and to the trauma that's existing.

Again, locally and across the world, and so it's things like climate change and, you know, invasions of democratic countries and again, you know, the economy and the racial tensions that we're seeing over the last several years. And to be honest, it's the role of social media. Most of the research suggests social media is kind of a mixed bag. So, it can have some positive outcomes when it comes to helping connect isolated individuals, particularly those with social anxiety.

But by and large, what we're seeing is that it's having a pretty negative impact, particularly on younger adults and in particular, younger girls. And so, when we're faced with all these stressors, you know, what is it that we do? And so, if we go in the **next slide** while I take a sip of water.

Because what we're seeing, unfortunately is that all of these are having a very negative impact on our mental health. So, when our stress in America survey from a couple years ago and we do these every year, we asked adults to self-report on how they think they're mental health is. And nearly one in five adults said that their mental health is worse than it was at this time last year. And you can see that it disproportionately impacts younger adults. And we see this year after year after year and there's a variety of reasons for it. One is we know that younger adults just don't quite have as much resilience and coping skills.

As older adults do as you learn from adversities and overcome them. But I also think younger adults are facing a much different world than some of the older adults ever had to deal with. Whether that's mass shootings and school shootings and incredible student loans. And so, I think that you can see why a younger generation is so incredibly impacted. And if we go to the **next slide**, it's not just young adults. It's kids and adolescents as well, who have been just disproportionately impacted by the pandemic over the last three years. And so, when we look at things like claims data like actual research, we see that we're seeing increasing rates of anxiety, depression and post traumatic symptoms even among young children. And what's even more disheartening or terrifying is we're seeing or really severe behavioral changes, so intentional self-harm, overdoses and substance use disorders in kids from as young as 13, right? And even younger, we're seeing an increase in obsessive compulsive disorders. So that kind of checking behavior that, you know, constant kind of not being able to control. You know your behavior and your obsessions as well as tic disorders. So, things like verbal tics and physical tics. So again, just to highlight just how challenging the situation is and if we go to the **next slide**.

And it's not just young adults and young children. There are a variety of populations that are impacted by HealthEquity issues, in particular mental health equity. And I know some of the other speakers are going to talk about this as well. So, I'm just going to touch on it very briefly, but of course, we're talking about people with disabilities and older adults. Women still are disproportionately often impacted with around their mental health, particularly depression and anxiety. And we're seeing incredible increases in substitutes the LGBTQ.

Like LGBTQ Plus community as well as rural communities. And you know, historically marginalized communities, such as individuals from communities of color, they're all kind of part of this HealthEquity.

Vulnerable population lens that we want to be thinking about as we're having our discussion today and if we hit the **next slide**,

I really love this quote about what health disparities are. Because it really highlights the fact that it comes from a systemic place right within our society, and so we need to be thinking about sweeping change. How do we, how do we really? Disrupt the status quo and think about reaching people where they're at in their communities.

Because as we go to the **next slide**.

And what we're seeing is that these stressors, these increases in depression and anxiety, are having a negative impact on our behaviors. So, this is again from the stress in America survey from just last year where we asked how people were coping with their stress and what we saw was some.

At some significant unhealthy coping behaviors that people were engaging in, not just this past year, not two years ago, but since the beginning of the pandemic. So, these unhealthy behaviors have become ingrained in some ways, which makes them even more hard to dismantle. So, we're seeing 58% reported significant undesired weight changes, whether that's increases in weight or decreases in weight. That, again, were undesired. So that, you know, suggest - Lack of activity potentially. Certainly, unhealthy eating behaviors potentially, and just to startling, we saw a significant increase in drinking more alcohol to cope with stress.

Umm, with men saying they averaged 12 drinks per week and women saying the average 8 drinks per week. Of course, if you look at CDC stats, that's considerably higher than what would be considered healthy. And so, I think when we're thinking about how do we change these behaviors, that's one critical component because if we don't and we go to the **next slide**.

To utilize point earlier, when these unhealthy behaviors go unchecked and or when stress becomes chronic and unmanaged in general, it has negative impacts on both our physical health and our mental health. So, we see increases in cardiovascular disease, diabetes, obesity, increased mortality as well as hypertension.

And all of these have lifestyle components to them, right? That could help improve the physical health conditions. But we also see the impact on mental health. So that again, can look like depression and anxiety, post-traumatic stress disorder and insomnia, as well as eating disorders. And so, you might be saying, well, what am I supposed to do about it? Well, I think a lot because if we go to the **next slide**.

We can't just therapy our way out of this. There's just not enough of us. The workforce was insufficient to meet the mental health needs before the pandemic. And again, it's only gotten worse in the last three years. And so, you know, obviously my perspective as an organization that supports psychologist, I want to continue to do that. I want to expand the workforce; I want to support the existing psychology workforce so that they can meet these mental health needs. But I know that can't be the only solution. We have to think again, more innovatively About how we treat mental health, particularly mental health disorders, but also how we prevent and how we even just reconceptualize what meant to health means in our communities, in our workplaces, in our families. So, if we go to the **next slide**.

So, part of that means kind of getting back to the foundation and this is a critical for everybody to really be thinking about and why it's the foundation, is it truly is what sets the stage for us to be better able to cope with the stresses in our lives. So, what that means things like balanced eating, getting adequate sleep, staying socially connected to others and includes activity. I think when we find that when we say the word exercise that has the tendency to turn people off. We usually try to just sort of coach it in this idea of physical activity and making sure that we're getting outside into nature and the reasons are if we go to the **next slide**.

Because we're talking about really population health. We're talking about, how do we address everybody within our communities within our state, within our society. Because when we have a healthier population.

We only see positive outcomes, right? We have better economic outcomes, we have better workplace outcomes, we have better community supports outcomes. And again, I think a population health. Perspective enables us to really see the big picture. So, if we go to the **next slide**.

I think where my profession often focuses is on this top 6% right. This group of individuals that have a diagnosable mental illness and require again the sort of highest level of care. But look at the rest of the population, how could we think about not just waiting until people get sick to talk about mental health, but how can we reach the at-risk population and the healthiest populations? How do we reach them to get them to start engaging in behaviors that support their mental health?

Support their emotional well-being and I think that that's where the opportunity is for this group, and I think I just have one more slide and we'll pass it off to the rest of the group because I know we're going to talk about this too. But there is a lot of research that actually supports the role of activity in nature. It's growing space, a lot of it has focused again on exercise specifically, but you're seeing increasingly numbers of studies focusing just on walking and focusing on just being in nature and the impact that that has.

And we know that it has the potential to improve things like depression, anxiety and worry, insomnia, stress, burnout, even cognitive functioning and memory. And, of course, physical health benefits as well. And so, with that, I believe my last slide is just my contact information in case anybody has any questions or wants to follow up or kind of think about how we could be working together as we I think capitalize and really again.

Think about how do we reach people in their communities? We can't just wait for people to come to.

A specialist to address their mental health, we need to be addressing mental health in all facets of our life. And with that, I'll stop really appreciate again the opportunity to be here and I'm excited to hear from the other panelists and get to answer some questions. So, thanks again.

AB

Bality, Attila P16:47

Thank you, Vaile for some outstanding information there. Appreciate that we're going to save any questions for her until all three panels have concluded their presentations.

We're going to go now to Allison Colman. She's the director of Health for National Recreation Park Association. She leads the Health and Wellness pillar, and we'll learn more about those pillars in a second. We've shared that with you all in the past as well. Allison focuses on leveraging the power of local Parks and Recreation to advance Health Equity, improve health outcomes and enhance the quality of life across 7 dimensions of well-being. Before joining NRPA, Allison worked in the recreation field, facilitating health and Wellness programs across all populations and combined with her work in local and national levels, Allison has extensive experience implementing and scaling evidence-based health and wellness interventions and advancing equitable systems change and community driven approaches to improve community health and well-being.

Allison, thanks for being here. Welcome.

AC

Allison Colman17:52

Thanks Attila. Happy to be here and thank you so much Vaile for that great presentation. I really enjoyed it and very informational indeed. I'm Allison Colman, she/her pronouns, as Attila said, director of health at NRPA. I'm going focus my presentation a little bit more on what Vaile was just talking about, really, the growing evidence that demonstrates the mental health benefits of parks, green space and recreation from both a prevention and a treatment perspective.

I'm also going to share a little bit of data that NRPA has on how people are engaging with Parks and Recreation for mental health benefits and the types of programs and services that park and recreation agencies across the country are beginning to offer. But that might provide some opportunities for partnership with NPS and other organizations. Before I get into that, I wanted to do just a quick overview of NRPA. If you're not super familiar with our organization, we are the national nonprofit that represents all local park and recreation systems across the country, so think primarily your city, county, regional park and recreation departments. Many of you are working with at that local level. We have about 60,000 members. Most of those folks are park and recreation professionals working on the ground in their communities every day. And our vision is really focused on seeking a future where the full power of Parks and Recreation is widely recognized for creating a better life for everyone by building strong.

Healthy and resilient communities because everyone deserves a great park. We want to go on to that **next slide**.

NRPA has three pillars, and these are really at the core of our work. And three of the areas where we know Parks and Recreation can make some of the greatest impacts on their communities at the center of our work is equity. Our work is grounded in equity and that transcends the other pillars. And we are absolutely committed to closing the gaps in terms of who can benefit from Parks and Recreation and fully experience those benefits. Our conservation pillar is focused on building more resilient communities in the wake of climate change.

Are most existential threat and at the same time we are focused on connecting more people to the outdoors, protecting those natural habitats and ecosystem, and really fostering the next generation of environmental stewards. And that work is, of course, connected to our health and wellness pillar. You know, getting people in the outdoors but also recognizing the critical role that Parks and Recreation play as a key part of our public health system, they provide opportunities for people to be physically active.

That green space and that physical activity promotes mental health and well-being. They support social connection and the opportunity to connect with other neighbors and constituents and community members. Those folks from different backgrounds as well. We often say that difference meets at the playground here at NRPA. Park and recreation agencies really play a vital role in our communities, and these are the three areas where our organization focuses our work. On we go to the **next slide**.

We advance this work by really digging in on these guiding principles, which are at the core of our current strategic plan. This is really, I think helpful to kind of articulate how we work with our local agencies. But as we focus on centering equity and community, we are a committed to advancing systems change approaches. So really working on practice, policy change, shifting mindsets and norms, looking at power structures and how decisions are being made in local park and recreation agencies.

And flipping the switch on those so that we can really ensure community driven approaches or moving forward that address barriers to Parks and Recreation and other social determinants of health, we are focused on a holistic approach to respond to today's public health challenges. As Vaile was just saying, a host

of those, we really recognized that we need to be applying a whole person, whole Community lens, making sure that we are focused equally.

On multiple dimensions of well-being versus sort of traditional views of just focusing on physical health.

Our work is also really focused on changing the narrative, and I'll talk about that in a few minutes, but we have to elevate the role that Parks and Recreation play in communities as essential and not just a nice to have not just an amenity, but something that needs to be part of the fabric of every community and the conditions where people live, learn, work, play and age. And then the last way in which we move our work forward is really by supporting the professional. So that is our membership base and focused on providing our members with the competency, the knowledge, the tools that they need to carry their work forward and meet the demands of today. If we move on to the **next slide**.

I wanted to talk a little bit about the role that parks and recreation plays as a social determinant or a social driver of health. We know that the conditions where people live, learn, work and play, including things like access to safe neighborhoods, educational opportunities, jobs, healthcare, healthy food, social supports. Those are the elements and the factors that have the greatest influence on our health outcomes and overall quality of life. So those are commonly referred to as the social determinants of health. What you see on your screen here, though, and you might be familiar with this, is the **vital conditions framework**. This comes from the well-being in the nation network, and it's really designed to take those social determinants of health and better conceptualize well-being really better. Illustrate the drivers of health and well-being. So, for example, you know, we shouldn't just be focused on ensuring housing for everyone - we need to be focused on ensuring humane housing for everyone.

We shouldn't just be thinking about, you know, the neighborhood and built environment, but really focusing on building a thriving natural world as a vital condition. So, we are using this framework as we talk about the social determinants of health here at NRPA and highly recommend that.

But either way that you look at it Parks and Recreation is represented in this and that's because more and more evidence continues to reinforce the positive health, social, environmental, economic impacts that parks have on communities. We know that people who live near parks are physically and mentally healthier than those who do not, and Parks and Recreation have been found effective at increasing physical activity at improving mental health, at reducing the risk of chronic disease and at reducing health care costs.

Let's go on to the **next slide**.

Parks and Recreation have unmatched reach. When we think about the need for large scale upstream prevention focused solutions, Parks and Recreation are one of them. I won't read through all of these statistics but do want to call out that first one. In 2022, nearly 300 million people visited a local park or recreational facility at least once that year. So again, thinking about the need for investing in solutions to promoting health and well-being, especially mental health, Parks and Recreation really have such potential for really making significant impacts across this country, we'll go on to the **next slide**.

And so, diving a little bit more specifically into the mental health benefits of parks. And again, I'm not going to read through all of these word for word, but as we've said, the evidence continues to grow and it's somewhat new space, but there is strong evidence that is emerging, really demonstrating the mental health and the social emotional benefits that Parks and Recreation provide to communities. All these data points that you see on your screen, we maintain a page on our website. And I can throw that into the chat and a little bit.

But we keep up to date information on emerging research and evidence that really document the health benefits as well as the economic, environmental, social benefits of Parks and Recreation. So, we know that access to green space reduces stress. Symptoms of depression, improves mood and attention. We know that mental health is related to residential distance from parks and green space. So, if you live closer to parks and green space, there are better mental health outcomes associated with that then, if you live further away.

Diagnosed depression is higher in areas lacking green space and green space exposure has a positive effect on children and there are several benefits associated with that. Additionally, the public agrees nearly all US adults, 93%, say that the activity is in the spaces provided by park and recreation departments are essential to their mental health. We did a similar park Pulse survey in the early days of the pandemic, where the same number. 93% of people agreed that their local parks were essential to their physical and mental health at that time. So, people agree that the mental health and physical health benefits of Parks and Recreation are strong.

Let's go on to that **next slide**.

I wanted to show you all in addition to the spaces, you know, the parks, the trails, the greenways that are agencies are managing, they're also providing several programs and services that are really focused on mental health and contribute to improved mental health. This data is from our 2021 advancing Community health and well-being survey and it highlights the many ways Park and recreation agencies are providing programming. So, everything from facilitating community events to mindfulness programming, that's been a really exciting area of growth that we've seen over the last five years, especially meditation, forest bathing, nature walks, yoga, Tai Chi, taking place outdoors in local park settings.

Intergenerational programs. You know, bringing together different generations to participate and outdoor recreation, social, emotional learning programs. You know, we've talked about the challenges facing youth and how park and recreation programs out of school time programs taking place in those settings can be leveraged to help youth build communication skills, regulate their behavior and decision making, etc. So, there's a whole variety of programming that's happening at the local level. And these are some opportunities. Where we know our members are looking for partners to tap into and really help expand these offerings moving forward.

Let's go on to that **next slide**.

And at the same time, of course, there are significant gaps that continue to exist. So, we know Parks and Recreation play a vital role in promoting health and well-being, but 100 million people, 30% of the population, still lack access to the benefits Parks and Recreation provides close to home. And on top of that, physical access and barriers to these spaces, parks are not always safe. They're not always welcoming. They're not always inclusive or community driven.

And due to a history of systemic racism, black indigenous people of color, low-income communities, and other historically disenfranchised populations face additional barriers to being able to access these spaces and fully participate in these spaces. So, we have a lot of work to do to continue to close that gap, and if we go on to the **next slide** here.

I just wanted to share that, you know, one of the ways that we are focused on closing those gaps is really by helping our members to address these emerging public health challenges, including mental health. It's a growing area of focus for many park and recreation agencies. 38% of agencies offer programming and services that address social isolation and loneliness. Another 37% deliver social emotional learning services.

And then many of our agencies, 20% or so and just to set that number out there, there are 10,000 local park and recreation agencies nationwide. So, 20% of them are starting to dedicate resources specifically to mental health disorders and specifically to supporting staff who are confronting these challenges. So, we see a lot of agencies offering staff training related to mental health, first aid, trauma, informed care, administering Narcan in parks to.

In the wake of an overdose taking place on Parkland, the opioid epidemic has taken a big toll on local parks. So, you know, there's a growing interest in this area, and it's a growing area of focus for our members. So just wanted to point that out here now. If we go on to that last slide, I think.

These are some of the resources that we have put out over the last couple of years as you see, it's been really a growing body of work for us, but we have a whole set of resources focused specifically on mental health and substance use disorder and the role of Parks and Recreation and responding to those challenges. We have a mental health language guide, stigma issue, brief prevention guide and then a comprehensive report around how to respond to the substance misuse crisis, particularly the opioid epidemic.

We recently released the active Parks Implementation Resource Guide and partnership with CDC that is around a recommendation from the Community Preventive Services Task Force focused on expanding infrastructure improvements and additional activities to increase the use of parks for physical activity and other health benefits. From an equity perspective, we also have our HealthEquity per our HealthEquity framework. There's a number of tools included in that.

And then lastly our Community Wellness Hub Toolkit, which really focuses on that holistic approach to providing high quality programs and services across 7 dimensions of well-being. So, this is one of the ways in which we support our members, connecting them to resources in response to their needs. And so, I would encourage you to check those out and I can drop some links into the chat after this. And I think that will wrap it up for me. My email's there, so please feel free to reach out. We'd love to continue this conversation after today.

AB

Bality, Attila P33:22

Thanks, Allison. Wonderful presentation. A Couple things jumped out at me. One was the seven vital conditions you referenced in there and maybe think as a more of our staff are starting to get engaged with working on Community health profiles for our project work, thinking about those vital conditions in our health profiles. And the second one was the importance of the programming in the work. Our staff are typically focused with the partners wanting to complete the physical project. Sometimes a physical project doesn't actually engage the parks and rec departments because it maybe it's in planning or public works or something. But ways to bring in parks and recreational would be to think about how can we incorporate that programming?

Our third presenter. Is Doctor Keith Tidball from Cornell University. He's an environmental anthropologist and naturalist focused on better understanding how to amplify recruitment of citizen conservationists and the development of a 21st century land ethic. (So, we're going to be reading his book Sand County Almanac, Part 2 in a couple of years and right Keith!) His work feature is efforts to locate and explore portals and pathways into conservation behaviors grounded in cultural anthropology, disturbance ecology and environmental psychology. He approaches this challenge via as integrated research and extension work exploring the dynamics of natural resource management in the context of trauma, disturbance, disasters and war experiences in the military and in the field of international disaster response and relief in form is unique

brand of applied scholarship, including stints through Asia, Africa and the Americas. His doctoral work, focused on the role of community based natural resource management and post Katrina resilience of New Orleans, and it continues to work in post disaster context globally as well as in disaster readiness, resilience and response.

He studies how outdoor recreation contributes to an enhances resilience and recovery for those who have experienced trauma explicitly. Combat wounded veterans, first responders and disaster survivors. And with an RTCA, as our staff moves into working more with post disaster recovery work in these communities with FEMA, I think Keith's message will be fairly relevant to all of our staff in this space.

Welcome, Keith

KT

Keith Tidball (Guest)36:04

Well, thanks very much for that introduction and for organizing this. This is an amazing opportunity to hear some work that's being done already. I really appreciated Vaile's and Allison's talk and certainly will appreciate conversation we have later.

As was said by Attila, I'm from Cornell University, the Department of Natural Resources and Environment, which is in our College of Agriculture and Life Sciences. Being a land grant university, I am a public servant like many of you, and I just want to give a little shout out to the National Park Service for all that you all do and how much I appreciate that. And in the space of this work, the name of my talk is Eco RX and a little tongue in cheek. A prescription for acute trauma, chronic ecological disenfranchisement and related maladies. **Next slide, please.**

So, we've heard some excellent sort of contextual background overview and some data from our previous presenters. I just want to focus in a little bit on the specifics around trauma as I understand it and a quick caveat. I am not a trained psychologist, psychiatrist or licensed therapist. I come at this as a social scientist as was mentioned in my introduction. But I think we can all agree about.

What we're talking about when we're talking about trauma and you can see that there's basically three types, acute, chronic and complex. I'm not going to go into the weeds on those. You can read through those more carefully if you'd like. I'm sure we'll see these slides later for further delving in. What is important, though, in the space of trauma as it relates more broadly to mental health and our relationship between our mental health and the rest of nature, outdoor spaces, parks, et cetera, is that trauma is ubiquitous. If we're only talking about adverse childhood experiences were already at 70% of the population. If you add in traumatic events like natural disasters, other hazards, war, you know there's a lot, probably most everybody you know has experienced trauma at some form and at some time. And some of those individuals are going to be experiencing that in a way that is more severe to include post-traumatic stress and other and other ailments. And as already been mentioned, you know, COVID-19 has been a magnifying glass on this case not only trauma in particular, but mental health, as has been well described already by my colleagues. **Next slide, please.**

So, the way this actually seems to work and I like this diagram because it helps us understand a process for people that are experiencing trauma, is that whatever you as an individual or as a family or as a community show up with or have in your proverbial rucksack, if you will, before some traumatic event, is what you've got, right? So, there's whatever you are in the pre trauma space and then there is whatever the impact full stressor is. Then there's this brief, really brief period of sort of a surge of adrenaline and activity and maybe

even community cohesion, sort of called the honeymoon phase here. And then there's the problem. There's this precipitous falling off the cliff into a lower emotional states and disillusionment, you know, taking stock and taking inventory can cause depression because of loss. And then several trigger events while in that basin, if you will, can actually magnify those problems, so can anniversaries.

Until we finally get to the point again as individuals, as families, as communities, as societies, even of reconstruction or renewal or new beginnings. So, I think this cycle is important to understand. It's sort of obvious in some ways, but let's keep it in the background of minds as we move forward in this in this chat. **Next slide** please.

What I like to think of, and I've written quite a lot about is, is this space here, the red zone, where the objective would be for practitioners like myself and many of you to do what can be done in terms of mental health, in terms of PTS, in terms of renewal to mitigate and or at least reduce the amount of time spent in this red zone, spent in this space of disillusionment and to better understand what role might green space might, parks might outdoor recreation might the act of restoration play in helping us raise ourselves or enhance our capabilities to get out of the red zone and back into this reconstruction and renewal sort of framework? **Next slide** please.

So, what I mentioned you know we show up with whatever we show up with in terms of those that that state that we're in prior to the impactful event. And I was very intrigued by some of the slides I saw, especially Allison's, but they mentioned it also around the social determinants of health and some of the newer thinking about that. And I would like to add to that conversation that we not forget the ecological determinants of health, that these human social determinants of health exist entirely within an ecosystem that we call our home, and that we're utterly dependent upon to include. As you see on the list of ecological determinants of health, oxygen, water, food, and the list goes on. I think that my colleagues have done an excellent job of sort of describing and spelling out really the importance of social determinants of health and the way that they can be reconstructed or conceived.

So, I'm not going to spend a lot of time on that. Those are self-explanatory. I think the point of this slide and I'll return to this concept later is the necessity and this point was driven home in the talk before mine that we've got to do a much better job scientifically empirically describing how our relationship with the rest of nature is not a nice to do. It's not extra stuff on top. It's not the cherry on the sundae. It's critically important and we need to systematically integrate it into the way that we think about.

But our public health approaches as well as our specific approaches to mental health and even trauma. **next slide** please.

So, in addition to those determinants, ecological and social determinants of health that we have in that proverbial rucksack I mentioned, we also show up with some things that we are fortunate to have called protective factors that help us against risk factors and you know the definition of those is there and we want to protect from things like exhaustion, confusion, sadness and the list goes on in terms of some of the effects that we would expect to see in trauma that I like this diagram because it sort of shows an interrelationship between a number of broad baskets, if you will, of protective factors. And I think it's productive in that there is at least space to think about what is the role of the environment in all of that? What is the role of nature in all of that? What is the role of our relationship to the rest of nature? And I will continue to situate ourselves as humans, as part of nature, not exceptional from exempt from, and so forth, which may be one of the fundamental problems that that we're facing is that that sort of human exceptionalism. But anyway, I think this this diagram does a nice job of letting in the idea of green space of ecological determinants of health and so forth. **Next slide**.

We saw some other slides having to do with pillars in my work. As was mentioned in the introduction, I'm a veteran, I focus a lot of my work, probably about 80% of my work at this point and probably for the last 10 years or so is focused on outdoor recreation as therapeutic for people who have experienced trauma, predominantly veterans, especially combat veterans, but also first responders and disaster survivors. And what I've seen through collaborations and cooperations with a host of different not-for-profit organizations doing programming, whether that's in the space of paddling, community gardening, hunting, fishing, hiking, climbing. The four things I've seen over the years are critical to have in these kinds of programs in order to maximize your opportunity to be helping in terms of trauma recovery. And that's practicing mindfulness activity, getting moving, the willingness to heal. And there are some things that have to be thought through in terms of coaching that and enhancing the ability to do that without forcing things and also the ability to accept support from others, these I think nicely overlap with a couple of other pillars we saw in Allison's presentation that would actually welcome an opportunity to sync those up even more so these things are some key pillars that we see that any program that's trying or project is trying to address trauma or trauma recovery using outdoor environments, using nature, using greening, using outdoor recreation.

As the programmatic item, the these pillars are what should be underlying those sorts of programs. Those programs should be built upon these pillars. **Next slide** please.

So, returning to the concept of red zone, in that red zone space there can be a couple of constructs that I've that I've applied. One of them is greening in the red zone, which has to do with a sort of restoration construct, and we'll get into that in a little bit here in just a minute. And then the other one is more of a recreation orientation. And I've talked about this at length with a number of other colleagues, and I want to share briefly with you that resource because one of the charges I had for this talk was to amplify the important points of that Vaile and Allison made with some demonstration of some empirical examples and case studies that could be used as you think through how you would like to proceed with Parks and outdoor recreation in the space of mental health. So **next slide** please.

I would recommend to you this edited volume ([Greening in the Red Zone: Disaster, Resilience and Community Greening](#) 2014th Edition by Keith G. Tidball (Editor), Marianne E. Krasny (Editor). My colleague Marianne Krasny and I worked on this over a period of years. There are over 30 chapters in here. It's an edited volume. So, most of those chapters are from colleagues. Many different authors from different disciplines, from different orientations. In terms of the value of outdoor settings in a disaster, particularly, but also in in things like conflict zones and in war. It's a Springer publishing book. Therefore, the price tag is on the on the high side. But I do know that there are used copies and so forth on Amazon.com if you're interested in that. Also, the book is available as a Kindle book and the individual chapters are available in PDF. If you're not able to immediately or in the near future, grab that book. I would also let you know that this little screen shot in the lower right corner, there is a YouTube video of a book talk that I did at our man library in their chats in the stacks series. It's about 1/2 hour and it covers more in depth than I can cover today. Some of the specifics and for the case studies and the thinking and philosophy behind the idea of greening in the red zone. The Long story short on this, you know, in we were given, I don't know, 10 minutes to talk with you today and just hit the wave tops but this is the deep dive if you're interested in looking for some case studies that describe this from multiple disciplines and perspectives next.

More recently than that book project is this amazing paper that came out just this last August. I had heard about this research team, and I had been excited to see what they were doing. Although I had some misgivings about how huge the undertaking was, and then I was contacted by the Washington Post to review this paper before when it was embargo, before it was actually released. And I have been stunned by what has

happened with this paper that the accomplishment is amazing. These this research team reviewed hundreds, literally of scientific peer reviewed scientific papers and collated that information and organized that to show or identify 227 different unique pathways through which people's interaction with nature positively and a couple negatively affect well-being many of those affecting well-being in the form of mental health, this paper must read material.

Next slide.

One of the things that I think is excellent about this paper, you probably can't see this very well. I know it's small. I'm just showing you this to you to actually get the, you know, let the image wash over you in terms of the thoroughness of this work. It's organized around the idea of cultural ecosystem services, which is important because it actually insinuates a value. No more of this nice to do stuff. These are actually valued services, and they run the gamut. There are eighteen of them. They're organized on in this paper. This is one of the graphs in the peer reviewed paper that's out. They're organized in terms of the type of mechanism, the definition of that mechanism, sample, cultural ecology ecosystem services.

Then what is the channel of interaction when one might experience those sample constituents of human well-being? And then good examples, good description of examples of those things you're seeing. I don't know if you seen probably six of those now. **Next slide**, there's a handful more totaling 18 types of mechanisms, all defined, all organized into cultural ecosystem services in ways that have heretofore been unavailable to us in the research and in the literature, to quote from and to build upon in terms of further empirical study. So, I highly recommend again.

Harkening back to that, my charge for this talk in terms of what are the empirics, what's the data actually saying? What are these various data telling us? This one, I think you really need to take a look at it and think about how it might relate to your programs now and future programming. And I'm excited to work with you on that. There is a lot to work from with this exciting new paper.

In the next couple slides ago where I where I showed the cover shot of that that paper, I also provided a link to the Washington Post review. It's worth checking that out because there are a number of voices who have commented on this paper that will also provide more cookie crumb trails if you will to other research and other thinking about this that would that that would be potentially useful.

Going back to the **next slide** in the deck.

So, there are a number of graphics like this. At first this is a little overwhelming, but it's kind of a cool one. When you dig into it, it's an alluvial diagram. The thing to take away from it today without getting way into a 30-minute lecture is look at the top right corner. Look at the thickness of that turquoise color bar and note that it is the thickest of the bars in that constituents of human well-being mechanism, liminal space, if you will. And it's mental health and right next to it is subjective well-being and physical health. So, the health and well-being, particularly mental health implications of that paper are profound. This is where we will in the future, when writing our papers at describing what we're seeing in our individual projects and programs. This is the paper that we will use, I think as the backbone of our literature review going forward. So hopefully this is helpful to you as you write grants as you do evaluations of programs, or you do actual empirical research on what we're discussing here today. **Next slide.**

I just wanted to make sure and hit this little caveat. You know, the narratives are important. The way we describe these things are important. The greening in the red zone and that whole project had to do with a restoration orientation, which I think is very, very important.

Uhm, the greeners are obvious. Those are the people engaged in some form of greening, which is the activity of, you know, whatever the activities are that are restoration activities, environmental improvements, citizen science, civic ecology, all of that. And then, of course, there is the implication of the of the green spaces themselves and the overlap of all that. So that is a kind of restoration orientation, which is different in a nuanced way from a more recreation orientation, which I think is important to distinguish from there. You just substitute the actors in terms of.

Who are the people involved? They're not necessarily restoration oriented. Their recreation-oriented recreationists and they are in the act of recreating or doing things that they find as hobbies or healthful activities or sports or what have you. Slightly different than restoration work. And of course, there's a little more measure on impacts of in those recreation spaces in terms of not restoration activities, but just use of the amenity. So, it's important to not confuse those two things. And it's a little caveat I think for those of us working in, in applied domains, **next slide**.

The other thing, and I'm sort of getting ready to wrap this up, is to harken back to the title of the talk. Now we'll hear things like this. You see out there in, in the media and in in some programmatic work, federal, state or otherwise. The term outdoor X that's often affiliated with what's going on with the Veterans Administration and trying to find a way to prescribe outdoor interventions and so forth as a as a some sort of a therapeutic for people who've experienced PTSD and other things. There's also this universe of Parks RX there's also this other thing called Nature RX. All of them have some unique and nuanced differences, but are generally in the overlap area that I'm pointing to. Here are all generally getting back to this idea of ecological prescription and environmental orientation that that helps us get out of this sort of. Well, that's nice to do stuff too. No, this is fundamentally important to our health and to our biology and to our evolutionary history.

Next slide.

And this is the slide I'll end on and then this is just goes to where you can see where my axe is being ground in this space. In academia, this is an example of somebody charting risk and protective factors that has is well meaning. And I don't mean to throw rocks at these folks, but there are some clear holes, some gaps that I think this conversation and others like it will go a long ways to help addressing these gaps. So, on the far left, you see that Red Star and a green circle surrounding a big empty space.

The diagram purports to be a social, ecological model, social ecological systems, and that terminology means something very important, especially to those of us that call ourselves resilient scholars. The problem is, if you look down their social ecological model column, there's no ecological they're using ecological as a sort of shorthand for systems being connected or the old hearth definition. But there's not an environmental, biological, ecological sort of connection or baseline like we discussed earlier.

The environmental determinants of health or ecological determinants of health and their relationship to social the other thing to point out here is that other Red Star over to the right as you go across the yellow bars, which are columns the social ecological model, the various risk factors going down the column, protective factors. Then it goes to social determinants and then putting it all together. I argue that it's not very easy to put that all together. If you're missing those environmental or ecological determinants. If you're missing not taking account for them, and more importantly in the future chart like this, missing the opportunity to systematically integrate those into the way that we think about public health, mental health trauma, and so forth. So, my hope in in showing this is not to be critical of somebody else's hard work, but it is to show where the work that we're doing in the discussions we're having right now might be beneficial going forward, especially in the domain of outdoor recreation and parks. **Next slide** please.

This is my thank you and conclusion slide, I'm very grateful to the organizers of this and we've been really easy to work with and I think pretty progressive and forward in their thinking about the way they assembled the speakers here. I also want to thank them for being open to having a couple colleagues of mine from a program over in Forest Service that is focused on utilizing this very thinking to address trauma among military families and veterans in in the Ukraine. So, I'm grateful for that opportunity and thank you to those guests that are here. With that, I'll turn it back to you until and I just look forward to. Being an applied and engaged scholar with all of you, and look forward to any questions or comments or ways that we can work together with the literature I've showed you or other things in the future.

AB

Bality, Attila P57:26

Thank you. Thank you, Doctor Tidball. I bet we have CSU with Cornell University, so hopefully we could take advantage of some of the services there in the Northeast or other parts of the country. What stuck to me with your presentation was talking about the four pillars of the trauma recovery and then the protective factors. The protective factor is the one that jumped out of me was the cultural and religious values and preventing suicide. And I think a lot of it's beginning more work and tribal communities and that that little piece of resonate with me with our work within travel communities.

KT

Keith Tidball (Guest)57:26 Thank you.

AB

So, at this point I'm going to stop sharing my screen. We can all go back to cameras. Stephanie is going to take over the question panelist question series and we'll continue the conversation and have time for discussion from the participants and we encourage you to either put question when we get to that, put questions in the chat or do the hand raise skill on teams.

ST

Tepperberg, Stephanie M58:29

Thank you so much to all of our presenters for your incredible presentations and for sharing your expertise with us around mental health and the state of mental health in this country and contributing factors to that health disparities. And then most importantly, we're all here. You know how nature parks and the outdoors can really promote mental health and Wellness, respite and connectedness. So, thank you all so much again and at this point we have about 30 more minutes left and, what we were hoping to do is go ahead and do a panel discussion with our with our speakers. If any of you all as participants have questions for our speakers, feel free to throw those into the chat and Laura will be monitoring those questions. We can ask them after a couple panel questions that we have and or we're going to open it up probably at the 15-minute mark here just for anyone who has a questions for our amazing speakers.

So, with that, I'm going to go ahead and, I think, ask the first question of Vaile, Allison, and Keith and this is for everyone.

So, the audience, who's on the call today from the National Park Service, you know, we're largely planners, landscape architects, outdoor recreation and park professionals. So, we would love to hear from each of your

perspectives, all of which - I think you're coming at it from slightly different spaces, which is amazing, so from each of your perspectives, where do you feel our biggest opportunity is to promote and support mental health and well-being?

And I can turn it over to anyone who wants to start.

AC

Allison Colman

I'm happy to jump in and give it a go. First, I think that it's interesting we're going through a new strategic planning process right now. And so, we've been doing some interviews with Park and rec professionals and also members of the public and the things that continue to come up are the facts that there are still significant barriers to accessing parks, green space nature for many communities and you know predominantly communities that are low income, rural communities, Black, Indigenous, people of color, other historically disenfranchised population. So, I think that continues to be an area of great need and of focus and really leading with that equity work moving forward. So, I think that's the biggest opportunity and the biggest priority.

And in addition to that, we continue to hear from all different stakeholders these very traditional views of Parks and Recreation that they are just these kind of amenities in communities and they're just there for you know, recreational purposes and not making that connection to really the power of these spaces to promote positive mental health outcomes. So, I think shifting that narrative, you know, really drilling in on the mindset of key stakeholders is another big opportunity. To really, you know, grow this movement.

KT

Keith Tidball (Guest)1:03:01

I agree with that. If I could chime in just a little bit, I think in the world that I seem to explore these ideas being the biggest opportunity is when things are the worst. I've written about this in a paper you may be interested in called *Urgent Biophilia*. The idea is that when we're experiencing some of our worst fears and trauma and grief and those sorts of things were often most likely to experience an attraction, an actual, physical, emotional, even cellular, I argue in the paper with some help from others, the need to reassociate and reaffiliate and reconnect with nature. So, it's in those moments where those of us that are in, you know, applied domains or in, for example, agencies that I think we can really make an impact by offering, by knowing that fact, and by having something available for folks to be able to react to. And I'll give you just a quick example of how not to do it:

In Hurricane Katrina in New Orleans, they closed all the parks for the longest period of time. They were more concerned about many other things, which I get it. Got to get the lights on. You got to get the light, the power back to people's homes in the water running again. But you don't have the same time have to remove perhaps the most important resilience mechanism that was available to them on the landscape, which was the parks while they were mourning the loss of their Live Oak forest in that urban forest. So that's a way not to do it and obviously the instruction or the suggestion would be open the parks and make it known to people that this is where you can go without and somehow, we have to think that through without letting that overwhelm like as has happened in the Adirondacks in the COVID pandemic completely overwhelmed. So, there's a challenge there for parks management and natural resource and amenities management, but there's also a huge opportunity in that urgent biophilia sort of construct.

VW

Vaile Wright 1:04:00

Yeah, and I think you know to sort of follow that up. I mean, I think what we're also getting at is the importance of being local and of connecting with the Community, right. And that can look like a few different things. I mean, I think that includes probably an environmental scan, right of what exists within the Community already and where the gaps are and using the expertise of community members within it to really help guide, you know, how you think about mental health. And it's also local within yourself. And within your own organization, right? Like how are you addressing mental health needs? How are you thinking about it for yourself as you think about that relationship to nature and your work? Because I think if you can't solve some of the problems at home first, then you really can't be looking out into how you solve problems in the larger ecosystem.

KT

Keith Tidball (Guest)1:04:50

In the spirit of a panel discussion, I just, I'm so glad you raised that community point, Vaile. In my introduction there, Attila mentioned Aldo Leopold, and one of the big quotes of Aldo Leopold is that we need to start thinking about the community as more than we the humans, we need to expand that so.

Amen to that.

ST

Tepperberg, Stephanie M1:05:15

Yeah, that's actually, that point and Vaile's point and Keith's point, I think is a really good segue into another question we had for you all is: you know, a lot of the folks on the phone from the Park Service, are from our Rivers, Trails, and Conservation Assistance program or our Conservation and Outdoor Recreation division where we do work outside of the national parks, at times, and are working with the communities and at the local level. And so, how can, or what would you all suggest, from your perspective, national park staff best collaborate or coordinate or partner with mental health entities, or the mental health community, to sort of bring this perspective into local parks and recreation work? And, you know, that question, and then also, you know, feel free to share, as well, if there are specific ways that the folks on the phone, all of our participants, might be able to partner, or just gain support from, you know, NRPA, and I know Allison already shared several resources, but Vaile, I know your organization has contacts all over the country and you know, Keith, how could we partner with the Cooperative Extension program to really address mental health more deliberately in our work? So that was a lot, but any thoughts?

VW

Vaile Wright 1:06:48

Sure, I can start with this one. I mean, I think just the fact that we're having this discussion is really revolutionary. I mean, this is not happening and other spaces. And so, I think we should take pause just to kind of recognize how incredibly exciting this is, cuz it really got me thinking of like, how would you transform a pathway to be more mental health supportive? How would you design A park? How do you include the community to make sure that you're actually using or doing the things that meet their needs and not what you think they need. Right. So, I think In terms of partnerships, as Stephanie alluded to, so in addition to the national headquarters of the American Psychological Association, every state and territory has a local

psychological association. So whatever state you're in or whatever toward territory you're in, just Google that state psychological association and you can get in touch with experts in this space. Now, again, I think because this is a cutting-edge space, sometimes psychologists aren't on the cutting edge. They're in the growth edge. But I do think you're going to find people that are really excited about this idea.

And expanding it, we also in APA have several different divisions that are like subgroups of specialty areas. So, people with expertise in particular areas. We have a division on environmental population and conservation psychology that I think is another potential Ave. for either resources and or people resources as well as the division on sport exercise and performance psychology. So again, thinking about how you incorporate activity. So those are a couple of the different ways I think in Members on this call, if they're interested, could get in contact with experts from a psychological perspective in this space.

ST

Tepperberg, Stephanie M1:08:32

Awesome. Thank you.

KT

Keith Tidball (Guest)1:08:35

I agree with that. There are models I would point people to Nature Sacred, which is one of the ways I met Attila. That TKF Foundation formerly known as now Nature Sacred sort of, has is ahead of the game. I think a little bit in creating park spaces that are also sacred spaces that are also these sort of reflection opportunities and educational landscape. So that's a suggestion for a kind of model that could be scaled. And the other thing is the concept of partnerships at some of the highest levels there are these federal advisory committees or councils.

I'm on the one for hunting and fishing. That's between Department of Interior and the Department of Agriculture, for example. You know National Park Services got, you know, good relationships with the Department of Interior because that's mom and dad. And I think the same is true of Cooperative Extension. Who is mom and Dad is, USDA. If we're telling the leaders at the very highest level this stuff is not nice to do, we need to talk agency to agency about how Park Service and how Forest Service can work with Veterans, Veterans Administration and others to actually do this work and also set up research we need, we need longitudinal studies to be able to look at this and make, you know, documented in such a way that it can be prescribed. So those federal partnerships at the very highest levels, I think are ways for National Park Service employees to be ahead of the game in terms of addressing mental health and the role that parks and open space and activity like this could play.

AC

Allison Colman1:10:18

Yeah, completely agree with everything that Vaile and Keith have said. I love the focus too, on normalizing this conversation. And you know, recognizing that this conversation is not really happening in a lot of other spaces. And oftentimes, you know, there's still so much stigma around mental health that it's been a barrier. So, I think really continuing to infuse this into every type of conversation and meeting you're having. It's so interconnected to all aspects of health. And in terms of the partnership perspective, there are 10,000 local park and recreation agencies across the country. So, we are happy to make connections, when possible, to our local affiliates. There are also 50 to state affiliates. Every state has a State Park and Recreation Association as well. But in addition to that, you know there are so many local coalitions that are working on

these very topics, a lot of substance abuse coalitions our members have been partnering more and more with them over the years.

To do exactly what Keith was talking about, build those protective factors around youth in out of school time programs through mentoring opportunities, workforce development after school care.

So I think it's also important to recognize that there's likely coalitions that exist, and determining how your you know, organization and division can get engaged with those coalitions and you know, talk about what you're going to bring into the table because that is often, you know, sort of the biggest barrier that we hear that, oh, another person's coming in wanting to partner. But really this is just going to end up being, you know, more work for us. So, I think it's really important to align on shared goals. And really call out, you know, the amazing skills and knowledge and tools and resources that you have at NPS to bring into these spaces.

ST

Tepperberg, Stephanie M1:12:14

That's wonderful. Yeah. I appreciate all of those, that guidance. And we just have one more question before we open it up to all of the participants and I think this, again, stems really well from the conversation that we're already having.

Vaile, you talked a lot, actually everyone has talked a lot, about just how significant the mental health crisis is at the at the moment, and Keith, you've of course mentioned this need to connect to green space and the outdoors in a post disaster and acute trauma conditions, and so given all of this urgency, just curious: How you all would suggest we convert the evidence that you've all mentioned into sort of an urgent call to action around mental health for our staff to share with the communities and partners? So, when we're going to have conversations at the local level, when we are interacting with communities around building parks, around building trails, and how do we infuse the importance of mental health into those conversations and bring awareness to the benefit that parks, trails and open space and nature can have?

KT

Keith Tidball (Guest)1:13:46

I think a good start would be to have the three of us that just spoke with you sit in a room together for about an hour and mishmash our slides together, so that we could actually make a really strong case. I mean, I think that what we what we just saw in those three presentations, is a pretty strong case. And if we could do like I described in that last slide with the chart, that's missing a couple of key items, and reconfigure that so that there was an emphasis that focused on parks generally speaking, or generically speaking, open space, nature, wilderness, all of that, and then calls out agencies and an opportunity for those agencies to fill real needs in partnership with other agencies that that would be a good way to do it, that would seem to me.

VW

Wright, Vaile1:14:34

And I think along those lines, I think it's important to capitalize on the moment. I think one of the potential benefits to come out of the pandemic has been a renewed sort of emphasis on mental health and the

importance of mental health in a way that I don't think we were talking about three years ago. I will say, I think the conversation about mental health has been changing slowly over the last decade or so. Umm, but I think it again Kobe researcher disruptor in terms of just really recognizing how much our physical health and our mental health are connected and how we really can't ignore mental health or if we do so, it's at our peril. I also think there was a new kind of appreciation for nature. I don't know about your communities, but all of a sudden everybody was walking in my community because it was the safe thing to do, particularly at the height of the pandemic. And so, I think that this is just a really important time.

VW

Wright, Vaile1:15:26

A catalyst, even to actually have these conversations in a maybe a more blunt way than we might have had before, right, that we might have like shied away from it. We might have been a little hesitant. I don't think we should feel hesitant. I think we should just kind of boldly go into communities and, you know, it might be that depending on the community you're talking to, the language probably has to shift right about what's important to that community. So, it might be around healing or around emotional well-being as opposed to depression, anxiety, etcetera. But I think if you can think about how you craft your messaging, it's time to have it now.

AC

Allison Colman1:16:00

It was so well said. I don't want to add anything to it, honestly.

I can confirm though that park use has increased significantly over the last several years and absolutely agree. Never let a good crisis go to waste and this has been, you know, a huge opportunity to shine a light on the mental health benefits of parks, green space and nature. And we just need to keep talking about it and really getting that messaging out there to the right audiences.

ST

Tepperberg, Stephanie M1:16:32

Well, thank you all so much for all of your incredible insights. And at this time, I want to go ahead and invite anyone who is a participant, yeah, to just raise your hand and we'll invite you to come off mute and ask questions. So, I see Helen has a question.

HM

Mahan, Helen1:16:54

Hi, Helen Mahan from northeast region. Thank you so much for presentations were fantastic and it spent a few minutes reflecting on this topic and where a group of us were 20 years ago because 20 years ago, Attila, Lilia, and a group of US were at the forefront of the movement of parks, physical activity and the built environment. And that's formed kind of how this group has continued to move over the last 20 years, can't believe it's been 20 years already.

AB

Bality, Attila P1:17:27

I know.

HM

Mahan, Helen1:17:28

But one of the key things that I think I think we failed about was the messaging.

And so, if you look at the statistics about inactivity, obesity, they're worse instead of better. And I think so much of that was around not recognizing the importance of different messages for different audiences, communities of color. So, Vaile, I heard you say all these people are walking in my parks, but the same time, 30% don't have that access or don't feel safe. So, I think anything you're seeing out there about who's focusing on the message, that's a critical area to help us to move to action and to move to, you know, kind of move forward on this learning from the things that probably we didn't do as well over the last 20 years.

ST

Tepperberg, Stephanie M1:18:24

Appreciate that. Yeah. Let's do it. Any other questions?

JT

Tuck, Joshua C1:18:35

Yeah, I was going to say, I put two articles in the chat and it just kind of triggered my thoughts, when I was listening to everyone speak about, and I was thinking about, in Japan, there's an area called the Sea of Trees that unfortunately a lot of people go, and they commit suicide. You probably remember it because a YouTuber had filmed something there and got in some trouble about filming the bodies that were there, but you know, for folks who've been to, if you've been around the parks a long time, you probably know that it develops this reputation by some as like ohh, a place to go, or at least what you hear, especially is a place to go and commit suicide. But what the article I shared in the chat really highlights is what's going on, it highlights what's going on, which is that people are going to parks to seek out peace and to seek out solace. And it was that I think it was a second article, let's see, and I'm going to put a quote here that really stood out in that abstract. It kind of reminds me of, I guess, for the RTCAers why our work is important. So basically, folks ultimately are seeking out peace and, in those spaces, and they oftentimes, unfortunately, some do commit suicide, but they're trying to find peace and they don't want to leave that space as a way you can kind of interpret what's going on in some of these situations. So, it's funny how this article really writes about it because there's really people are trying to go to green spaces to grapple with finding some level of comfort and peace in green spaces, and it's so nice for them that that's where they want to stay and be versus the thought process that people are going to national parks to end their lives or what have you. So, I think this article kind of flips it on his head, and it, I'll just read, it says: our findings suggest that urban green space that rural forest coverage may have a protective effects against self-harming behavior. Future suicide prevention efforts should consider an increased greening of the residential environment in terms of both availability and accessibility, especially with better designs that accommodate population needs and local conditions.

And I just like that little aspect of the article, because it really highlights our work and why it's important. You know, so if people can find some level of peace and green space in their immediate surrounding and they don't have to travel far and wide, maybe that will help in some ways in terms of mental health. So, I just found that interesting and kind of in line with what we're talking about regarding mental health that our work is important, kind of, fundamentally and because people have to go so far to seek out spaces, they often don't want to leave those spaces and do find peace in those spaces, but if they were more close to home, what benefits and what good things can come out of that?

ST

Tepperberg, Stephanie M1:21:57

Josh, thank you so much. Yeah, I feel like that just all ties together really well everything that's been said this far, and you know it makes me think too, of what Vaile said earlier in her pyramid of, you know, how can we, she's looking at those folks that are really having acute issues, that there's this huge segment of the population and you know, how can we reach those folks? And I think through the work that RTCA does, the work that NRPA does and this idea of promoting parks, trails, nature, open space for mental respite before it gets so dire, is a huge opportunity for us and it's a good segue into our next presentation on April.

So, I know we have about four minutes left. I'll just share a little bit more about what we are going to talk about during part two of our webinar series. So, this was the state of the evidence around mental health and nature, mental health and the outdoors, and that connection. In April, we will be joined by several new panelists to discuss the practical applications of how we might be able to design our outdoor spaces, nature, parks, trails to promote mental health and wellness in a in a very deliberate way. So, I'm hearing from some of our colleagues around their work doing hospital, you know, greening spaces, hearing about some additional, some folks from Nature Sacred around post-disaster greening and mental wellness. And we invite all of our panelists as well to join us for that follow up conversation next month. So, we'll have more information coming out for everyone about that.

And with our last three minutes, wondering if the panelists have anything that they would like to close with any last thoughts.

KT

Keith Tidball (Guest)1:24:11

One thing that I just thought of as we were talking about the importance of settings and as Josh was talking about, you know, I've actually worked somewhat for a few months in Japan after their 311 disaster. And there was other implications there. One, one thing that occurs to me to point out is that it's more than a setting. Park space is not just a setting. There's all kinds of other connectivity there that we should figure out how to make sure and highlight so that it's not static. So, you know, the idea of coming home homeless, church, Sanctuary, Tabernacle, Synagogue, all those things are part of it.

VW

Wright, Vaile1:24:52

Yeah, that's similar to what I was sort of thinking about is, you know I do a lot of. Well first, I just thank you for having me and for this opportunity. I think it's really exciting to be having these kinds of discussions. But you know, I have sort of similar types of you know, how can we be more innovative discussions in this space and a lot of different avenues. And I feel like this is giving me a whole another tool to talk about in ways that I have incorporated yet. So, hopefully I give you all something, but you've definitely given me something to take away as well. So, thank you.

AB

Bality, Attila P1:25:21

Excellent!

AC

Allison Colman1:25:21

And yeah, I would just add quickly, it sounds like we have a communications campaign element here to work on together between NPS and ARPA and other partners. So, we should add that to our MOU (I know we're getting that signed), but lots of opportunities to keep this conversation moving forward.

AB

Bality, Attila P1:25:30

Right.

ST

Tepperberg, Stephanie M1:25:39

Absolutely.

AB

Bality, Attila P1:25:40

OK. So, then it's wrapping up. Thanks everyone. We'll we will save the recording. We'll transfer, transfer it from Microsoft Stream into a YouTube video that's be shared only by people who've been invited to share it, and not public. We'll also put the transcripts together so, if they can be translated down the line for the Ukrainian partners, that'd be fantastic.

We appreciate the participation of everyone on the call. We will put that on the, on our Healthy Recreation SharePoint site, under the continuing education folder for the session today. And look forward to seeing everyone on April 20th for the next one. Thank you for joining today!