

Partnerships across healthcare teams and with Deaf community members: The Mindfulness Practices Project

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ABSTRACT

Background: Greater cultural and linguistic diversity in mindfulness is needed. **Objective:** This participatory evaluation project created mindfulness practice videos in sign language by way of partnerships across healthcare teams at the University of Rochester Medical Center and with Deaf community members. **Methods:** A review team provided feedback on video rehearsals from mindfulness practice facilitators, then formal filming of loving kindness, mindful sitting (grounding), mindful movement, mindful walking, mindful sitting (breathing), and body scan videos occurred. Video edits from further iterative review were completed post-production.

Lessons learned: Suggestions were made to ease the burden of translation from English to sign language, foster understanding of the video rehearsal feedback, and improve the overall clarity and aesthetics of the final videos. **Conclusions:** To ensure materials are well received by diverse audiences who access language visually, development and production requires interdisciplinary collaboration across invested healthcare teams and extensive project engagement, input, and leadership from community members.

KEYWORDS: Community-Based Participatory Research, Community health partnerships, Health disparities, Health promotion, Process issues, Sign language, Feedback, Mindfulness, Deaf community, Linguistics

INTRODUCTION

Described as moment-to-moment attentiveness to our physical and mental processes, mindfulness has been shown to be effective in enhancing well-being, managing symptoms of anxiety, and preventing relapse of depression.¹⁻⁴ Mindfulness practices or formal contemplative practices have traditionally encouraged a softening of the gaze or closing of the eyes. This limits participation for Deaf sign language users, who access language visually compared to their hearing or non-Deaf peers.⁵ Although there is limited diversity in mindfulness research, some previous work with Deaf communities suggests that mindfulness practices can be culturally and linguistically tailored.^{6,7}

The Deaf Wellness Center (DWC) in the Department of Psychiatry at the University of Rochester Medical Center (URMC) provides evaluation and psychotherapy services to individuals who are Deaf and use sign language, hard-of-hearing, deaf* and communicate orally, or hearing people with Deaf family members.⁸ Mindfulness is noted as one of the dialectical behavior therapy modules that is taught in their skills training groups.⁵ Facilitated in sign language, these training groups incorporate mindfulness activities that regulate one's attention without judgement to things they can externally touch, see, and smell. They have noted that skills fundamental to mindfulness practices, such as quietly focusing internally on one's thoughts, feelings, and physical sensations can be particularly challenging for many Deaf individuals.⁵ It is unclear if this is associated with their experience of unpleasant isolation or from limited

* Deaf with a capital "D" refers to a shared cultural identity within the Deaf community, whereas deaf with a lower case "d" indicates an audiological condition of hearing loss. Individuals who are Deaf often prefer to communicate manually using sign language and individuals who are deaf may prefer to communicate orally through speech.

accessibility of mindfulness resources and hence, lack of exposure to and practice of mindfulness.

Committed to making mindfulness practices available to the Deaf community, we initially conducted a study with medical sign and spoken language interpreters investigating the impact of a mindful practice program.⁹ Resulting from that experience, we became curious about the Deaf community's exposure to mindfulness and searched for available mindfulness practices in sign language. The vast majority of resources we found provided information about mindfulness or about upcoming workshops and did not actually teach mindfulness practices that could be used in everyday life.¹⁰⁻¹³ To our knowledge, only two resources offered visual guided meditation or other accessible mindfulness practices^{14,15} and after asking around within our local context, we were unable to find any mindfulness practice videos in sign language.

This paper describes the Mindfulness Practices Project, a participatory evaluation project with partnerships across healthcare teams at UPMC and with Deaf community members. Our goal was to create mindfulness practice videos in sign language and assess the lessons learned from the partner-informed nature of the video production.

METHODS

This project was approved by UPMC's Research Subjects Review Board (STUDY00008498) and spanned from February 2022 through September 2024. Logistics and other practical details about the study timeline are conveyed in Figure 1. It resulted from the video producer's (GR; Table 1) involvement in the Partnered Research Program, which was sponsored by the U.S.

Department of Veterans Affairs' Health Services Research & Development Service in alliance with the Society of General Internal Medicine (SGIM). The goal of the Partnered Research Program was to equip early career investigators with the necessary skills to conduct high quality research in partnership with healthcare teams. It consisted of monthly learning sessions on topics like identifying and communicating with partners and understanding partner priorities. In addition to applying what was gleaned from these monthly sessions when partnering with healthcare teams at UPMC, the Mindfulness Practices Project also adhered to the UPMC's Center for Community Health & Prevention guiding principles for community-engaged research¹⁶ with Deaf community members. Such principles as mutual benefit, shared findings, and being responsive to community priorities and perspectives nicely dovetailed with Deaf community values, like communication access, transparency, and collectivism.¹⁷

Partnerships across healthcare teams and with Deaf community members

Video production involved partnerships within and across the respective healthcare teams from the Departments of Family Medicine and Psychiatry, among Deaf community members, and across healthcare teams with Deaf community members (Table 1). The producer and Partnered Research Program mentor (SB) are faculty from the Department of Family Medicine. One of the Co-Directors of the Mindful Practice® in Medicine (MPIM) program^{18,19} (RE) at UPMC is also faculty from Family Medicine and he reviewed the mindfulness practice scripts and videos. Healthcare teams from the Department of Psychiatry were from the DWC and the Behavioral Skills Lab. In addition to the Co-Director of MPIM, the Director of Clinical Services (AO) and other faculty and staff (DG,SH,DT) at the DWC reviewed the mindfulness practice videos. A studio editor (SF) and photographer (BC) from the Behavioral Skills Lab, a hands-on studio

space for learners where skills can be recorded for development and assessment, offered full-service video production. Seven local Deaf community members were identified from professional and social networks and hired as mindfulness practice facilitators (TF,AN,ZA,AS,KP,LB,DS). The facilitators were required to have some experience with meditation and/or mindfulness or be open to learning about and embodying a mindfulness practice. Bringing expertise as a signing coach/consultant, Deaf translator, and community liaison, another local Deaf community member was hired as the Director of Artistic Sign Language (DASL; MJS). Along with the Co-Director of MPIM and DWC, the DASL also reviewed the mindfulness practice videos. Additionally, he offered one-on-one support to the facilitators during video rehearsals and collaborated with the producer, editor, and photographer on the formal days of filming. Lastly, we recruited nine attendees at the 2024 American Deafness and Rehabilitation Association (ADARA) Conference for further review of the mindfulness practice videos. This offered a broader Deaf community perspective, as attendees represented the fields of vocational rehabilitation and behavioral health. All interactions involving Deaf colleagues and community members were conducted in sign language. Interpreting services were arranged to provide communication access for those not fluent in sign language.

Script development

The producer worked with the Co-Director of MPIM to develop six one-page mindfulness practice scripts in English. Each practice encouraged noticing of one's thoughts, feelings, and physical sensations without judgement while gently redirecting the attention back to the present moment.

Iterative review of video rehearsals

Because Deaf sign language users are easily distinguished by a viewer from someone who is hearing and fluent in sign language, we followed guidance from the DWC that the mindfulness practice facilitators be Deaf. The DWC also advised that facilitators represent diverse backgrounds, gender identities, ages, and sign styles. Facilitators were issued a script that aligned with their interests and background. Facilitators were asked to complete two sequential self-filmed video rehearsals using their own electronic device. Reviewers (RE, AO, DG, SH, DT, MJS) offered feedback on the facilitator's transition from instruction about mindfulness to commencement of the actual practice, the facilitator's reliance on the script, the video duration, sequencing and emphasis of specific content, sign choices, how well the facilitator embodied the mindfulness practice, and engagement with the viewing audience. Review team meetings were recorded, later reviewed, and documented. The producer summarized the respective feedback in written English and shared it electronically with the facilitators. Five of the seven facilitators opted to receive support from the DASL to feel more comfortable with translating the script and integrating the review team feedback. The iterative review of the facilitators' video rehearsals, the multiple perspectives offered during the review meetings, and the support offered by the DASL to the facilitators were strengths of this process.

Formal days of filming and follow-up with facilitators

At the time of formal filming (Fig. 2), six mindfulness practice videos were captured. These included loving kindness, mindful sitting (grounding), mindful movement, mindful walking, mindful sitting (breathing), and body scan (Fig. 3). The mindful walking video warranted two facilitators, whereas each of the other videos had one facilitator. Facilitators were encouraged to bring their own script notes, if needed, that could be conveyed via a teleprompter. While the

DASL, editor, and photographer worked collaboratively on equipment set-up, filming, and directing the facilitators, the producer ran the teleprompter while simultaneously serving as the interpreter for communication between the DASL and facilitators with the editor and photographer. After filming, the producer elicited feedback from the facilitators via electronic mail about their experience (Table 2). The producer established a question prompt framework and used qualitative description²⁰ to categorize their responses.

Iterative post-production

Based on the DASL's notes from the days of filming, paper drafts or documented timepoints in sequence across the raw footage for each video were completed, then converted into resulting rough video cuts. Similar to the iterative review of video rehearsals prior to filming, the producer, editor, and photographer sought additional feedback from reviewers in post-production. Meetings were first hosted with the DASL. These meetings were recorded, later reviewed, and documented to guide the editor and producer with addressing his recommended video edits. After initial review and edits from the DASL were complete, the producer met separately with the DWC and Co-Director of MPIM for successive meetings and gathered their respective feedback. Feedback summaries were shared with DASL and DWC to ensure accurate capture. The editor and producer continued working together to integrate the DWC and Co-Director of MPIM's feedback into video edits and captioning was rendered for all videos, as suggested. Then, the producer met again with the DASL to share the DWC and Co-Director of MPIM's comments, show the latest video versions, and conduct a final review.

Conference poster presentation

The producer, along with facilitators (AS,KP) presented a poster about the Mindfulness Practices Project at the 2024 ADARA Conference (Fig. 4). Video drafts were shared with attendees via a portable electronic device and the camera on the device was used to capture their feedback in sign language, which was later reviewed and documented. Because this project posed no greater than minimal risk, documentation of written informed consent was waived. Instead, the project was explained to attendees and they manually communicated their permission to be recorded. Attendees offered feedback on delivery of the mindfulness practice content, video quality, camera angle for ease of viewing, and how they would envision use of such videos as components of their professional practice. Additional video edits via post-production meetings between the photographer and producer addressed the compiled feedback from the DASL's final review and Conference attendees. Once complete, the mindfulness practice videos in sign language launched to the public.

LESSONS LEARNED

Feedback from the mindfulness practice facilitators

Five of the seven facilitators replied to the producer's request for feedback. Table 2 conveys their responses in full. They felt free to be themselves and safe sharing their emotions when being filmed, expressed excitement about the opportunity, and were eager to learn from the experience. "I did kind of understand what they were doing for this project and I was thrilled to help out. Because I felt like I knew a few people like me who needed this kind of resource" [loving kindness facilitator]. This confirmed the desire for accessible mindfulness resources; however, the facilitators would have preferred the rehearsals be practiced in community with one another. Although including facilitators to join in the poster presentation at the ADARA Conference

elevated the Deaf community value of collectivism,¹⁷ the facilitators' desire to practice rehearsals together rather than separately demonstrates how we could have done better. Facilitators also wished for more formal mindfulness practice training upfront. They commented that the scripts needed to be simplified and video rehearsal feedback would have been better received directly in sign language.

Feedback from video reviewers

General and specific comments from iterative post-production of the videos with the DASL, DWC, Co-Director of MPIM, and ADARA Conference attendees can be found in Table 3. Points of transition between video clips needed to be less abrupt and lengthened. Some videos needed a closer view of the facilitator to reduce eye strain. Reviewers had concern about how certain English segments were interpreted into sign language and the overall sign quality of a couple videos. We replaced the solid green backdrop that was used while filming with digital backgrounds. Although we thoughtfully scaled the different designs, selected the colors, and minimized shadows to ensure accessibility, there was some thought that the background looked fake. Reviewers liked the picture-in-picture or segments with inset videos, as this offered additional commentary or helped to further guide the viewer. More visual cues, like a circle highlighting the body region of focus in the body scan video, a clock counting down in the mindful walking video, and directional animation for the inhale and exhale of the mindful sitting (breathing) video were all suggested.

Even though we shared feedback summaries with the DASL and DWC to ensure accurate capture and promote the Deaf community value of transparency,¹⁷ more could have been done earlier in the process to improve video clarity in the end. The DWC offered that all facilitators

should be required to receive support from the DASL and invited to join the review team meetings of their video rehearsals to interface with reviewers directly for ease of communication. They also suggested hiring an all-Deaf crew and having multiple Deaf sign language users (along with the DASL) available on the days of filming to provide feedback and advise for a greater number of takes in real-time. Deaf sign language users have a more nuanced understanding of sign language and are more culturally attuned, thus are better suited to assess the delivery of content in sign language and determine if it is accessible to a representative Deaf audience. In the final review with the DASL, he felt that his involvement during the facilitator interviews could have helped with screening and having him gloss the mindfulness practice scripts into sign language could have eased the burden of translation. He said we could consider having someone who is Deaf with experience in mindfulness contribute to the script writing and like the DWC, he also suggested a Deaf videographer along with a DASL or an entirely Deaf crew on the days of filming to enhance the sign quality of the final videos. He mentioned Morpheyes Studio,²¹ which is the creative production studio within the National Technical Institute for the Deaf at the Rochester Institute of Technology.

DISCUSSION

We aimed to describe the Mindfulness Practices Project. Partnerships ensued across healthcare teams at URMC and with Deaf community members with the goal of creating mindfulness practice videos in sign language. We also assessed the lessons learned from the partner-informed nature of the video production. Suggestions were made to ease the burden of translation from English to sign language, foster understanding of the video rehearsal feedback, and improve the overall clarity and aesthetics of the final videos

There were a few limitations to this project. It was funded out of the producer's start-up support and by the generosity of time that was donated by healthcare teams. The projected budget, should we have had to hire an outside video production studio, would not have been feasible without extramural funding. Even though payment was rendered to community members, extramural funding would have helped to secure payment for the partnerships across healthcare teams, as well as allowed the team to consider a different set design. In addition to financial constraints, time constraints introduced delays. Originally, the editor indicated that video post-production would take around six months, however the videos were not finalized and available for launch to the public until 13 months after formal filming. Availability surrounding our need to prioritize other projects and undercutting the time needed to conduct the iterative post-production all contributed to the prolonged timeline. At the time of formal filming, a large conference room was used as a makeshift studio because the Behavioral Skills Lab was undergoing renovation. Because of logistical constraints relating to the tremendous undertaking with setting-up and breaking down production equipment each day of filming, we elected not to do any refilming. Thus, if other video segments were not available from the raw footage, we were unable to address feedback that related to the interpretation from English to sign language, correction to the use of sign space, and video viewing angle. Four male and three female facilitators of varying ages with different backgrounds and sign styles, along with captioning provide a variety of ways for viewers to access the mindfulness practice videos. Without visual descriptions and audio overlay, admittedly, the videos do not provide accessibility for Deaf-Blind viewers.

The literature base on mindfulness with Deaf communities is scant, hence there are many avenues available for future research and project development. Initially, we intended for these

videos to be used in an experimental study as an adjunct to the psychotherapy services provided by the DWC. When compared with routine care, we anticipated they would have a positive impact on the outcomes of clients with mental health diagnoses. However, due to our desire to make the mindfulness practices available to the public sooner than later, our focus shifted to assessing the partner-informed nature of the video production. The impact of the videos as an adjunct to care could still be explored in future research. Previous work with Deaf community members has noted that mindfulness practices involving internal directives can be challenging.⁵ Other future research could investigate the best mechanism for improving mindfulness and whether previous exposure to and practice of mindfulness may be relevant factors. Lastly, we hope our lessons learned will help inform future efforts that include developing additional mindfulness practice videos in sign language and when partnering with Deaf community members generally.

Having a skillset in video production is important for disseminating materials to communities who access language visually. Development of such resources requires interdisciplinary collaboration across invested healthcare teams and extensive project engagement, input, and leadership from community members. Oversight of such a project is immense and takes commitment. Diligently addressing the feedback that could be incorporated throughout the iterative review process is critical; however, it challenges those involved to wonder if the project will ever reach completion. Patience, flexibility, openness, and cultural humility throughout the process will lend to putting forth the best possible product. The role of a DASL is relatively new within the entertainment industry and new within the sector of academic medicine and research. In effort to produce videos that are usable and accessible to Deaf

communities, further expansion of the roles for community members in participatory evaluation projects or partnered research with healthcare teams is key to improving public health.

Supplemental materials

Access to the mindfulness practice videos can be found: [loving kindness](#), [mindful sitting \(grounding\)](#), [mindful movement](#), [mindful walking](#), [mindful sitting \(breathing\)](#), and [body scan](#).

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Author contributions

The producer was responsible for data curation, project administration, and writing of the original draft. The producer and Partnered Research Program mentor were responsible for conceptualization, investigation, methodology, and visualization. Formal analysis was conducted by the producer, DASL, DWC, Co-Director of MPIM, studio editor, and photographer. Finally, all authors equally contributed to the review and editing of the writing.

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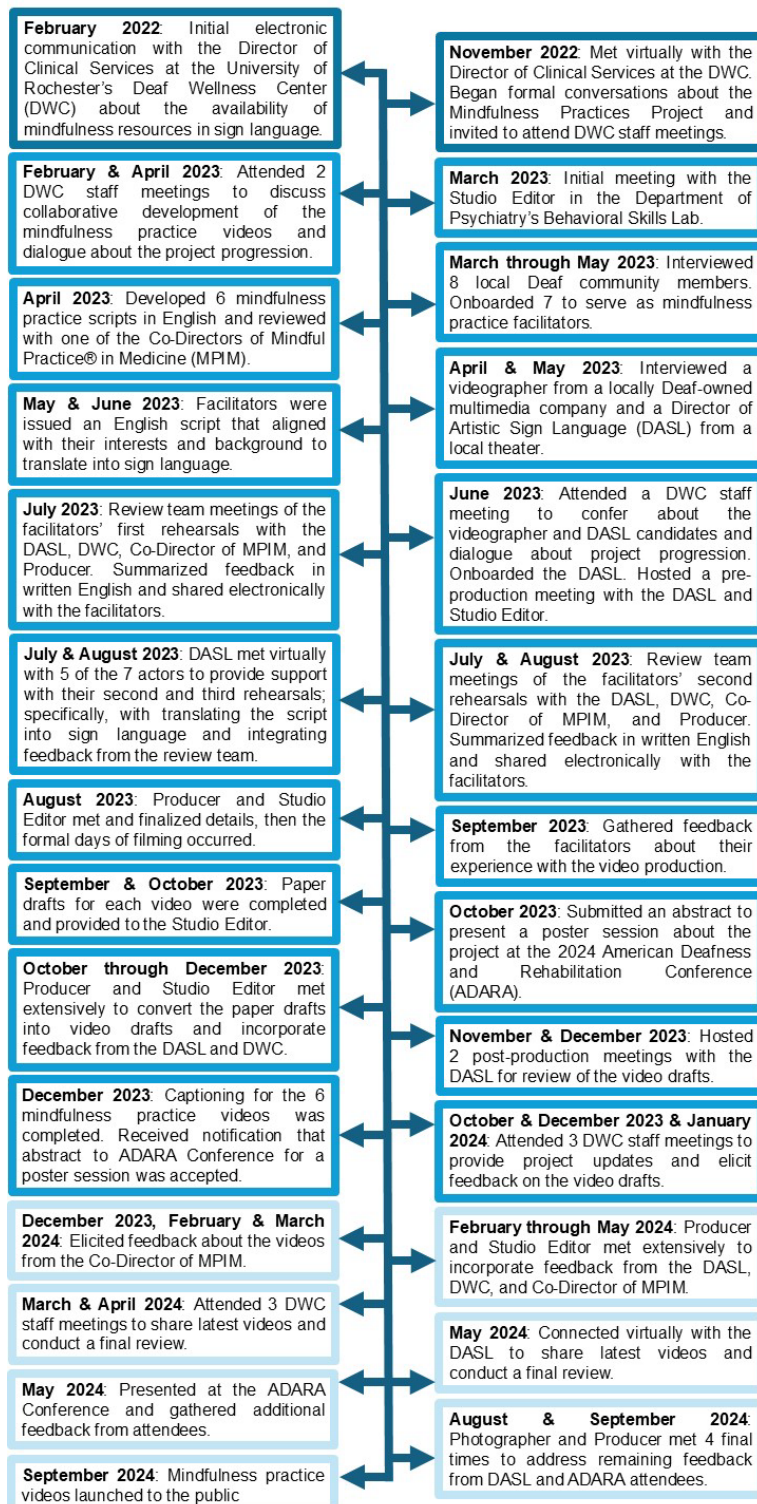


Figure 1. Timeline for the Mindfulness Practices Project (different shades of blue indicate the details for each year).



Figure 2. One of the formal days of filming. From left to right, the Director of Artistic Sign Language (MJS), mindful sitting (grounding) (AN) and mindful movement facilitators (AS,ZA), producer (GR), and photographer (BC).

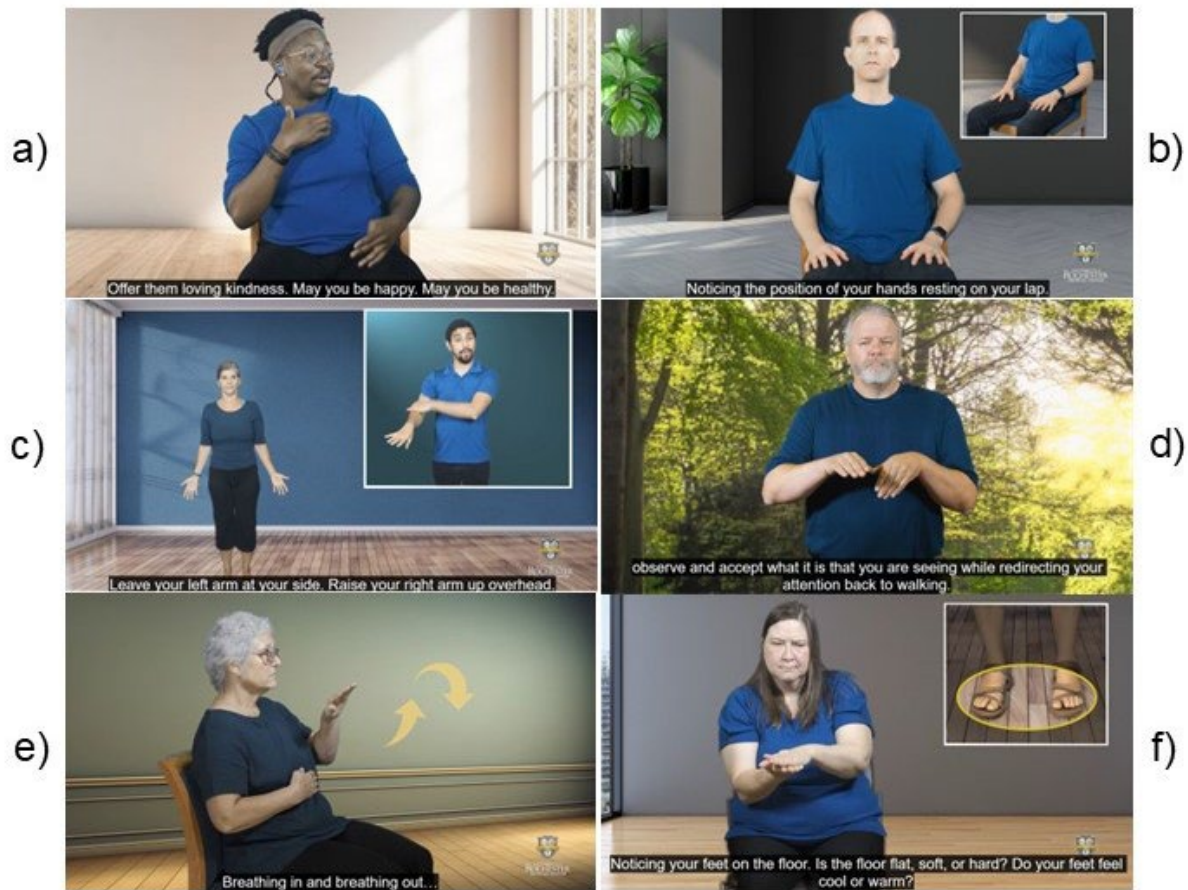


Figure 3. The six mindfulness practices in sign language: a) loving kindness (TF), b) mindful sitting (grounding) (AN), c) mindful movement (ZA,AS), d) mindful walking (KP), e) mindful sitting (breathing) (LB), and f) body scan (DS).



Figure 4. Poster presentation at the 2024 American Deafness and Rehabilitation Association (ADARA) Conference: a) one of the mindful movement facilitators (AS) communicating with Conference attendees about the project and b) from left to right, one of the mindful movement facilitators (AS), mindful walking facilitator (KP), and producer (GR).

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Table 1: Partnerships across healthcare teams and with Deaf community members					
Partner	Project role (initials)	Description	Hearing status	Sign language fluency	Compensation
Healthcare teams	Department of Family Medicine				
	Producer (GR)	Faculty member	Hearing	Maintains her certification as a sign language interpreter	No supplemental pay was received
	Partnered Research Program mentor (SB)	Faculty member	Hearing	Knows some sign language	
	Reviewer of the mindfulness practice scripts and videos (RE)	Faculty member and one of the Co-Directors of MPIM	Hearing	Does not know sign language	
	Department of Psychiatry, DWC				
	Reviewer of the mindfulness practice videos (AO)	Faculty member, clinical psychologist, and Director of Clinical Services	Hearing	Fluent in sign language	No supplemental pay was received
	Reviewer of the mindfulness practice videos (DG)	Faculty member and clinical psychologist	Deaf	Communicates using sign language	
	Reviewer of the mindfulness practice videos (SH)	Social worker	Deaf	Communicates using sign language	
	Reviewer of the mindfulness practice videos (DT)	Social worker	Deaf	Communicates using sign language	
	Department of Psychiatry, Behavioral Skills Lab				
	Studio editor (SF)	Staff	Hearing	Does not know sign language	Full-service video production offered free of charge
	Photographer (BC)	Staff	Hearing	Does not know sign language	
Deaf community members	Reviewer of the mindfulness practice videos and Director of Artistic Sign Language (MJS)	Signing coach/consultant, Deaf translator, and community liaison	Deaf	Communicates using sign language	\$75/hour
	Mindfulness practice facilitator (KP)	Previous collaborator and Certified Deaf Interpreter	Deaf	Communicates using sign language	\$50/hour
	Mindfulness practice facilitator (AS)	Yoga practitioner	Deaf	Communicates using sign language	\$50/hour
	Mindfulness practice facilitator (AN)	Previous mindfulness experience	Deaf	Communicates using sign language	\$50/hour
	Mindfulness practice facilitator (DS)	Yoga practitioner	Deaf	Communicates using sign language	\$50/hour
	Mindfulness practice facilitator (LB)	Experienced meditation facilitator	Deaf	Communicates using sign language	\$50/hour
	Mindfulness practice facilitator (TF)	Actor at a local theater company	Deaf	Communicates using sign language	\$50/hour
	Mindfulness practice facilitator (ZA)	Actor at a local theater company	Deaf	Communicates using sign language	\$50/hour
	Reviewers of the mindfulness practice videos	ADARA Conference attendees	Deaf	Communicate using sign language	No pay was received
Notes: MPIM=Mindful Practice® in Medicine; DWC=Deaf Wellness Center; ADARA=American Deafness and Rehabilitation Association					

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Table 2: Feedback received from the mindfulness practice facilitators after their participation	
Question prompt	Response
How did your actual experience compare with what you first thought you signed-up for and agreed to do?	It was a little different, but obviously made more sense once we got onsite [mindful walking facilitator].
	I wasn't 100% sure what would transpire but I knew I wanted to contribute to something positive, using my knowledge and love for yoga/meditation and make it accessible/available to other D/HH people. I enjoy collaborating, so I was glad I was able to do this. And I'm excited to have a small part in this project! I truly believe that the community will benefit from this endeavor [mindful movement facilitator]!
	I am honored to be part of this project. I initially thought I knew what mindfulness is as compared to what I learned from meditation training. This is the reason why I agreed to participate in this project. I did not realize that mindfulness is different from what I was taught [mindful sitting (breathing) facilitator].
	I did not expect to be translating the script written in extreme present moment tense - this was something that was new to me, as was the mindfulness body scan despite being a yoga teacher. My experience also helped me understand and translate. What I thought I signed-up for was accurate but I thought I would be meeting other signers at filming (although that would not make sense - long process) [body scan facilitator].
	When I first signed up, I thought it was very simple and easy to follow the instructions. I did kind of understand what they doing for this project and I was thrilled to help out. Because I felt like I knew few people like me needed this kind of resource. So, it was an amazing experience I ever do this project [loving kindness facilitator].
What was great about the experience?	Working with you and learning more about mindfulness in general [mindful walking facilitator].
	Meeting/collaborating with Gretchen, as well as interacting with Matthew Schwartz and Zain Ahmed! Filming was comfortable and parking easy to find. Zain and I enjoyed working together to "make sense" and interpret the script faithfully. Matthew's support helped immensely so that we could make sure the ASL makes sense to a wider audience [mindful movement facilitator].
	The experience was great. I thought I could grasp the concept of mindfulness on my own. But I was wrong because I realized that I was struggling with how to express myself with the concept of mindfulness to a person who is not familiar with it. I embraced my experience by practicing mindfulness, with the number of hours to figure out how to express the concepts, with my colleagues to gather their feedback on how I should sign, and with Matthew to give me a better understanding of what mindful breathing is about [mindful sitting (breathing) facilitator].
	The filming experience was very positive! The support from Gretchen & Matt was appreciated [body scan facilitator]!
	One of the great experiences was that I had an opportunity to work with these people for filming. I felt like I was pretty open to new ideas and how they wanted me to express them. It was nice that I kind of just acting it out myself. It was cool that I was able to feel my emotions to people I know. I related to this project and know that mental health is very important for our lives. I know that life isn't great but we just learn how to take one day at a time. Allow ourselves to grow in our own time [loving kindness facilitator].
What are some things you would change?	I would work on my prep a bit better [mindful walking facilitator].
	This is me personally speaking – but it would have been nice to been immersed/trained by Mindful Practice® in Medicine theory/concept. Perhaps we could have taken a hands-on class/workshop led by Ron Epstein, Mick Krasner, and Fred Marshall – so, I could better understand what they were trying to convey to a different audience – since they were initially targeting medical practitioners. As you know, there are many different philosophies/approaches to mindfulness/yoga. When I initially got the script, it was quite wordy – so I took the time to translate written English to written "ASL" – basically simplifying the language. But once I did, I wasn't sure if I had "interpreted" the movements correctly, physically/bodily conveying what it should look like on-screen. I hope that does come across authentically and honestly in video form. There was one movement I had particularly struggled with as I wasn't sure of its intent and didn't make sense to me as a yoga practitioner. But I went ahead and did it the best I could since it wasn't my process to begin with [mindful movement facilitator].
	<ol style="list-style-type: none"> 1) Discussion needs to be done when meeting with the team (in-person) when they provide feedback to me (instead of reading feedback via email). 2) I felt lost after reading feedback via email (more like cultural gap). Would it be beneficial to be in the team to get feedback in-person instead of reading in email? Discuss with the team (in-person) to get appropriate feedback on sign choices. 3) Then practice the mindful breathing at home (like doing a homework assignment) then meet with the team as if I am teaching them. Get a sense of community where I can get direct feedback from the team. Maybe meet up three times before doing the video work [mindful sitting (breathing) facilitator].
	I would have a short meet & greet with the other signers & staff on the project ahead of time & meet the director of artistic ASL a lot earlier. They were able to help simplify the script further & crunch it into easier to memorize bits. So, this earlier on would have been great to have! It would be helpful to have a clear list with text of expectations (email?), processes, dates & the like [body scan facilitator].

	Well, there is only one thing I would like to change that It would be cool if we have meeting in-person or maybe met other people who in the project. I think it would be nice to see other idea and know what their expectation. Because when I got this work, I feel like I need like third party person or need a team who can just discuss this. I believe that will be all [loving kindness facilitator].
Notes: D/HH=Deaf and hard-of-hearing; ASL=American Sign Language	

Table 3. Feedback received from iterative post-production review of the mindfulness practice videos				
	DASL	DWC	Co-Director of MPIM	ADARA Conference attendees
General				
	<ul style="list-style-type: none"> dialogued about the available options for different background colors and edits to the credit slides editing was needed to the captioning to make it less dense/more simplified 	<ul style="list-style-type: none"> expressed concern with the signing quality and wished to remove DWC from being listed on the credit slides of two videos 	<ul style="list-style-type: none"> felt the blue monochromatic background was too sterile and desired something more aesthetically pleasing 	<ul style="list-style-type: none"> regarding the actual integration of these videos into a mental health practice, one of the attendees suggested having the case manager or therapist use the videos together with the Deaf client, then asking, "How did that work? How did you feel?" felt that most of her client base would not take the initiative to watch/practice the videos themselves
Specific				
loving kindness	<ul style="list-style-type: none"> editor was encouraged to lengthen the transition time when segueing in between specific video clips to allow full expression of the facilitator's non-manual communication 	<ul style="list-style-type: none"> discussion about how the last offering ("may you live life with ease") was interpreted from English into sign language 		<ul style="list-style-type: none"> further comments were made to lengthen the transition time; particularly, from providing instruction about loving kindness to the practice of offering loving kindness noted the facilitator's use of space when interpreting the offering, "may you be safe and free from harm" was confusing, as he established the person to whom the offering was being made on the left of his sign space but then referenced them in the offering to the right
mindful sitting (grounding)	<ul style="list-style-type: none"> liked the inset videos like loving kindness, commented on points of transition that needed to be lengthened concern regarding that color saturation of the facilitator's skin tone against the background color and the lack of definition of the facilitator's fingers when signing 	<ul style="list-style-type: none"> shared the view of the facilitator was too far away and caused them to visually strain because of his small signing space outside of when the facilitator was describing grounding through his feet, asked the video to be zoomed in for ease of viewing inset views of where the viewer should be grounding (e.g., feet, thighs, spine, 	<ul style="list-style-type: none"> shared that the conversational style in the beginning of the video was inviting observed this facilitator assuming a more meditative state as the video progressed liked the use of inset videos to further guide the viewer to the body region being grounded 	<ul style="list-style-type: none"> thought the information was good and liked the inset videos providing additional prompts for where he should be focusing said that it seemed to be a lot of work, though, for him to ground himself and that grounding should be rewarding and he wanted the video to be more fun

		<p>hands) were positively received</p> <ul style="list-style-type: none"> • some members of the DWC did not understand the facilitator's signing and because of the sign choices, they stopped paying attention to his message 		
mindful movement	<ul style="list-style-type: none"> • encouraged the editor and producer to add English descriptors to demarcate the five different mindful movements • liked when the two facilitators were on screen together for the final mindful movement • also, liked the added inset videos with the one facilitator providing commentary of the different mindful movements being performed by the other facilitator; although, he wanted the insets to be bigger • noted that some of the timing was off between the facilitator instructing and the facilitator demonstrating the mindful movement, specifically, with the shoulder rolling motion 	<ul style="list-style-type: none"> • not clear why the facilitator who was eventually going to demonstrate the movements was standing alongside the facilitator instructing the viewer about what to expect in the beginning • requested the inset videos of the facilitator providing instruction be enlarged, liked his animated facial expressions and felt that he did a great job of controlling their attention; although, there was some confusion about how he elected to repeatedly sign "stretch gently" • some thought that there may be too many instructional inset videos and the viewer could simply watch and adhere to the movements as shown • when the last mindful movement (forward bend) was demonstrated, wished they could see the facilitator's hands touching her shins, then touching the floor again before resuming mountain pose • the interaction between the two facilitators at the end of the video when they looked to one another and smiled was felt to be too staged and not needed 	<ul style="list-style-type: none"> • found the instruction to stand relaxed in mountain pose confusing because the arms were not relaxed in standing with the palms forward • because the intent was for viewers not to strain, he thought it was important to caution that everyone's abilities will be different • give them permission not to strive to be the same as the facilitator demonstrating the movements • said that we should consider repeating each movement a couple of times because normally, people are not sure if they are doing movements correctly the first time 	<ul style="list-style-type: none"> • liked the facilitator providing the instruction and said he made them feel good and that his signing was beautiful • the cautionary slide in the beginning with written instructions in English needed to allow for more time so the viewer could read with ease • similar to the Co-Director of MPIM, suggested to first have the mindful movement facilitator demonstrate and the other facilitator provide whatever necessary instruction, then show the facilitator demonstrating the movement again, allowing the viewer more time to follow along

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mindful walking	<ul style="list-style-type: none"> inset videos of the facilitator demonstrating (noticing how the foot strikes the ground, noticing a reciprocal arm and leg swing) while explaining were missing certain transition times in need of lengthening were noted adjustments to the rotoscoping from the green screen of the facilitator's foot in contact with the floor were called out 	<ul style="list-style-type: none"> a visual cue, like a clock counting down was suggested when the facilitator was demonstrating mindful walking so the viewer would know when they needed to reattend for further instructions suggested some of the repeated explanation be removed, as it was too redundant instead of a plain background in contrast with the facilitators skin tone, wanted a forest or some visually pleasing aesthetic that emulated walking outdoors 	<ul style="list-style-type: none"> similar to the DWC, felt a cue was needed so the viewer would know when to reattend to the facilitator from their mindful walking for further instruction advised that the video prepare the viewer to be in a space where they could view the video and simultaneously practice mindful walking 	<ul style="list-style-type: none"> it was uneasy holding our portable electronic device while walking around the Conference exhibit hall and thought we should consider using virtual reality glasses although it was not clear how he would be able to walk with the virtual reality glasses on, he felt using them would allow him to feel more connected when performing the mindful walking practice noted that the video of a walking path through the forest was low-quality resolution and suggested 108 pixels or 5K resolution instead
mindful sitting (breathing)	<ul style="list-style-type: none"> shadows from the lighting were pointed out as distracting like mindful sitting (grounding), color saturation of the facilitator's skin tone and the lack of definition of the facilitator's fingers when signing needed editing 	<ul style="list-style-type: none"> noted that the shadow of the facilitator that was cast from the lighting was quite distracting found the transitions from the forward to side facing views of the facilitator demonstrating and visually guiding the viewer with how to breathe were abrupt requested that the one segment of the facilitator breathing without providing any sign instruction be removed suggested directional animation of the inhale and exhale be added 	<ul style="list-style-type: none"> commented the video was too long 	<ul style="list-style-type: none"> felt to be a good start for people who wanted to learn about mindfulness and the different views of how to breathe deeply were enjoyable felt startled by the camera panning upward while the facilitator described "drawing a string from the top of your head" to encourage upright sitting while breathing although admitted to having attention-deficit/hyperactivity disorder, said that she lost patience while viewing and became distracted
body scan	<ul style="list-style-type: none"> shadows, lengthening of transition times, and the rendering of the room from using the green screen, particularly how the facilitator was seen, at times, sitting on the wall instead of the floor were noted 	<ul style="list-style-type: none"> felt the change of viewing angle helped to not make the video feel too long like the mindful sitting (grounding) video, requested a closer view versus a whole-body view in the beginning to decrease strain 	<ul style="list-style-type: none"> agreed with the DWC that the facilitator was too far away in the beginning noted her facial expressions to be very welcoming, they were hard to see felt the inset videos guiding the viewer 	<ul style="list-style-type: none"> liked how the facilitator signed with ease, as this helped him to feel relaxed aware that a green screen was used during filming and did not like the "fake" background

	<ul style="list-style-type: none"> instead of showing separate inset videos to guide the viewer to the body regions of focus, one running inset video throughout the body scan, zooming in or highlighting the different body regions would be less disruptive 	<ul style="list-style-type: none"> additional visual cueing, like an outline or circle was suggested to emphasize the body regions of focus in the inset videos several comments about parts of the video when the signing was not clear and how reliance on the captioning or supplemental visual cues would be needed to create a clearer message 	<p>to the different body regions of focus were blurry and that the coloring didn't seem to match the larger video</p>	
<p>Notes: DASL=Director of Artistic Sign Language; DWC=Deaf Wellness Center; MPIM=Mindful Practice® in Medicine, ADARA=American Deafness and Rehabilitation Association</p>				