



**San Luis Obispo County
Behavioral Health Department
MHSA Innovation Project Evaluation**

**“SoundHeal” Year One Progress Report
July 2023**

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Project Overview

The SoundHeal Meditation project aims to study the impact of sound bath therapy/meditation in conjunction with traditional talk therapy on clients receiving mental health services treatment under the San Luis Obispo (SLO) county Behavioral health department. Clients who participate in the SoundHeal project complete meditation sessions in the 4x4 feet Heal Meditation HealPod before or after their schedule individual or group therapy session. The HealPod is equipped with speakers and a touchpad. In the HealPod, clients select a desired guided or unguided meditation track. After the meditation session, clients are then prompted to complete a brief journal entry where they indicate their feelings/emotions before and after the HealPod session. SoundHeal seeks to help clients develop wellness practices and facilitate traditional talk therapy by helping clients get into a better frame of mind through the meditation practice.

The project evaluation is performed in partnership with the California Polytechnical University's Master of Public Policy department. This progress report briefly summarizes the HealPod implementation strategy in the Justice Services Division of the SLO County's Behavioral Health Department, provides preliminary analysis of the HealPod's effectiveness, and outlines feedback about the data collection tools currently in use. This preliminary analysis shows that clients indicate improved attitudes after completing HealPod sessions, an outcome consistent with improved mental health. However, stated goals such as the impact on medication intake and the optimal duration of meditation cannot be assessed effectively with current data. The SoundHeal team plans to field a survey of providers to attempt data collection that better assess these stated goals.

Background

The Heal Meditation Project (Heal) is sponsored by the SLO County Behavioral Health Department in partnership with SoundHeal, Inc., a sound meditation technology company. Funding was provided in 2021 by the California Mental Health Services Act under its *Innovation Incubator* program.

SoundHeal works alongside the Justice Services Division of the SLO County Behavioral Health Department. Programs within this department focus on court-ordered mental health treatment plans. These programs are designed to address the needs of individuals at different points in the justice process. SoundHeal provides an additional, alternative treatment option for those in the Justice Services Division through the HealPod.

The HealPod used by SoundHeal is a 4x4ft sound insulated, enclosed space with a curtain entry and a padded chair with a backrest. The HealPod is located at the Health Department's central campus. The HealPod sits in a room adjacent to the counseling rooms where therapists meet the participants for their session.

Inside the HealPod, clients select a meditation track that includes sounds and vibrations to help induce and promote meditation. The meditation sessions start with 5 minutes of meditation with clients graduating to longer sessions. The sounds offered were designed by SoundHeal to cope with and reduce stress, anxiety, irritability, pain, improved self-worth, esteem, and confidence. The meditation tracks are organized into a curriculum that is selected by the participant with input from the therapist, who received curriculum training from SoundHeal during the project's initiation.

Stated Goals of the SoundHeal program

As stated in the SoundHeal proposal, “the key learning goal of this project is to learn whether this sound meditation technique will be effective for increasing court/diversion clients’ wellness participation and ultimately, improving their mental health outcomes” (SoundHeal Work Plan Fiscal Year 2021).

More specifically, SoundHeal identified 5 question-based goals of the project:

1. Does the use of sound meditation intervention increase the well-being and overall outlook of life of participants?
2. Which specific sound meditations have the greatest impact on participants with dual diagnosis?
3. What is the appropriate number of times the intervention is most positively effective in the participants’ behavior?
4. What is the optimal duration of an individual session to most positively be effective in the participants’ behavior?
5. Does the intervention positively impact the medication intake of participants?

This progress report focuses on assessing goal 1 – overall well-being and outlook of participants. Data appropriate to fully assess goals 2 and 5 requires knowledge of health data about diagnoses and prescribed medication, of which access is highly limited. The SoundHeal team is currently planning to survey the therapists; survey data from therapists may give insight into general trends or patterns about goals 2 and 5 but may not be sufficient for directly assessing those goals. Goals 3 and 4 concern optimization of the HealPod experience. Monthly journal data from participants (described below) may be able to assess goals 3 and 4, but at this early stage in the project the number of Monthly Journals is still limited.

Implementation

Design

The client population for the SoundHeal project are those in forensic mental health (court and diversion) population. Participation in the SoundHeal program is voluntary for therapists and clients. Therapists share SoundHeal as an option to their clients. Clients who choose to participate are scheduled for HealPod meditation sessions just before their individual or group counseling sessions. During their appointment, clients enter the HealPod and select a meditation track.

Immediately after the HealPod meditation session, clients fill out a handwritten Daily Meditation Journal (see Appendix 1 for full text). These meditation journals can be taken to the counseling session to be shared with the therapist and serve as a data collection tool about clients' experiences and feelings before and after meditation. After a client has completed 10 sessions in the HealPod they are asked to complete a feedback journal that asks questions about clients' overall experiences in the Sound Heal Program (see Appendix 2 for full text).

In addition to the two versions of journals, SoundHeal surveys the therapists about their experiences and observations of clients who participate in the SoundHeal program. The first survey was sent to therapists in the summer of 2023.

Result Summary

Daily Meditation Journals: Pre-selected Emotions

At the suggestion of the evaluation team, the SoundHeal Project updated their Daily Meditation Journal in December of 2022 to allow for more straightforward comparisons of client feelings before and after participation in the HealPod. Between December 2022 and May 2023, the SoundHeal team collected approximately 200 daily meditation journals across 30 clients.¹

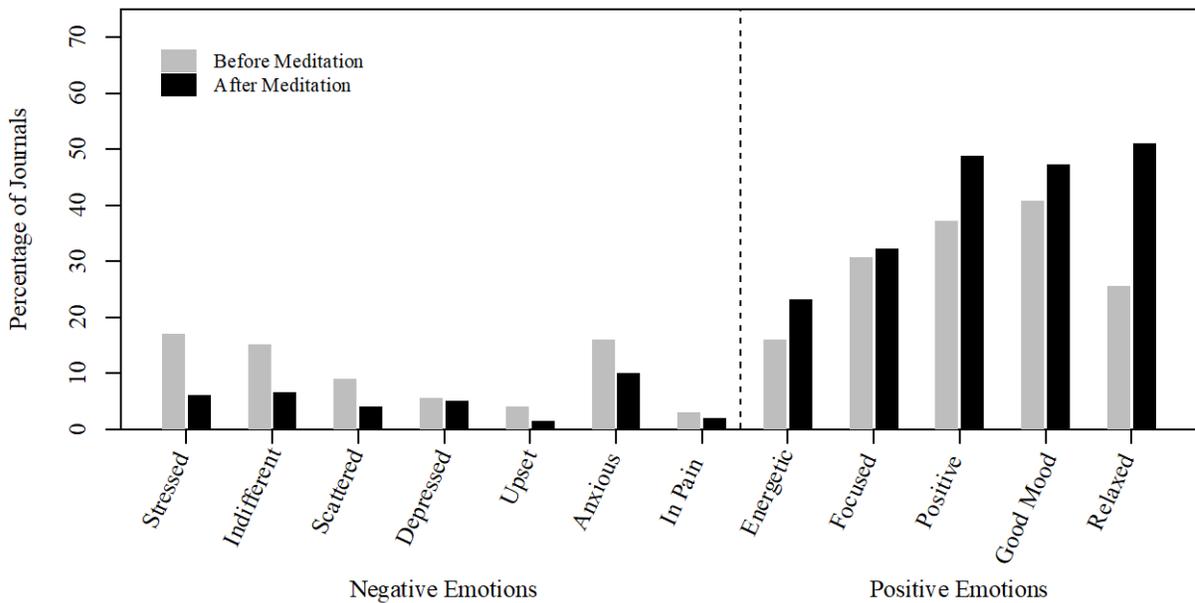
Figure 1 shows the percentage of clients who selected each of the pre-selected emotion options on the Meditation Journals for how they were feeling before and after the session. The grey bars show the percentage of client journals that selected each term *before* the HealPod session; the black bars show the percentage of client journals that selected each term *after* the HealPod session. The terms of the left portion of the graph are typically emotions with a negative association, and the terms on the right side are emotions with a positive association.

Figure 1 shows that client feedback aligns with the project goal of well-being. For typically "negative" emotions, there is an observed decrease in the percentage of client-journals that indicated those emotions after the session relative to before the session. For the "positive" emotions, there is a general increase after the session relative to before the session.

¹ Seven clients (and 142 journals) were not included in this analysis because they ONLY submitted meditation journals in the non-updated format.

Particularly pronounced is the before and after change in percentage of client journals in which “Relaxed” was selected from the pre-determined list of emotions before and after the HealPod session: 25.6% of client journals had “Relaxed” checked off for how one was feeling before the HealPod session and 51% of client journals had “Relaxed” checked off for how one was feeling after the HealPod session ($p < .001$ in a difference in proportions test).

Figure 1: Client Emotions Before and After



Daily Meditation Journals: Qualitative Feedback

In addition to indicating their feelings before and after the HealPod session from a list of pre-selected emotions, clients also are prompted to describe in writing how they are feeling three times: (1) they are asked to provide details about how they were feeling before the meditation; (2) clients are asked “What did you experience in today’s session? Write your feelings, emotions, even colors, smells, and sensations you experienced:” and (3) clients are asked to provide “Any Additional thoughts on how you feel now [after today’s meditation].”

To evaluate this feedback, thematic content analysis (Braun and Clarke 2006) was utilized. By reading through the qualitative feedback, the evaluation team noted various themes in responses and then identified how often those themes appeared in client feedback. Tables 1, 2, and 3 identify key themes for the three qualitative questions and provide examples of each theme from client journals.

In line with the results described in Figure 1, the qualitative data summarized in Table 1 emphasizes that many clients enter the HealPod already in a good mood. However, many clients also describe feeling tired, that they are thinking or worrying about daily tasks and life issues, or are experiencing physical discomfort.

Table 1

Response Themes	#	Example
Good/Good Mood	25	"Good day. Sure of my well being and self"
Tiredness/ Low energy/ "funk"	21	"I was tired wanted to go to sleep"
Thinking about daily tasks/ family/ life/ legal issues	11	"I felt a little stressed out with everything going on in my life"
Typical/ Average/ Neutral feelings	11	"Okay"
Notes a feature of the HealPod experience	9	"I liked all the chimes & dings good meditation"
Physical discomfort	8	"not really feeling physically well. cold, tired, nausea"
Calm/Relaxed/Content	8	"Im not sure how I feel but I am calm"***
Open to growth/ focusing on goals	7	"focused on the future and goals"
Thinking about Therapy session	6	"I felt anxious starting my first one on one but mostly indifferent"*
Nervousness/ Anxiousness	6	"I have just been a nervous wreck since entering this program. Probably just fear of the unknown because I feel this is too much change."
Emotionally scattered/Highs and Lows	5	"emotional highs & lows fears, nervousness"*
Stressed	4	"I was stressed (as always) but then again I'm always stressed..."
Annoyance/Irritation/Impatience	4	"irritated from earlier discussion"
Unsure	4	"I felt unsure about today"
Letting Go	3	"Letting go of what i cannot control"
Optimism/Excitement	3	"looking forward to the near future"
Sadness /Grief	3	"I have be[e]n carrying a feeling of sadness and loss from changes going on in my marriage..."***

Table 1 Details about Feelings Before Meditation: Summary of themes identified in client responses to the request for details about how they were feeling prior to the HealPod session. Themes listed are those that were identified in three or more responses. One hundred and thirty journals had some type of response in the Details before meditation section. *Also coded as Nervousness/Anxiousness. **Also coded as Calm/relaxed. ***Also coded as Unsure. *** Also coded as Thinking about daily tasks/family/life/legal issues

Table 2 summarizes client feedback about what they experienced *during* the HealPod session. The most common theme identified in these client responses was about “Calmness/Relaxation/Release/Peace.” Just shy of 70 client journals noted or described particular sounds they heard inside the HealPod such as “bells,” “chimes,” “chanting with flute music,” or “sounds of water trickling.” Several clients likewise noted physical feelings inside the HealPod, described visual images they experienced, or reflected on the feelings of vibrations in the HealPod.

Table 2

Response Themes	#	Example
Calmness/Relaxation/Release/Peace	90	“calm soothing relaxed comfortable”
Sounds	68	“I enjoyed all the bells & whistles in this meditation”
Color	17	“I experienced the color blue that almost felt cool inside my chest”*
Notes physical feeling	18	“Warmth-heat on my face then calm-and the heat stopped I felt light(bodyweight) and I held energy in a ball and felt a release.”*
Visual images	9	“Mountains, green field, fresh air, experienced visual. Although the mountains remind me of my childhood...”**
Vibration	9	“I felt the vibrations up from my lower body to my shoulders ...”*
Disappointed/Unsatisfied/Frustrated	7	“I feel a bit unsatisfied with the experience and find it not very beneficial or rewarding to my overall mood or emotional state.”
Struggle with meditation/Difficulty focusing	7	“... I don’t know if it was being told to relax and how to breath or just my own anxiety but now I kinda feel stressed and anxious now ... I’ve never really like doing meditation any ways.”**
Anxious/Stressed	6	“The only thing I can report is I was a little anxious to be done with today's meditation”
Breath	6	“I really enjoyed the breathing exercises”
Energized/Invigorated/Rejuvenated	5	“A loud, more intense meditative quality; one which energized, invigorated me, actually...”
Gratitude/Grace/Positivity/Forgiveness	5	“grace & understanding”
Self-Improvement	4	“...I was focused & ready to deal with my life quite ably...”***
A desire to express/self-expression	6	“More motivation to write down some stuff...”
Excitement	3	“happiness, joy, excitement”
Feeling in tune/wellness	3	“felt more in tune w/ my thoughts & being aware of them...”
Focus	3	“Focus, to where there was no thought (outside)...”

Table 2 Experience During Meditation: Summary of themes identified in client responses to “What did you Experience in today’s Meditation.” Themes listed are those that were identified in three or more responses. 195 Daily Meditation Journals included some type of written response

to this question. *Also coded as Noting Physical Feeling/Awareness of Body. **Also coded as Anxious/Stressed. ***Also coded as Focus.

Finally, table 3 summarizes client responses when prompted for details about how they felt after the HealPod session. Again, the most common response is associated with a theme of Calmness, Relaxation, Release, and Peace followed by a theme of being in a good mood or feeling content or happy. Several clients provided responses that showed motivation or eagerness to take on the day or what is to come. For example, one client wrote “I’m happy, healthy, and excited to re[a]p all the hard work I’ve put into my recovery so far going,” and another wrote “Ready to take on the whole entire world...!” Three client journals noted anticipation to see family members or excitement from having recently seen family members, comments that were missing from the other qualitative questions.

Table 3

Response Themes	#	Example
Calmness/Relaxation/Release/Peace	35	"It is nice to feel calm when there are so many stressors in the world that can make you feel anxious"
Good mood/Content/Happiness	23	"Im having a good day"
Better/Improvement/Accomplishment	16	"I feel a little better from what mood I started in."
Motivation/Readiness/Acceptance for the day or what is to come	14	"I feel ready to get through the rest of the day"
Balanced/Grounded/Centered	8	"I felt grounded & balanced [smiley face drawing and heart drawing]"
Mindfulness/Presence/Emotional Awareness	8	"Aware of myself, my emotional state in this moment, and that my emotions are only a part of my existence. I am realizing they don't define the true me."
A Willingness to try meditation again	7	"I would try it again"
Gratitude	6	"... just chillin and grateful"
Physical discomfort/Tiredness	5	"I'm physically unwell GI and runny nose sore throat"
Racing thoughts/ /Distracted/Overwhelmed	5	"...but I still find myself scatter brained at times and not being able to focus..."
Neutral/normal	4	"feel kind of the same nothing to report im just sort of being today"
A desire to self express	3	"It's not "easy" sometime getting motivated to write what I wish to communicate sometimes..."
Disappointment/Impatience	3	"maybe disappointed I couldn't relax"
Sadness/Depression/Grief	3	"kinda depressed"
Thinking about seeing family	3	"Im excited to see my kids"

Table 3 Details about Feelings After Meditation: Summary of themes identified in client responses to the request for details about how they were feeling after to the HealPod meditation session. Themes listed are those that were identified in three or more responses. Out of all the journals collected so far, 138 had some type of response in the details after meditation section.

Conclusions

Preliminary data analysis from the Daily Meditation journals suggests positive outcomes of the HealPod meditation sessions. The journals show an increase in “positive” feelings and a decrease in typically “negative” feelings after the HealPod session. Qualitative feedback indicates that some clients are eagerly engaging in the meditation process and do associate calmness, relaxation, and other typically positive feelings with the HealPod meditation experience.

Given the nature of the project and data collection tools, it is difficult to quantify an independent effect of the HealPod on client well-being. Clients engaging in HealPod sessions also participate in counseling and other services that lead to improvements in well-being over time that may be unevenly weighted to differing impacts. Identifying an independent effect would require a randomized controlled trial, which is not feasible in this voluntary setting. Likewise, data from the meditation journals may suffer from social desirability bias (Grimm 2010), in which research participants communicate what they think they are expected to feel or think. However, several clients provided feedback critical of meditation, suggesting that the effects of potential social desirability bias are not universal.

During the next phase of the project, SoundHeal seeks to expand the number of clients utilizing the HealPod, which will lead to an increased number of Monthly Feedback Journals for a more robust evaluation. As a supplemental practice to enhance clinical treatment, the HealPod aims to assist clinicians by offering this unique approach by analyzing client’s HealPod experiences. In support of this objective, the SoundHeal team has begun collecting survey data from clinicians to gain a more comprehensive understanding of the impact from a provider's perspective. Expanding participation, observing trends over a longer time period, and the collection and analysis of clinician feedback will provide further insights into the project's alignment with its stated goals.

Appendix 1: Daily Meditation Journal Data Collection Tool

Name: _____

Date & Time: _____

Heal Meditation Journal (Please fill out after your Heal session)

What was the name of the track you selected today?

- How did you feel **before entering** the Heal meditation pod? (select as many)

- | | | | | |
|--------------------------------------|------------------------------------|----------------------------------|----------------------------------|------------------------------------|
| <input type="checkbox"/> Stressed | <input type="checkbox"/> Scattered | <input type="checkbox"/> Relaxed | <input type="checkbox"/> Anxious | <input type="checkbox"/> Energetic |
| <input type="checkbox"/> Indifferent | <input type="checkbox"/> Good mood | <input type="checkbox"/> Upset | <input type="checkbox"/> In pain | <input type="checkbox"/> Focused |
| <input type="checkbox"/> Positive | <input type="checkbox"/> Depressed | | | |

Details:

- **What did you experience** in today's session? Write your feelings, emotions, even colors, smells, and sensations you experienced:

- How did you feel **after today's meditation**? (select as many)

- | | | | | |
|--------------------------------------|------------------------------------|----------------------------------|----------------------------------|------------------------------------|
| <input type="checkbox"/> Stressed | <input type="checkbox"/> Scattered | <input type="checkbox"/> Relaxed | <input type="checkbox"/> Anxious | <input type="checkbox"/> Energetic |
| <input type="checkbox"/> Indifferent | <input type="checkbox"/> Good mood | <input type="checkbox"/> Upset | <input type="checkbox"/> In pain | <input type="checkbox"/> Focused |
| <input type="checkbox"/> Positive | <input type="checkbox"/> Depressed | | | |

Any additional thoughts on **how you feel now**?

Appendix 2: Monthly Meditation Journal

Client ID: _____

Date & Time: _____

Heal Monthly Meditation Journal

- How often does Heal meditation help you with your overall well-being? **(select 1)**

Always Very Frequently Occasionally
 Rarely Very Rarely Never
 Other _____

- Does Heal meditation help build coping skills? **(select as many)**

Walk/run/bike/hike Cook Exercise Clean Take Breaks
 Reorganize Family time Eat healthy Arts & crafts Does not help
 Accept challenges Me time Prioritize tasks Building good habits

Any "Other" skills or additional details ?

- Does Heal meditation help with? **(select as many)**

Anxiety Stress Depression Sleep Alcohol Addiction
 PTSD Sleep Physical Pain Eating Drug Addiction
In your own words how Heal meditation has helped in reducing symptoms?

- How can we better the Heal meditation experience? **(select as many)**

Need more meditations 5 day, 7 day, 15 day meditation courses
 Bench is not comfortable Vibrations can be stronger
 Bench too low Improve the quality of sound
 Touch screen interface Good as is
Any additional thoughts on how we can improve the pod or specific sounds you want?

- What do you enjoy about the Heal meditation experience? **(select as many)**

Distraction free Safe Spacious and comfortable
 Good sound Easy to use vibrations Protected
 Time to myself

Justice Services, San Luis Obispo

Client ID: _____

Date & Time:

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The pod is spacious	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel immersed in the sounds	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Touch screen interface is easy to use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vibrations are great	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How satisfied are you with Heal Meditation? 1- 5 **(1 = Not satisfied , 5= very satisfied)**

1 2 3 4 5

How easy is the Heal Pod to use? 1-5 **(1=very easy, 5=very difficult)**

1 2 3 4 5

How often do you use the Heal Pod in a week?

1 2 3 4 5 **times a week**

Would you like to have Heal Pod sessions in a week? **Y / N**

If **“Y”** how many sessions would you like to do in a week?

1 2 3 4 5 **times a week**

Would you **like to increase the length of your Heal sessions** from 5 mins to 10 mins? **Y /**

N

References

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.

Grimm, P. (2010). Social desirability bias. *Wiley international encyclopedia of marketing*