Learning Brief: Review of Headspace, myStrength, and Other Selected Apps

help@hand ™
Evaluation

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Headspace and myStrength were reviewed for this learning brief. These products were chosen because they were used or considered by many counties/cities in the Help@Hand program. For each product, two comparable products that were available for download on the app stores[1] were selected. Two other meditation apps were compared to Headspace and two other cognitive behavioral therapy (CBT) apps were compared to myStrength. When possible, comparable products that were considered in the Help@Hand program (e.g. Calm, Happify) were chosen. **Table 1** shows all apps reviewed.

Learnings and recommendations are presented to help inform implementation and evaluation of Headspace, myStrength, and other products within counties/cities, particularly for the Help@Hand program.

Summary of Learnings

1. Mindfulness and sleep content is commonly provided across the apps reviewed.

2. People who have consistent access to internet may benefit from these apps the most, since they can access the content in the apps at any time.

3. People who speak English may benefit the most from these apps.

4. Exercise caution when comparing app data using marketplace performance (e.g., download rate), as the number of people using each app varies tremendously.

5. Metrics such as app use and engagement can provide rich information on how people are benefiting from the apps reviewed.

6. Although apps with higher user experience might not always have high marketplace performance, it is still an important consideration when selecting apps.

Learning #1: Mindfulness and sleep content is commonly provided across the apps reviewed.

Table 1 reveals all of the apps reviewed contained mindfulness and sleep programs, showing that content for mindfulness and sleep is popular across many different types of apps. Other common features included tracking (e.g. symptoms, mood, health), social and community features, and psychoeducation.

Learning #2: People who have consistent access to internet may benefit from these apps the most since they can access all the content in the apps at any time.

Table 1 shows that all of the apps reviewed require people to be connected to the internet for use. Only two apps (Calm and Headspace) allow people to download content when they are connected to the internet and access offline later.

Learning #3: People who speak English may benefit the most from these apps.

Table 2 shows five out of six apps were available in both Spanish and English. Availability in other California threshold languages[2] was very limited; Happify was available in Simplified Chinese, and Calm was available in Korean. Four out of six apps were available in other languages.

Even when an app is translated, audio or video content is often not translated and instead people need to read subtitles. Moreover, translating the text of an app does not ensure cultural relevance. Counties/cities should consider the need to culturally adapt content and examples, or include representation of the target population in graphics and videos.

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[1] All products reviewed were available on both iOS and Android, and were designed to be self-guided or standalone apps, rather than used as an adjunct to face-to-face treatment.
[2] A threshold language is a language spoken by 3,000 Medi-Cal eligibles or 5% of the Medi-Cal population in California.

Table 1. Meditation and CBT apps reviewed.

Meditation apps aim to help people learn to meditate and be mindful in their daily lives. Meditation apps might help people manage their mood, anxiety, stress, and sleep. **Cognitive Behavioral Therapy (CBT) apps** help people learn skills to support healthy ways to deal with thoughts, emotions, and behaviors. CBT apps can help people with various conditions, such as mood disorders, anxiety, stress, substance use, post-traumatic stress disorder (PTSD), chronic pain, and sleep problems.

App type	App	Product Features	Cost[3]	Internet Requirements
Meditation	Headspace	Listen to mindfulness audio tracks Listen to audio for sleep, focus, exercise, etc. Set reminders and notifications to meditate Track the amount of time spent meditating Connect and meditate with friends	$12.99 /month (mo), $69.99 /year (yr) **Collaborative Pricing:[4]** $18/user/yr	Internet needed. Some content can be downloaded when connected to the internet and accessed later when offline.
Meditation	Calm	Listen to mindfulness audio tracks Listen to audio for focus, sleep, relaxation, etc. Set reminders and notifications to meditate Track the amount of time spent meditating	$14.99/mo, $69.99 /yr **Collaborative Pricing:** $46.56-$48.72/user/yr	Internet needed. Some content can be downloaded when connected to the internet and accessed later when offline.
Meditation	MyLife	Listen to mindfulness audio tracks Track emotions and mood every time the app is used	$9.99/mo, $119.99/yr	Internet needed. All content can be used only when connected to the internet.
CBT	myStrength	Access content and activities based on CBT Track emptions, mood, health, goals, etc. Connect with other people on a community forum Access content to support better sleep Listen to mindfulness audio tracks Read educational content and articles Access content based on evidence-based psychotherapy[5]	No cost to user, but must get access through insurance or medical provider **Collaborative Pricing:** $7/user/yr	Internet needed. All content can be used only when connected to the internet.
CBT	Happify	Access content and activities based on CBT Track emotions and mood every time the app is used Message with an artificial intelligent (AI) chatbot coach Connect with other users on a community forum See positive news feed Listen to mindfulness audio tracks Read educational content and articles Use a gratitude journal	$14.95/mo, $139.95/yr	Internet needed. All content can be used only when connected to the internet.
CBT	SilverCloud	Access content and activities based on CBT Track emptions, mood,, health, goals, etc. Use a personal journal Connect with a trained coach Schedule activities and track progress completing them Listen to mindfulness audio tracks Read educational content and articles	No cost to user, but must get access through insurance or medical provider **Collaborative Pricing:** $90-$140/user/yr	Internet needed. All content can be used only when connected to the internet.

Table 2. Language availability of apps reviewed.[6]

	Headspace	Calm	MyLife	myStrength	Happify	SilverCloud
English	✔	✔	✔	✔	✔	✔
Spanish	✔	✔		✔	✔	✔
Simplified Chinese					✔	
Korean		✔				
Non-threshold Languages	✔	✔			✔	✔

3 Cost as of time of review in May 2021. Costs may change over time.
4 When available, pricing quotes provided by these apps to the Help@Hand Collaborative are included. In some cases, a range is provided because pricing will change based on the number of licenses purchased. Note that there are some one-time fees in addition to the per user costs.
5 Evidence-based psychotherapy includes dialectical behavior behrapy (DBT), acceptance and commitment therapy (ACT), and medication-assisted treatment (MAT).
6 The table notes threshold languages in California available in the apps (e.g., English, Spanish, Simplified Chinese, and Korean). Non-threshold languages include French, Italian, and German.

Learning #4: Exercise caution when comparing app data using marketplace performance (e.g., download rate), as the number of people using each app varies tremendously.
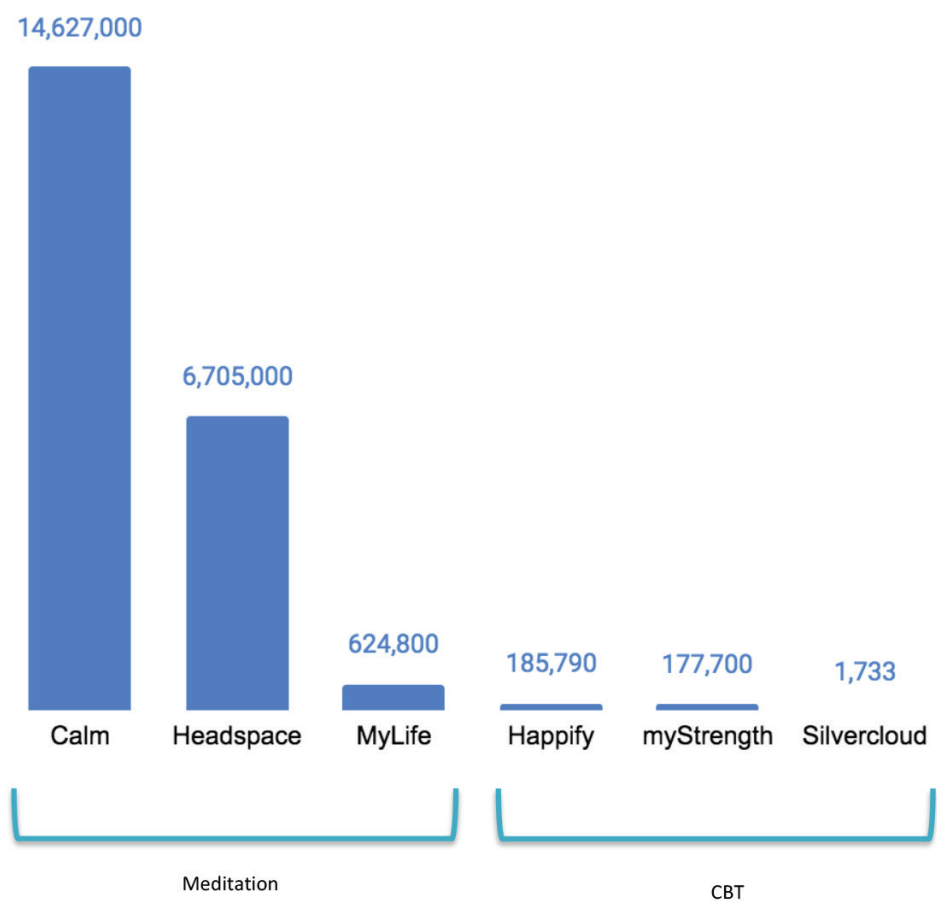
Comparing analytic data of Calm and Headspace to other apps makes it look like other apps perform poorly. However, this is not necessarily the case.

Figure 1 shows that Calm and Headspace have a huge share of the market, with over 14 million and 6 million downloads over the past year, respectively. Their downloads far exceed the downloads of other apps. In the figure, it looks like MyLife meditation performs poorly. However, it was downloaded over 600,000 times, which is more than the 3 CBT apps (Happify, myStrength, and Silvercloud) combined.

Note that some products have different entry points to use; for example Happify, which is available for anyone to download, performed similarly to myStrength, which has more limited access (e.g. through insurance provider). Silvercloud must be accessed through an insurance provider, which is likely to impact the number of downloads, as a referral is needed.

Given differences in downloads rates, examining other metrics might be more useful to compare use and engagement. For counties/cities looking for realistic benchmarks of use, it might be worthwhile to consider other comparisons or metrics (see Learning #5 for an example).
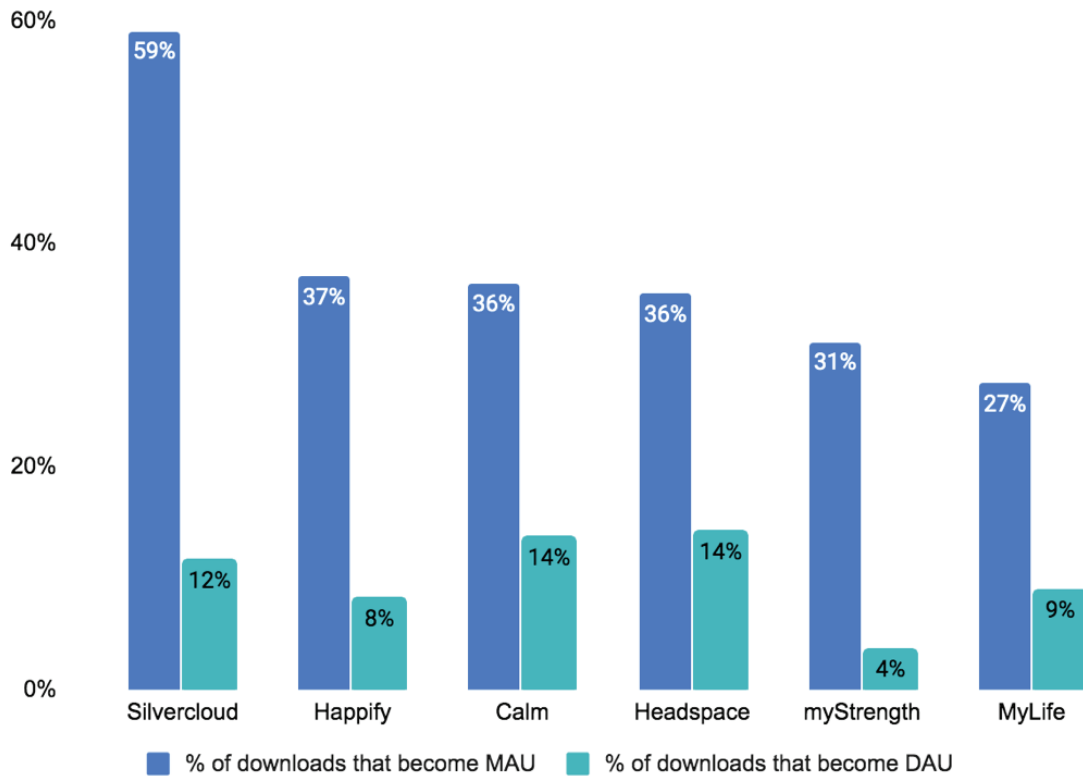
Figure 1. Total downloads over the past year for all apps reviewed.

Learning #5: Metrics such as app use and engagement provide rich information on how people are benefiting from the apps reviewed.

Downloads alone does not indicate that people will benefit from these products since someone could download the app and never actually open it. **Figure 2** shows the percentage of people who download the app and then become Monthly Active Users (MAU) or Daily Active Users (DAU) for each app reviewed.[6]

Figure 2. Conversion rates from downloads to Monthly Active Users (MAU) and Daily Active Users (DAU)[7] of apps reviewed.

Although SilverCloud had the lowest number of downloads (as shown in **Figure 1**), it had the highest rate of people downloading the app and becoming MAU (as shown in **Figure 2**). This suggests that people who download SilverCloud are more likely to actually use the app regularly.
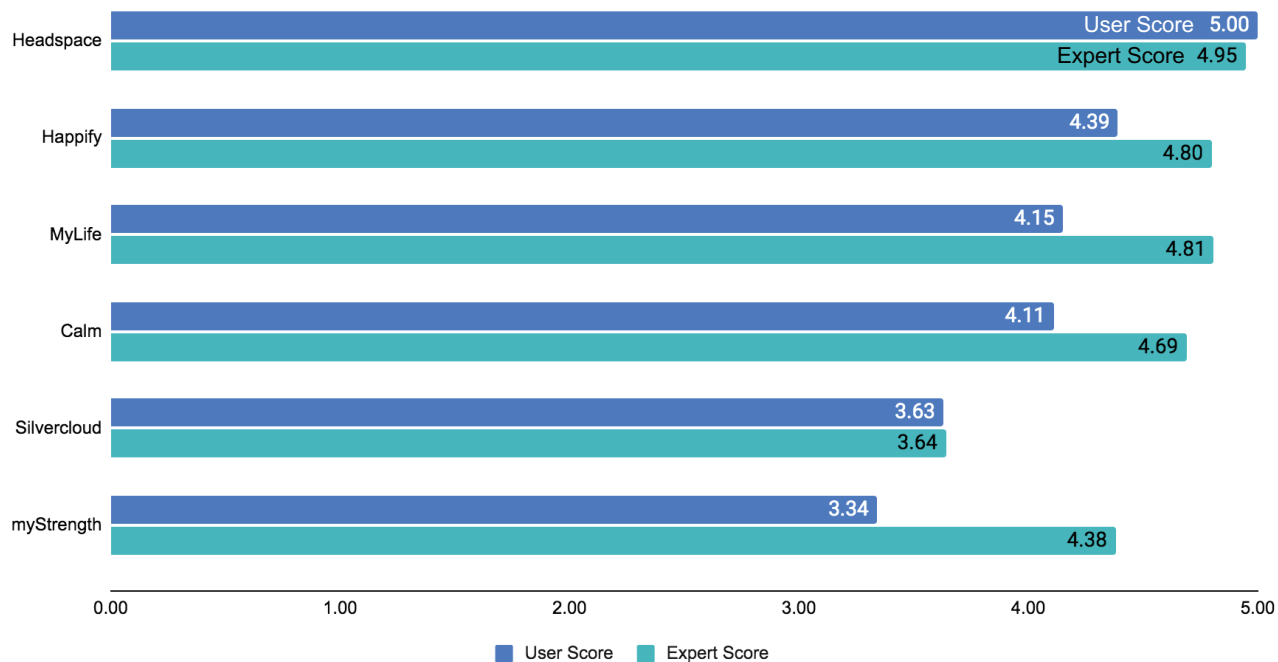
Figure 2 also shows that apps differ in their conversion to DAU versus MAU. Although 31% of myStrength downloads convert to MAU, only 4% convert to DAU. Conversely, some apps might lead to more daily use. Understanding the expected engagement with these apps can help set benchmarks for measuring success. For example, if an app encourages users to use it every day, we would hope to see a higher conversion from downloads to DAU. If an app encourages users to use it a couple of times a week, we would hope to see a higher conversion to MAU.

[7] Monthly Active Users (MAU) are the number of users who opened the app at least once in a 30-day period. Daily Active Users (DAU) are the number of users who opened the app at least once in a day.

Learning #6: Although apps with high user experience might not have high marketplace performance, user experience of an app is still an important consideration when selecting apps.

Two experts in health apps and one user with lived experience downloaded and used each of the apps and rated them on the Mobile App Rating Scale (MARS), a measure of how engaging, easy to use, visually appealing, and informative the app is. The maximum possible score is 5. **Figure 3** shows the User Experience scores of the apps reviewed.

Figure 3. User Experience scores of apps reviewed.

User experience scores do not align perfectly with marketplace performance (shown in Figure 2). For example, MyLife outperforms Happify in terms of marketplace data, but underperforms on user experience. Headspace had the highest user and expert user experience scores, but did not perform as highly as Calm in terms of number of downloads. This shows that good user experience (e.g. nice graphics, layout, ease of use, etc.) does not always translate to real-world engagement with these apps. That said, user experience is still an important consideration as it is unlikely a user will continue to use the app if it has technical issues, is not visually appealing, or is hard to navigate.

Recommendations

The following recommendations are meant to help counties/cities make decisions about the implementation and evaluation of mental health apps use within Help@Hand.

1. **Consider how content within a product aligns with goals.** If a county/city's goal is to support non-English speaking communities, availability in languages other than English is a key decision factor when choosing an app. If the goal is to support members with CBT activities, the presence of CBT is the most important decision factor.

2. **Create implementation plans that consider patterns of engagement.** It might be helpful for counties/cities to specify different expected uses of products – for example "We expect consumers to use this app X times each week" or "We expect consumers to use this app when they are feeling Y". Such concrete expectations can help set benchmarks on expected use both in terms of amount of use and types of content.

3. **Define outcome metrics that can provide insights into whether or not a user may actually be getting benefits from the app.** The number of downloads does not tell counties/cities about app use. Instead, the number of Monthly Active Users may be more meaningful because it shows how many people who download the app are actually opening and using the app. If counties/cities can receive individual user-level app data, they may also be able to determine metrics such as the number of users who remain active after certain periods such as 2 weeks or 1 month.

4. **Understand that good user experience might be important, but not a necessary criteria for user engagement.** The apps reviewed that outperformed in the marketplace did not always have the highest user experience score. Counties/cities should try to understand what other factors drive people's use of these apps, beyond a positive user experience. (For example, is it because they trust the app? Is it because they find it helps them feel better?)

5. **Appreciate that Calm and Headspace are already widely downloaded, but have download rates that are inconsistent with the wider marketplace.** This might offer an opportunity for consumer education and awareness on other digital mental health products. For example, outreach teams can educate consumers by saying "You may have heard of wellness apps like Headspace or Calm, but did you know that there are other apps out there that can do more than just help you meditate? You can also learn other skills to promote your wellness."