Supplemental Materials: Understanding and Supporting Self-Tracking App Selection

Contents:

Semi-structured Interview Protocol

Hi! Thank you so much for taking the time to talk with me! My name is [REMOVED FOR REVIEW], you can call me [REMOVED FOR REVIEW], and I'm [REMOVED FOR REVIEW]

Our study involves us recording the audio of this interview. Are you okay with that? There is also an option to turn the video off if you want. [Start after ok]

Just to shortly introduce our research,
We are currently researching how people go about looking for personal tracking tools and ways to better support them. I'm first going to ask a couple of questions about your experience with tracking apps, then going to show you some app store designs and ask for your feedback.

Before we start, if there's any questions you don't want to answer, it's totally fine for you to ask to skip it.

- Are you currently or have tracked anything in your life using an app? Such as tracking time you spend on studying or tracking what food you are eating?
    - **Why did you start using** that app?
        - What do you like about it? -> Feature A
    - **How did you find** X app? Can you describe the process? ->Probe to see if they used an app store, social media, or anything else
        - What did you consider most when searching?
        - Were you looking for feature A when searching?
    - Do you tend to try out a couple of apps first before settling on one?
        - How did you find those apps?
        - What were you looking for when trying out multiple?
            - If you already knew about those beforehand, do you think your trying out apps would be different?
    - Did you have a good idea of what the app did before you installed it? ->Probe to see if knowing about the app's features were important when searching for an app

- Was X app the first app that you used to track your Y?
  (Learn about previous experiences with personal tracking apps)
    - If not) probe for why this was better than alternatives
        - Did you explore for any alternatives? How? (Walk through all previous apps)
        - What made you switch? / What made you stick?
        - What did you use when exploring previous apps? (ex: app store, social media, recommendations from friends)
        - What do you normally look at in the description page of an app? Why?
        - What did you consider the most while searching?

[Memo: Sticking to these questions would help with preventing misleading questions. Ask open questions about the idea once they've seen the design.]

Thank you for answering the questions! These are really helpful.

What I will show you next is a rough sketch of one idea, which reimagines an app store like Google Play or Apple App store

We have no plans to actually make this new app store and have no attachment to these sketches; we just want to know what people think of the general ideas.

Our main goal here is to understand what people consider when they're looking for personal tracking apps. So don't worry about being critical and share anything that comes to your mind!

I'll start sharing my screen to show you a couple of sketches.
If you don't mind, voicing out loud about your reactions while you are viewing the sketches would be really helpful to us!

If you have any confusion on particular parts or feedback, please feel free to share your thoughts!

Slide 1~8:
- Go over the app description page and explain what each tag and headers mean
- Make sure to point out they can highlight relevant screenshots by clicking on tags

So these sketches are the description page of an app. The information shown here is just an example; as such these might not be an accurate representation of the real app. But let's pretend they are. If you want a better look at some parts of the sketch, just tell me the slide number.

Just a couple of questions about your experience with the design:

- How do you feel about the app after you have looked at the description page?
    - Was there anything about the information shown here that was confusing?
        - How would you make it better for each section?
    - What would you add to this description page to understand what the app does?
    - What about this sketch would you find unhelpful when looking for a tracking app?
    - What about this sketch would you find helpful when looking for a tracking app?

- How do you feel about the themes and tags shown here?
    - (Probe why they feel about certain parts that way)
    - If positive) Why do you feel that way?
    - If negative) Why? How would you make it better?

- For the six themes shown here (as sections), which do you think are most important? Which do you think are not?

- Among the information shown here in this sketch, what do you think will be the most helpful for you searching for a tracking app?
  - Why do you feel so?
  - What is the least helpful?
    - Why do you feel so?

- Can you think of some problems with this sketch that the current app store does well?
  - Why do you feel so?

- Can you think of some problems with the current app store that this sketch did well?
  - Why do you think that's a problem?
  - How does the design overcome it?

Thanks for answering the questions! Now we'll start going over the last portion of the sketch, which will be the store page.

Slide 10~11
- This is the store page of a re-designed app store.
- Again, this is just meant to represent one possible idea; we have no attachment to it and are just looking to understand what people consider when searching for tracking apps.
- Here you will be able to browse personal tracking apps by categories.
- (Showing app cards) You can browse more apps from a category by scrolling right. Notice the tags in the app cards; each app displays three prominent tags associated with it!
- The app cards also has tags related to the tracking behaviour of the app
- You can browse more categories by scrolling down
- The button by the "More" text opens up a new page which displays all the tags currently available. We are going to press "Browse Tags" to navigate to the Tags page.

Slide 12-13
- This is the page where all the tags are displayed.
- The tags are organized by 7 different "themes": what it tracks, feedback and analytics, goals, convenience, privacy, and social features.
- Like before, you can browse more themes by scrolling down. More tags can be browsed by scrolling right for a theme.
  - Again, the tags shown here are examples from a couple of real-world apps. There would be a lot more if more apps are registered in this store.
- Here, we are going to scroll down to display more themes and tags.

Slide 14 (maybe go over this quickly since it's already shown before)
- The tag organization is hierarchical in nature. You can get more details from a tag by expanding a tag.

- For instance, the page here is the result of you long-pressing on tag "Running" and "Visualization"

Slide 15-16
- You can also select tags by which you want your apps to have.
- You can include more than one tag for the filter.
- Here we have additionally included "Trends over time" to our filter.
- Now we are going to select "back" and go back to the store page.

Slide 17
- Now we have these two tags as a filter!
- Notice apps that don't have either tags are greyed out

So this ends the guided demo! Again, tell me whichever slide you would like to see again. While you are doing that, I just have a couple of questions related to your experience with the overall design:

- How do you feel about the way this sketch uses tags to filter apps?
  - Why do you feel so? (Probe - especially for filtering)
  - How do you feel about the apps shown here with the tags? Why so?

- (Focus on themes) Is there anything you would add besides the 6 themes shown here?
  - Can you think of any tags that would be associated with it?
  - Is that something you consider important? Why / why not?
  - (If none) What would you like to filter tracking apps by?

- (Recall from their responses to the first couple of questions -> X app)
  Imagine you are using this design to browse for X app. How would you browse through the pages? It would be really helpful if you can voice your thoughts while you are looking through.
  - (Probe why they feel certain ways for various parts of the sketch during the navigation)
  - (Look if they would want to filter based on features/tags)

- How would you normally search for the app? (Remind them that they can look at the current app store on their phones)

- What do you wish were here in the store pages?
  - What do you wish were **not** here?
  - Why do you think so?

- What problems can you think of in this particular sketch that the current app store does better? Why do you think so?

- Can you think of some problems with the current app store? Why do you feel so?
  - How would you solve it?

Thank you for your answers! Just to wrap up our interview, we have a few last questions:

- If you had a way of knowing what the app did beforehand, how would you search for it? Would it be different from now?
    - Why?
- Do you have any other feedback?

Great! Thank you so much for your time. As we mentioned in our recruitment ads, we compensate $25 for your participation. Would you like to receive it by Venmo or by Amazon gift cards?
- Venmo:
    - Username
- Amazon gift cards:
    - Email

(After noting info) Okay, if you have any questions regarding the study, please feel free to reach out to me.
Again, thank you so much for your time!

Themes and Codes Extracted from the Thematic Analysis

The following tables contain the final list of codes, sub-themes, and themes, which are described by indentation levels. The list has been generated from the sem-structured interviews.

1 Understanding Selection Practices
1.1 Trialing
1.1.1 Trialing vs. using
1.1.2 What they would be looking for after trialing
1.1.3 Why trial
1.1.4 Problems learned after trialing
1.1.5 What they liked after trialing
1.2 Minimal browsing
1.3 Searching with non-specific needs
1.4 Searching with specific needs
1.5 Information source
1.5.1 Online videos
1.5.2 Multiple sources
1.5.3 App website
1.5.4 Why they use outside sources
1.5.5 App Store
1.5.5.1 User reviews
1.5.5.2 Suggested apps
1.5.5.3 Screenshots
1.5.5.4 Does not spend time browsing store
1.5.5.5 Search results
1.5.5.6 Text description
1.5.5.6.1 Looks for attributes
1.5.6 Blog posts
1.5.6.1 News
1.5.7 Social media
1.5.8 Close people
1.5.9 Organization
1.5.10 Search engine
1.5.11 Online forums

Full Paper Prototype

Forest: Stay focused

Seekrtech   Productivity
Contains ads • In-app purchases

★★★★✦ 220,600 👤

Install

What it tracks

Work   Screen Time

Feedback and Analytics

Visualization   Rewards   Motivational Messages

Supporting Goals

No Goal Support

Forest: Stay focused

Seekrtech **Productivity**
Contains ads • In-app purchases

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Install

What it tracks

Work

- Time Spent
- Automatic Tracking
- Manual Tracking

Feedback and Analytics

Visualization

Graphs

- Trends over time
- Ratio between Data

What it tracks

Work   Screen Time

Feedback and Analytics

Visualization   Rewards   Motivational Messages

Supporting Goals

No Goal Support

Convenience

Notifications

Privacy

Data Shared w/ Developer   Can Clear Some History

Social Features

[Social Groups] [Progress Sharing]

User Reviews

User 1 : ★ ★ ★ ★
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat ...

more →

User 2 : ★ ★ ★ ★
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat ...

more →

User 3 : ★ ★ ★ ★
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat ...

more →

User 4 : ★ ★ ★ ★
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat ...
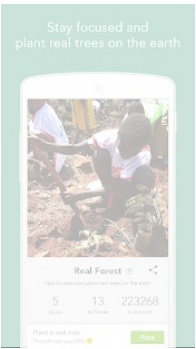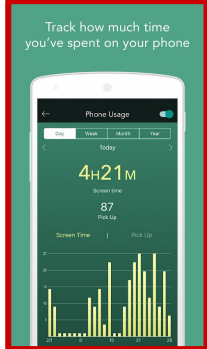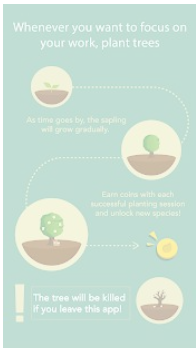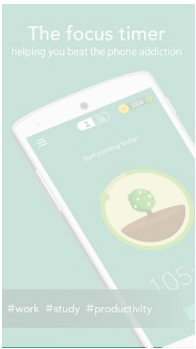
more →

Forest:
Stay focused

Seekrtech   Productivity
Contains ads • In-app purchases

★★★★⯪ 220,600 👤

Install

What it tracks ⊗

Work   Screen Time

Feedback and Analytics

Visualization   Rewards   Motivational Messages

Supporting Goals

No Goal Support

Forest:

Whenever you want to focus on your work, plant trees

As time goes by, the sapling will grow gradually.

Earn coins with each successful planting session and unlock new species!

! The tree will be killed if you leave this app!

Forest:

Track how much time
you've spent on your phone

Phone Usage

| Day | Week | Month | Year |

Today

4H21M

Screen time

87

Pick Up

Screen Time | Pick Up

27

20

15

10

5

2/1   8   15   21   28

Forest:
Stay focused

Seekrtech   Productivity
Contains ads • In-app purchases

★ ★ ★ ★ ⯪ 220,600 👤

Install

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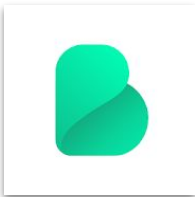
Supporting Goals

No Goal Support

Search 🔍

Filtered Tags   More →

You have none
selected!

Productivity

Loop Habit Tracker

Habits • Graphs •
Habit Strength Score

Boosted

Projects • Grap
Data Not Shar

Forest: Stay Focused

Projects • Graphs •
In-App Rewards

Fitness and Sports

Garmin Connect

Running • Cycling •
Time Goal Support

Runkeeper

Analytics • Run
Time Goal Sup

Strava

Running • Cycling •
Social Groups •
Time Goal Support

Search 🔍

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Running • Cycling •
Social Groups •
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Search Tags

What it tracks

Habits Projects / Courses / Work

Tasks / Todos Screen Time Steps

Running Cycling Swimming

Feedback and Analytics

Analytics Visualization Rewards

Recommendations Motivational Messages

Supporting Goals

No Goal Support Time Goal Distance Goal

Body Weight Goal

Search Tags

Convenience

Notifications

Third-party Support

No Third-party Support

Privacy

Data Not Shared w/ Dev

Data Shared w/ Dev

Cannot Clear History

Can Clear Some History

Can Clear All History

Social Features

Can be Anonymous

Friends

Social Groups

In-App Chat

Sharing

Competitions

No Social Features

← | Search Tags | 🔍

What it tracks

Habits | **Projects / Courses / Work**

Tasks / Todos | **Screen Time** | **Steps**

Running
- Distance
- Heart Rate
- Courses
- Calories
- Time
- Pace
- Cadence

Feedback and Analytics

Visualization

Graphs
- Trends over time
- Ratio between Data

Maps

Recommendations | **Motivational Messages**

⌄

Search Tags

What it tracks

Habits

Projects / Courses / Work

Tasks / Todos

Screen Time

Steps

Running

Distance

Heart Rate

Courses

Calories

Time

Pace

Cadence

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Graphs

Trends over time

Ratio between Data

Maps

Recommendations

Motivational Messages

Search 🔍

Filtered Tags   More →

Projects / Courses / Work ❌

Trends over time ❌

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