

Abstract

[Problem] I focus on addressing gender inequality, social environment, and security in fitness, particularly for women. The gender differences in physical activity levels and the historical exclusion of women in fitness spaces are the barriers females face in physical activity, including weight stigma, harassment, and gender disparities in sports participation.

[Prototype] The research questions revolve around improving the gym or outdoor activity service system and creating a safe and comfortable environment for women. The Proposed design innovation is a service design blueprint that includes an application to empower females.

Introduction & Background

Problems

Females face numerous barriers to participating in physical activity (PA), both in indoor gyms and outdoor settings.

CDC data shows that **49% of women** aged 18 and above meet the recommended aerobic activity levels, compared to **57% of men**.

Literature Review

[Empowerment] Tailored cognitive-behavioral programs can enhance physical activity among middle-aged white women by addressing their specific societal and psychological challenges.

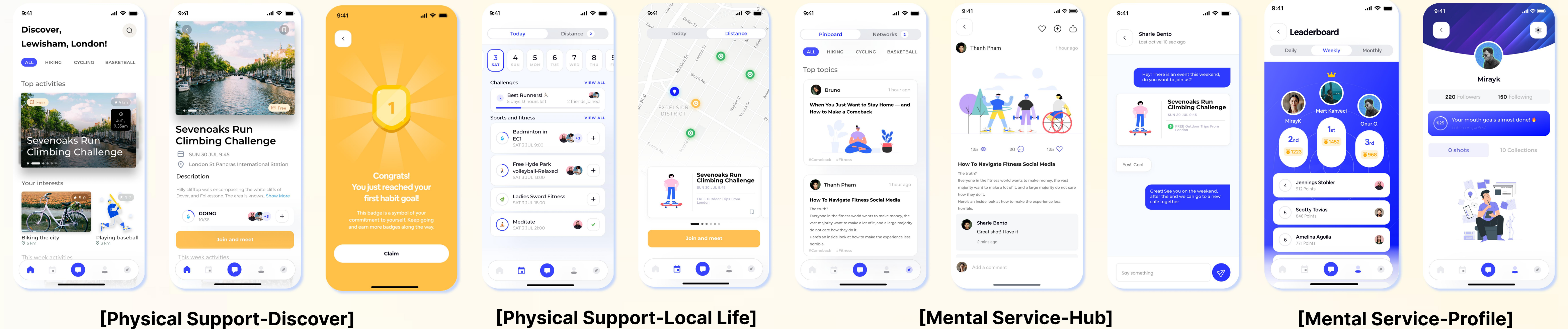
[Exercise Psychology] Modern theories often focus only on motivation, neglecting the barriers to activity. Addressing these barriers is essential.

Diagram / Design

Through collaborations with local fitness clubs and community members, we **curate exercise routes that align with the preferences of females**. Whether it's discovering hidden gems in London or maximizing their time in each activity, we strive to provide an interesting social experience.

Strategy

My mobile prototype contains a home page, activity page, hub page and profile. The homepage is convenient for users to browse and capture event information quickly. The activity page allows users to find event information more accurately by date and region. The hub page is a platform for finding like-minded friends and keeping in touch with fitness partners.



[Physical Support-Discover]

[Physical Support-Local Life]

[Mental Service-Hub]

[Mental Service-Profile]

Study Methodology

Interviews

To gain a genuine understanding and closely relate to the users, it's essential to identify their pain points and ascertain their specific needs. To achieve this, user interviews were conducted. Six participants were invited for the interviews, categorized as follows:

- 2 participants occasionally attend free fitness activities.
- 1 participant desires to engage in fitness activities but feels apprehensive about starting.
- 2 participants have a consistent weekly fitness routine.

Testing & Evaluation

A/B Test with lo-fi

I invited 2 participants to do paper prototyping test with interview.

Competitors Analysis- SWOT Analysis

Finding Likeminded Fitness Partners: Platforms like *Strava* and *Squaddy* mostly cater to exercising with pre-existing friends, making it a challenge to find new workout partners who share similar fitness goals.

Lack of Diverse Activities in Social Communities: While platforms like *StepBet* and *StrideKick* offer well-established social communities, they lack a diverse range of activities to engage in.

Difficulty Pairing Activities with Partners: Platforms like *Meetup* may have intriguing activities, but it's often challenging to find the right fitness partner to attend with.

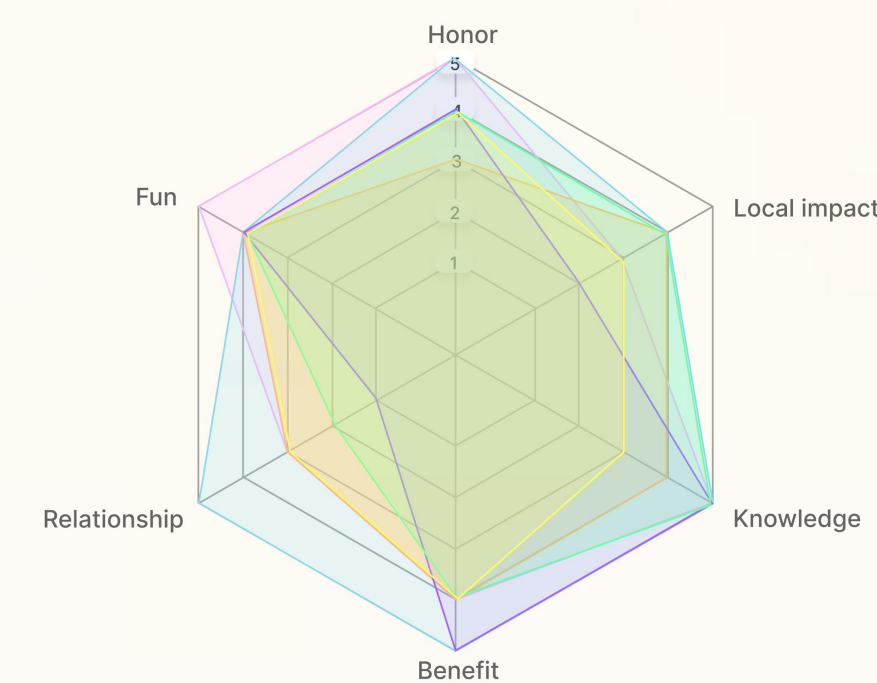
Formative Test with hi-fi

I invited 6 participants to do the digital prototyping with SUS form. And I use the eye-tracking device to monitor what the user see on website.

Research Results

User Needs Statement

1. Many women are hesitant to exercise due to unfamiliarity, seeking guidance but are shy to ask.
2. Group classes are of great interest, but due to high costs or lack of opportunities, many refrain from participating.
3. For beginners, having a workout partner provides mutual encouragement.



Value Drivers

for radar evaluation

[Honor] are more attractive to someone who good at sports.

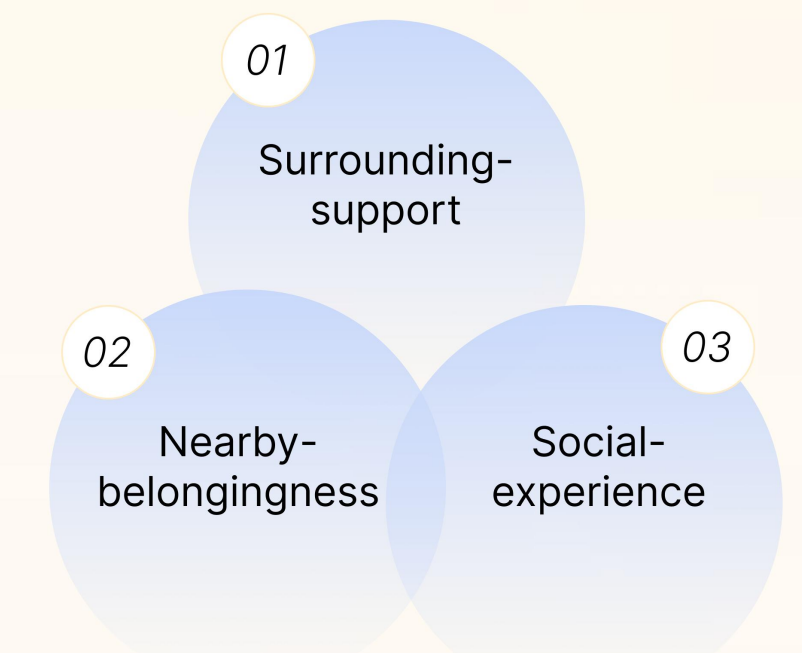
[Fun] plays a big role in most people's fitness.

[Relationship] is the smallest driving factor.

[Benefit] is the second cortical factor influencing decision making.

[Knowledge] is the most critical factor influencing decision making, with 4 people giving 5 points.

[Local Impact] overall average, varies according to individual occupation and free time.



Conclusions & Future Work

[User Feedback Integration] In the future, prototypes will continue to be used to test whether target users' perceptions of use have changed. In addition, interviews will continue to progress to understand how users are varying in order to further advance user-centred design.

[Community Building] We envision fostering a stronger sense of community by introducing features that allow users to share success stories, challenges, and collaborate on group fitness challenges.

[AI-Driven Partner Matching] Leveraging machine learning, we aim to develop an intelligent matching system that pairs users based on their fitness levels, interests, and goals, streamlining the process of finding the right workout partner.